

*Developing local community participation
within shoreline management in England:
The role of Coastal Action Groups*

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A thesis submitted in partial fulfilment of the requirements for
the award of the degree of Doctor of Philosophy of the
University of Portsmouth.

January 2016

Abstract

Empirical evidence from the broader literature suggests that public participation is vital to improving coastal management. This study focuses on the wider context of factors influencing local community participation and more specifically upon the nature and influence of Coastal Action Groups (CAGs) involvement in the shoreline management decision-making processes. CAGs represent a reaction by local communities to local shoreline management policies that they fail to understand or perceive as detrimental especially decisions involving withdrawal or relaxation of defences. Precisely, some strategic coastal defence policies arising from shoreline management initiatives from the late 1990s onward have generated the conditions promoting formation of CAGs. Using a multiple-case study approach, this research examined 12 prominent community based CAGs in England. The research further investigated the modes of CAGs establishment and operations via an extensive postal questionnaire survey and semi-structured interview process. The results provided a comprehensive and critical evaluation of the key opportunities, gaps, barriers and factors affecting local community participation in the shoreline management process in England. It also evaluated the roles of CAGs in these processes. The study revealed that the participation of local community in decision-making processes is still at a 'rudimentary' stage. This was found to be due to a number of issues, including insufficient information on shoreline management planning processes and lack of awareness of the management authorities' decisions. Through analysis of empirical findings, a series of recommendations were made on how to further: 1) promote fairness and transparency in decision-making processes; and 2) improve access to information. The research concludes that, in order to reduce conflict and future rejection of management options, the process of local community participation should not be viewed simply as a 'tick box' exercise, but as a process from which mutual understanding can be fostered and compromises is established. This research provides a unique contribution to the ongoing debate regarding public participation in coastal zone management.

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Declaration

Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other academic award.

Word count: 70, 879

A handwritten signature in black ink, appearing to be 'J. [unclear]', written over a dotted line.

Signed..... Date.....14th October, 2016.....

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Abbreviations

AGM.....	Annual General Meeting
BEG.....	Blyth Estuary Group
CAG.....	Coastal Action Group
CBW.....	Carlyon Bay Watch
CCAG.....	Coastal Concern Action Group
CDO.....	Coastal Defence Options
CFAG.....	Cockermouth Flood Action Group
CG.....	Coastal Group
CHaMPs.....	Coastal Habitat Management Plans
CP.....	Coastal Partnership
CZM.....	Coastal Zone Management
DCLG.....	Department for Communities and Local Government
Defra	Department for Food Environment and Rural Affairs
DOCA.....	Defend Our Coast Association
EA.....	Environment Agency
EC.....	European Commission
EU.....	European Union
FCERM.....	Flood and Coastal Erosion Risk Management
FRRA.....	Faversham Road Residents Association
HCAG.....	Hopton Coastal Action Group
HRG.....	Ham Residents Group
ICZM.....	Integrated Coastal Zone Management
IDB.....	Internal Drainage Board
IPCC.....	Intergovernmental Panel for Climate Change
LA.....	Local Authority
MAFF.....	Ministry of Agriculture, Fisheries and Food
MDC.....	Maritime District Councils
MMO.....	Marine Management Organisation
MOSOP.....	Movement for the Survival of the Ogoni People
n.d.....	No Date
NE.....	Natural England

NGO.....	Non-governmental Organisation
NIMBY.....	'Not - in - my - back -yard'
NVCC.....	National Voice of Coastal Communities
RBMP.....	River Basin Management Plan
SCaR.....	Suffolk Coast against Retreat
SCEG.....	Scraby and California Environment Group
SCOPAC.....	Standing Conference on Problems Associated with the Coastline
SMP.....	Shoreline Management Plan
SOS.....	Save Our Selsey
SPB.....	Save Pagham Beach
UK.....	United Kingdom
UKCIP.....	UK Climate Impacts Programme
UNCED.....	United Nations Conference on Environment and Development
UNESCO.....	United Nations Educational, Scientific and Cultural Organisation
WAG.....	Welsh Assembly Government
WFD.....	Water Framework Directive

Acknowledgements

This thesis owes an immeasurable debt of gratitude to my supervisor, Dr Jonathan Potts, who has tirelessly read and corrected all the many drafts. It was Jonathan that first suggested to me in 2011 that I might want to think about doing a PhD, and since then it has been both, a challenge and a dream that I have enjoyed working towards. I am very grateful to him for seeing that potential in me. I have had two other supervisors during the course of the research. Dr Malcolm Bray who remained supportive and positive throughout, even when I was struggling to fit everything in, and given up his time to read through work, discuss ideas and ask questions about the research. I also wish to acknowledge the support and encouragement provided by Dr Julia Brown during the early stages of my research. All three have given me much valued advice.

This thesis could not have been written without the CAGs, government authorities and consultants who agreed to participate in this research. Their willingness to share their experiences, their candour and the trust they put in me was very humbling – it was a privilege.

Although, a PhD is largely an independent research, I have never been alone. Thanks to my wonderful family – the motivating force behind this endeavour. In particular, my wife, Olumayowa Famuditi, I am most indebted for supporting me and my precious girls (Anita and Tiffany). They never complained when I had to spend many weekends at university, rather than at home. Honey, you have made this journey even more special and I could not have done it without you. Thank you for believing in me.

I would like to acknowledge my colleagues and administrative staff at Portsmouth who became my friends and (for want of a better description) academic family. While there are too many to name individually, I would like to thank: Jenny Cox, Lauren Knight, Cornelia van Diepen, Paul Weber and Sharon Jakobek, you were indispensable. My appreciation also goes to my brother Kenny Famuditi and my Portsmouth family for restoring my confidence in completing the research. I would also like to thank Paul Carter who assisted me with the case studies maps.

Part One: Context of the Research

Chapter One: Introduction

1.1 Introduction

This thesis investigates the emergence of Coastal Action Groups (CAGs) and their role within the shoreline management process in England. Increasing interest in the problems affecting the shoreline such as the impacts of climate change, increase in inundations, and storm surge as well as the government approaches to the management of these problems has led to the formation of CAGs.

In order to research the specific aims and objectives of this thesis, 12 case studies were selected and a combination of quantitative and qualitative research techniques in the form of a postal questionnaire survey as well as semi-structured interviews have been employed. The participants specifically involved in this research were the members of CAGs, representatives from shoreline management authorities and also the shoreline planning consultants. This allows the research to investigate the reactions of local community towards the shoreline planning and management processes. Issues relating to social justice in the context of flood and coastal erosion risk management were also investigated.

This introductory chapter establishes the overall basis and coverage of the thesis. It starts by describing the management structure of flood and coastal erosion risk in England. The following sections outline the conceptual foundation of the research and a statement of aims and objectives of the study. The scope of the study is then discussed, together with the definition of key terminology used in the study. This is followed by an introduction to the methodology and sources of information used. Finally, an overview of the structure of the thesis is outlined.

1.1.1 Flood and Coastal Erosion Risk Management in England

Coastal governance in England has evolved over centuries with various regulatory systems that provide responses to different environmental, social, economic and political issues as they arise at different scales (Taussik, 2007). The issue of coastal flooding and sea defence policy has proven contentious (McKenna *et al.*, 2008). The government has argued that coastal erosion and flooding are not new phenomena

(Environment Agency, 2011). As such, coastal erosion and flooding, and their implications for many coastal inhabitants, has become the prime focus in the UK of climate change and its effects (Department for Communities and Local Government, 2012). Previous studies (Evans *et al.*, 2004, Pitt, 2008; Portman *et al.*, 2012) predicted the number of people at risk from flooding and erosion as well as the costs of damage from floods will rise significantly unless there is a change in shoreline management policies and investment levels. Therefore, continued research into the impacts of coastal flooding and erosion will remain essential.

1.1.2 Changing Policies: An overview

Within England and Wales, government policy for management of Flood and Coastal Erosion Risk Management (FCERM) has changed since the beginning of this century (Penning-Rowsell *et al.*, 2014). Three key phases have been identified starting with ‘land drainage’, moving through ‘flood defence’ finally to ‘flood and erosion risk management’ (Johnson & Priest, 2008). A number of regulations and comprehensive policy documents have been produced to guide the various aspects of coastal planning and development. These include: Making Space for Water (Defra, 2004), the National Integrated Coastal Zone Management Strategy (Defra, 2009b), Adapting to Coastal Change: Developing a Policy Framework (Defra, 2010c), Flood and Water Management Act (The UK Government, 2010) and the National Flood and Coastal Erosion Risk Management (Defra / EA, 2011).

The adaptive management approach set up a significant shift in coastal policy that would have profound implications for significant stretches of the coastline and its inhabitants (Nicholls *et al.*, 2013; Turner & Luisetti, 2014). An increasing emphasis is placed on coastal communities to undertake more responsibilities of taking suitable action themselves against flood and coastal erosion where appropriate (Defra, 2008; Johnson & Priest, 2008). In response to this apparent volte-face there has been a public and often vociferous backlash demanding social justice and compensation if continued defence by the government is no longer an option (O’Riordan & Ward, 1997; O’Riordan *et al.*, 2006; Cooper & McKenna, 2008; Day *et al.*, 2015).

1.2 Rationale for the Research

In England and across other countries such as Canada and Australia, the concept of “community” is becoming an increasingly popular notion in the context of flood and erosion risk management (Spiller, 2004; Chouinard *et al.*, 2008; Wilby & Keenan, 2012). The majority of coastal communities in risk areas have to face up to the implications of a changing coastline due to the likely impact of climate change (Zsomboky *et al.*, 2011). Within the shoreline management plan policy in England, there is little to suggest any indebtedness that coastal communities may have on both the management approaches and solutions to flooding and coastal erosion. However, the management authorities are beginning to understand and address the need to empower communities through participation in decision-making processes (Defra/EA, 2011; Nye *et al.*, 2011; Rouquette, 2013; Penning-Rowsell *et al.*, 2014).

Agenda 21, Chapter 17 provides the international basis for the protection and sustainable development of the marine and coastal environments and their resources (United Nations Division for Sustainable Development, 1992). The response to the outcomes of the Rio Declaration on Environment and Development in 1992 affirms the importance of the adoption of participatory and community-led approaches in national development strategies (Blanchfield & Lawson, 2010). Asking coastal communities to ‘live with flood risk and coastal erosion’ will require provision of essential support for the process of adjustment before communities can be expected to adapt and participate in the management process (Nicholson-Cole & O’Riordan, 2009).

1.2.1 The Increasing Role of Local Community in Shoreline Management

There is a vast amount of literature about engagement, participation, partnership and stakeholder representation in shoreline management initiatives (including: Renn *et al.*, 1995; O’Riordan & Ward, 1997; Edwards *et al.*, 1997; Fletcher, 2003; 2007; Stojanovic & Barker, 2008; Scott, 2009; Nye *et al.*, 2011; Schmidt *et al.*, 2014; Day *et al.*, 2015). The UK government approach of moving from a ‘hazard management’ paradigm, through a ‘risk management’ paradigm, has resulted in a ‘consequence

management' paradigm (Nye, *et al.*, 2011). This move could therefore be understood as recognition of those affected, and greater consideration for how these people can be better involved in the flood risk management process (Walker & Burningham, 2011).

Based around the needs for community involvement, Defra (2011) identified the need for a more integrated approach to flood and erosion risk management, with a greater emphasis on the significant importance of local community inclusion in contributing to policy deliberation (Defra/EA, 2011). As the National Flood and Coastal Erosion Risk Management Strategy for England (Defra, 2011, p.14) states “the risk management authorities should work in partnership with communities to understand the community perspective of flooding and coastal erosion...and encourage them to have direct involvement in decision-making and risk management actions.”

1.2.2 Research Aims and Objectives

The core aim of this thesis is to critically identify and evaluate the role of CAGs in developing participation in shoreline management process. The thesis will consider the group members' views, opinions, motivation and organisational dynamics in order to add depth to the understanding of the individuals and the groups they are involved with.

The specific research objectives set to achieve this aim is to:

- 1) Review and evaluate the theoretical context and practice of public participation in shoreline management in England through a comprehensive literature review.
- 2) Examine personal motivations and experiences of CAG members.
- 3) Critically assess the reasons for the formation of CAGs.
- 4) Investigate the views of local communities and management authorities on the shortcomings and achievements of CAGs.
- 5) Put forward a series of recommendations and requirements on how CAGs can promote local community participation in shoreline management.

1.3 Definition of Key Terms

For this study and in the wide literature reviewed, there were a number of terms used requiring further clarification and explanation. Some of the key terms used in a specific way throughout this thesis, not least in the title and research aims and objectives may be used interchangeably elsewhere. This section further elaborates several of the terms by establishing their definition and meaning. This also helps to clarify the precise scope of the study.

1.3.1 Coastal Zone Management and Shoreline Management

In the established body of literature on coastal management, the planning and management of coastal activities are referred to variously as Coastal Zone Management (CZM), Integrated Coastal Management (ICM), Integrated Coastal Area Management (ICAM) and Integrated Coastal Zone Management (ICZM)(Sorensen & McCreary, 1990; Cicin-Sain, & Knecht, 1998; Kay & Alder, 1999; Vallega, 1999; Beatley, 2002; Smith & Potts, 2005). These terms are used somewhat interchangeably. Unless quoting directly from another source, the terms ‘coastal management’ and ‘shoreline management’ shall be used here. Coastal management will be used in referring to the general mix of regulations, plans, policies and institutions that make up coastal management in its broadest sense. Shoreline management is used when referring specifically to Defra and the Environment Agency’s (EA) approach to managing flood and coastal erosion risks in England. Furthermore, the term ‘shoreline management’ will be used to describe the contemporary approach to managing the coastline in order to minimise confusion when referring to the shoreline management process.

1.3.2 Coastal Action Groups (CAGs)

Before proceeding with a detailed discussion of the role of CAGs within shoreline management, it is critical to have a context-specific and unambiguous understanding of the definition used. For the purpose of this study, the definition of CAG is provided as:

A group of voluntary bodies and stakeholders which seeks as one of its aims to influence the decision making process of management authorities in an attempt to secure social justice in shoreline governance (Author's Own, 2016).

This broad definition allows an inclusive understanding of the groups and sets the context for all of the discussions, analysis as well as conclusions that follow. It presents a broad picture of the kind of groups that can be defined as CAGs. The common factors here are the diversity of the groups, the exact nature of the groups, and the campaign methods of these groups. An 'Action group' is only one of a series of terms that have been used to describe a body formed to campaign on a particular issue. Others include 'Pressure group', 'Lobbying group', 'Interest group', and 'Residents group'. Each of these groups was not quite suitable to define the kinds of group that the study has investigated.

1.4 Introduction to the Research Process and Methodology

Several different methodologies have been employed in researching this thesis. These include desk-top literature review, analysis of documents and related literature, survey technique which comprise of questionnaire study and semi-structured interview schedule. Each of the selected methods represents different styles of enquiry.

1.4.1 The Research Strategy

The outcome of the study is a clear understanding of how policy aspirations and actions are experienced and acted upon by the public collectively and the implications of this for the pursuit of their rights in decision-making process. In obtaining accurate information about the role of CAGs and their involvement in the shoreline management process, a multiple case study approach was employed in exploring, describing, comparing and explaining the actions and experiences of people in distinctive contexts. In addition, documentary data was widely consulted as a secondary source with which to complement the data from the interviews.

Semi-structured interviews were conducted with CAG coordinators in the 12 selected case studies. Additional field research was conducted, which involved interviews with the shoreline management authorities and also the planning consultants. These individuals represent a specialised area of management and/or stakeholder activity and they possess the critical knowledge and experiences for the study. The documentary research was successful at providing crucial evidence with respect to the activities of CAGs and the management authorities. In addition, a whole variety of evidence was gathered through the key policy documents on shoreline management, reports from planning consultants, and information available through the CAGs and management authorities' internet websites.

1.4.2 Desk-Top Literature Review

Central to this research was the long contested concept of local community participation (Few *et al.*, 2007). Both CAGs and shoreline management authorities were examined to explore how to improve participation in the shoreline decision-making process. From the basis of the comprehensive review of the literature, three main areas of concern have been identified to aid improved participation. The areas were:

1. Shoreline management and who participates?
2. Involvement in decision-making and how decisions are made.
3. Trust between coastal communities and management authorities.

Guidance provided by the shoreline governing bodies was also reviewed and recommendations noted from the literature as to what criteria needed to be addressed, to achieve a series of recommendation and requirements for effective and sustainable local community participation.

1.4.3 Case Study Approach

Cases were selected from widely varying organisations within the limits of the scope discussed above. Yin (1994) recommends that, within multiple case studies, cases should be selected either because they predict similar results, or contrasting results but

for predictable reasons. Selection of the 12 prominent communities based CAGs followed this recommendation. The case studies explored in this research were often fragmented in terms of organisation, and as a result, some of the groups are rarely recognised by the shoreline management authorities.

For this study, CAGs were classified into three groups, namely: 1) Single issue; 2) Environmental justice; and 3) Radical. This was based on Kempton *et al.*, (2001) classification of environmental groups. This understanding was translated into the shoreline management context and therefore has been used to illustrate the inherent diversity of CAGs. With regard to their campaigns and participation in shoreline management process, these three groups have different characteristics, and as a result they provided an interesting comparison. This will be discussed in more details in Chapter Five.

1.4.4 Questionnaire Survey

The use of an extensive questionnaire survey was chosen for this study. According to Gillham (2000), this method was identified as the least complex way of quickly getting information from an adequate sample of respondents. The questionnaire covered four broad sections: 1) participant information; 2) the group and current participation; 3) future expectations; and 4) respondent details. A pilot survey was tested on one of the CAG coordinators, university staff and research students. The complete survey was sent by post to the group coordinators prior to each interview scheduled. The initial plan was to conduct a questionnaire survey with all members of each case study group to establish their roles in the shoreline management, and their level of participation. Because some of the groups have been disbanded at the time of study, this method was only successfully used for those currently active. The limited success of the whole-group questionnaire as a method of sampling is discussed in detail in Chapter Four of this thesis.

1.4.5 Semi- Structured Interview Schedule

Digitally-recorded semi-structured interviews were undertaken in each case, informed by a schedule of questions for different categories of respondents both within and

across cases. Interviewees were selected from individuals within the organisation who participated in some way in the activity concerned. 18 interviews were conducted with the following groups: 1) CAG co-ordinators; 2) management authorities; and 3) planning consultants. Participant information sheets detailing the purpose of the project and arrangements pertaining to ethical considerations were prepared for participants. The interview schedules aimed to establish the following details: 1) the group's/organisations specific interests within the shoreline management process; 2) local community awareness of CAG; 3) local community participation within shoreline management; and 4) future needs for shoreline management. This was the focus of the participant interview, which was the main form of data collection, and which satisfied the aims and objectives this study.

1.4.6 Data Management and Analysis

Data collected on interviewees were anonymised and securely stored electronically. After transcription of the interviews from recordings, qualitative analysis of the interviews that took place involved the following stages: 1) coding of data; 2) categorising of codes; 3) theory and story building. To enable easy indexing and retrieval of structures within the interview and questionnaire data, the computer program ATLAS.ti was used. The questionnaire data for each participant were registered in Excel according to the questions.

1.5 Limitations of the Research

Research carried out on the activities of CAGs and their role within shoreline management is limited. Studies of environmental groups are highly varied, originating from multiple academic disciplines including: sociology; psychology, environmental, and from the policy literature (see: Rawcliffe, 1998; Bullard & Johnson, 2000; Kempton *et al.*, 2001; Fielding *et al.*, 2008). Most sources tend to elaborate on issues related with the research focus, such as group-led behavioural change, or social capital and environmental behaviour, rather than investigating in-depth case study of individuals' activities of CAGs. Given the relatively limited amount of studies on this topic area, it made a research strategy for building a large data sets challenging. The

use of multiple and relatively varied case studies in this research has helped to allow a combination of in-depth data, as well as generalisability across cases. In later research as knowledge advances then it would be worthwhile to investigate how some particular aspects shown to be important in the study can be applied to the coastal zone managerial context for other countries.

1.6 Thesis Structure

This thesis is comprised of three main parts, arranged into eight Chapters. A summary of these Chapters is presented in Section 1.6.1-1.6.3. The thesis structure (Figure 1.1) indicates how each Chapter relates to the conceptual, theoretical, empirical and analytical stages of the research and the overall research objectives.

1.6.1 Part One: Context of the Research

Part One of the thesis comprises of three Chapters. Chapter One provides an introduction and background, with regard to the overall study. An outline of the research techniques as well as an overview of the structure of the thesis is also provided in this chapter. Chapter Two provides theoretical framework for the research, based on shoreline management and legislation. The third Chapter reviews academic and policy literature on local community participation in shoreline management process, and establishes a theoretical framework for further enquiry.

1.6.2 Part Two: Data Collection, Analysis and Interpretation

Part Two consists of Chapters, Four, Five, and Six. It outlines the general methods undertaken for the research. This part focuses on results and discussion of the questionnaire surveys and interviews. Chapter Four focuses on the data collection which follows a mixed-methods approach. These include postal questionnaire and semi-structured interviews. Chapter Four also illuminates positionality, and ethical considerations. Chapter Five presents findings from 78 questionnaires of members of CAGs in the case-study areas. Chapter Six provides a discussion on the activities of CAGs from semi-structured interviews with the coordinators of the groups.

1.6.3 Part Three: Conclusion and Recommendations

Part Three (Chapters Seven and Eight) brings together the recommendations and final conclusion of the research. Chapter Seven draws upon findings from semi-structured interviews with the coordinators of CAGs, shoreline management authorities and planning consultants to consider their experiences about CAGs and shoreline management processes. By evaluating the role(s) played by the participants in this studies, Chapter Seven presented the recommendations for an effective participation in the shoreline management. Finally, Chapter Eight draws together the main contributions of the thesis, and revisits the aims and objectives of the thesis.

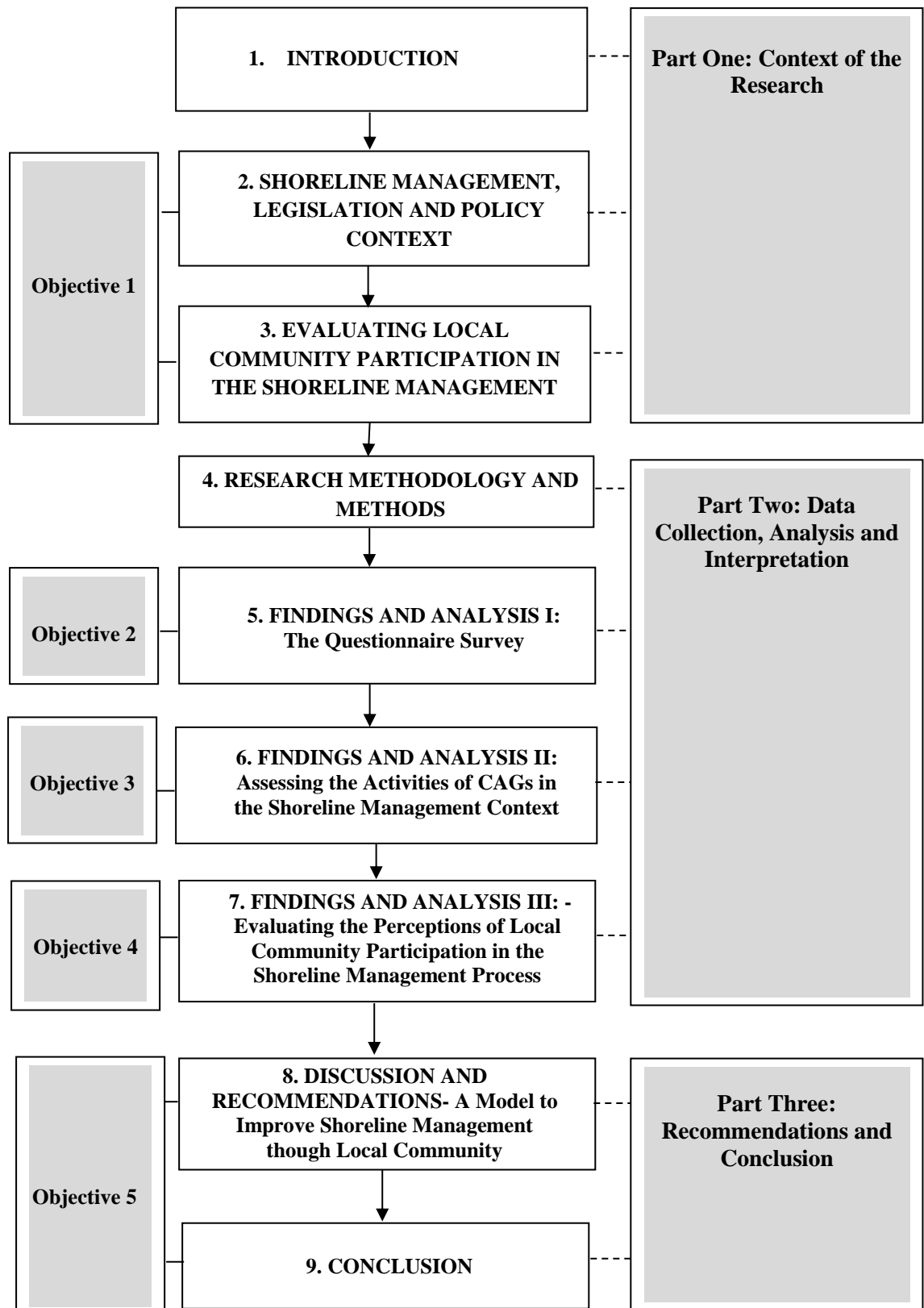


Figure 1.1- Thesis structure (Source: Author's Own)

Chapter Two: Shoreline Management, Legislation and Policy Context

2.1 Introduction

This chapter will review shoreline management in England, both historical and currently. It will discuss the specific objectives, frameworks, and issues and the range of policies relating to this core component of wider ICZM. To understand shoreline management policy, it is important to consider the legislation and policies for improving participation and associated coastal management.

The chapter starts by providing a summary of historical approaches to coastal zone management both globally and in the UK, followed by a brief discussion on the development of coastal defence in England. The following section focuses on the key elements of this thesis that are expanded upon in subsequent chapters. The section is concerned with the shoreline management process in England. It reviews the origins of Shoreline Management Plans (SMPs) and its objectives. It then considers its funding mechanisms and the responsibilities of organisations involved with the management of shoreline and the extent that wider stakeholder consultation is included. The last section concentrates on interactions between different management plans and environmental directives in relation to shoreline management.

2.2 The Theory and Practice of Integrated Coastal Zone Management (ICZM)

Historically, the inherent interaction between land and sea has given value and attracted a range of human activities to the coastal zone (Alvarez-Romero *et al.*, 2011). The inter-relationships between these two domains are the basis of coastal management (Cicin-Sain & Knecht, 1998). These activities (Figure 2.1) have made coasts attractive places to occupy. For example, World Bank statistics on population growth estimated that in 2025 about 75% of the world's population will live in coastal areas (The World Bank Data, 2014). Consequently, a growing coastal population will put an enormous pressure on coastal ecosystems (UNEP/MAP-Plan Bleu, 2010). This pressure is further compounded by impacts of climate change, rising sea levels and demands for finite resources in the coastal zone (Huntley *et al.*, 2001, Vernberg & Vernberg 2001; Norman, 2009).

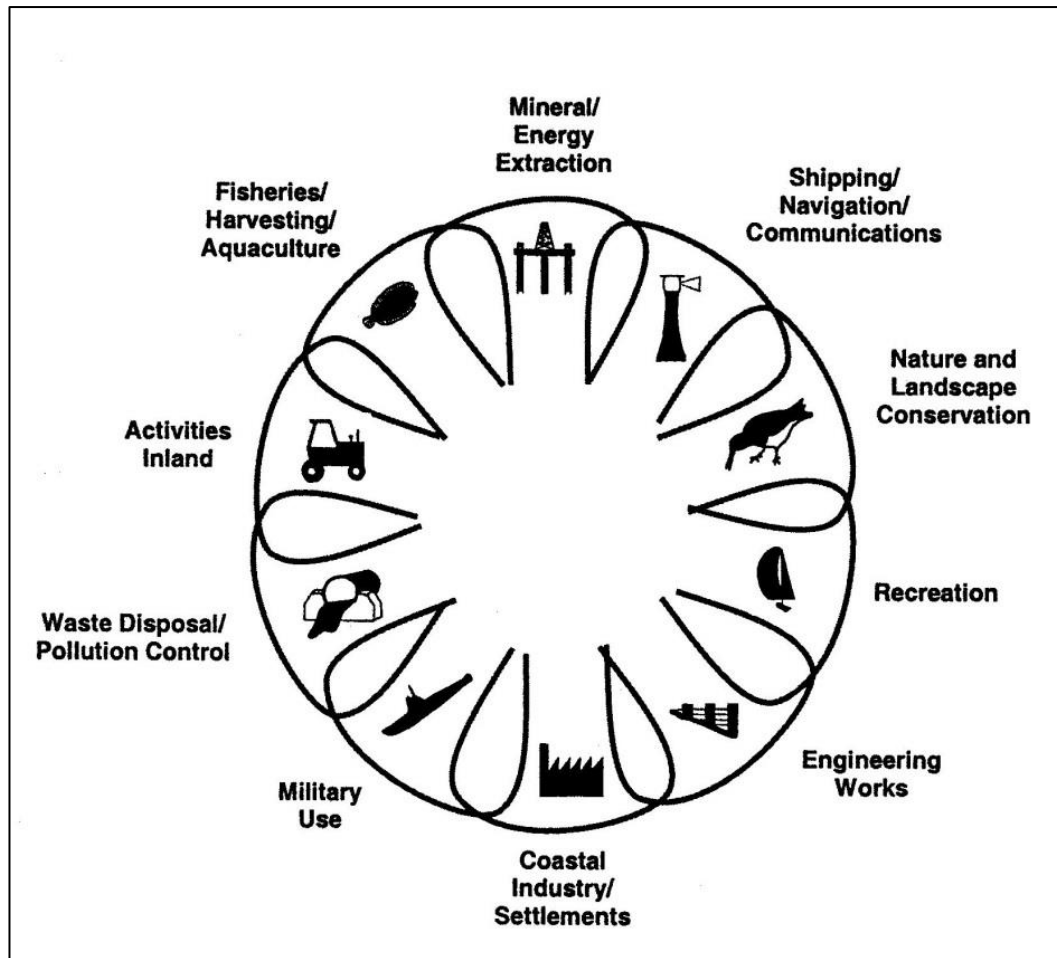


Figure 2.1- Major uses in the coastal zone (Source: Taussik, 1998).

2.2.1 The History of ICZM; Development and Practice

The concept of coastal management acknowledges the need for coastal spaces and resources to be administered, and seeks to provide a framework within which the resources of the coastal zone may be conserved, protected or exploited according to the varying needs of society (Cicin-Sain & Knecht, 1998). Following the Rio UNCED meeting in 1992 the focus of coastal zone management evolved to ICZM (Cicin-Sain *et al.*, 1995; Cicin-Sain *et al.*, 2000; European Commission, 2014). The introduction of ICZM raised the question of how to achieve integration. This concern was ultimately resolved with the Johannesburg World Summit on Sustainable Development where the focus of ICZM programmes shifted to incorporate coastal governance (Olsen 2000, Olsen & Christie 2000; Cicin-Sain & Belfiore, 2005; Christie & White, 2007). Governance was described by Juda (1999 p.89) to

incorporate “the formal and informal arrangements, institutions, and more” which determine how resources or an environment are utilised.

ICZM centres around ways to bring together disparate planning and management techniques and to form holistic and flexible coastal management systems (Cullen 1987; Kay & Alder, 1999). Significantly, the ICZM approach is required for two reasons: the effects of ocean and coastal uses, as well as activities further inland, can have on related environments, and the effects ocean and coastal users can have on one another (Cicin-Sain & Knecht 1998; Cicin-Sain *et al.*, 2000). A key goal of ICZM is to manage the coastal zone in a way that meets the objectives of sustainable development by focusing management around three areas: 1) social progress; 2) economic growth; and 3) environmental protection (Krelling *et al.*, 2008).

2.2.2 Defining ICZM

ICZM represents a cross-sectoral, inter agency, and multidisciplinary approach to the many and varied issues affecting the biological and physical and social resource base within the wider coastal and oceanic environment (Cicin-Sain & Knecht, 1998). Although Chapter 17 of Agenda 21 adopted by the United Nations Conference on Environment and Development (UNCED) in 1992 does not define integrated coastal management, it does underline the need for its implementation in order to achieve sustainable development, and the States commitment to adopt this approach under the international basis provided by the United Nations Convention on the Law of the Sea (UNCED, 1992). However, Chaniotis and Stead (2007, p. 518) defined ICZM as “a dynamic process in which a co-ordinated strategy is developed and implemented for the allocation of environmental, socio-cultural and institutional resources to achieve the conservation and sustainable multiple use of the coastal zone”.

Furthermore, Cicin-Sain *et al.* (1998) described ICZM as a process by which rational decisions were made concerning the conservation and sustainable use of coastal and ocean resources and space at the general level. The process was primarily designed to overcome the fragmentation inherent in single-sector management approaches (fishing operations, oil and gas development, etc.), in the splits in jurisdiction among different levels of government, and in the land–water interface. The researchers emphasized

that ICZM specifically seeks to address the different coastal issues through a broad and holistic perspective (Stojanovic *et al.*, 2004; McKenna *et al.*, 2008), that accomplishes integration on horizontal and vertical levels, integrates sea with land, and science with policy (Cicin-Sain & Knecht, 1998).

Whatever the definition, the essential purpose of ICZM remains the same - to provide a framework for coordination of a wide array of interests, and create a viable mechanism for development and conservation, that is, sustainable use of renewable resources within the defined coastal area (Kay & Alder, 1998).

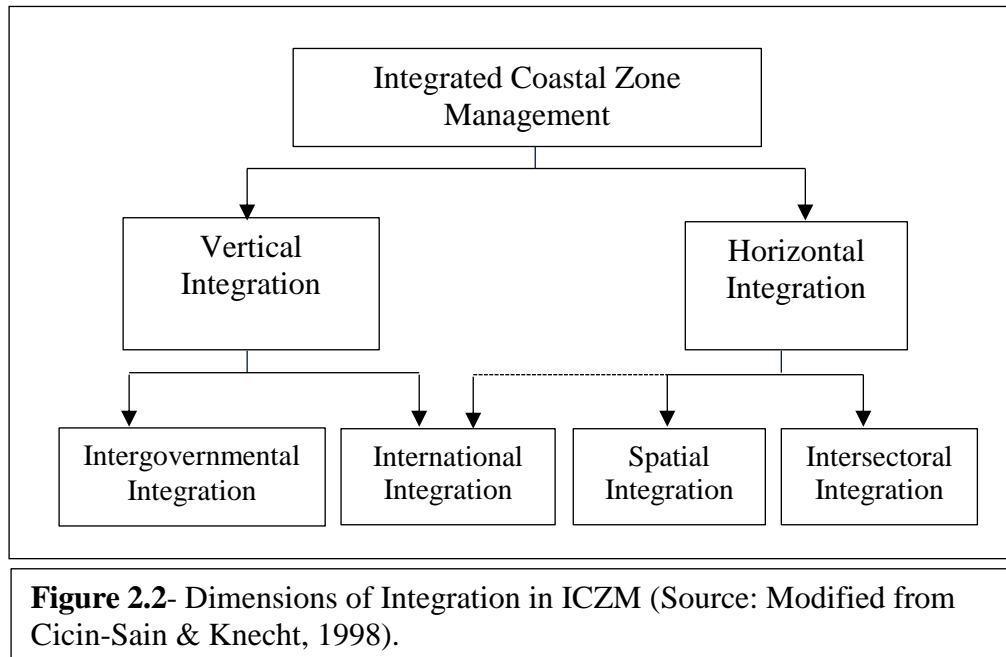
2.2.3 Defining “Integration” in the Context of ICZM

The design of an ICZM programme is defined by the physical, socio-economic, cultural and political context in which it is to operate (Cicin-Sain & Knecht, 1998, Cheong, 2008). ICZM can be adapted to coastal zone management plans at different levels of implementation (including national, state and regional levels). Integration provides the tools for the holistic approach inherent of ICZM. Cicin-Sain and Knecht (1993) identify five areas in which ICZM can employ integration. These are: 1) integration among sectors; 2) integration between the land and the water sides of the coastal zone; 3) integration among levels of government; 4) integration between nations; and 5) integration among disciplines. Below is the description of each area:

- ***Integration among sectors:*** There are many sectors that operate within the coastal environment. Inter-sectoral integration involves integration among different coastal and marine sectors (e.g., Coastal tourism, port development, oil and gas development, fisheries and marine mammal protection) moreover, integration between coastal and marine sectors and land-based sectors that affect the coastal and ocean environment, such as agriculture, forestry, and mining. A sense of cooperation between these sectors is the main requirement for sector integration in ICZM. Inter-sectoral integration also addresses conflicts among government agencies in different sectors.

- ***Integration between the land and the water sides of the coastal zone:*** This is also referred to as spatial integration. The coastal environment is a dynamic relationship between many processes all of which are interdependent. There is a strong connectivity between land-based activities and activities in the ocean involving water quality, fish productivity, sediments movement and the like; similarly, different systems of property ownership and government administration predominate on the land and ocean sides of the coastal zone, often complicating the pursuit of consistent goals and policies.
- ***Integration among levels of government:*** This can also be called intergovernmental integration (National, regional, local). Between levels of governance, consistency and cooperation is needed throughout planning and policy making. National, regional, local plays different roles, address different public needs, and have different perspectives. These differences often lead to difficulty in achieving coordinated policy development and implementation. ICZM seems to be effective where initiatives have a common purpose at all levels.
- ***Integration between nations:*** International integration is required when there are needs for conflict resolution among nations. The national government plays the leading role in finding solution to international disputes such as establishment of maritime boundaries, overfishing activities, trans-boundary pollution, passage of ships, and other issues. Such international issues could be avoided or mitigated if goals and beliefs are collective among the nations. This sees ICZM as an important tool on a global scale.
- ***Integration among disciplines:*** Science-management integration is essential in coastal zone management. Throughout ICZM, it is critical that knowledge should be accepted from all disciplines (e.g., the natural sciences, the social sciences, and engineering). For effective communication and mutual understanding among disciplines, all means of scientific, political, as well as local expertise need to be accounted for.

The interaction between the characteristics and dimensions of integration in ICZM can be illustrated as in Figure 2.2.



2.2.4 The Principles of ICZM

The principles for effective ICZM have been proposed by Parker (2006; 2007); McKenna and Cooper (2007) and McKenna *et al.*, (2009) as:

- A broad holistic perspective
- A long perspective
- Adaptive management during a gradual process
- Local specificity
- Working with natural processes
- Participatory planning
- Support and involvement of all relevant administrative bodies
- Use of a combination of instruments.

Ballinger *et al.* (2010) assessed progress of the eight principles in seven study areas: four in England, two in Ireland, and one in Belgium. They found that the most relevant principle was local specificity, better results were found in supporting stakeholder

involvement but typically the least progress was made in planning for a participatory approach. This did vary across the study areas, but in four of the seven study areas the EU ICZM principle of a participatory approach had not been implemented. The most participation appeared to be for issue identification. Issue identification and potential barriers to participation are also sought in this research. The case studies particularly focus on participatory practices and their improvement.

2.2.5 Integration: The Role of CAGs

CAGs can be considered as a reaction to poor or partial integration in shoreline management. Groups typically develop either where there is limited local participation in decision making and/or where local people feel that their views are not considered sufficiently. Group attempt to influence decision makers using the power of collective voice and collective action (Jones, 2006). CAGs contribute to the process of community participation by committing their time and energy for the benefit of their communities and the protection of interests. Therefore, CAGs are integral to achieving the aims which the process of local community participation in shoreline management is seeking to realise. This view, however, assumes that CAGs are representative of the communities in which they are embedded, however, this is uncertain and will be tested further within this research.

2.2.6 The implementation of ICZM in the UK

Integrated practices in the UK have not been easy to achieve due to the multitude of stakeholders concerned with coastal planning that tends to inhibit or delay decision-making (McKenna, & Cooper, 2006; Defra, 2010b). For example, Turner (2000) identified upwards of ten different land and water users of the coast, all with different and potentially conflicting requirements and plans for its use. Many of the land uses cited such as agriculture, urban, commercial and fisheries would be affected by coastal flooding and therefore need to be made aware and included in flood planning. The diversity of uses and the problems caused by overlapping and/or conflicting demands on the coastline and coastal zone prompted an holistic approach to management (McKenna *et al.*, 2009).

Table 2.1 highlights some key developments in ICZM in England. Increasingly the EU has become more influential in ICZM within member states and has been an impetus for more effective ICZM (Juda, 2007). However, there are concerns about how ICZM can be implemented due to its legal status as an EU Recommendation, which is a weak, non-binding, instrument that can be ignored, interpreted, or partially implemented (McKenna & Cooper, 2007). Early suggestions for measuring ICZM were thought possible and desirable at an European or national level. However, it is at the local level where challenges of integration of people into plans lie (Pickaver *et al.*, 2004).

Table 2.1- History on the development in Coastal Zone Management (CZM)¹, 1993 to 1996 and Integrated Coastal Zone Management (ICZM), 1999 to 2006 (Source: modified from Ballinger, 1999; Atkins 2004; Defra, 2006a; Defra, 2010b).

Year	Events
1993	Managing the Coast (Consultation paper), Department of the Environment (DoE) and the Welsh Office.
1994	Coastal Forum (for England) launched.
1995	First Shoreline Management Plan initiated by the Ministry of Agriculture, Fisheries and Food (MAFF).
1996	Byelaws Discussion Paper-Towards Best Practice Guidelines on CZM
1999	EU Demonstration Project for ICZM (King, 1999).
2002	Recommendation adopted by EU Member States on implementing ICZM
2004	Defra report on ICZM: a stocktake (Atkins, 2004).
2004	New strategy that led to SMPs launched
2006	Defra Consultation: Promoting an integrated approach to management of the coastal zone (ICZM in England) (Defra, 2006a).
2010	UK report to the European Commission on ICZM progress.

Research carried out by McKenna and Cooper (2006) in Northern Ireland found that ICZM projects were short term and had no continuity due to high turnover of young

¹ The gap between 1996 and 1999 is due to a change from CZM to ICZM for proposals to integrate coastal zone management and an EU Recommendation.

project officers on short term contracts. They also commented that ICZM principles were carried out at the lowest possible level, with short term projects. Its voluntary and non-statutory nature was, and is, a weakness (McKenna & Cooper, 2006). Other research acknowledges that claims for the effectiveness of ICZM is contested but also proposes that at the regional and local levels ICZM can provide a structure for a more inclusive way of planning and to 'coalesce interest groups around issues' (Stojanovic & Ballinger, 2009, p. 61).

The main ways in which Defra has been implementing ICZM for flood and coastal erosion risk management in England, is through the Marine and Coastal Act 2009 and the Marine Management Organisation (MMO), The Flood and Water Management Act of 2010 (discussed in Section 2.5.3), Coastal Partnerships (see Section 2.4.2.4) and more directly the discontinued Pathfinder Programme, to discover good practice in ICZM. One part of the ICZM process relevant to this research encourages increased public awareness, education and participation to encourage a sense of greater coastal stewardship within communities (Defra, 2006a). This could improve understanding of how local communities can adapt to changes in the coastline (Barrett, 2011). Partnership working (see Section 2.4.2) also seems to be at the centre of the Government's National Flood and Coastal Erosion Management Strategy for England (Hardiman, 2011) and a way to empower local communities and stakeholders in more longer-term partnerships (Shipman & Stojanovic, 2007).

2.3 Coastal Defence Strategies and Legislation

Management strategies for coastal areas are often thought to have evolved as a response to serious flood events (Johnson *et al.*, 2007). This section presents the history of the changing responsibilities for coastal defence that highlights changes in the contextual effects on national policy. It further highlights changing circumstances from events and decisions that have impacted on national policy and planning for coastal defence.

2.3.1 Historical Development of Coastal Defence in England

Coastal management in the form of coastal defences and drainage systems has been in existence since Roman administration, this is due to hazardous natural processes historically overlapping into areas occupied or used by society (Fletcher & Potts, 2008). Historic England is involved in several activities along the coastline such as building defences at ports and harbours, construction of hard engineering to protect coastal resort towns and reclamation of lands (Laudicina, 2015). It was not until after World War II that scientific studies of the impacts of development in the coastal zone became more numerous and substantial (Ballinger, 1999). The defence of the coast from hazards such as flooding or erosion was undertaken in response to local situations to meet particular social needs (Townend, 1992). Defences were constructed in order to hold a fixed line against the sea, but they were not traditionally implemented in the most effective manner. Little consideration or adaptability for coastal processes was also taken (Cooper *et al.*, 2006). There was weak horizontal and vertical integration of management that lacked co-ordination (Ballinger *et al.*, 2000), resulting in a disjointed, ad hoc, site specific, non-strategic management approach (Leafe, *et al.*, 1998; Potts, 1999; Baily *et al.*, 2002; Cooper, 2003; Smith & Potts, 2005; Cooper & Pontee, 2006).

2.3.2 The Shifting Policy Context for Flood Defence and Coastal Erosion

Research by Shennan (1993) found that significant portions of the coastline of England (Figure 2.3) are at serious risk from flooding due to settlement of low lying coastal lands. Vega-Leinert and Nicholls (2008) emphasise this point by stating that the exposure will worsen with the onset of sea level rise and other potential climate changes.

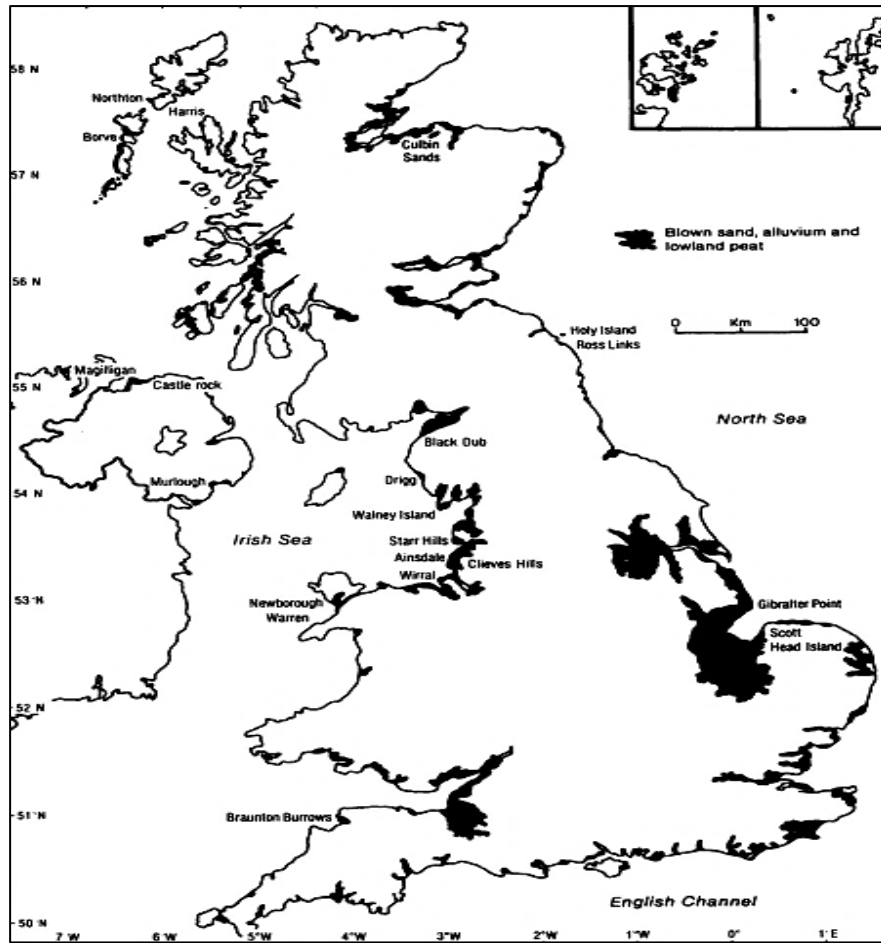


Figure 2.3- Major coastal lowlands of the UK (Source: Shennan, 1993).

From the 1930s to early 1950s, sea wall building, reclaiming land for farmland, draining salt marsh and keeping the sea out was the preferred strategy (Pettit, 1999). The 1953 floods on the east coast of England showed the vulnerability of the coastal defences and the subsequent policy was again to strengthen the defences and build up the sea and river walls to ‘hold the line’, that is to build defences to keep the sea out (Crichton, 2004). During the 1960s there were advances in the understanding of coastal processes that meant, where possible, soft defences such as beach replenishment were used more frequently (Pye & Blott, 2006). These defences have become increasingly favoured over or used in combination with the expansion of the sea wall, groyne and other hard defences (French, 2006). Such a decisive response of the aftermath of the 1953 floods has increased the awareness of the need for a new approach to management (Figure 2.4) and revisions of policy (Tausnik, 2000b; Sayers *et al.*, 2012).

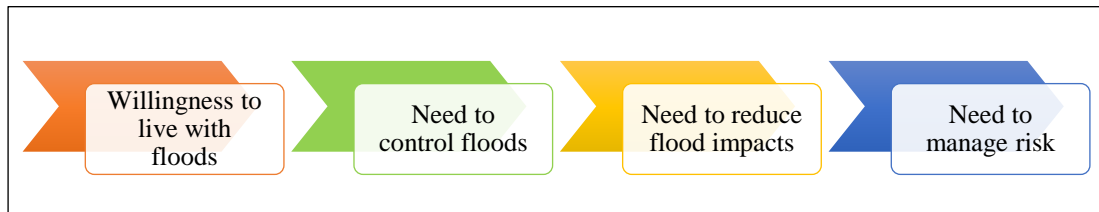


Figure 2.4- The evolution development of flood risk management. (Source: Modified from Sayers, *et al.*, 2012).

2.3.3 National Flood Policy and Coastal Defence From 1993-2003

A significant turning point for coastal defence occurred in 1993. Government policy brought together coastal managers and decision makers to work together to produce SMPs (MAFF/Welsh Office, 1993) (See Section 2.4.1). It was also the start of many Coastal Partnerships that were to aid the integration of coastal management (Fletcher, 2003; Heeps & Fletcher, 2004; O’Riordan *et al.*, 2006; Stojanovic & Baker, 2006) (see Section 2.4.2.4).

In 1993, the government policy on flooding emphasised the need for: 1) adequate and cost effective flood warning; 2) technically, environmentally and economically sustainable flood defences; and 3) not permitting inappropriate development in flood risk areas (Defra, 2006). These objectives left the responsibility for flood defence with the newly formed Environment Agency in 1996, along with the local authorities and internal drainage boards (see Section 2.4.2). The main changes in responsibility in the management of shoreline occurred in 2001 due to Government department restructuring, specifically from the Department of the Environment (DoE) and Ministry of Agriculture Fisheries and Food (MAFF) to a combined Department of the Environment, Food and Rural Affairs (Defra) (Defra, 2001).

2.3.4 Flood and Coastal Erosion Risk Management from 2004 to the Present

The year 2004 was a significant time for change in the approach for management of flood and coastal erosion, it heralded new developments in policy from Defra, notably the Making Space for Water policy and the Foresight Future Flooding Strategy (Defra, 2011). Since the publication of the Foresight Future Flooding Study in 2004, England

has witnessed a number of widespread and severe flood events, such as the Cumbrian floods in 2009, the winter flood from mid-December, 2013 to early January, 2014 and most recently another Cumbrian flood in December 2015². The 2013 events were considered to be the stormiest period of weather experienced in almost 250 years (Met Office, 2014). Following the storms 7,000 properties were flooded and residents were evacuated from their homes (Met Office, 2014). Whilst the UK government argues that coastal erosion and flooding are not new phenomena (Evans *et al.*, 2004; Defra/EA, 2011), it acknowledges that flood and coastal erosion risk is expected to increase due to climate change and development in areas at risk (Defra/EA, 2011).

Three key phases have been identified in the Government flood management policies: starting with ‘land drainage’ in 1900s, moving through ‘flood defence’ in 19th and 20th century currently to ‘flood risk management’ (Tunstall *et al.*, 2004; Johnson & Priest, 2008). Similarly this type of move to risk management can be witnessed in the United Nations International Strategy for Disaster Reduction (ISDR) in which emphasis was shifted from Disaster Response and Relief to Disaster Risk Reduction (Briceño, 2004). Management policies involve an increasing emphasis on coastal communities to undertake more responsibilities in taking suitable action themselves against coastal erosion where appropriate (Defra, 2004; Johnson & Priest, 2008). The key differences between the previous approaches to shoreline management and the current policies are summarised in Table 2.2.

² At the time of writing this thesis, it was not yet clear the estimate of properties affected by the Cumbrian flood in December, 2015.

Table 2.2- Differences between the previous and current system of shoreline management (Source: Modified from the Environment Agency, 2010).

The Previous System	The Current Approach
Involved more than 90 different management authorities	Holistic coordinated approach to risk enables long-term decision making
Lack of consistency and sustainability due to fragmentation in management	A clear link between flood and coastal erosion risk management Policy and operational activities
Funding for coastal erosion and flood defences took priority over other aspects of risk management	Management approach major aim is to reduce risk
Defra approve the Shoreline Management Plans	Clear roles and accountabilities and joint ownership of plans amongst management authorities
Environment Agency's Regional Flood Defence Committees only cover flood defence and engage in limited consultation.	Water Framework Directives encourages effective engagement with stakeholders
Various technical knowledge within Defra, Local Authorities and coastal groups	Best use of technical expertise and engineering resources

National flood and coastal defence strategies between 2003 and 2015 are listed in Table 2.3. The table summarises the development from recommendations to present legislation and strategies that has implications for shoreline management.

Table 2.3- Development of Flood and Coastal Erosion Risk Management strategies and EU legislation 2003-2015(Source: Adapted from: Johnson et al., 2003; Defra, 2004; 2006a & b; Defra/EA, 2011).

Year	Legislation and Strategies
2003	<ul style="list-style-type: none"> • <i>Making Space for Water (Introduction)</i>- Proposal by Defra for plans for flood and coastal erosion risk management
2004	<ul style="list-style-type: none"> • <i>Making Space for Water Consultation</i>- Flood and Coastal Erosion Management Consultation Document (Defra)
2005	<ul style="list-style-type: none"> • <i>Proposals for a Marine Bill</i>- UK Government
2006	<ul style="list-style-type: none"> • <i>Making Space for Water</i>- Environment Agency Strategic Overview • <i>ICZM</i>- Defra Consultation: Promoting an integrated approach to management of the coastal zone (ICZM) in England.
2007	<ul style="list-style-type: none"> • <i>EU Floods Directive (2007/60/EC) for identification mapping and planning for flood risk areas</i>. Leading to the UK Flood and Water Management Act and Flood Risk mapping by 2013.
2009	<ul style="list-style-type: none"> • <i>Marine and Coastal Access Act leading from the Marine Bill</i>- Established the Marine Management Organisation (MMO).
2010	<ul style="list-style-type: none"> • <i>Adapting to Coastal Change: Developing a Policy Framework Report</i>- Reviews innovative approaches for risk reduction due to coastal erosion (not compensation). • <i>Flood and Water Management Act</i>- Requires the EA to prepare a national strategy for risk of flooding and coastal erosion.
2013	<ul style="list-style-type: none"> • Regulations from Flood and Water Management Act for <i>Hazard and Risk Maps</i> for the end 2013. Produced by lead local authorities.
2015	<ul style="list-style-type: none"> • <i>Water Framework Directive (Implementation)</i> • <i>Flood Risk Management Plans</i> produced by EA in England and Natural Resources Wales.

2.4 An Overview of Shoreline Management Plans (SMPs)

Section 2.4 outlines the evolution of Shoreline Management Plans (SMPs) in England; it will cover their aims and objectives; funding mechanisms; benefits and their challenges. The section details approaches relating to the delivery of short, medium or long term sustainable shoreline management in England.

2.4.1 Evolution of Shoreline Management Plans (SMPs)

As mentioned in Section 2.3, one of the most important developments in coastal defence has been the production of Shoreline Management Plans (SMPs). (Table 2.4) A SMP is defined as a large-scale assessment of the risks associated with coastal processes (which) helps to reduce these risks to people and the developed, historic and natural environment (Ballinger *et al.*, 2002; Atkinson & Fisher, 2004). It aims to manage risks by using a range of methods which reflect both national and local priorities to:

- Reduce the threat of flooding and erosion to people and their property; and
- Benefit the environment, society and the economy as far as possible, in line with the Government's sustainable development principles (Defra, 2006a).

Table 2.4- Timeline of SMP development (Source: Modified from MAFF/WO, 1993; MAFF, 2000, Defra, 2004; 2006a & b; Defra/EA, 2011).

Year	Key Events
1993	MAFF and the National Assembly for Wales (NAW) sets out the Strategy for Flood and Coastal Defence in England and Wales
1994	Shoreline Management Plans Guidance for Coastal Defence Authorities was launched.
1995	First generation SMPs was initiated
1998	Agriculture Select Committee published its report on flood and coastal defence.
1998	Environment Agency (EA) was established
2000	The completion of first round of SMPs
2001	Updated guidance on SMPs was published following a review of the First generation SMPs
2002	Initiation of Second generation SMPs
2002-2004	Three very different areas of coast were piloted to assist in the development of SMP2 Guidance Note.
2006	Using the findings from the pilot plans, updated Guidance to inform the second generation of SMPs was issued by Defra
2007	Quality Review Group was set up to measure the consistency of SMPs
2010	The 18 SMPs for England and two SMPs cross border plans with Wales were completed
2011	Completion of the two Welsh SMPs
2012	Outcome Measure for Shoreline Management Plans in England was established

2.4.1.1 Objectives of Shoreline Management Plans (SMPs)

The objectives of developing a Shoreline Management Plan (SMP) included: 1) improving understanding of coastal processes; 2) predicting likely future coastal evolution; 3) identifying assets likely to be affected by coastal change; 4) identifying the need for regional or site specific research and investigation; and 5) facilitating consultation between those with an interest in the shoreline (Potts, 1999). It was stated that the completed plans should assess a range of alternatives and agree a preferred coastal defence option. It should outline future monitoring, research and data management; inform coastal zone planning; identify opportunities to maintain and enhance the natural coastal environment; and establish continued consultation (O’Riordan & Ward, 1997; Defra, 2006b).

The policy underlying SMPs was first introduced in the Ministry of Agriculture Fisheries and Food (MAFF) Strategy for Flood and Coastal Defence in England and Wales in (1993). This recommended the setting up of stakeholder groups to address the issues of flooding and coastal defence which reflect common interests within identified coastal cells comprising local authorities, National River Authorities and other bodies with coastal responsibilities (MAFF/Welsh Office, 1993). Amongst other things, the strategy sought to encourage and provide guidance for the development of River Catchment Plans and SMPs.

The first formal Guidance Note on the preparation of SMPs was published in 1995 with the aim to encourage the production of such plans around the coastline of England and Wales (MAFF, 1995; Defra, 2006a; EA, 2010). The coastline was divided in cells and sub cells as shown in Figure 2.5.

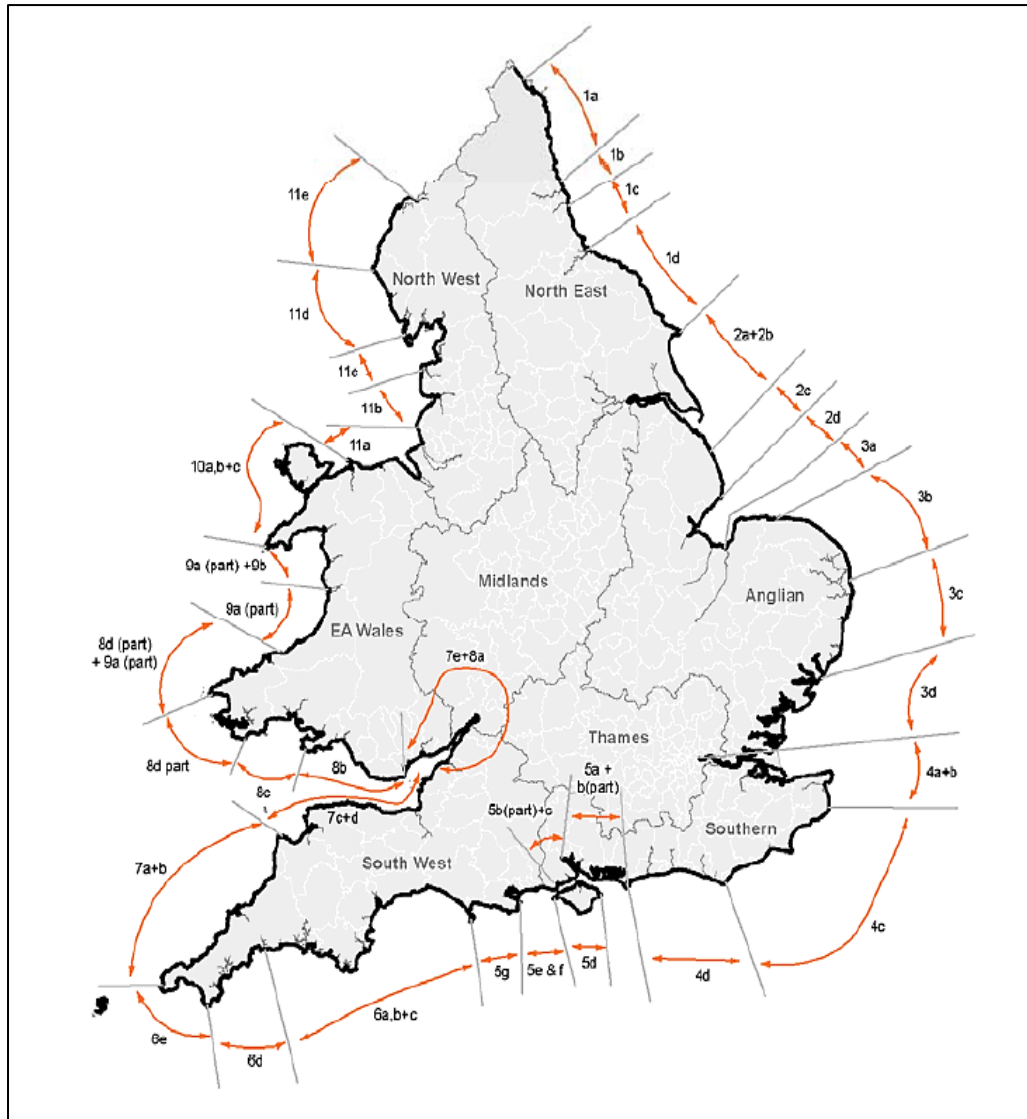


Figure 2.5- Sediment cells for Shoreline Management Plans (Source: Environment Agency, 2010).

Littoral cells were identified by MAFF, using recommendations by HR Wallingford (Motyka, & Brampton, 1993), and were defined by the sediment transport process in each unit (Hooke & Bray, 1995; Cooper & Pontee, 2006). Each sediment cell is relatively self-contained as far as the movement of sand or shingle is concerned, so the actions taking place in one sediment cell would not be expected to have a significant effect on other cells. These cells were then divided into sub cells to provide appropriate sized boundaries within which SMPs could be prepared. There were 41 separate plans in SMP1 (Potts, 1999), revised to 22 in SMP2 in 2001 where economies of scales were made (Cooper *et al.*, 2002). The cells and sub cells for the original SMP1 are shown in Figure 2.6.

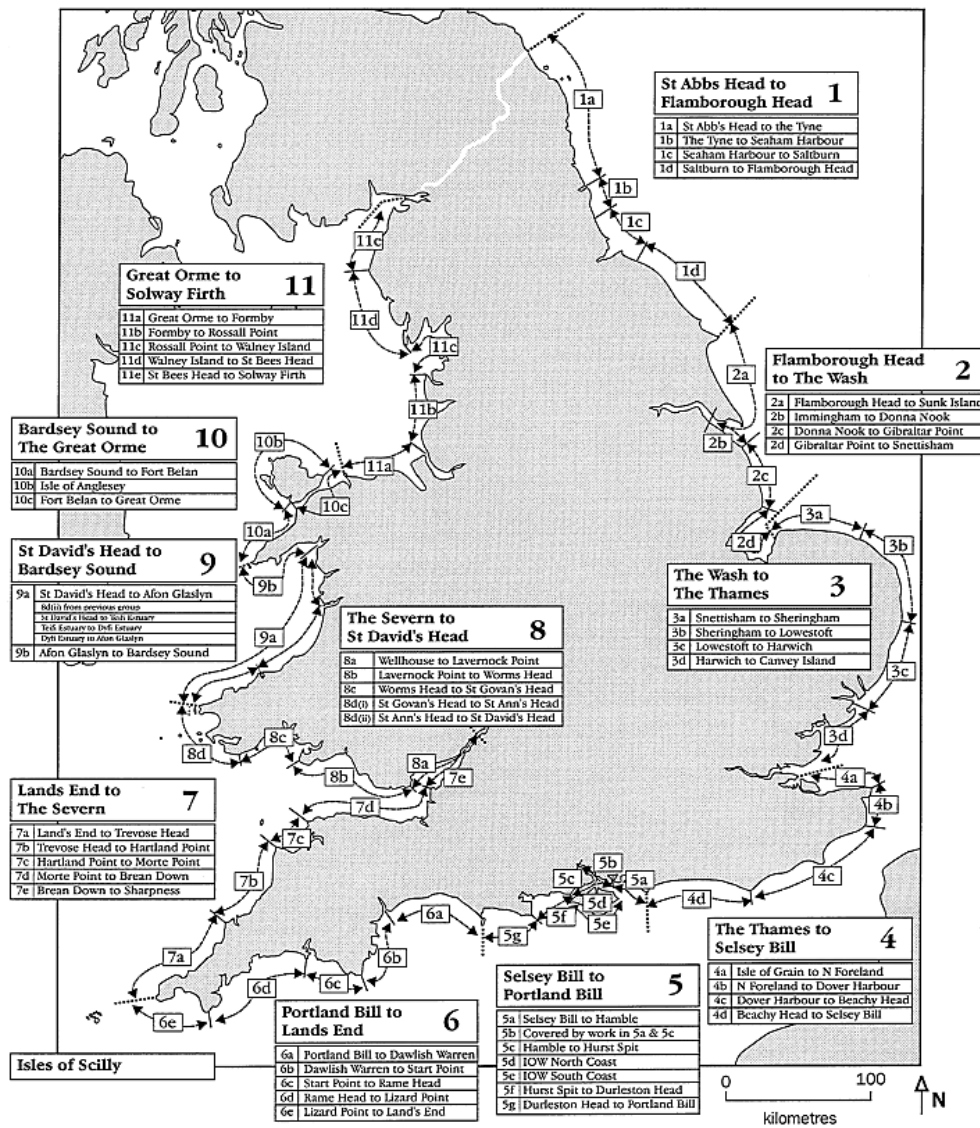


Figure 2.6- Sub-cells and Shoreline Management Plans for England and Wales for SMP1 (Source: Potts, 1999).

Whilst SMPs are expected to inform statutory development plans and provide opportunities for continued consultation and participation of interested parties (Potts, 1999), evaluation of a pilot of the second SMP (Sub Cell 3a) on the North Norfolk coast, led to the realisation that many interested parties are not being consulted (NNDC, 2004) and that some of the policies were considered inappropriate by some stakeholders. The need for more efficient and focussed consultation was recognised, as was the importance of informing and supporting the planning system.

Following a review of the strengths and weaknesses of the first generation SMPs (MAFF, 2000), further guidance was published in 2001. This guidance listed issues

that should direct the revision of SMPs, including a focus on the assessment and management of flooding and coastal erosion over a consistent time scale, and the recognition that the SMP policy may become infeasible or unacceptable at some time during the plan’s lifetime. At that point there should be development of clear plans for policy alterations. It stressed the need for an awareness of the implications of coastal evolution, climate change and sea-level rise over a longer time scale and also awareness of the uncertainties associated with predicting shoreline management requirements in the future. The guidance also recommended the inclusion of estuaries within the SMP process; identification of the consequences of adopting particular policies, including their effects on European sites and identification of anticipated funding sources. (Defra, 2001). Figure 2.7 illustrates the map of SMP2.

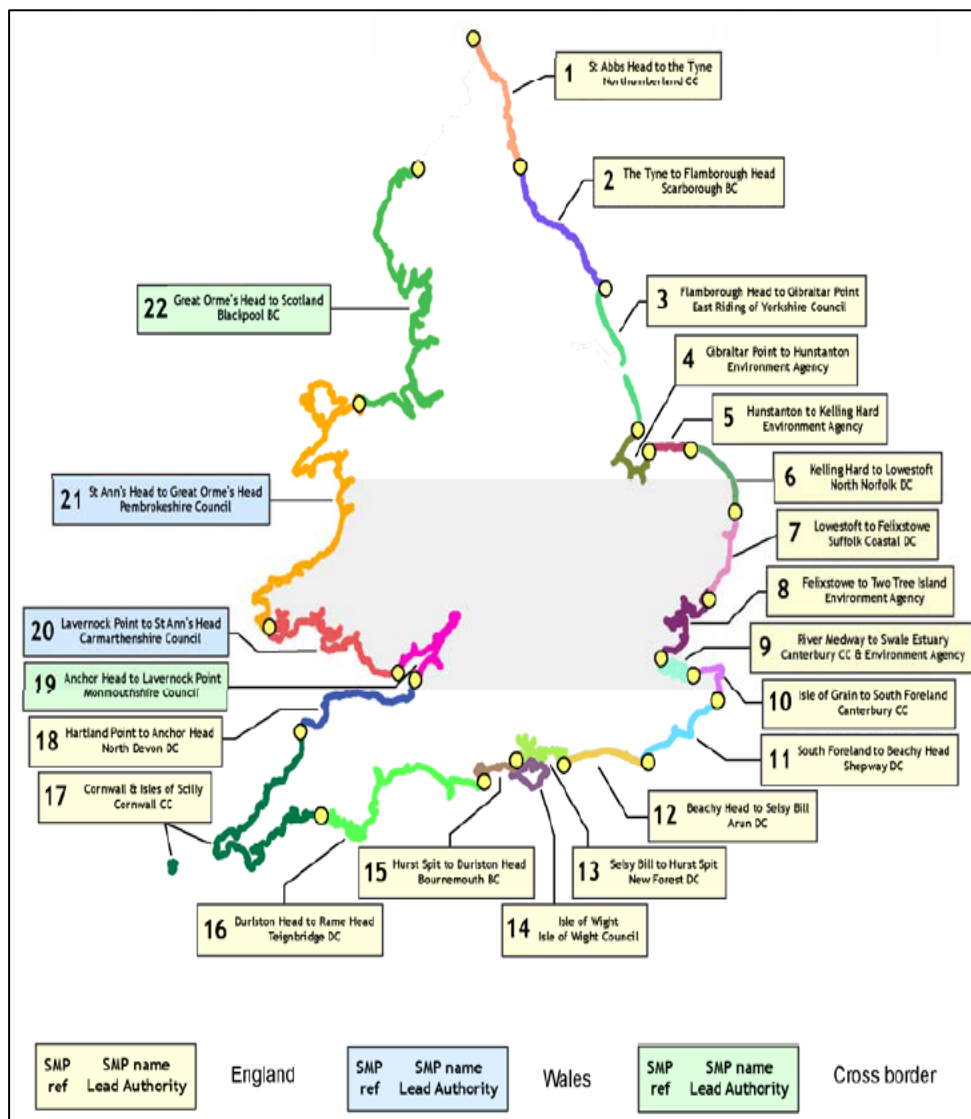


Figure 2.7- Second generation Shoreline Management Plans Map (Source: Defra/EA, 2011).

2.4.1.2 Coastal Defence Options

The original SMP guidance identified four generic Coastal Defence Options (CDOs). Each CDO was initially reviewed on the basis of its compatibility with natural processes, the implications on human environment, natural environmental acceptability, technical soundness and sustainability, economic viability and its wider impacts (Cooper et al, 2001, Defra, 2001; 2006).

These CDOs were: do nothing; hold the existing defence line; advance the existing defence line; and retreat the existing defence line. It stated that the preferred option should be sustainable, and compatible with the preferred options identified for adjacent management units and the processes at work within the sediment cell (Defra, 2006), and should be adopted only after consultation. The guidance emphasised that SMPs should be working documents, subject to monitoring and review. Table 2.5 presents the explanation of each policy option (Defra, 2001).

Table 2.5- Shoreline Management Plans policy options (Source: Modified from Defra, 2001b).

Policy option	Description	Non-technical description
Hold the line	On-going maintenance of the flood defences in their existing locations. The standard of protection from flooding should be sustained or increased by raising or replacing the existing defences.	Keeping the shoreline in the same place.
Advance the line	Placing new flood defences in front of existing ones typically involving reclamation of land.	Creating more land by moving coastal defences into the sea.
Managed realignment	Placing new flood defences landward (behind) the existing ones. Often assets immediately behind the defences restrict the opportunity for landward realignment. In some cases, this process may also provide the potential opportunity to create habitat in front of the new defences.	Letting the shoreline move forward or backwards in a controlled way.
No active intervention	Allowing the existing flood defences to fall into a state of disrepair, with no further maintenance. Eventually the defences would fail and the land behind them would be no longer protected from erosion and/or flooding.	Letting nature take its course on the shoreline.

2.4.2 Operational Responsibilities for Shoreline Management

Coastal defence policies are implemented by the government with the assistance of Management Authorities, which are generally the District Council, Unitary Authority or the Environment Agency (EA). Changes in responsibility would have implications for how stakeholders and citizens can be included. However, there has been some overlap of responsibilities between the Environment Agency, Local Authorities, and other non-statutory organisations such as the Natural England.

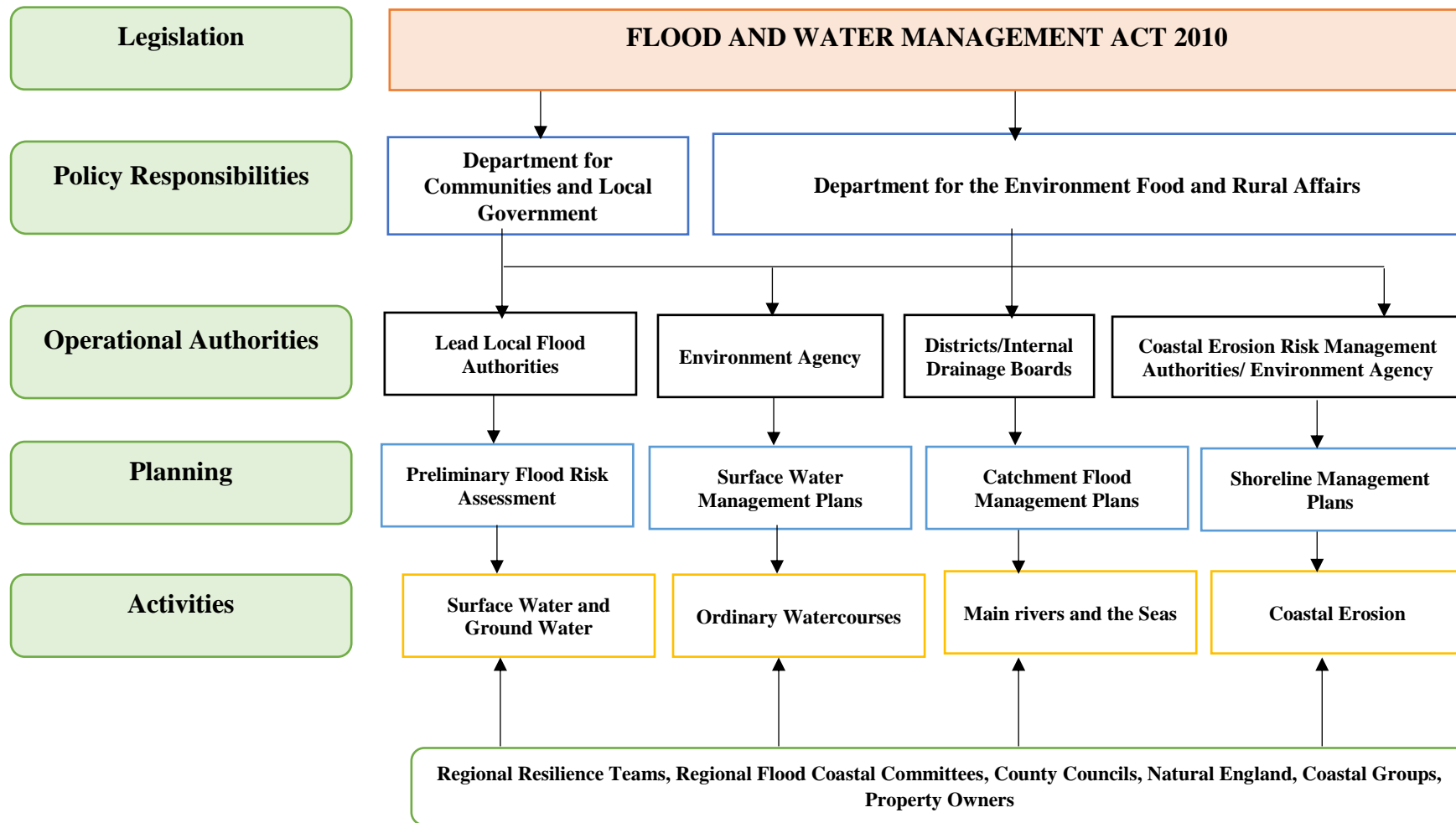


Figure 2.8- Organisational responsibilities for flood and coastal erosion risk management in England (Source: Adapted from EA, 2010; Defra/EA, 2011).

2.4.2.1 Environment Agency

The responsibility for shoreline management has been in the past, and still is, a complex issue (Tompkins *et al.*, 2008). The situation for flood and coastal erosion risk management, described in Figure 2.8, means the EA (directed by Defra) remain the lead organisation with strategic overview for coastal risk management. In carrying out its flood and coastal erosion risk management, the EA has three roles: 1) supervisory; 2) regulatory and; 3) operational (Defra/EA, 2011). The general supervisory role relates to an overview of all aspects of flood and erosion risk management.

The regulatory role is related to control of development in areas at risk from flooding while the operational role involves a permissive power to undertake flood defence works (Thomas, 2014). The EA has to make decisions about flood management along coastal rivers and low lying areas of coastline. Legislation to include local communities in shoreline management decisions is also undergoing increased emphasis arising from the work of the Department of Communities and Local Government (DCLG).

2.4.2.2 Natural England

Natural England was formed from an integration of three agencies, amalgamated in 2007. The agencies were: English Nature, whose main remit was that of the protection of wildlife habitats; the Countryside Agency, whose prime consideration was with recreational land use; and the Rural Development Agency concerned mostly with economic and farming issues. The main aims of Natural England are working for people, places and nature and to enhance biodiversity, landscapes and wildlife in rural, urban, coastal and marine areas (Natural England, 2015). Protecting and conserving the value of the landscape for Natural England means that among its responsibilities, inherited from English Nature, are ensuring the status of Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and to designate and protect Sites of Special Scientific Interest (SSSIs). Natural England has therefore considerable powers to protect wildlife habitats in the coastal zone. Natural England also undertakes to protect landscape, and is therefore involved in planning that affects cliffs and land susceptible to erosion along the coastline.

2.4.2.3 Coastal Groups

Coastal Groups (CG) are non-statutory groups that were developed alongside SMPs in order to inform and assist them in the resolution of coastal issues or concerns both at a local and regional level (Carter *et al*, 2000). The first CG to be founded in England was the Anglian Coastal Authorities Group (ACAG) in 1987 with the common objective of providing the best approach to managing the risk from sea flooding and coastal erosion (MAFF, 2000; EA, 2010). The remainder of the groups were formed by January, 1992 (Oakes, 1992). They consist of coastal managers from Maritime Local Authorities, Ports Authorities and the Environment Agency, as well as key stakeholders (Defra, 2010) who would have some influence on the SMP process.

In 2008, as part of the Environment Agency's strategic overview, Coastal Groups in England were restructured and became fewer in number to provide a more strategic, integrated and encompassing approach to coastal defence (Defra, 2010). The reformation of the groups was made as a result of occasional overlapping of their previous boundaries which were based on a mix of political and administrative boundaries and coastal process sub-cells (Defra, 2010). In 1999 there were seventeen Coastal Defence Groups listed (Potts, 1999). The present number of the groups is now reduced to seven. Figure 2.9 shows the current CGs for England and their geographical locations.

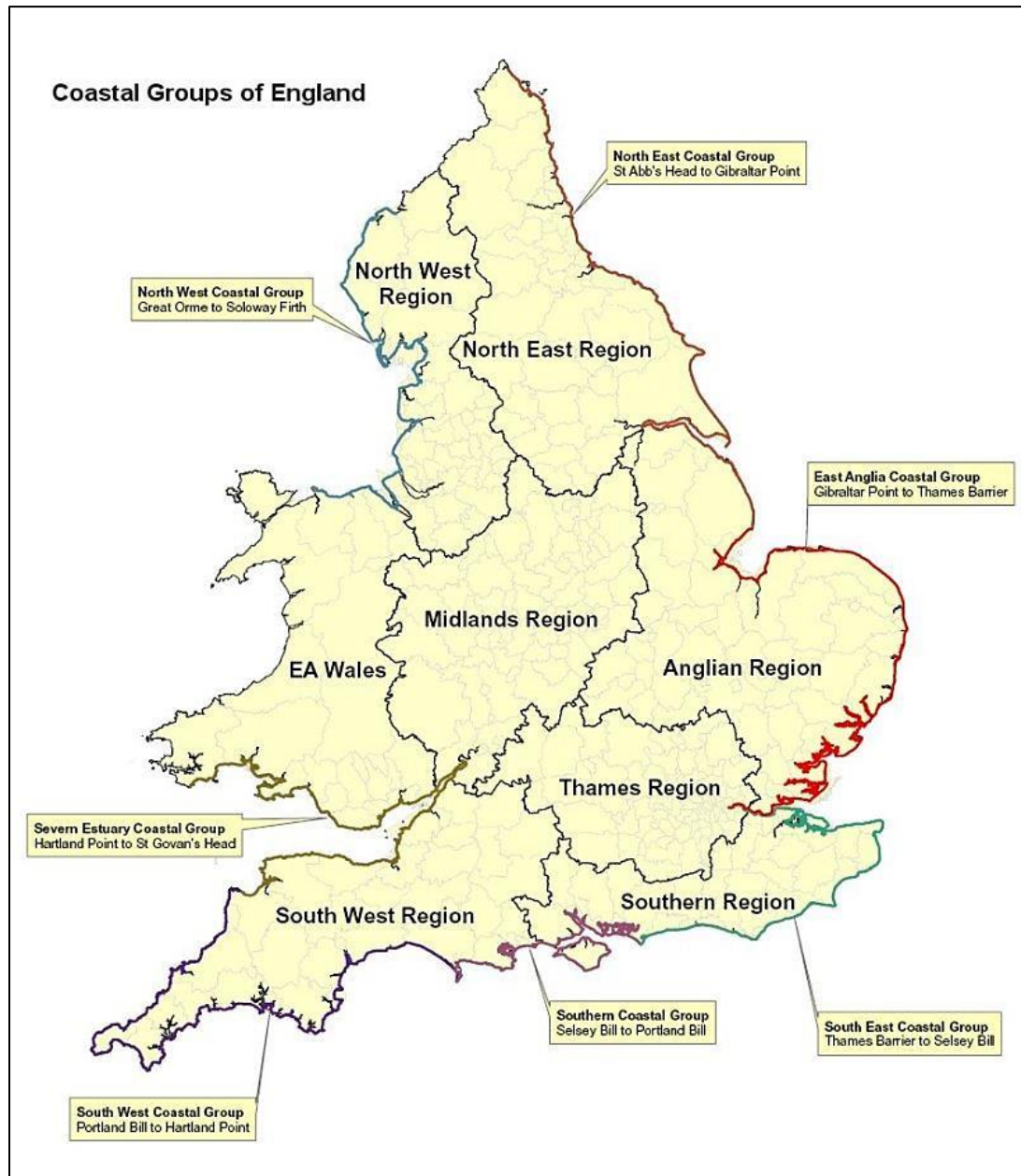


Figure 2.9- Coastal Groups of England (Source: SCOPAC, 2015).

2.4.2.4 Local Authorities

The operational responsibility for coast protection is enacted under The Coast Protection Act 1949, local authorities with coastal frontage are designated as ‘Maritime District Councils’ (MDC) under Section 49(1) (Defra/EA, 2011). Under the Act, MDC have permissive powers to control third party activities on the coast, such as the construction of private defences or the removal of beach material.

Local Authorities both in England and Wales play a fundamental role in the management of flood and coastal erosion risks. These include (SCOPAC, 2014):

- avoiding inappropriate development in vulnerable areas through land-use planning or realignment of the coastline in a managed way;
- reducing the likelihood of loss of life and property along the coast through effective shoreline management engineering techniques;
- provision of suitable warning systems;
- protection against damaging storm events through flood and coastal defence schemes or building modifications, and
- taking lead in emergency planning for flooding and handling the recovery of areas that have been affected by flooding.

In addition to the above responsibilities, the Local Authorities also lead and assist Coastal Groups in the preparation and adoption of SMPs. The authorities also provide informal support and contribute to the development plan and its future reviews (Ballinger *et al*, 2004) where agreed by the Coastal Groups. In terms of inland flooding and as a result of the Flood and Water Management Act 2010, each Local Authorities are also a Lead Local Flood Authority, working in partnership with other organisations (e.g. Defra, EA) in reducing risks from development in the floodplain and management of drainage and small watercourses.

2.4.2.5 Coastal Partnerships

There are numerous organisations with interests in the coast; of which Coastal Partnerships (CPs) are amongst them. CPs show considerable variation, from those that are small in size, such as the ‘Isle of Wight Estuaries Partnership’ to the ‘Thames Estuary Partnership’ with the multitude responsibilities. Since the early 1990s over 60 voluntary Coastal Partnerships (Figure 2.10) have emerged around the UK coast in reaction to local coastal issues (Fletcher, 2003; Heeps & Fletcher, 2004; O’Riordan, *et al.*, 2006; Stojanovic & Barker, 2008).

All the partnerships in England were formed voluntarily, with no statutory powers, and have developed their own decision-making processes (Fletcher, 2007). These

voluntary groups encourage regular exchange of information, experience and debate between the central government and stakeholders (Fletcher, 2007; Coastal Partnership Network, 2011). Sources of funding can include project funding from European Union and national bodies such as the Environment Agency, Defra, Natural England, private sector sponsors such as utility companies and landowners, NGOs and small community grants or charitable funds.

The idea of forming CPs have been embraced by many groups concerned with coastal planning (Fletcher, 2004; Morris, 2008, Fletcher *et al.*, 2003 & 2014). CPs have a vital role to play in the management of the coast (Fletcher, 2003; Midgley, 2004; Stojanovic & Ballinger 2009; Ballinger *et al.*, 2010). Amongst these are: improving communication between management authorities and the public, creating awareness and understanding coastal issues; advising on policy and planning, as well as mobilising community involvement in decision-making (Natasha & Tracey, 2007). Fulfilling that role will inevitably vary in different parts of the country that have different flood and coastal erosion management needs and local specificity.

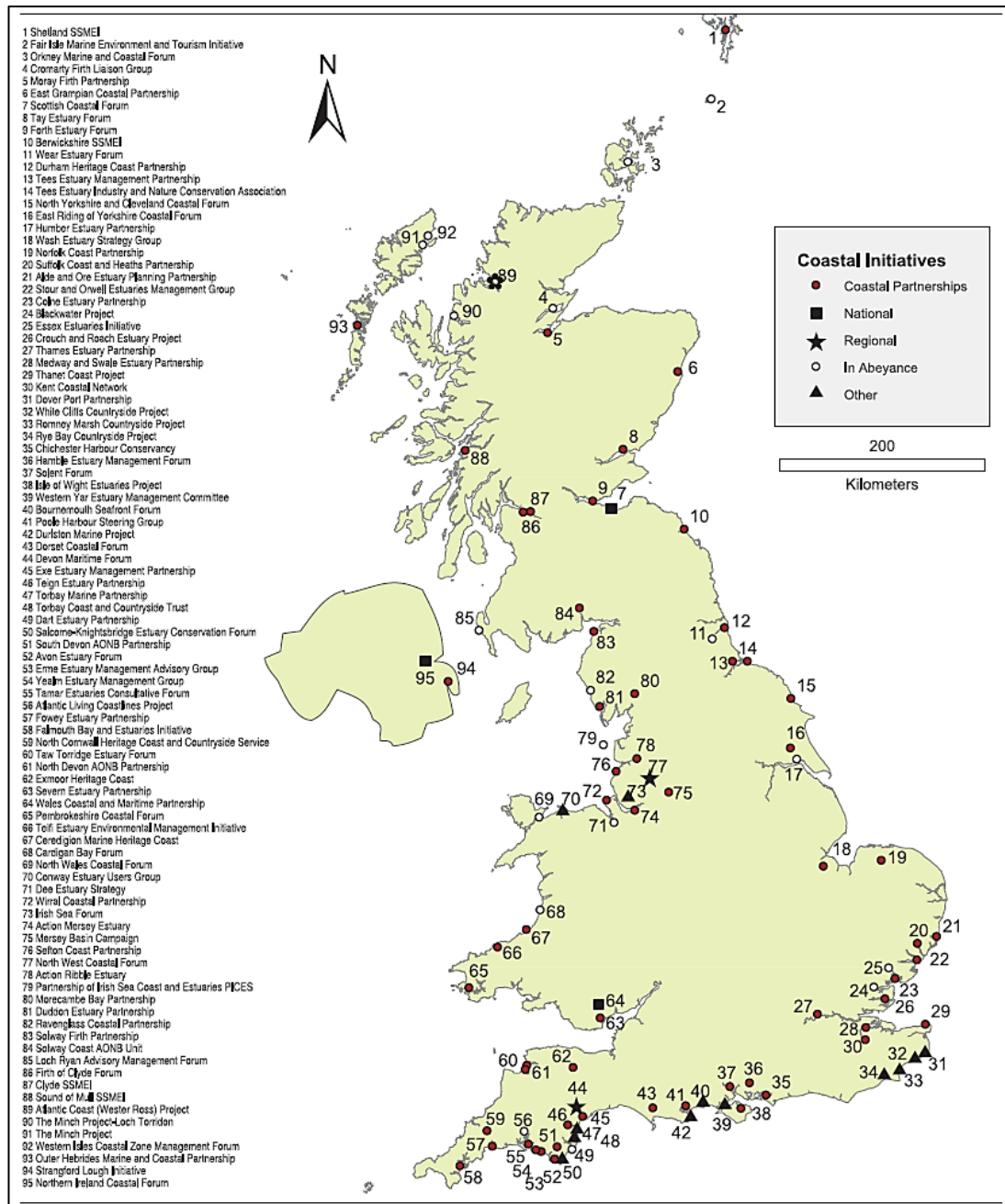


Figure 2.10- Coastal Partnership initiatives in the UK. (Source: Stojanovic & Barker, 2008).

2.4.3 Funding Mechanisms for Shoreline Management

Funding for flood and coastal erosion risk management projects comes directly from central government in the form of Grant-in-Aid (Defra, 2015). This funding is administered through Defra, the EA and the Department for Communities and Local Government (Figure 2.11) to carry out their duties under the Flood and Water

Management Act 2010 (Defra, 2014) and to ensure that expenditure contributes towards government policy aims (Pontee & Parsons, 2012). Large scale schemes in the past could be funded directly with block grants. Block grants allowed decisions on spending to be made directly by the EA and Regional Flood Defence Authorities, now Regional Flood Coastal Committees, rather than grant-in-aid, where schemes had to be approved by Defra (Defra, 2005).

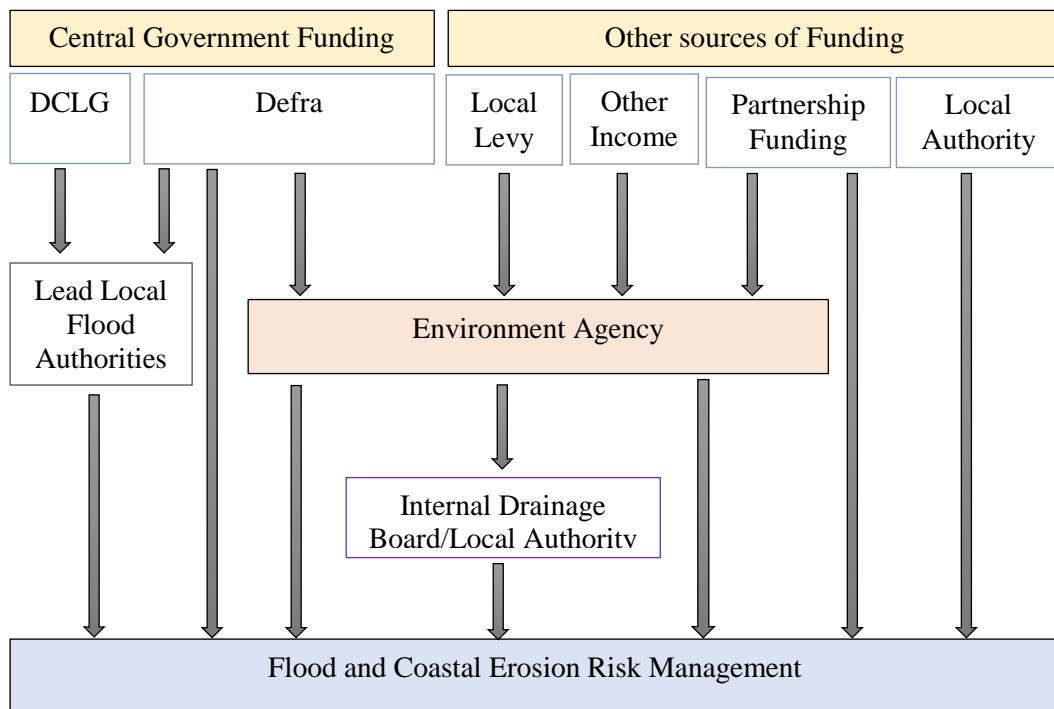


Figure 2.11- Funding sources for Flood and Coastal Erosion Risk Management (Source: Modified from Defra, 2015).

Other funding for managing the shoreline can be sourced from the Partnership funding scheme and private investment (land owners) under planning responsibility. Landowners along the coastline fund and maintain their own solutions to coastal erosion and flood management, but they are constrained by the planning regulations administered by local government and the permissive powers of the EA (Defra, 2014).

Implementation of the Flood and Water Management Act (2010) has broadened the Environment Agency’s grant-making powers to allow a greater range of risk management and adaptation activity in the areas most at risk from flooding and in the most deprived coastal communities (Defra, 2015). The new system allows funds to be allocated based on the economic, social and environmental outcomes each project is

expected to deliver. Although the SMPs set out the overall policy that should be implemented, however, it does not guarantee that funding will be available for all actions needed to implement that policy. In situations whereby the Benefit-Cost Ratio (BCR) of the proposed policy option is low, schemes may be less likely to receive public funding and it may be necessary to secure funding from non-public sources (Defra, 2009).

2.5 Shoreline Management Plans and Their Relationship with Other Planning Initiatives

The SMP is not a 'stand-alone' document, it relates with other types of plans and initiatives including Coastal Habitat Management Plan and Catchment Flood Management Plans (Figure 2.11). This section identifies some of the Acts and European Directives, which both allow for and restrict shoreline management activities in England. Those of relevance are discussed below, Sections 2.5.1 - 2.5.7.

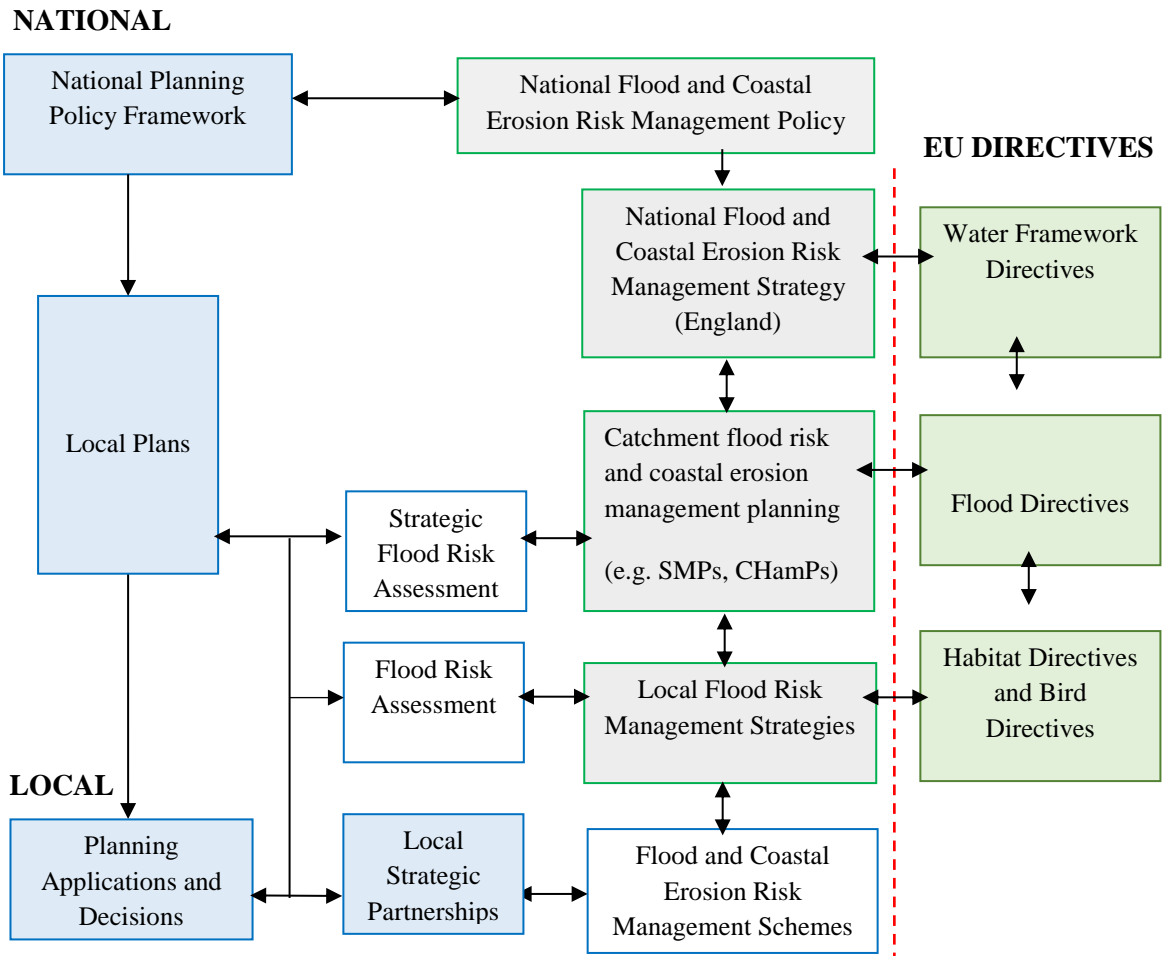


Figure 2.12- Links between Shoreline Management Plans and other legislation (Source: Modified from Defra, 2011).

2.5.1 Making Space for Water 2004

Subsequent to the historical developments of coastal defence in England identified in Section 2.3.1, and the key events and activities identified by Ballinger (1999), Pettit (1999), and Potts, *et al.* (2005), there have been further attempts to improve the strategy for flood and coastal erosion risk management (Defra, 2008). The most significant approach was encapsulated in the Making Space for Water programme led by Defra (Defra, 2005; Defra/EA, 2011). The remit of the programme was to manage the risks from flooding and coastal erosion by adopting an integrated portfolio of approaches which reflect both national and local priorities (Defra, 2005). The Making Space for Water approach facilitated the paradigm shift away from 'flood defence' towards more 'flood risk management' (Johnson & Priest, 2008), and supports the

principle of ICZM through adopting a more joined-up approach towards management of the coastal environment (Defra, 2009)

2.5.2 Marine and Coastal Access Act 2009

Calls for a more holistic approach in the complex system of management of the marine and coastal environment in the UK have ultimately led to the ratification of the Marine and Coastal Access Act in 2009 (Environment Agency, 2010). The Act was developed to provide enhanced protection of the marine environment and biodiversity, improved management of freshwater and migratory fisheries in England and Wales. It also improved access to the English coast whilst integrating the socio-economic needs of all marine users with the need to protect the marine environment and preserve biodiversity (Defra, 2009a).

The legislation established the Marine Management Organisation (MMO) in 2010 to discharge a number of marine functions on behalf of the UK Government and reorganised several other key bodies to better manage the marine environment (Boyes & Elliott, 2015). The MMO's responsibilities include the production of a forward plan for marine planning, to be achieved by the preparation of a Marine Policy Statement and regional marine plans. An important role for local steering groups associated with the MMO is to facilitate public participation and integration of local experience by community engagement in the marine planning process (Defra 2009a).

With a change in government, the coalition government in 2011 published the Marine Policy Statement (HM Government, 2011) which implement initiatives from the Marine and Coastal Access Act (2009) and include numerous references to the planning, licencing and protection of the marine cultural environment, including a section dedicated to coastal access (Defra, 2011). There is an expectation by Defra that Coastal Groups, especially Coastal Partnerships (discussed in more detail in Section 2.4.4) are one of the local level management solutions that will be able to deliver public participation.

2.5.3 Flood and Water Management Act 2010

Sir Michael Pitt's reviewed the devastating floods of summer 2007 in England. The flood caused enormous physical and economic damage in which 55,000 properties were flooded, 7,000 people were rescued and 13 people lost their lives (EA, 2007). In his report, Sir Michael Pitt identified that there should be a single unifying Act to address the way that flood risk is managed and to clarify responsibilities for flood risk management (Pitt, 2008), such, the Flood and Water Management Act 2010 was developed. The Act addresses gaps in the way that flood risk is managed, to ensure that risk from all sources of flooding (not just rivers and seas) are managed more effectively (Defra, 2012b). The review recommended that the lead local flood authority should bring together all relevant bodies to help manage local flood risk in their areas.

The EA has responsibilities for the maintenance and development of flood and coastal erosion risk management in England (Discussed in Section 2.4.2.1). In fulfilling this role, they expected to work with Local Authorities to help them to develop the knowledge and understanding of the areas at risk of flooding. The EA also has the responsibility under the Act to specify and measure risk management and assess costs and benefits for the purpose of shoreline management decisions. Both strategies must take into account climate change and wider environmental effects. The strategies should also have an element of consultation with the public, as well as all shoreline management authorities (Defra, 2011).

2.5.4 Coastal Habitat Management Plans

Coastal Habitat Management Plans (CHaMPs) aim to set out the necessary information to inform strategic flood risk and coastal management decisions for sites designated under Ramsar Convention, Habitat and Birds Directives; most in particular when SMPs and flood and coastal defence strategies are produced for the site (Bray & Cottle, 2003). Their aim was to identify (Gardner *et al.*, 2007) and develop a policy and management approach to deal with dynamic change and its impact on the ecological requirements of designated features and promote best practice to achieve consistency in addressing these issues (Severn Estuary Coastal Group, 2009).

CHaMPs are developed by the operating authority (EA and Natural England), working in partnership with relevant stakeholders to provide a framework for managing site complexes over the next 30-100 year period (Bray & Cottle, 2003).

2.5.5 Habitats Directive (92/43/EEC) and Bird Directive (79/409/EEC)

The Habitats Directive identifies an EU-wide network of the conservation of natural habitats known as the Natura 2000 network (Ostermann, 1998), and it aims to promote the maintenance of biodiversity by requiring Member States to take measures that promote the sustainable management of natural habitats and wild species (European Commission, 2014a). The EU Birds Directive came to force in 2009 (European Commission, 2014b). The Directive provides a framework for the protection of all wild birds and their habitats with special measures for migratory birds and those considered rare or vulnerable (Donald *et al.*, 2007). Enacting the Habitat Directive in England to protect and conserve the landscape is one of the major areas of concern for Natural England (discussed in Section 2.4.2.2).

The Birds Directive and Habitats Directive, which all EU Member States are committed to uphold, form the basis by which Europe's rare and most threatened habitats and species are protected across Europe as well as securing vital ecosystem services (Defra, 2012). However, both Directives are currently undergoing an in-depth evaluation as part of the EU Regulatory Fitness and Performance (REFIT) initiative. The REFIT initiative considers the possibility of merging them into a more modern piece of legislation (European Commission, 2014c).

2.5.6 Water Framework Directive (2000/60/EC)

The Water Framework Directive (WFD) is designed to improve and integrate the way water bodies are managed throughout Europe. The Directives came into force in December 2000 (Holland, 2002; Kaika, 2003) and was transposed into UK law in 2003 (Environment Agency, 2010). The aim of the Directive was to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater (Wilby *et al.*, 2006), that is the area of river catchments and marine waters up to one nautical mile offshore. The Directive

also has an important aim to reduce the danger of flooding. Objectives are to improve water quality, stop the deterioration of habitats and improve aquatic wildlife habitats.

WFD requires Member States to establish river basin districts and for each of these a River Basin Management Plan (RBMP). The first planning cycle for the WFD was completed in 2015, it would then be reviewed every six years. Many of the aims of the WFD are relevant to the preparation of SMPs. This includes the objective to achieve good ecological status for designated or modified water bodies (Holland, 2002; Hering *et al.*, 2010).

2.5.7 European Union Floods Directive (2007/60/EC)

The EU Flood Directive was developed in 2006 in response to a number of extreme flooding events suffered across the EU. It entered into force in November 2007 (Tsakiris *et al.*, 2009) and aimed to establish a framework for assessing and managing the negative impact of flooding on human health, the environment, property, cultural heritage and economic activity across the border (Klijn *et al.*, 2008). The Directive requires Member States to carry out a preliminary assessment of flood risk from inland waters as well as all coastal waters across the whole territory of the EU, and then to identify the river basins and associated coastal areas at significant potential risk of flooding (Wilby *et al.*, 2006).

The Directive also requires the UK Government to ensure assessments of flood risk, to produce management plans and to draw up maps for flood risk areas. The SMPs have the potential to contribute to the implementation of the Floods Directive as they include an assessment of coastal flood risk, map where these risks are, and identify policies to manage these risks. This has mostly been the responsibility of the Environment Agency for coastal and estuarine areas and rivers, under the UK Flood and Water Management Act 2010 (Defra, 2013).

2.6 Summary

This Chapter has focused on the theoretical and conceptual components of ICZM and shoreline management in England. Section 2.2 discusses the theory and practice of ICZM. ICZM centres on ways to bring together disparate planning and management techniques and to form holistic and flexible coastal management systems. Section 2.3 provided an introduction to the evolution of coastal defence in England. It further reviewed the history of legislation and planning for shoreline management.

Section 2.4 examined the evolution of shoreline management and current responsibilities for decisions about its management. Whilst the shoreline management has witnessed a considerable shift in power and decision making (Johnson & Priest, 2008), responsibility still lies mostly with local authorities, the Environment Agency, internal drainage boards and landowners. However, the degree to which they are responsible is described as being subject to change.

Section 2.5 identified the relationship between SMP and other management initiatives. It can be seen that there has been a myriad of EU Directives, national legislation, policies and changing strategies. An overview of these strategies has been necessary as many of these can influence shoreline management.

Chapter Three: Evaluating Local
Community Participation
in the Shoreline
Management

3.1 Introduction

This Chapter examines the concepts of community participation underpinning the literature on flood and coastal erosion risk management in England and, how policy changes place growing pressures on local communities to participate in the management. This review is confined to an overview of the theoretical and practical literature underlying the approach of involving and representing the local community in the shoreline management decision-making process.

This Chapter covers two major issues: community understanding of coastal change and social justice in shoreline management. One of the problems identified at the start of this research was the Government change in coastal defence strategies (discussed in Section 2.3), which was possible reason for lack of community participation in shoreline management. Change in management policies has been seen to cause problems in many areas along the coastline of England (Turner *et al.*, 1998; French, 2004; Few *et al.*, 2007; Milligan *et al.*, 2009; Defra, 2011; Day *et al.*, 2015). It is argued that if local populations understand changes they are more likely to be able to become involved in informed decisions (Ostrom *et al.*, 1999; Bonnell, 2003; Hostovsky *et al.*, 2010; Bramati *et al.*, 2014).

The aspects of climate change discussed in this Chapter will ascertain the levels of knowledge of local communities understanding of flood and coastal erosion risk management. Climate change could result in rising sea levels and less predictable, more extreme weather conditions which may cause flooding (Tompkins *et al.*, 2010; Zsomboky *et al.*, 2011; Coumou & Rahmstorf, 2012). These changes will have implications for how the shoreline is to be protected and managed. Understanding of coastal change could be fundamental in the acceptance or otherwise rejection of changes in shoreline management strategies (Cooper & McKenna, 2008). Section 3.5 forms the core of this Chapter and outlines the reasons for formation of CAGs.

3.2 Definition and Characteristics of Communities

Section 3.2 provides an introduction to the meaning of community. This section then explores the fundamental concepts of community in three perspectives: System; Social and; Individual. Each of these provides different insights into the process of community participation.

3.2.1 Defining Communities

The task of defining ‘community’ is being described as complex (Cole, 2006) due to the fact that communities are usually understood to denote much more than geographical entities, and to refer to more intangible concepts such as shared values, identity and ‘community spirit’ (Scheyvens, 2002). Due to the complexities of communities and the variations between them, there is no agreed definition of the word ‘community’ itself (Day, 2006). According to the New Oxford Dictionary of English (Pearsall, 1998, p. 371), ‘community’ can be defined as a ‘living together in one place’ or ‘having a religion, race, profession, or other particular characteristics in common’. It is worth mentioning that communities are dynamic in nature. As discussed in Section 2.2.5, CAGs can be recognised as a reflection of community as they react, interact, evolve and change as a result of political and economic forces as well as environmental concerns. (Cohen, 1985; Thompson *et al.*, 1990). Again, it must be understood that this view assumes that the CAG is actually representative of the community in which it is embedded. This is explained further in Chapter six.

Whilst community is an increasingly important concept in shoreline management, it remains largely unexamined and undefined in the environmental disaster context (Tapsell, *et al.*, 2003). Within the sociological literature, the concept of community can be attached to three broad meanings (Worsley, 1987). The first usage described ‘community’ as ‘*a place*’, which exists within a fixed and bounded geographically bounded location. Secondly, community is also used to indicate a ‘*social interaction*’. In this usage, community relationships can be characterised by conflict as well as by mutuality and reciprocity. In the third usage, community can be referred to as a

'political and social responsibility', one that involves political and social motives in the formation of communal groups (Patrick & Wickizer, 1995).

In general, community is defined by both sociologists and geographers as any set of social relationships operating within certain boundaries, locations or territories (McMillan, 1996, Lamont & Molnár, 2002). To this end, it is important to establish exactly what or who constitutes 'the community'. Conventionally, there are three answers to this question: 1) anyone affected by an issue; 2) who the decision makers decide the public / stakeholders / community to be and; 3) those with the capacity to make their voices heard (MacQueen *et al.*, 2001; Theodori, 2005; Stroud *et al.*, 2015).

3.2.2 Concepts of Community

The term 'community' is perhaps more widely used now than ever before and it can be seen in many aspects of policy, including shoreline management related policies. In the move from flood defence to FCERM, local community has become increasingly central (Defra, 2011), seeking wider community is often cited as the ideal means of developing participation in decision-making. Therefore, it is a concept that needs consideration. Although only a fraction of the literature could possibly be discussed here, and there is much that lies outside of the scope of this research, community having relevance to so many topics. This study explores three of the most relevant concepts of community.

3.2.2.1 Systems Perspective

From a systems perspective, a community is similar to a living creature, as described by the anthropologist Anthony Cohen, who published *The Symbolic Construction of Community* in 1985. Cohen argued that community was essentially symbolic in nature and it comprises different parts that represent specialised functions, activities, or interests, each operating within specific boundaries to meet community needs enshrined in the concept of the boundary (Cohen, 1985). For the community to function well, each part has to effectively carry out its role in relation to the whole organism. This marks an important shift, showing communities as a connected, interdependent sector that share responsibility for recognising and resolving problems

and enhancing its well-being. Successfully addressing a community's complex problems requires integration, collaboration, and coordination of resources from all parts (Thompson *et al.*, 1990).

3.2.2.2 Social Perspective

The move to understanding communities as social and political networks that link individuals, community organisations, and leaders, is certainly welcome, for it allows an examination of the appeal that the idea of community continues to exert. Giddens (1990) asserts that modernity is increasingly associated with the undermining of stable social relations and a secure sense of the self which has a hugely detrimental effect on any potential community links. If community is not realised through actual social relations then it is difficult to see how community members can contest and negotiate meanings. By understanding these concepts, it becomes possible to address the processes through which community is negotiated and envisaged (Mitchell, 2000).

3.2.2.3 Individual Perspective

The relationship between the people and the place is central to the notion of local community. Individuals have their own sense of community belonging that can change over time and may affect their participation in community activities (Rich *et al.*, 1995). Despite the many changes from the traditional notions of community, dense local networks, where the majority of residents are known to one another remained central to understandings of local community. Thinking more broadly, community may also refer to “all forms of relationship which are characterised by a high degree of personal intimacy, emotional depth, moral commitment, social cohesion and continuity in time” (Nisbet, 1967, p. 47).

3.2.3 Features of Coastal Communities in England

The diverse coastline around England is rich in important natural habitats, heritage sites, tourism and recreational opportunities as well as economic activities (Zsomboky *et al.*, 2011). The history of coastal towns in England has been wide and varied, with a longstanding history as fishing towns (e.g. Whitby), ports (e.g. Portsmouth), and

coastal holiday resorts (e.g. Blackpool) (Howell, 1974; Walton, 1997). However, many coastal communities also face a series of significant environmental challenges as a result of climate change impacts (Fletcher & Potts, 2008). The 2,700 miles of British coastline provide a setting to various environments, industry and settlements (Hassan, 2003). Defining a specific coastal hierarchy is not a simple process, as locations are tied to the wider urban and rural classifications of place (Beatty and Fothergill, 2004).

An examination of the literature has revealed both the increasing significance of local communities in shoreline management and at the same time the complexities of the concept of community (Roe, 2000; Hall *et al.*, 2003; Milligan *et al.*, 2009). The main principle of community participation is to empower people in making a decision in order to perceive positive effects on their lives socially or economically (Sanoff, 2000). Moreover, a participation approach is to provide people with skills and confidence to analyse their situation, reach consensus, make decisions and take action, so as to improve their quality of life (Mowen *et al.*, 1997; Manzo & Perkins, 2006). The key concepts of community participation will be discussed in the next section, (3.3).

3.3 Conceptual Framework for Community Participation

This section addresses a number of issues related to community participation in shoreline management by examining key points emerging from a range of studies, reports and other sources of information. It commences with a discussion about the rationale for community participation and its adoption in recent management initiatives. It further defines participation, and examines various levels of community participation. The section also identifies factors which influence local communities and enable their participation in the shoreline management process.

3.3.1 Rationale for Community Participation

The concept of community participation has received recognition in many national and international policies (Reed, 2008; Coleby *et al.*, 2009; Brown, 2013). In

particular, the Earth Summit in 1992, Principle 10 and Agenda 21 (WCED, 1987), and the Aarhus Convention (UNECE, 1998). Since then, the practice of public participation in decision-making has included keeping governments accountable for their actions, identifying and understanding the public interest, and developing the substance of policy (Beierle & Cayford, 2002). Consequently, a variety of forms of public participation have played an important role in the decision and policy-making process (Horlick-Jones *et al.*, 2007).

As identified by numerous authors, public participation has become an important concept in environmental decision-making, in addressing some situations of Not in My Back Yard (NIMBY) (Smith, 1997, Ogunlana *et al.*, 2001; Beierle & Cayford, 2002; Marttunen & Suomalainen, 2005). While the NIMBY situation can lead to a lack of trust, suspicion and dissent towards the management regime, reducing the possibility of future participation (Edwards *et al.*, 1997; Appelstrand, 2002), there is an argument that sometimes this reaction was only a response from local communities who were excluded from the decision-making process (Beierle, 2000).

Despite many government institutions trying to apply public participation to deal with environmental issues, they are less likely to succeed in their efforts (King *et al.*, 1998; Smith & McDonough, 2001) unless responsive institutions and the legal and policy framework that facilitate and support local participation are in place (Tosun, 2004; Wang & Wall, 2005).

3.3.2 Definition of Community Participation

With respect to environmental decision-making issues, the term ‘community participation’ and ‘community involvement’ are used interchangeably (Creighton *et al.*, 1981; Marshall & Roberts, 1997; Hostovsky *et al.*, 2010) as there are no significant differences in the meaning of these words in the English language. Predominantly, public involvement has a broader meaning and approach while public participation is more narrow (Roberts, 1995). Public involvement refers to a wide range of approaches in which the public can be engaged in the decision-making process (Roberts, 1995). Furthermore, it focuses on exchanging information between the agency and the public,

by providing a context in which information can be interpreted and used in the decision-making process (Creighton *et al.*, 1981).

According to Creighton (2005), participation is a process in which the public's values and concerns are integrated in the decision-making process. Roberts (1995) argues that this definition implies a shift from advisory public consultation to power sharing. This raises the stakes for environmental planners and decision-makers because it advocates a process through which the public can influence and take control over development initiatives as well as decisions which affect them. Basically, community participation programmes perform a set of functions, but importantly, also make a contribution to the process of involvement (Sanoff, 2000).

Strang (2004) examined local community engagement with water policy and found that the inclusion of community groups was effective in representing the public voice at the local level and gave those involved a sense of ownership and involvement. However, the mechanisms enabling local engagements to move upwards are weak and therefore on the fundamental issues around water and flooding, national government is still the key player and the public remain "spectator". It is argued that a more effective way to view participation is as a complex relationship where through a process of social learning governance can emerge, where local people could have increasing input into decision making, with new kinds of roles and relationships (Keen *et al.*, 2005; Tritter & McCallum, 2006).

There is a need to clarify the concept of public participation (Kelly & Vlaenderen, 1995), particularly, in the context of shoreline management. Thus, a variety of meanings of public participation from different researchers were identified and evaluated to develop the ideas, and integrate concepts of public participation in the specific context of this research. These are presented in Figure 3.1

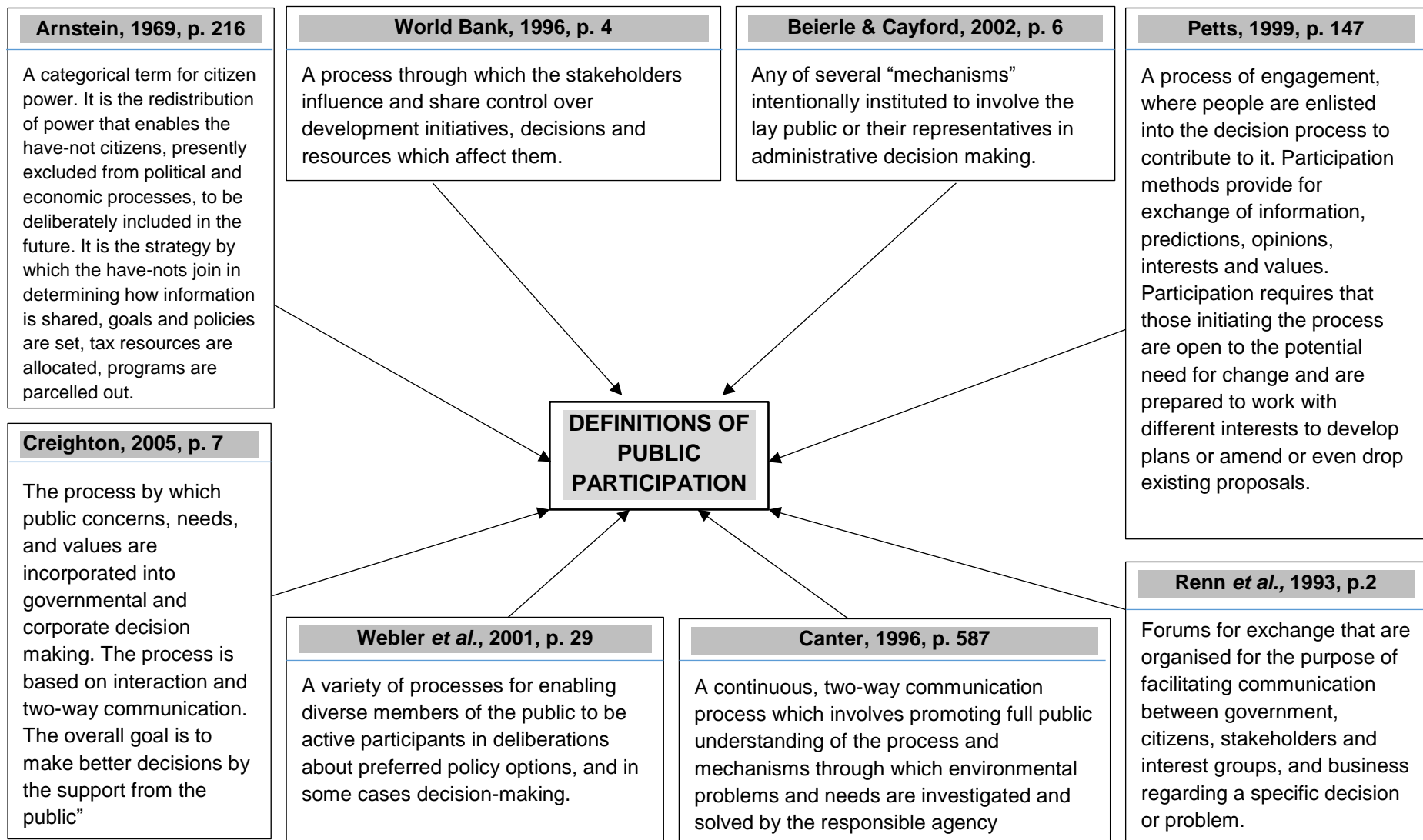


Figure 3.1- A comparison of definitions of public participation (Source: Adapted from various authours).

3.3.3 Levels of Community Participation

A number of researchers have identified different levels of people's participation in the environmental decision-making process (Vasseur *et al.*, 1997; Agarwal, 2001; Konisky & Beierle, 2001; Tress *et al.*, 2005). One of the first researchers to work on different public participation levels and their implications was Arnstein (1969). This work developed eight types of characteristics regarding citizen participation as illustrated in the 'ladder of citizen participation' (Figure 3.2).

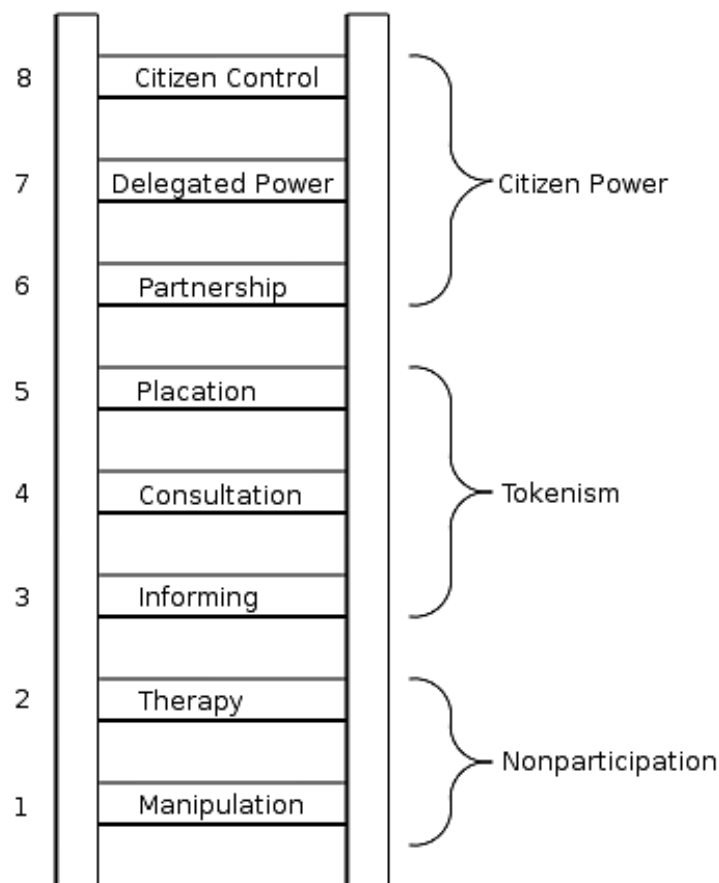


Figure 3.2- Levels of citizen participation (Source: Adapted from Arnstein, 1969)

Each rung corresponds with the extent of citizen power in determining public plans or programmes. In contrast, Wilcox (1994) and the International Association for Public Participation (IAP2, 2003) proposed five stages of people's participation, which are: 1) Inform: one way communication, 2) Consult: two-way communication, 3) Involve: Deciding together, 4) Collaborate: Acting together and 5) Empower: Supporting independent community interests (Table 3.1).

Table 3.1- Stages of People’s Participation

Arnstein (1969)	Wilcox (1994)	International Association for Public Participation (2003)
Manipulation		
Therapy		
Informing	Informing	Inform- one way communication
Consultation	Consulting	Consult- two way communication
Placation	Deciding together	Involve- participatory processes
Partnership	Acting together	Collaborate- partnership
Delegated power	Supporting independent	Empower- implementing what
Citizen control	community interests	public decides

In detail, the eight participation stages proposed by Arnstein (1969) are mainly encompassed by three (main) categories. Firstly, the bottom rungs of the ladder which are a combination of two stages (“manipulation” and “therapy”) are defined by non-participation, with the proponent merely persuading the public to accept a proposed action. Secondly, the middle rungs are characterised as forms of tokenism (“information”, “consultation” and “placation”) where the process involves a great deal of “information out” with no, or limited, opportunity for the public to express concerns or influence the decision making process. At these levels, the goal is often to bring in the public at the end of the process to “educate” them (Arnstein, 1969), rather than to commit to meaningful public engagement. The three final stages, which are “partnership”, “delegated power” and “citizen control”, allow for an increasing amount of public power over decision making, as explained in Figure 3.2.

In the context of shoreline management, public participation has been identified as way of offering stakeholders the opportunity to share and exchange knowledge (Edwards *et al.*, 1997; Chess & Purcell, 1999; Kearney *et al.*, 2007, Defra, 2011). For example, in 2011, the Coastal Communities 2150 (CC2150) Project was launched by the EA in England. The project was funded by the European Regional Development Funds to promote the most appropriate way of engaging the local communities on the long-term issues of changing coastlines (Sutton *et al.*, 2012). As suggested by different researchers (e.g. O’Riordan & Ward, 1997; Edwards *et al.*, 1997; Appelstrand, 2002),

failure to involve the local communities at the early stages of the decision-making process has often resulted in a lack of trust, suspicion and dissent towards the management regime, reducing the possibility of future participation. Therefore, in order to encourage the highest degree of acceptance, inclusion in the process is vital as individuals are more likely to accept plans if they believe their opinions and input are valued (Appelstrand, 2002).

3.3.4 Benefits of Community Participation

Public participation has become a central theme for resolving environmental problems for example how to protect, manage or distribute environmental resources (Gunes & Coskun, 2005; Berkes, 2009). Additionally, public participation has shifted to be particularly significant in a variety of environmental management procedures such as the planning process (Richardson *et al.*, 1998), resource management (Lawrence & Deagen, 2001), environmental policy and decision-making processes (Smith & McDonough, 2001; Webler *et al.*, 2001; Renn, 2006), and environmental conflict management (Daniels *et al.*, 1996; Daniels & Walker, 1996).

There are many benefits of meaningfully engaging the community in environmental decision making (Garande & Dagg, 2005) and more specifically, in shoreline management. First and foremost, participation empowers community members as it supports decentralised, non-hierarchical decision-making processes that strengthen the autonomy of the individuals in the community (Arnstein 1969; Webler *et al.*, 1995; Fitzpatrick & Sinclair 2003; Sinclair & Diduck, 2009). Fiorino (1990) and Shepherd and Bowler (1997) argued that participation can provide better information for both decision makers and participants by exchanging relevant information and their points of view. Furthermore, Petts (1999) suggested that participation could improve professional decision-making by facilitating experts to do their job more easily by structuring problems and finding alternatives.

Another major advantage of community participation in the shoreline management decision-making process is the potential for conflict resolution (Treby & Clark, 2004). Numbers of studies argue that public participation could be implemented as a mechanism to prevent and reduce conflict and confrontation (Hollick, 1986; Renn *et*

al., 1993; Roberts, 1995; Beierle & Cayford, 2002; Coenen, 2009), by providing a means of discussion and negotiation on issues before the decisions are finalised (Harding, 1998). However, Creighton (2005) highlighted that it is difficult to promise that all conflicts could be reduced or eliminated through public participation.

3.3.5 Barriers to Community Participation

There are numerous factors identified as barriers to effective participation. For example, lack of participation in environmental management at strategic levels of planning has resulted in lack of trust in the management authorities (MacNaghten & Jacobs, 1997; White, 2001; Vari, 2004). This has resulted in a perception that the communities were only given an opportunity to receive information about the decision rather than providing a constructive dialogue or opportunity to influence the decision (Creighton, 2005). Through this, people may feel there is little point in taking part if the decision has already been made (Ashford & Rest, 1999; Diduck & Sinclair, 2002) and the knowledge and information given by them is not used and valued (Robinson & Bond, 2003).

Another limitation of community participation is partly due to the perception that the participation process often causes delays in decision-making, particularly when trying to reach decisions on complex and disputed issues (Innes & Booher, 2004). Oftentimes, incorporating community input directly into the decision-making process are seen as being time-consuming and costly; potentially enhancing conflict (English *et al.*, 1993).

To overcome some of the aforementioned constraints in the context of shoreline management, it is crucial to involve all of the affected stakeholders at the beginning of the process when no irreversible decisions have been made. It is also essential to ensure adequate duration provide to allow the public to become familiar with, and formulate opinions about, the strategic issue (O’Riordan & Ward, 1997, Simm & Samuels, 2006; Milligan *et al.*, 2009). Correctly identifying and addressing the barriers to community participation are essential approach to: motivate stakeholders to participate, eliminate the significance of such barriers, and improve the participation process itself (Stewart & Sinclair, 2007; Maguire *et al.*, 2011; 2012).

3.4 Local Community Understanding of Coastal Change

A clear understanding of the natural processes affecting the coastline can be an important reason for people's participation in shoreline planning. If local communities accept that coastal areas will be affected by rises in sea level and wave heights and accelerated coastal erosion, especially if they live in an area of high risk, they may be more likely to participate in planning for shoreline management. If they are uncertain about sea level rise and therefore the need for shoreline management, they may not feel the need to become involved (Harvatt *et al.*, 2011). The changes in policy direction place an increasing emphasis on involving those at risk in the shoreline management process (Milligan *et al.*, 2009). The concept of community is central to this and local communities are expected to have an increasing role in shoreline management decision making process (Defra, 2011).

The variations in degrees of vulnerability across a population as well as their resilience to an event and finally their ability to adapt to and militate against flooding and coastal erosion risk will be explored in this section.

3.4.1 Sea Level Rise and Climate Change: England

One of the major challenges facing policy makers and environmental managers is change at the coast as a result of rising sea levels (Devoy, 1987; Nicholls and Mimura, 1998; Turner, 2000; O'Riordan, 2006; Turner *et al.*, 2007). The latest consensus projections detailed in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2013) suggest a global average rise of 0.10 – 0.79 m by 2100, a range primarily based on various plausible greenhouse gas emission scenarios, thermal expansion of the oceans and the melting of glaciers and ice sheets. These projections are downscaled into national and regional projections (Murray & Ebi, 2012; Rahmstorf, 2012) for improved understanding and application in coastal planning.

Rising sea levels mean risk zones in England will migrate upward and landward increasing the area/population susceptible to flooding, and further increasing the vulnerability of the population within the pre-existing flood plain (Nicholls *et al.*,

1999). Although there may be a high level of public awareness of climate change, a reoccurring theme across research indicates that misunderstandings about the causes and consequences of climate change are held in conjunction with accurate beliefs (Bord *et al.*, 2000; Lorenzoni & Pidgeon, 2006).

3.4.2 Implications for Coastal Communities

Other factors that may contribute to making flood predictions more realistic to people living along the coast is the fact that the coast is more vulnerable to flooding because of storm surges and large waves (McInnes *et al.*, 2003). Most coastal flooding occurs when strong storms and low atmospheric pressure combine to produce storm surges and, coupled with high tides, the effects can be devastating (Dawson *et al.*, 2009). The increased frequency of these extreme events is an important measure of the impacts of future sea-level rise (Nicholls & Klein, 2004). Storm surges accompanied by high tides are potentially more damaging than sea level rise. However, there is again uncertainty from modelling predictions of weather and tides as to when these phenomena occur and their magnitude (Tebaldi *et al.*, 2012). Although extreme weather events cause the most damage to the coast, the limits in the long-term prediction of these water levels mean projections of future sea level offer a more useful tool for strategic shoreline management (Lowe & Gregory, 2005; Hall *et al.*, 2006; Gehrels, 2011).

3.4.3 Perceptions of Climate Change as a Risk Issue

There is no unique specific definition for flood risk (Hall, *et al.*, 2003). However, Smith (2004, p. 12) defined *Risk* as "the probability of a hazard occurring and creating loss" and is the likely consequence of a hazard which can be viewed as the cause of the risk. The way people understand and perceive a risk underlies planning and adaptation to climatic threats (Kunreuther & Pauly, 2006). Distinguishing between expert knowledge and general knowledge is important when considering adaptation responses because expert knowledge cannot be assumed for all actors.

Following an assessment of the Government's approach to coastal issues, the Foresight Future Flooding study commissioned in 2004 by the Office of Science and

Technology (Evan *et al.*, 2004) examined the impact of climate change and socio-economic scenarios on catchment, coastal and urban flooding. This was a significant study that identified drivers of flood risk and how these may change over the twenty-first century under scenarios of climate and socio-economic change. The Foresight Future project also considered an alternative proposal from previous management techniques, namely, stronger stakeholder accountability of coastal planning and protection, whilst reducing the local authority influence (Brown *et al.*, 2005). The Report of the project was update in 2008 to reassess and identify any new drivers or responses that may have become significant since the last project. Four years after the Foresight Programme, ‘The Pitt’s Review’ was released in response to the catastrophic floods of 2007 (Pitt, 2008). The outcome of Pitt’s Review is further discussed in Section 3.4.5.

3.4.4 Local Community Understanding of Vulnerability

Vulnerability is described by Wisner *et al* (2004, p. 11) as “the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard (an extreme natural event or process)”. Vulnerability is therefore socially constructed and determined by factors in people’s everyday lives (Fordham 1992; Blaikie *et al.*, 1994; Hewitt 1997; Enarson & Morrow 1998; Canon, 2000; Wisner *et al.*, 2004). Social vulnerabilities are rooted in economic, social, political and environmental condition and thus vulnerability can vary between and within communities (Few *et al.*, 2004; Hilhorst & Bankoff, 2004; Wisner *et al.*, 2004). This was articulated by Wisner *et al.* (2004) as the application or the release of pressure on individual vulnerability (Figure 3.3). Given that people’s vulnerability to disasters such as floods, and therefore also their resilience, is rooted in their everyday lives, it is necessary to understand those everyday structures. As Wisner *et al.* (2004, p. 235) assert:

“Vulnerability issues need to be addressed not through the prevention of floods, but through changes in the processes that create the unsafe conditions”.

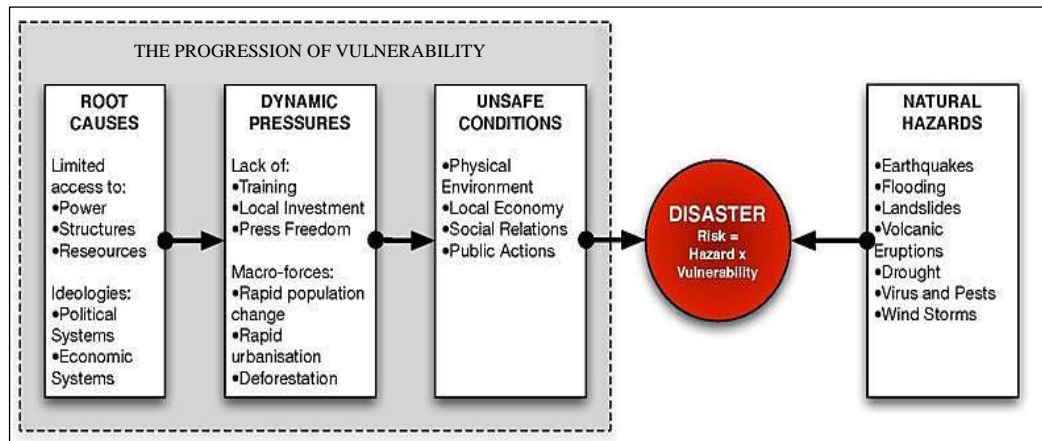


Figure 3.3- Pressure and Release (PaR) model: the progression of vulnerability (Source: Modified from Wisner *et al.*, 2004).

3.4.5 Local Community Understanding Adaptation

Modern understandings of disaster and vulnerability paved the way for a new more flexible approach to flood and coastal erosion risk management known as ‘adaptation’ (Adger *et al.*, 2005). Adaptation is an attempt to modify the socio-economic system or physical environments in response to changing conditions (Mitchell & Ericksen, 1992). Adaptation towards coastal erosion and flood hazards can be subdivided into a number of different forms. Fankhauser *et al* (1999) recognise two distinctions which can be used to separate adaptations; reactive versus anticipatory adaptations and autonomous versus planned adaptations. Reactive adaptation responds to events as and when they happen while anticipatory adaptations are deliberate measures taken to prepare for the effects of flooding.

The role of adaptation to flood and coastal erosion risk was brought into the spotlight by Sir Michael Pitt’s Review (2008), following the widespread flooding that took place in England in the summer of 2007. The Report included a review into the role of the organisations involved in the management of flood risk. Pitt’s Report called for fundamental changes to the way in which flooding was managed, outlining 92 recommendations, of which 21 were specifically related to Local Authorities and their responsibilities (Pitt, 2008). The Report recommended that Local Authorities should play a major role in the management of local flood risk, taking the lead in tackling local flooding and co-ordinating all relevant agencies. The author further highlighted

the need for mitigation efforts to be combined with adaptation measures with the purpose of addressing the issue in the short to medium term. Adaptation is essential in order to prepare for future risks, which are likely to be exacerbated by global warming. In addition, adequate adaptation could enable communities to benefit from potential opportunities that a changing climate can bring (Zsomboky *et al.*, 2011). Following the recommendations within the Pitt's Review, in 2009, the Environment Agency published its long-term strategy document called 'Investing for the Future: Flood and Coastal Risk Management', which looked out to 2035 (EA, 2014b).

3.5 Social Justice and Community Action

In the early 1990s, there was a growth in the development of environmentally concerned groups and a surge of public interest and involvement in the environmental decision-making processes globally (Bowlby, 1992; Davis, 1996; Beierle, 1999). The emergence of environmental legislation around many nations during this period was a reflection of the increasingly widespread public awareness and concern for the environment. Despite a range of research into community action and environmental issues (see: Crowfoot & Wondolleck, 1990; Shepard, 2002; Agyeman, 2005), there is very little to be found in the literature on coastal governance as to how local people organise themselves into groups, beyond simple references to 'community stakeholders' (Child, 1996; O'Riordan *et al.*, 2006; Milligan *et al.*, 2009) and 'representatives of the local community' (Tosun, 2006). Who these people are, how they come to represent their 'communities', the nature of responsibilities and their relationships with others both within and outside their communities, were not explored. This is because of a certain amount of controversy that persists over what exactly constitutes the environmental movement, environmentalism and even environmental groups (Rawcliffe, 1998).

3.5.1 The Concept of Social Justice

Social justice is a highly contested concept (Defra/EA, 2008). According to Miller (1999), the term is best understood as forming part of the broader concept of 'justice' in general. Miller (1999) further argues that actions are 'just' when they are taken in

attempt to bring about a “just state of affairs”, or when they actually have this desirable result. In line with Miller’s (1999) view, a situation of social justice exists when all members of a given society, irrespective of status or class, receive equitable shares of public assets and bear equitable shares of collective burdens.

Despite the appeal for social justice in environmental management, there are critics who see the quest for social justice as lacking justification. Loberfield (2004) for example argued that social justice is a meaningless expression and there is no justification for saying that societal benefits should be distributed equally among its members. The criticisms against social justice were, however, countered by Flew (1997). He disagrees with the critics’ assertion that the concept is hollow and without meaning and further argues that even though the term is often employed quite thoughtlessly, there is sufficient regularity in the usage of the expression (social justice) to provide it with a meaning that is somewhat vague and variable (Flew, 1997; Syme & Nancarrow, 2001).

3.5.2 Social Justice in the Context of Shoreline Management

The concept of social justice provides a useful framework for developing the cost benefit analysis for FCERM in England (Defra, 2004). Defra (2010c) makes explicit government’s position that it will defend the coast only where it is sustainable to do so. Since the publication of Defra’s ‘Making Space for Water’ document (2005), the policy of maintaining hard sea defences is only in place where the benefits of protecting the coast outweigh the costs of the defences (Defra, 2014).

Social justice issues and fairness of treatment along with compensation for individual loss have also been highlighted (Milligan *et al.* 2006; Houston *et al.* 2007). There has been much pressure to address the issue of compensation for loss of property from flooding or erosion risk. Defra (2015) emphasised that the government does not plan to compensate individuals for any loss of property – sea defence being a permissive power under the 1949 Coast Protection Act (The National Archives, 2011). This initiative or approach by Defra has proven contentious among the vulnerable coastal communities and has also accelerated the formation of CAGs (otherwise referred to as ‘Environmental Groups’). The majority of environmental

groups can also be referred to as pressure groups (Lowe & Goyder, 1983). Strictly speaking any organisation that does not put up candidates for election but tries to influence government policy can be called a pressure group. Each of these groups will be explored in detail in Chapter Four of this thesis.

In 2006, the All Party Parliamentary Group (APPG) on Coastal and Marine issues was established. The group was set up in conjunction with CoastNet, an international networking organisation that works with a wide range of organisations to find long-term solutions to coastal problem (CoastNet, n.d). The aim of the group was to offer Members of Parliament to discuss and examine the unique challenges faced by coastal communities, most of which are economic, social and environmental. In CoastNet Briefing paper No.3 on *Social justice and coastal flood and erosion risk management*, the term “Social justice” was presented by the APPG in different definitions as a readily understood and open decision-making process, which (CoastNet, 2007; Cooper & McKenna, 2008; Defra/EA, 2008):

- a. sits within a wider policy framework for coastal management, which reflects the wider sustainable development context
- b. acknowledges and quantifies the risks to the community from the inevitable impacts of coastal change
- c. acknowledges that past decisions may have had detrimental consequences
- d. involves the community in issue identification and problem-solving
- e. does not allow mistakes to be repeated by any level of government
- f. protects the community from issues that individuals cannot easily resolve themselves, such as social and market pressures (especially in relation to housing)
- g. encourages the community to take responsibility for its own future

Social justice has become a driving force for the majority of CAGs. It is therefore difficult in this research to agree on the precise meaning of “social justice”. Social justice is generally equated with the notion of equality or equal opportunity and the majority of local communities believe that the violation of it is intimately related to the concept of inequality (Papageorgiu, 1980). However, the usage of the term in this

study is to have a clear understanding of the CAGs arguments in relation to fairness, equity, or the equitable in shoreline management decision-making process.

3.5.3 Community-Based Environmental Activism

Environmental activism began to emerge in the in the late 1960s, prior to this time, mainstream environmentalists emphasised nature and largely focused on the protection of threatened forests, rivers and non-human species rather than protecting humans and their environments (Chamacho,1998; Benton & Short, 2000). During this period, there was a general lack of concern over justice in the early environmental movement as people did not fully recognise the fact that social inequalities and imbalances of power contributed to environmental degradation, resource depletion, pollution and environmental hazards that disproportionately impact the poor and other marginalised groups in society (Shrader-Frechette, 2002). Environmental groups that later emerged began to notice community's most vulnerable groups and called for protection for their environments and eroding livelihoods (Bullard, 2005). Usually, support from activist groups and local leaders have been important in encouraging grassroots protests against environmental injustice which also lead to the formation of CAGs.

Kempton *et al.* (2001) provided an insightful guide to exactly what, and who, is covered by the term "environmental activism". They see environmental groups as the key to building the social and cultural infrastructure necessary for sustained environmental practices; they are not a less influential version of the large national organisations but are significant in their own right. Thus, environmental groups are identifiable by a concise core of beliefs and particular principles of action (Jordan, & Maloney, 1997). The common concerns shared by them can primarily be thought of as supporting the sustainable management of resources, and the protection and renewal of the natural environment by transforming public policy and individual behaviour (Cundill, & Rodela, 2012).

Since the 1980s, grassroots protest movements have emerged in countries around the world to organise oppressed communities to stand up for their fundamental rights to livelihoods and safe environments (Kiefer & Benjamin, 1993) and gain as much power

influence in the decision-making process. These include for example, in the Philippines in 1996, the protest of the local community as a result of mining activities led to the enactment of laws banning mining in the area for between fifteen and twenty-five years (Shrader-Frechette, 2002). Also in the US, protesters at Love Canal, Forest Glen and Algeld Gardens successfully prevented the siting of polluting industries or toxic landfills (Shrader-Frechette, 2002).

Outside the United States, in Nigeria, the Ogoni ethnic minority group in the Niger Delta provides an African example of grassroots environmental protest action. The Movement for the Survival of the Ogoni People (MOSOP) campaigned against the extensive environmental damage caused to their wetland and water resources by the operations of Shell, Chevron and other multinational oil companies (Wheeler *et al.*, 2002). This non-violent campaign led to the execution of the leaders of the MOSOP by the Nigerian military government on November 10, 1995 which prompted international outrage and immediate suspension of Nigeria from the Commonwealth of Nations (Obi, 1997; Okome, 2000). In countries around the world, such grassroots and environmental action groups are consistently confronting institutionalised environmental injustices, and to protect oppressed communities and groups.

The focus of this thesis is on activist collectives that are made up of individuals at a grass-roots level, which “operate under a variety of organisational (and disorganisation) banners depending on the action concerned” (Anderson, 2004, p. 107). In England, activist groups and concerted grassroots protests against perceived injustice have led to the formation of CAGs, some of which may be long-lived e.g., CCAG whilst others have only operated for short period e.g., FRRA (CCAG, 2008a, NVCC, 2013a). Specifically, some strategic coastal defence policies arising from shoreline management initiatives from the late 1990s onward have generated the conditions promoting formation of CAGs.

3.6 Summary

This chapter has reviewed the literature related to a number of themes addressed in this study. Section 3.2 discussed the concepts related to community participation. This led on to a discussion about the background to coastal communities in England. The historical trajectory of flood and coastal erosion governance in England was traced back over the twenty years or so preceding the 2007 floods.

Section 3.3 detailed the key components of community participation. These are: 1) Rationale for community participation; 2) Definition of community participation; 3) Levels of community participation; 4) Benefits of community participation; and 5) Barriers to community participation. Due to different contexts of interpretations of the terms ‘community’ and ‘participation’, the definitions of community participation are sometimes controversial. However, for the purpose of this research, ‘community’ is regarded as something locational within which there are divisions which express its diversity and heterogeneity.

The influence of community participation is strongly related to their understanding of climate change. Therefore, Section 3.4 explored the role of the public engagement with flood and coastal erosion risk – examining different conceptualisations of the community which might get involved and how different individuals and communities perceive climate change. Finally, Section 3.5 explored the concept of social justice in the context of shoreline management and covered the history of local activism.

The literature offered in this chapter is not only useful in developing an understanding about public participation and related issues, but also the concepts covered in this Chapter are essential and helpful in interpreting, analysing, and integrating the analytical concepts of community participation in the shoreline management decision-making processes. The methodology for accomplishing this research is outlined in Chapter

Part Two: Data Collection, Analysis and Interpretation

Chapter Four: Research Methodology and Methods

4.1 Introduction

This Chapter outlines both the over-arching approach as well as the specific techniques adopted to address the objectives for the research. It begins with a discussion of the research strategy adopted and the arguments for and against combining the two approaches. Section 4.2 highlights the underpinning reasons for adopting a community case study approach and the reasons for employing a combination of techniques of data collection. Section 4.3 provides a description of the case studies area profile, which establishes background information of the research context. Sections 4.4 identifies the research design and the methods used in the selection of the research participants. A description of various participants involved in the study is also provided. The methods of data collection as well as its analysis is presented in Sections 4.5 - 4.6. The issues and concerns involved with each of the stages are outlined in the last section, and the responses adopted to address these issues and concerns are discussed.

4.2 Research Methodology

The research design is a systematic plan of research, usually involving the formulation of a strategy to resolve problems; the data collection methodology; the analysis of data and their interpretation; and the publication of results (Robson, 2002; Maxwell, 2005). This section focuses on the methodological approach based on the pragmatism paradigm applied for this study.

4.2.1 Justification for the Methodological Approach

As stated in Chapter One, the purpose of this study was to investigate the role of CAGs in developing local community participation within shoreline management. The key feature of the research would be to gather individual views, opinions and stories from the members of the groups, management authorities and external consultants in order to add depth to the understanding of local community participation and the shoreline management decision-making process. To achieve the purpose of the study, a case study approach was used. This approach was considered to be most suitable because

of its ability to explore and generate a holistic, in-depth investigation, personal opinions as well as intensive knowledge about a particular community (Saunders *et al.*, 2000). The choice of the case study approach was informed by a number of reasons. First, as a research strategy, the case study method is a technique for answering who, why and how questions (Yin, 2003b). Case study is most valuable when the question being posed requires an investigation of a real life intervention in detail, where the focus is on how and why the intervention succeeds or fails (Stake, 1995), where the general context will influence the outcome and where researchers asking the questions will not have control over the events (Keen & Packwood, 1995; Yin, 2003a).

Second, typically, a case study allows the use of a combination of data collection methods such as archives, interviews, questionnaires and observations to gather information in one study (Eisenhardt, 1989; Cunningham & Tiefenbacher, 2008). This is because no one method is sufficient to capture all salient aspects of an intervention (Keen & Packwood, 1995). The evidence gathered can either be qualitative or quantitative or both (Eisenhardt, 1989). This characteristic of case studies offered an opportunity to gain a rich picture, and in-depth and powerful data (Pegram, 2000), which was a benefit in this research.

In an evaluation context, the case studies have been used widely to document and analyse implementation processes and the outcomes of the initiatives, such as the initiatives supported by either government agencies or private organisations. Case studies are flexible and could comprise any programmes, projects, situations, initiatives or sites (Bassegy, 1999; Yin, 2003a). An exploration and description from a case study can provide a valuable function in identifying variables of contexts and mechanisms (Yin, 2003b) that might influence the effectiveness of a public participation process. The flexibility of case study research is beneficial to an evaluation study (Baxter, & Jack, 2008), in particular of a public participation process (Rowe, & Frewer, 2004; Hartley, 2006). The study is strengthened through the triangulation of both quantitative and qualitative data which were obtained by means of the questionnaire survey and the interviews respectively (Hussein, 2009). This will be discussed in more detail in Section 4.2.2.

4.2.2 Quantitative and Qualitative Approaches

Triangulation of qualitative and quantitative methods can be used to support theories from different angles of viewing. The departure point of quantitative social research, as the name suggests, is numerical measurement of social phenomena (Bryman, 2004; Grix, 2004). Researchers who employ the quantitative approach usually employ a very structured approach in which competing explanations are formulated in terms of the relationships between variables (Grix, 2004). Thus, quantitative researchers usually condense what they study into a number of key attributes which are generally taken as indicators or variables (Miller & Brewer, 2003). The ultimate goal of quantitative research, as stated by Miller and Brewer (2003, p. 193), is “to find as small a set of variables as possible which explain as much as possible”. Miller and Brewer (2003) further explained that to know something, one must establish general sets of relationships which are robust across as many instances or cases as possible.

Qualitative research is seen by many as almost the complete opposite of quantitative research (Gummesson, 2000; Maxwell, 2005; Seawright, & Gerring, 2008). Generally, qualitative researchers tend to use methods of data collection which are flexible and sensitive to the social context in which the data are being produced (Grix, 2004). The approach usually involves in-depth investigation of phenomena through such means as interviewing, focus groups, or participant observations, archival or other documentary analysis (Rosener, 1981; Ragin, 1994; Beierle, 2002; Garin *et al.*, 2002;) and other methods which do not rely on, but can involve numerical measurements. The language of qualitative research tends to revolve around case studies and social contexts instead of variables and hypotheses as is the case in quantitative research. As observed by Holloway (1997, p. 80), “qualitative research involves the interpretation of data whereby the researcher analyses cases in their social and cultural context over a specific period of time” and may develop theories that emphasize tracing process and sequence of events in specific settings (Grix, 2004).

A major argument against qualitative research is that it is usually small-scale and non-representative, producing results that cannot be generalised beyond the cases investigated (Grix, 2004). Thus, qualitative research is often accused of being

unscientific, unrepresentative, open to bias and even to manipulation, whether this is conscious or unconscious (Bryman, 2004; Grix, 2004).

4.2.3 Rationale for Mixed Methods Approach

The debate over research methods has served to advance the validity of each approach, ranging from data collection to analysis (Bergold & Thomas, 2012). For example, qualitative researchers argued that their method of research (i.e. interviewing or observation) is appropriate to allow the researcher to get closer to the data (i.e. individual's perspective). Meanwhile, researchers with quantitative method claim that their statistical or mathematical findings provide more reliable results. Following the quantitative-qualitative debate, the question has arisen whether the two 'opposing approaches' can be usefully combined in a single study³.

Several researchers (Denzin, 1989; Robson, 1993; Creswell, 2003; Grix, 2004) argued that there is much to be gained from a fusion of quantitative and qualitative methods in a single study of social phenomena. The views of these scholars suggest that the methods of quantitative and qualitative approaches can complement each other in a single study of social phenomena. In this regard, Grix (2004) has advised that it is generally a good idea for social scientists to use more than one method of enquiry to improve the chances of getting better, more reliable data and to minimise the chances of biased findings.

Basically, there are six common methods of data collection; questionnaires, interviews, focus groups, tests and scales, observations, and documentary analysis (Denscombe, 2002; Robson, 2002; Johnson & Turner, 2003; Teddlie & Tashakkori, 2003; Bryman, 2004). Different methods have various advantages and disadvantages and fit best in different circumstances (Denscombe, 2002). A number of previous studies about public participation have alternatively attempted to measure its effectiveness by ascertaining the perspectives of the participants through mixed data collection methods (Strobl & Bruce, 2000; Ogunlana *et al.*, 2001; Jabbour & Balsillie,

³ The combination of method is variously referred to as triangulation (Blaikie, 2000; Grix, 2004) multi-strategy research (Bryman, 2004), mixed methods research (Creswell, 2003) or multiple methods (Robson, 1993).

2003; Vantanen & Marttunen, 2005; Charuvichaipong & Sajor, 2006; Badr, 2009; Jha-Thakur *et al.*, 2009; Theophilou *et al.*, 2010).

Importantly, the data collection methods should be practical, efficient and feasible (Marshall & Rossman, 1999). Although participant observation has been often used in many evaluation studies of public participation and coastal zone management (Treby & Clark, 2004; Few *et al.*, 2006; White *et al.*, 2010), it was not adopted in this research. This is because the public consultation processes of the SMPs in selected case studies were already completed. An observation of the public hearing and other activities was not possible. However, the reports of the consultation process, and the related documentations were available. In addition, some coastlines threatened by flooding and erosion risks were also visited with interview participants, in order to provide strong arguments and supporting evidence for the study.

Predominantly the data gathered for this study is qualitative, through interviews with CAG coordinators, representatives from the EA and local authorities (referred to hitherto for this thesis as the management authorities) and shoreline management planning consultants. However, information gathered through the interviews is also considered quantitatively. In this study, quantitative data includes specific information about groups and members, such as group size, year of group foundation and a summary of the group stability and membership turnover, in combination with the qualitative opinions and stories, provide opportunities for themes within the data to be identified and understood. It is, however, imperative to note that data collection techniques employed in this study (semi-structured interviews, questionnaires, focus group, field observation and document analysis) complemented each other and ensured comparison while enabling crosschecking of the findings from one technique with those of another. This will be discussed in detail in subsequent sections of this Chapter (see Sections 4.5 to 4.8).

4.3 CAGs Selection

Perhaps the most difficult and significant issue associated with case studies approach is the selection of cases to study (Yin, 2003a, & 2003b; Stake, 2005). This thesis investigates the role CAGs in developing effective local community participation in the shoreline management decision-making process in England. Choosing an appropriate case study will allow the researcher to explore and analyse a specific phenomenon or situation in an in-depth and holistic manner (Merriam, 1998). In the case of this research, it was clear from the outset that very little documented procedures could be the subject of a desk study. Although empirical evidence from the wider literature suggests that public participation is vital to improving management (see, Renn *et al.*, 1995; O’Riordan & Ward, 1997; Edwards *et al.*, 1997; Fletcher, 2003 & 2007; Stojanovic & Barker, 2008; Scott, 2009; Maguire *et al.*, 2011 & 2012), none probed deeply enough on the specific role played by CAGs in the shoreline management decision-making process, to provide the insights required for this research.

Twelve CAGs (Figure 4.1) were identified for further study, comprising the whole population of active groups in England. For the groups to be included in the research, they had to fit within the following criteria: 1) they had to be made up of or run by voluntary participants and; 2) involved in the shoreline management activities.

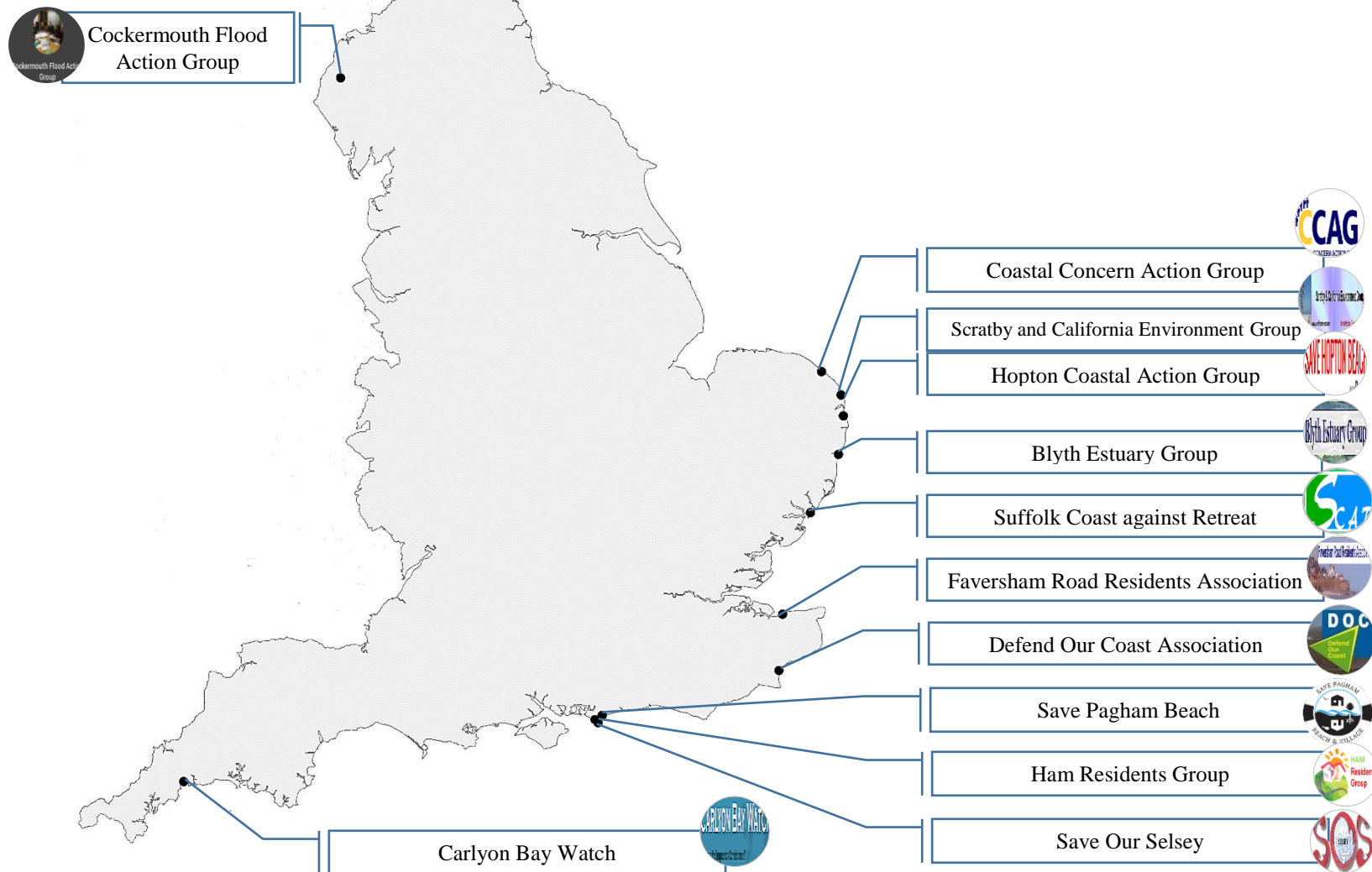
Local communities, in this research, do not necessarily refer to a group of people who live in the same physical settlement or locality, but also to those within the broader region who identify with the locality who share the common interest in shoreline risk management issues. The first stage of empirical study consisted of the development of a comprehensive list of local historical and environmental interest groups, to determine what groups were relevant to this study. This was followed by an intensive web search and contacts with the coordinators of the groups in order to find out more details on the groups, their thoughts, options and direct experience of the groups.

In order to test and address the objectives of this thesis (as stated in Section 1.2.2), the thesis adopted a multi-method strategy with five case studies from the 12 selected CAGs in England using both interviews and questionnaires to allow sufficient depth.

The five CAGs chosen were: The Blyth Estuary Group (BEG); Carlyon Bay Watch (CBW), Coastal Concern Action Groups (CCAG); Save our Selsey (SOS); and The Suffolk Coastal Against Retreat (SCaR). These case studies were selected to include some of the largest, longest established and active groups with known records of engagement within the shoreline management process. The case studies also facilitated the ability to examine the classification of CAGs as asserted by Kempton *et al.* (2001): Environmental justice; oppositional single-issue; and radical (each method of campaign will be explored extensively in Chapter Five).

The case studies were selected from locations that are affected by flood and coastal erosion hazards in England. It was intended originally to select a case study that covers both England and Wales; however, there were methodological difficulties of distinguishing between the two locations in terms of shoreline planning and management approaches. The practicalities of the research have also been considered, i.e. the need to have reliable and accessible information. Descriptions of each case study are also presented from Sections 4.3.1 - 4.3.12.

Figure 4.1- Coastal Action Groups in England (Source: Author's Own)



4.3.1 Blyth Estuary Group (BEG) – Suffolk

The Blyth Estuary Group (BEG) is located in Walberswick, Suffolk (Figure 4.2). It was formed in February 2006 to address local concerns and oppose the EA Strategy for flood risk planning in the Suffolk estuary of the river Blyth. (Blyth Estuary Group, 2012a).



Figure 4.2- Map showing the location of BEG (Source: Edina Data).

There was a perception from the local residents that in the River Blyth estuary there would be an increase in flooding that would result in changing land use and a loss of housing and livelihoods (Blyth Estuary Group, 2012b). These consequences motivated over a thousand people to gather on Walberswick beach in SOS formation in protest (Figure 4.3) (East Anglian Daily Times, 18th October, 2008).

The problem identified was therefore that policies cannot be enacted without a mutual understanding between the policy makers, in this case the EA, and the local residents. Other research reported in 2011 has come to the same conclusion, that successful changes in policy direction require ‘bottom up’ support as well as ‘top down’ instruction (Harries & Penning-Rowse, 2011).



Figure 4.3- People gathering on Walberswick beach in SOS (Source: East Anglian Daily Times, 2008)

The BEG supports the Walberswick Sea Defence Group, which was the initial action group selected for this study but was disbanded prior to the commencement of survey. The rationale for selection of the BEG was to provide the research with the similar characteristics as the Walberswick Sea Defence Group. In addition, both groups were ‘sending’ the same message to the government to formulate a long term sustainable solution to the problem of sea defence around their coastal environment. The aims of the group are (Blyth Estuary Group, 2012c):

- to protect and preserve the Blyth Estuary, it’s Harbour and infrastructure for the next generation.
- to investigate the science behind the EA’s strategy and challenge those elements the group considers flawed.
- to develop an affordable ‘contingency plan’ for the reinstatement and future maintenance of the clay walls.

- to seek cooperation through continued dialogue with the Government Agencies to facilitate advancement of its aims.
- to campaign for a change in the 1991 ‘Water Resources Act’ to give the EA a statutory duty to maintain the estuary defences to an agreed and acceptable standard.

The group comprises landowners, parish councillors, and representatives from other stakeholders such as the Southwold Harbour and River Blyth Users Association, Southwold Sailing Club and the Blois Estates. The BEG was chosen as it has a more complex organisational structure than other CAGs (Blyth Estuary Group, 2012d).

4.3.2 Carlyon Bay Watch (CBW) - Cornwall

The Carlyon Baywatch is situated in St Austell, Cornwall (Figure, 4.4).



Figure 4.4- Map showing the location of CBW (Source: Edina Data).

In 1990, a planning application was granted by Restormel Borough Council for 511 multi-storey holiday homes on Carlyon Bay beach. This was opposed by the local community. Despite massive local objection, the 1990 permission was renewed six years later to commence the development. The developers, Commercial Estates Group

(CEG), built temporary sea defences (Figure 4.5) made up of steel shuttering and rock armour in parts, some 40 metres out into the tidal zone to protect against erosion of the beach (Carlyon Bay Watch, n.d). After pressure was put on Restormel Borough Council by the local community, CEG was forced to make a planning application for a revised design. The developer was also required to maintain the sea defences along and included beach replenishment and recharge as part of the flood defences. Since that enforcement, no further work was undertaken by the developer until early 2015 (Carlyon Bay Watch, n.d).



Figure 4.5- Piles of steel shuttering and boulders left at Carlyon beach
(Source: Author's Own).

Carlyon Bay Watch (CBW) was formed in 2004; it comprises a group of local volunteers who came together following the announcement made in 2002 about the development on the beach at Carlyon Bay. Since the group lost the battle to stop the development of residential apartments on the beaches of Carlyon Bay, its aim has been revised to campaign for safe development and sustainable use of the beach (Carlyon Bay Watch, n.d). This case study forms an important part of this research in providing answers regarding how the aim and campaign of CAGs changes alongside a change in management decisions.

4.3.3 Coastal Concern Action Group (CCAG) - Norfolk

Coastal Concern Action Group (CCAG) is situated in Happisburgh, Norfolk. Its location is illustrated Figure 4.6.



Figure 4.6- Map showing the location of CCAG (Source: Edina Data).

Coastal erosion has been an issue for many years in Happisburgh, Norfolk (Poulton *et al*, 2004). Continuous breaches of the shingle bank as well as the repairs to the defences on numerous occasions convinced the EA that a more rapid decision would have to be considered (O’Riordan & Ward, 1997). Therefore, the government policy option for Happisburgh changed in 2002 from ‘hold the line’ to ‘no active intervention’. Maintenance and repair of defences were ceased, and the coastline was allowed to continue its natural regression (Figure 4.7). This decision led to the formation of CCAG (CCAG, 2008a; National Voice of Coastal Communities, 2013d).



Figure 4.7- Coastal erosion at Happisburgh (Source: Author's Own).

CCAG was frequently referred to in this research as one of the active CAGs due to its long existence and significant level of activities and campaign for social justice in shoreline governance. In terms of the relevance, practicality and lessons the CCAG case study could offer, it has been in continual operation for almost 17 years and has implemented consistently in its campaign since its launch. The CCAG is part of the National Voice of Coastal Communities (NVCC), an array of various community action groups and individuals which are campaigning against Government policies on shoreline management (National Voice of Coastal Communities, 2013d).

The CCAG has gained national recognition for its work campaigning for appropriate coastal governance and social justice (CCAG, 2008b). The maturity of this group is rare amongst other CAGs in this study in terms of similar initiatives, perseverance, and the length of time they have been in operation and development.

4.3.4 Cockermouth Flood Action Group (CFAG) – Cumbria

The Cumbrian floods in 2005 which centred on the town of Cockermouth were the most serious in many years (Tickner, 2011), with the flooding of 1,800 properties and the evacuation of 200 homes in the town (Environment Agency, 2009a & 2009b). Cockermouth Flood Action Group (CFAG) was established in 2009, and has been working proactively with the agencies responsible for flood prevention in the local area to achieve reductions to the flood risk. Figure 4.8 illustrates the location of CFAG.

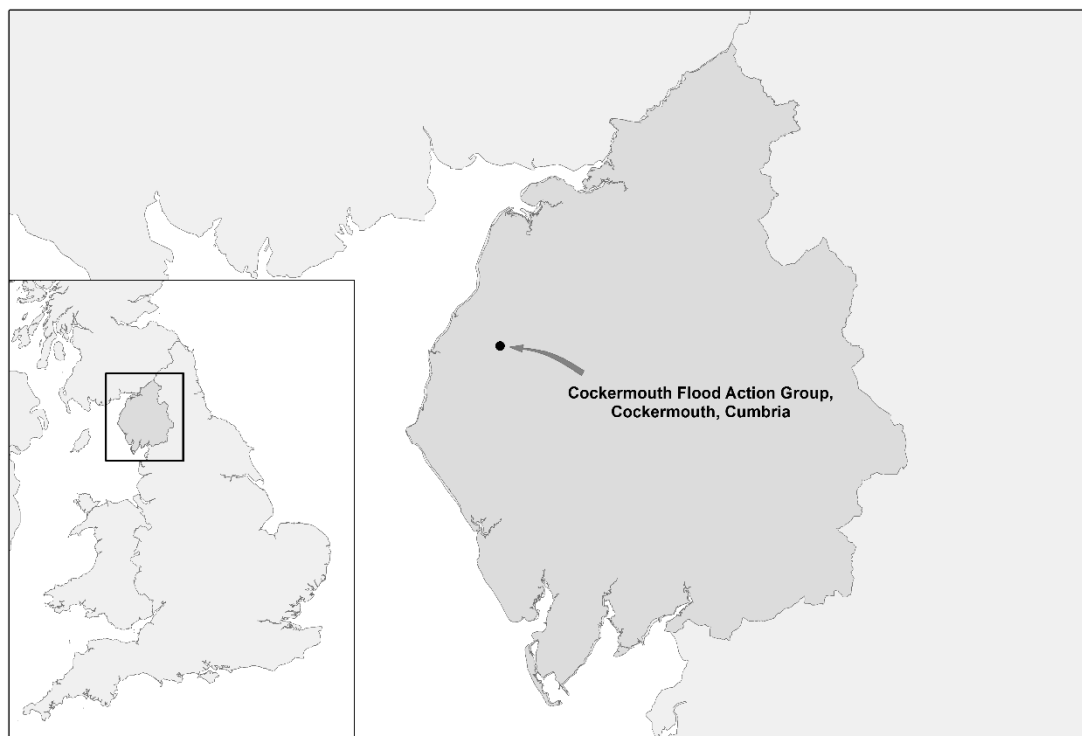


Figure 4.8- Map showing the location of CFAG (Source: Edina Data).

Although its focus is upon fluvial issues, CFAG operates in similar manner to the coastal groups and has similar aims. Inclusion of CFAG as a case study is valuable to further exemplify the interaction of an active action group with government. Although the group is located inland, CFAG organised themselves into key sub groups, dealing with communication, technical/ engineering, social wellbeing and fund raising for all communities along the Cumbrian coast. The group was initially seen as a pressure group but was later recognised for the essential role it could play as part of the wider EA led project team (Cockermouth Flood Action Group, 2012).

As part of its activity, the group has lobbied locally for an increase in local council tax to support the construction of future defence work (Andrew, 2012). Among the members of the group are the local residents and stakeholder representatives. The group has been particularly active in issuing flood warning and relevant information to their community through their website.

4.3.5 Defend Our Coast Association (DOCA) – Kent

Dissatisfaction from the level of consultation by Government agencies during sea defence policy planning and preparation of SMPs led to the formation of Defend Our Coast Association (DOCA) by the local community (Defend Our Coast Association, 2014a). Figure 4.9 illustrates the location of DOCA.



Figure 4.9- Map showing the location of DOCA (Source: Edina Data).

The group was set up in 2008 as a voluntary organisation with the following aims (Defend Our Coast Association, 2014b; National Voice of Coastal Communities, 2013c):

- to act on behalf of all local communities on the marsh in negotiations with various Government agencies in order to maintain and improve the existing sea defences.
- to liaise closely with all local stakeholders, businesses and Local Authorities to protect the communities from flooding.
- to justify to Government the continued need for sustainable communities on the marsh and to ensure that ‘managed realignment’ is not a preferred option.
- to work closely with all local communities to highlight coastal defence issues and associated effects of climate change.
- to disseminate all relevant information on sea defence issues throughout the local communities, councils and educational institutions and generally improve coastal literacy.

In the period 2008 – 2014, DOCA has lobbied actively to secure better and improved coast defences for the Marsh and has worked closely with all relevant government agencies in order to achieve this goal (Defend Our Coast Association, 2014a). In addition, the group has engaged in various activities (Figure 4.10) to keep local people informed about the progress of defending the marsh and to safeguard its inhabitants and environment from flooding.



Figure 4.10- DOCA community fun fair (Source: DOC, 2015).

In 2004 the published SMP, (Folkestone to Cliff End) recommended ‘Managed Retreat’ for the marsh, a plan which the local community felt will affect properties on this stretch of coast and placed the whole marsh at an increased risk of flooding. Following years of lobbying by the group, the EA re-considered the various options and proposed a scheme of ‘Hold the Line’ (Defend Our Coast Association, 2014c).

The group constitution only allowed serving officers to be in their role for five years and during its Annual General Meeting (AGM) in October 2014, there were no new officers willing to take part in the election to the roles. Due to this reason, the group members unanimously agreed to disband the organisation (Defend Our Coast Association, 2014c). However, the group continued to assist in dissemination of vital flood/sea defence information to the wider public through their website. This case study has been chosen as it represents a relatively successful CAG in terms of its campaign activities (Defend Our Coast Association, 2014c).

4.3.6 Faversham Road Residents Association (FRRA) – Kent

The Faversham Road Residents Association (FRRA) is located in Whitstable, Kent (Figure 4.11).

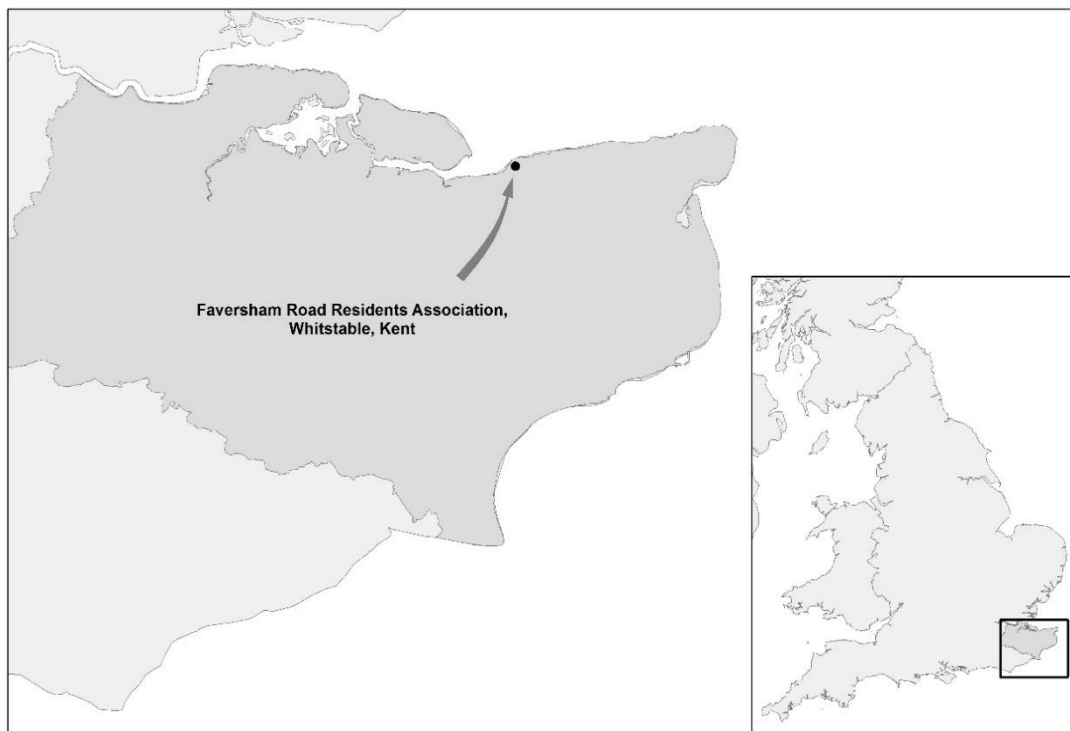


Figure 4.11- Map showing the location of FRRA (Source: Edina Data).

FRRA was formed in August 2007 in response to the draft SMP for North Kent. This proposed a medium term policy of managed realignment at Faversham Road (National Voice of Coastal Communities 2013a; Kent Life, 2015). While a summary of the draft SMP was made available to the community in 2007, residents were told they could expect their homes to be lost in the process, with no prospect of compensation.

The residents were unimpressed that they had not been fully involved as participants in the policy development process from its early stages (Blunkell, 2008). Therefore, they considered the proposed policy to be unjust. The local community argued that the consultation process bred mistrust and encouraged the belief that ulterior motives were at play (Blunkell, 2008). This led to a collective response and the setting up of FRRA. In matters specific to the campaign of FRRA, the group was particularly active in: 1) launching a petition; 2) lobbying politicians; 3) coalition with other CAGs; 4) involvement of the local press; and 5) sought legal advice (National Voice of Coastal Communities, 2013a). This case study is important in providing the research with evidence of a collective effort of a small community in amending policy proposals.

4.3.7 Ham Residents Group (HRG) – West Sussex

The Ham Residents Group is situated in St Austell, Cornwall (Figure, 4.12).



Figure 4.12- Map showing the location of HRG (Source: Edina Data).

The initial management option proposed for Medmerry was a ‘Hold the line’, similar to the surrounding coastlines. Following the government revision of the initial plan and an extensive consultation, the EA recommended managed realignment as the preferred option in the Pagham to East Head Coastal Defence Strategy (Environment Agency, 2007). Continued input from local residents, councils and interested parties was recognised by the EA. This led to the establishment of the Medmerry Stakeholder Advisory Group (MStAG) in 2009. The formation of MStAG provided the local residents the opportunity to learn more about the flood risk management scheme and discuss their ideas on how it can benefit their communities (Thomas, 2014).

In the Medmerry Managed realignment scheme, defences were built inland from the coast, allowing a new intertidal⁴ area to form seaward of the new defences. The main intention behind the scheme was to create ‘accommodation space’ within the coastal area in front of the new defences (Morris, 2012) and to provide additional protection with the new defences (Esteves, 2013). The HRG is involved in the MStAG to represent the ‘voice’ of Ham local community in the Medmerry managed realignment scheme.

The Ham Residents Group was chosen as a case study as it represents the ‘voice’ of Ham residents in the Medmerry Stakeholder Advisory Group (MstAG). It should be noted that whilst the study was intended to investigate the activities of CAGs, the inclusion of MStAG as one of the CAGs was somewhat debatable. MStAG was led by the EA to promote, manage and support the community effort, implementing and facilitating policy and action. Therefore, the EA’s decisions in many of the issues were resolved within the group before it was finally ratified.

4.3.8 Hopton Coastal Action Group (HCAG) – Norfolk

The Hopton Coastal Action Group is located in Hopton, Norfolk (Figure 4.13). The selection of this case study was mainly based on its active campaign. The group was formed in 2010 following the change in the Kelling to Lowestoft SMP from ‘hold the line’ to ‘no active intervention’ in the medium and long term.

⁴ 'Intertidal' refers to the land that is exposed at low tide and covered by the sea at high tide.



Figure 4.13- Map showing the location of HCAG (Source: Edina Data).

The community residents of Hopton partners with Bourne Leisure (owners of Haven’s Hopton Holiday Village) to embark on a two-year study to find the reasons for the erosion of cliffs, failure of coastal defences and collapse of beach accesses. As result of the investigation, it was concluded that the construction of the Outer Harbour at Great Yarmouth caused the substantially increased erosion of the beach. However, Hopton Coastal Action Group (HCAG) argued that this claim has been repeatedly been denied by the EA, Defra and the Great Yarmouth Borough Council.

The plan to abandon the long stretch of the coast to the sea had driven the establishment of HCAG in 2010. In 2014, the group was successful in their campaign for a planning permission to put up private sea defences. As HCAG was targeting specific sea defences, they harnessed the energy of communities bringing their campaign motives and methods to where action could be locally determined and undertaken. The HCAG has various partners from different interest groups including public, private and voluntary sectors. Much of the development along the shoreline in Hopton, including building of private defences are the result of the cooperative partnership working between the owners of the caravan park, HCAG, and Great Yarmouth Borough Council.

4.3.9 Save Our Selsey (SOS) – West Sussex

Save Our Selsey is located in Selsey, West Sussex (Figure 4.14).



Figure 4.14- Map showing the location of SOS (Source: Edina Data).

The Pagham to East Head draft Coastal Defence Strategy (2007) set out how the EA in partnership with Chichester and Arun District Councils proposed to manage flood and coastal erosion risks in the area for the subsequent 100 years (Environment Agency, 2007). The strategy indicates that the preferred option for Selsey Bill was ‘no active intervention’ (Environment Agency, 2007). SOS was established in 2007 to alert and inform residents and businesses of the proposals, and to campaign for a fair solution to the management of the coastline (Save Our Selsey, n.d). SOS continued in its campaign (Figure 4.15) for the management of existing defence until the new strategy (managed realignment) was agreed in 2009.



Figure 4.15- S.O.S publicity against the defence strategy (Source: Save Our Selsey, n.d)

Similar to the HRG (discussed in Section 4.3.7), SOS became part of the MstAG which was led by the EA. The SOS group campaigned for (National Voice of Coastal Communities, 2013b):

- a sustainable solution to coast defence
- social justice in shoreline management
- proper information and representation
- compensation for people whose property, are lost or devalued.

At the time of the survey (2014) the group had been disbanded. However, it continued to show commitment to the progress of defending the shoreline and to safeguard its inhabitants and environment from flooding (Personal Communication). The case study provided the research with useful information on the activities of a well-developed CAG and methods of successful campaign.

4.3.10 Save Pagham Beach (SPB) – West Sussex

The rationale behind the selection of Save Pagham Beach (SPB) as case a study was to provide the research with evidence that CAGs could form in response to an immediate flood and coastal erosion risk. SPB was formed following a major storm surge that hit the UK coasts in 2012. Figure 4.16 illustrates the location of SPB.



Figure 4.16- Map showing the location of SPB (Source: Edina Data).

The devastating effect of the storm caused the spit of shingle in Pagham to displace the harbour entrance and subsequently forcing an aggressive tide to flow parallel to the beach, resulting extensive erosion (Save Pagham Beach, 2014a). SPB noted that both the EA and Defra would not do anything to prevent a natural breach of the shingle spit nor seek to re-close the spit provided it was the result of natural processes (Save Pagham Beach, 2014a).

The aims of the group are (Save Pagham Beach, 2014b):

- to help identify, fund and implement sea defence projects to a minimal standard;
- to encourage greater participation in shoreline management activities by all sectors of the community and;
- to enable like-minded stakeholders to meet and discuss solutions to environmental problems.

At the time of writing this thesis, the group stands at around 10 members (Save Pagham Beach, 2014b). The membership number of this group is the least in the survey population.

4.3.11 Scratby and California Environment Group (SCEG) - Norfolk

Scratby and California Environment Group (SCEG) are situated eight miles north of Great Yarmouth in Norfolk (Figure 4.17).



Figure 4.17- Map showing the location of SCEG (Source: Edina Data).

The majority of the groups included in this survey were formed in reaction to changes in shoreline management policies⁵. SCEG was formed in 2004 following the proposed Kelling to Lowestoft SMP policy option of ‘no active intervention’ (Scraby & California Environment Group, 2015a). The group undertakes campaigns on shoreline improvements and raises awareness of the value of local participation of the wider community. Among its objectives are (Scraby & California Environment Group, 2015b):

- to work on behalf of the parish of Ormesby St Margaret with Scraby to establish all the facts relating to coastal erosion in our area.
- to present an ultimate argument and propose the necessary course of action to minimize or obviate the effects and threat of coastal erosion to the village.
- to understand the effects and threats of storm and tidal surges to the cliff.

As a result of their vigorous campaigns, the group have succeeded in having the policy of ‘no active interaction’ for Scraby changed to ‘managed realignment’ by the management authority (Scraby & California Environment Group, 2015c). SCEG have also succeeded with the co-operation of Great Yarmouth Borough Council (GYBC) in formulating a scheme for defences by extending the rock berm which gained EA approval in 2014. It was of interest, therefore, to investigate the partnership of this group with the authorities in achieving dialogue on shoreline management issues.

⁵ The only exception is the CFAG that raises significant concerns over the future protection of the town of Cumbria against the risk of flooding.

4.3.12 Suffolk Coast against Retreat (SCaR) - Suffolk

Suffolk Coast against Retreat (SCaR) is located in Felixstowe, Suffolk (Figure 4.18).

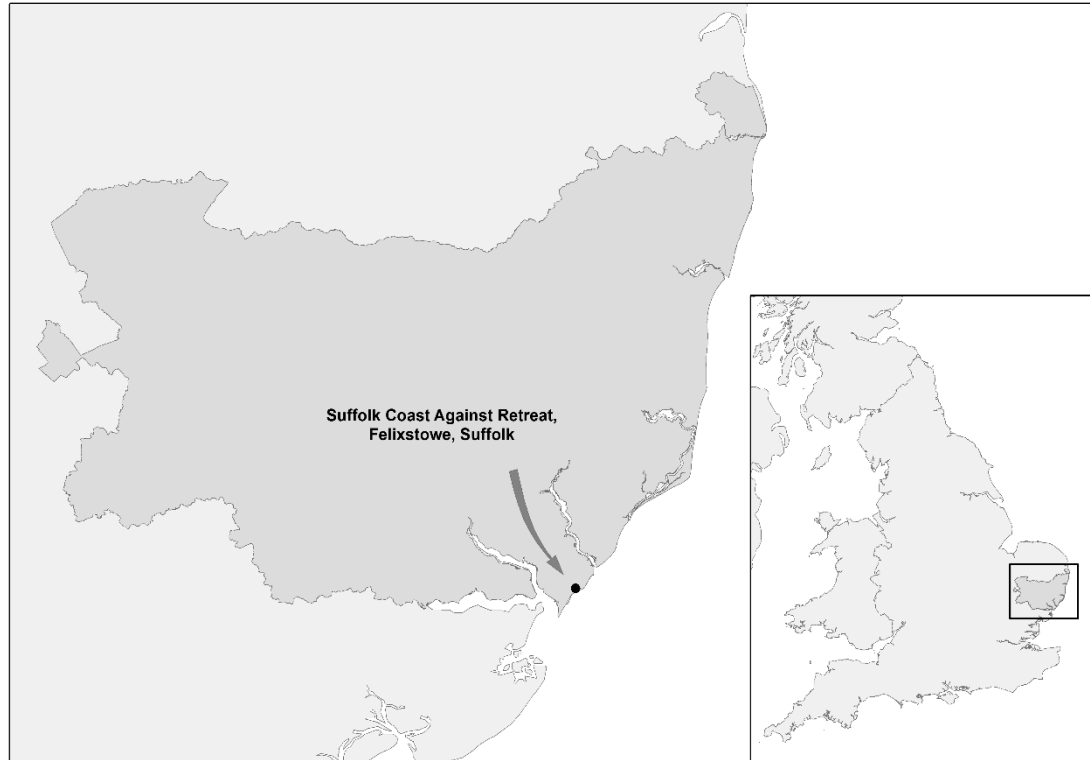


Figure 4.18- Map showing the location of SCaR (Source: Edina Data).

High rates of coastal retreat characterise the coastline of East Anglia (Brooks & Spencer, 2010). The Suffolk SMP proposed that all 45 miles of the coast could not be defended as a result of cost (Halcrow, 1997). Responding to this, residents from the affected communities organised a public meeting to discuss the shoreline management issues in Suffolk and the improvement actions needed to be taken. The meeting concluded the need of an action group to represent the collective voice of the community (Suffolk Coast against Retreat, 2015). To this end, in 2004, the local community launched the SCaR, and commenced campaigning for an alternative approach to defending Suffolk's coast. This group and individuals were, and in some instances still are, operating outside of the existing consultation processes of Local Government plans and EA strategies (Green, 2007).

SCaR has pledged to its community to preserve and protect the Suffolk coastline from erosion and flooding, and essentially to be very wary of change. The group has criticised the Government for not paying attention to the issue of coastal erosion (Suffolk Coast against Retreat, 2015). The range and complexity of shoreline management issues along the Suffolk coast is reflected in the partnership of SCaR with other organisations and authorities. In 2012, SCaR became part of the Suffolk Coast Forum which was established as a partnership of statutory authorities and community groups (Suffolk Coast Forum, 2015). This case study provided an interesting examination of a partnership approach to flood and coastal erosion risk management and closely related issues in the context of ICZM.

4.4 Selection of Respondents for the Study

In carrying out data collection for multiple case studies, it was essential to ensure that the method was carefully planned and consistent in terms of the preparation, procedures followed and analysis used across each case study. Following on from the decision to adopt a case study approach and the selection of case studies, a protocol was drawn up outlining the necessary actions that would enable data collection for each case study to be undertaken. These steps included:

- Background research/documentary review for case study areas
- Identification of key contacts for each case study group
- Preparation and sending of introductory communication to identified contacts
- Arrangement and undertaking of interviews with key participants and dissemination of questionnaires to members of CAGs
- Writing up interviews

Whilst it was important to plan ahead for the research involving multiple case studies, it was also recognised that the case study protocol could not be entirely prescriptive and that the research design should be flexible enough to accommodate any adjustments to the data collection strategy made as a result of initial findings or pilot studies (Yin, 2003b).

4.4.1 CAG Coordinators

The coordinators of CAGs became the main focus as the participants of the study because of indications that their groups had been excluded from shoreline management decision-making process. In addition, the group coordinators were targeted because it was judged that the individuals would have been more closely involved in the group's campaign activities. Therefore, they have a more detailed working knowledge of how their group functions and wider issues surrounding shoreline management. It was aimed that these coordinators will provide in-depth and useful information for the study. Initial interviews with the coordinator of CCAG, the review of each CAGs' websites and the collection of associated documents provided background information on the case studies.

Group member questionnaires were designed as a sampling tool to select key issues for discussion at the interview. These were followed by contacting the 12 selected CAGs coordinators (via email) (See Appendix One) with the purpose of providing information on: 1) whether the group is still active in their campaigns; 2) whether their group is willing to participate in the questionnaire survey and interview discussions; and 3) membership numbers for group questionnaires. Figure 4.19 presents a conceptual diagram of the key participants in the study and the process of data collection.

4.4.2 Shoreline Management Authorities

Two distinct organisations were identified to ensure adequate coverage of all research objectives. These are government representatives at the regional level and the local level. At the regional level, representatives from the EA were contacted for interview in order to gain a more strategic understanding of the shoreline management process. While at the local level, coastal engineers and officers working in the relevant authorities were contacted to participate in the study (Appendix One). Local government officers were crucial in this case because local governments are often a keystone to successfully implementing and enforcing public participation (Tuler *et al.*, 2002).

The main reason for selecting the representatives of shoreline management authorities as participants in this study is that, principally, different authorities play important and various roles in the shoreline management policy formulation and implementation. Investigating this subject from various management authorities can lead to a wide range of useful views and experiences that would be beneficial to the research (Carnes *et al.*, 1996). Recognition of the differences in behaviour and attitudes among different parties in society is a rational concept of public participation process (Churchman & Sadan, 2004).

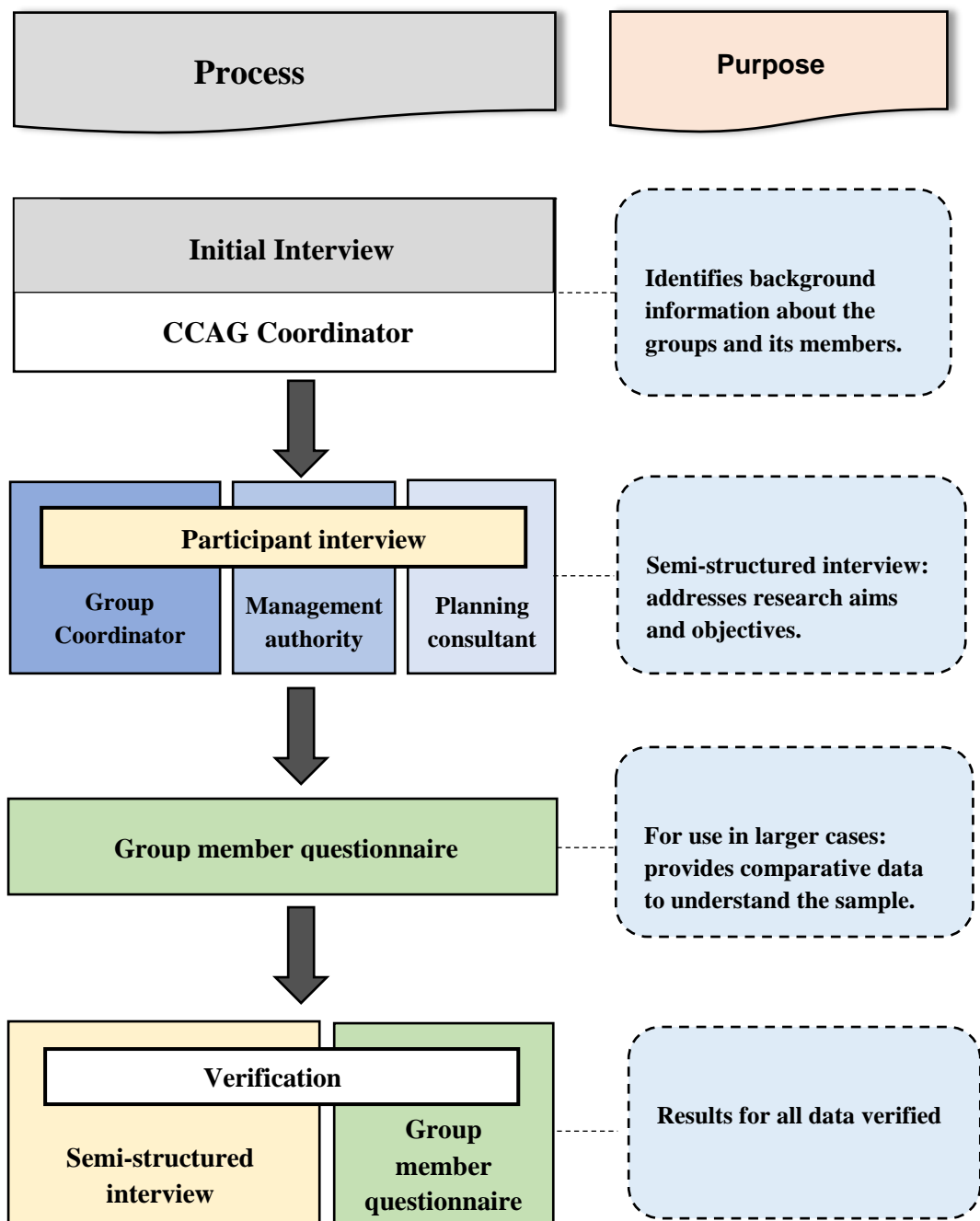


Figure 4.19- Data collection process and function (Source: Author's Own).

4.4.3 Shoreline Planning Consultants

With regard to the consultants, many of them were already involved in the shoreline management planning. The practitioners with expertise in flood and coastal erosion defences were viewed as key informants. Consulting firms who were most accessible and had an important role in the preparation of SMPs were identified and selected because it has been acknowledged that they have particular characteristics that enable detailed exploration and understanding of public participation issues (Child, 1996; Creighton, 2005). One of the selected consultants worked closely with the affected communities during the preparation of SMPs⁶ and advised the government on other projects such as the Medmerry Managed Realignment Scheme. The consultants who participated in the study were contacted by email and telephone and given sufficient explanation of the research (see Appendix Two).

4.5 The Questionnaire Survey

To allow a clear comparison of responses and in order to complement and verify the information obtained from the semi-structured interviews, a questionnaire survey involving group members in the study areas was also conducted. While the value of this mixed method approach is reflected in its ability to combine both qualitative and quantitative methods examining the research aims and objectives, it also allows the findings of one investigation to be checked against the findings of the other type (Bryman, 2004).

4.5.1 Designing the Questionnaire

The questionnaire for the group members was developed to cover an aspect of the objectives of the study which was to examine personal motivations and experiences of CAG members. The combination of management and planning, as well as community involvement in the decision-making process - typically reflect the key problems in shoreline management today (as described in Chapter Two of this thesis).

⁶ Royal Haskoning DHV was commissioned to develop and review some of the SMPs in England.

The purpose of conducting the questionnaires was to gather a sample of opinions from members of the group about the following issues:

- issues of importance to them in their coastal communities;
- coastal erosion and flooding generally;
- community awareness about shoreline management process;
- community involvement in the shoreline management process;
- the reasons for individual group campaigns; and
- the role and responsibility of management authorities

The questionnaire contained both closed and open-ended questions. While closed-format questions were used to enable the researcher to examine people's response on specific pre-coded aspects, open questions were predominantly useful for identifying the reasons why a particular respondent held such a point of view on a specific aspect. An advantage of this type of questionnaire technique was that while the closed questions made the questionnaire easier to complete, the open-ended questions provided the opportunity for respondents to give more detailed information about the issues being investigated (Covell *et al.*, 2012).

It is important that the data gathering instrument is designed in such a way that it is capable of being replicated and providing the information that is required (Grix, 2004). In order to achieve this, the questionnaire was divided into appropriate sections to allow for the systematic collection of data from the group members. Since the study sought to collect the views of local people, then a technique that would lead to representation of the community was crucial for this study. In line with what Long *et al.* (1996) advised all ambiguity was avoided. The questions were worded in a meaningful way to the understanding of the respondents. To aid this, the initial stages of the research involved an unstructured interview with the coordinator of one of the CAGs⁷. This revealed some of the issues that were important to campaigners, and

⁷ Malcolm Kirby- Group coordinator, CCAG was one of the key participants in a study conducted by the researcher in Happisburgh on local residents' views and best practice for public consultation in Shoreline Management Plans.

allowed a familiarisation with the vocabulary activists use to talk about their perspectives.

There are four main sections in the questionnaire. The questionnaire began with introductory questions set purposely to gauge whether respondents had some ideas or knowledge about the group and its activities in general. Questions were asked relating to such issues as why they had decided to take part in CAGs, or what they hoped to achieve by their actions. These were followed by behaviour questions to identify and explore the group's involvement in shoreline management planning and decision-making processes. Since these topics are significant to the activists, it was hoped this would engage their interest (Newell, 1995). The third section consists of attitudinal questions enquiring about what respondents think or feel about certain issues. The section presents the main argument of the questionnaire. It outlines the future expectations regarding local community participation in the shoreline management decision-making process. While it is reasonable to expect people to be able to answer the first two sections of questions fairly accurately, it is important to be aware of the limitations of memory and the possibility of bias being introduced (Bowling, 2005; Barnhardt & Geraci, 2008).

The final section of the questionnaire entitled 'about you' consisted mainly of classification questions probing respondents' age, sex, education and occupation. Because these questions referred to highly sensitive and personal aspects of people's lives, they can be very off-putting (Oppenheim, 1992). Bell (2014) suggests that the response rate to these questions can be improved by placing them towards the end of the questionnaire, in the hope that respondents would be committed to answering it, having already devoted their time and effort. Also, by asking respondents to indicate a category, rather than provide specific information, for example with age: 17-24, 25-34, 35-44, makes participants less troubled when providing an answer.

In the vast majority of variables, succinct questions were provided after which tick boxes along with a number of options were presented to the user. An example can be seen in Figure 4.20.

[Q.8] What other groups/agencies does your group have involvement with in relation to the shoreline management review and monitoring process? Please tick (✓) all that apply.

(✓)

Coastal Partnerships	<input type="checkbox"/>
Coastal Defence Groups	<input type="checkbox"/>
Shoreline management authorities (Defra, EA)	<input type="checkbox"/>
Other Action Groups	<input type="checkbox"/>
Other*	<input type="checkbox"/>

* Please specify.....

Figure 4.20- An example of closed-question used within this research (Source: Author's Own)

In all cases clear instructions for the respondent were provided. With regards to Figure 4.20, the instruction of '✓ more than one box if applicable' was provided. Additionally, any list of options cannot realistically be exhaustive if concerns regarding questionnaire length and response rates are to be addressed (Dillman, 2000). To cater for respondents disclosing additional information the last option to any tick box list is 'other, please specify' which permits the respondents to provide additional relevant information in free-form.

4.5.2 Process for Pilot Testing the Questionnaire

The design of a questionnaire survey is not without its shortcomings and problems (Oppenheim, 2000). Numerous drafts of the questionnaire were made to improve its design and content. This phase is essential to confirm the validity and reliability of the conceptual contents of the specific questions. There are two main objectives of a pilot in this study: firstly to look at the wording, in order to make sure that the questions and the instructions for completing them were clear, and secondly, to look at the formatting (Bryman, 2004).

Before administering the questionnaires, the pilot survey was split into two stages. Eight research colleagues were asked to fill in the questionnaire and record the time they took to complete it. The objective was that the questionnaire could be completed

within fifteen to twenty minutes. It would be unreasonable to expect respondents to dedicate more time than this and even with this length of time there was the danger that participants may become bored and stop. The second stage of the pilot necessitated drawing a small sample from the survey's main population (Newell, 1995). A pilot survey was conducted with the CCAG coordinator, University lecturers and research students. The aim was not only to pre-test the questionnaire with the view to ensure that respondents would understand the questions and provide appropriate responses, but also to check whether administration of the survey procedure as a whole would run smoothly (Finn *et al.*, 2000).

Experience from the survey procedure and feedback from respondents regarding the questionnaire were with no concerns. Valuable change to the original questionnaire was the ordering, wording, style of certain questions and in particular, a section asking respondents to provide their e-mail address if they were willing to take a further part in the research. For ethical reasons, it was suggested that the respondents could contact the researcher via his email address instead. Once the pilot stage had been successfully completed, the amended questionnaire (Appendix Three) was then prepared in multiple copies ready for use as a study instrument to elicit the required information from respondents (Figure 4.21).

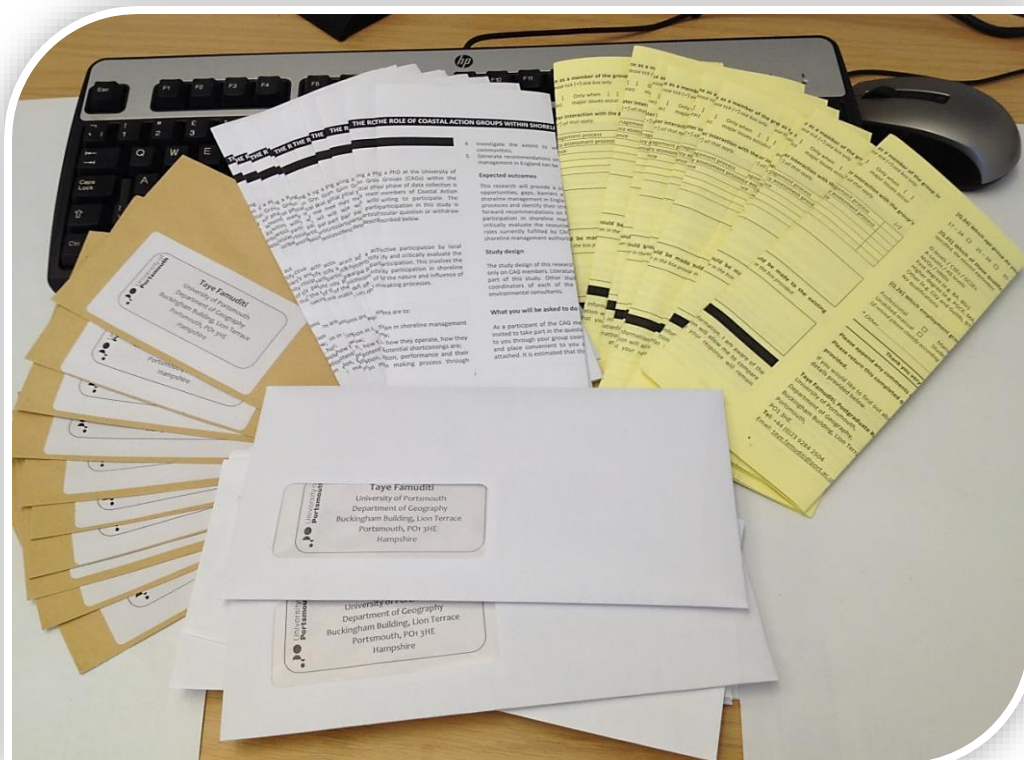


Figure 4.21- Questionnaire pack delivered to members of CAGs (Source: Author's Own).

4.5.3 Administering the Questionnaire

A number of factors including the absence of a definite meeting time of the groups of the selected CAGs, and the unverified number of members attending the meetings precluded the use of any random means of selecting the participating members. Faced with this situation, an alternative way of selecting participating group members had to be found. 12 CAGs were investigated but SOS and HRG were dissolved after the agreement on the Medmerry Managed Realignment Scheme in 2009, so that questionnaires and interviews were not feasible. However, these groups did engage in important interactions with the shoreline management processes so they are included for review of their past activities.

The remaining 10 CAG coordinators were contacted by email and/or telephone and were extremely useful in terms of distributing the questionnaires to members of their groups, both those that were easily contactable during group meetings and those who had provided the coordinators with their postal addresses. Given the membership number of approximately 10 from 10 case studies, it was decided that this was a sufficient number of potential respondents to yield an acceptable level of responses. The approach adopted for the administration of the questionnaire was with the help of coordinators in each study area. Prior to the interview with the group coordinators, each of them was sent an e-mail outlining the purpose of the research.

Due to their roles as local group coordinators access to the internet is a requirement, hence it was theoretically possible to contact every coordinator linked with the selected groups. The e-mails requested them to help in distributing the questionnaire to the members of their groups during meetings. A letter of introduction from the researcher and a covering letter were attached to the questionnaire, along with a returning stamped addressed envelope to the 12 CAG coordinators (Figure 4.21). They are shown in Appendix One and Two respectively.

To reduce the time and resources involved in the administration of the questionnaires, and to reduce non-response, the questionnaires, along with returning stamped addressed envelopes (Edwards *et al.*, 2002) were posted by the researcher to the group coordinators, to be administered during their meetings. In some cases, where the

members were not present at the meeting the questionnaires were posted to their home address using the stamp included in the survey. This was generously undertaken by the group coordinators. At the end of each interview with the coordinator, the returned questionnaires were obtained. For those members who had not returned their questionnaire at the time of collection from the coordinator, a reminder was sent by the group leaders prompting them to return the questionnaires to the researcher with the enclosed stamped addressed envelope.

With regards to questionnaire deployment and response rates, the decision to use a central point of contact (in this case, the CAG coordinators) to feed the questionnaire out to a wider group of respondents again proved effective (Creswell, 2003) and contact details had to be assembled from a single of source. However, the method suffers from a number of potential problems. The key advantage is that the group coordinator can identify the members and has their contact details and so can maximise the survey return. Also, respondent identities are kept confidential from researcher. A disadvantage of this approach is that it is inflexible because there is usually no opportunity to probe the social context in which questions are answered. In addition, the results from different members of the groups were compared to ensure accuracy.

4.5.4 Response Rates

The response rate to the questionnaire survey was initially slow, which led to initial concerns that an acceptable response rate would be achieved. One group (SPB) stated they were too small to be of any use in the questionnaire and returned most of the survey unanswered. The issue concerning the variable time of meetings was the main reason why respondents returned questionnaires late. Numerous respondents stated that some of their group meetings were held once a month which has limited their ability to collect the questionnaire and complete on time. While delays in receiving the questionnaires may not have given the respondents much time to ponder over some of their responses, the overall outcomes were sufficient for the research. The overall survey population was 100, of which 78 replies were deemed valid. This gives an overall response rate of 78% (Table 4.1).

Table 4.1- Response rate to the questionnaire survey (n= 100).

	Number	Percentage
Total Sent (<i>by post to coordinators</i>)	100	100%
Total Number of Responses	78	78
<i>Collected during interviews</i>	<i>64</i>	
<i>Returned by post</i>	<i>14</i>	
Total Number of Non- Responses (<i>questionnaire was not returned</i>)	6	6
Total Number of Invalid Responses (<i>declined to participate, returned blank</i>)	16	16
Total Number of Valid Responses	78	78

Higher response rates were achieved for closed questions, where respondents were provided with a list of options to choose from, and they were required to simply mark the most applicable answer. Additionally, where respondents were asked simple, specific open ended questions, such as the methods of campaign, response rates were also high. Low response rates were witnessed for ‘social justice’ questions which required respondents to explain their understandings. Subjective open-ended questions, such as “What involvement do you feel the group has in the shoreline management decision making process?” gained few responses (Lynn, 2001).

4.6 Semi - Structured Interviews

Interviews are one of the most common and important methods of data collection in case study research (Yin, 2003b). This is because the technique is ‘introspective’ and allows respondents to report on themselves, their views, their beliefs, practices, interactions and concerns (Freebody, 2003). Interviews are not only applied as an unaccompanied method of data collection, but frequently they are also used in combination with other methods (Kvale, 2007) because of their extensive advantages. Interviews provide a wealth of detail, in-depth, and nuanced information that other methods may not capture because interviewees are more likely providing idiosyncratic and complex information (Innes, 1999).

The interview technique is associated with a number of advantages over questionnaires and these showed up in the interviews conducted by the researcher for this study. Interviews create the opportunity for interviewees to ask for clarification when they do not understand a question just as the interviewer can ask for elaborations on answers given by interviewees (Kvale, 2007). Furthermore, there is the guarantee that all questions would be answered or, at least, attempted by the interviewee (once he/she can allow enough time for the interview) which ensures a high response rate. Moreover, it becomes possible to check on the reliability of a response by asking the same question differently and at various stages of the interview (Freebody, 2003).

Based on the extensive benefits of interviews discussed above, in this study, semi-structured interviews were the most appropriate method to elicit information from participants' experience, perceptions, and meanings to investigate public participation practice (Bamberger *et al.*, 2011) since interviews focus on studying participants' viewpoints (Bryman, 2004). Semi-structured interviews were preferred because the approach allows an examination of how the different groups involved in the shoreline management process and the exploration of meanings from their own perspective; to understand, from the 'inside' (Blaikie 1993) what it is like to be flooded or threatened by the risk of flooding and coastal erosion and how local communities respond.

Semi-structured interviews are not a series of identical questions to be asked (Grix, 2004; Steinke, 2004). Rather the interviews were guided by a series of themes which aim to ensure all the relevant topics or areas are covered but which allow interviewees to discuss issues in their own time and in their own terms. Despite having specific questions, semi-structured interviews allowed an extension of the interviews into other issues that were not originally included in the interview checklists, but nonetheless helped towards addressing the study objectives. For example, if a participant (an interviewee) raises an interesting point during the interview that was not initially included in the checklist of topics to be explored, the interviewer may accommodate it providing it helps to clarify or address clearly the research objectives (Kvale, 2007). A typical example is when one coordinator of CAG led to a discussion of integrating local knowledge as one of the essential pathways to community empowerment and sustainable shoreline management, but was not included in the original interview guide.

The population that this research seeks to investigate are the individuals who operate as coordinators of CAGs (see Section 4.4.1) shoreline management authorities (discussed in section 4.4.2) and shoreline planning consultants (see section 4.4.3). Obviously, the way this population was defined impacted upon the results that the research produced, and consequently its validity.

4.6.1 Developing the Interview Guides

As previously stated, the semi-structured interview schedule utilised a certain level of structuring. To ensure that interviewees' experiences and viewpoints were collected appropriately and comparative within an interview situation, an interview guide, containing a list of issues and questions that were to be explored in the interviews, needed to be developed. Bryman (2004) advised on the use of the interview technique in data collection. These are:

- developing interview guides based on the research objectives
- avoiding double barrelled or multiple barrelled questions
- identification of possible interview themes or subjects
- identifying the possible respondents from a given population
- deciding the mode of recording the interview (note-taking, tape recording or both)
- seeking permission from interviewees; and
- arranging suitable time and place for the interviews

Based on the objectives set for the study and guided by Bryman (2004), interview schedules were developed for each of the different participant groups (listed in Sections 4.4.1- 4.4.3) in order to address issues specific to their respective roles in shoreline management. The interview guide approach is based on covering certain topics without specific questions or predetermined wording, and the informal conversational approach generally lacks formal structure (Kitchen & Tate, 2000). The interview guide approach thus allows more flexibility and the informal conversational approach can result in very lengthy interviews. However, the risk of using either of

these techniques is that there will be greater variation in the interviews and not all topic areas will be covered⁸.

The interview guide was prepared in order to organise the background information of the research on topics and ensure that all questions covered all aspects of public participation issues in a more structured way (Patton, 2002; Vallaster & Koll, 2002). It also facilitated interviewing with different stakeholders to be more systematic and comprehensive by delimiting the issues to be discussed (Patton, 1987 & 2002). In this study, the interviews aimed to understand and explore the participants' perspectives concerning key perceptives and issues of shoreline management and public participation activities. Thus, the main topics covered in the interviews included important issues such as the ways and means by which each interviewee participated in the shoreline management process, how they were facilitated, and the adequacy of the resources. In addition, the interview guide was also used to dictate the interview activity including a clear schedule of data collection activities, and a plan for unanticipated events in this study (Stake, 1995; Patton, 2002).

4.6.2 Ensuring Validity and Reliability of the Interview Guide

Reliability is the ability for the study to be replicated (Bryman, 2004) and is enhanced through transparency in revealing the steps taken throughout the research process (Gibbert *et al.*, 2008). It can be said that if the research is not reliable, it is hardly to be considered valid; on the other hand, if the study is reliable, it may or may not be valid. Care was taken to ensure that the interview schedule was valid and reliable. First of all, the themes on which the interview questions were developed were drawn from the objectives stated for the study. After developing the interview guide, it was given to other research students who had also used interviews in their own research to review and comment on its structure and contents.

A small sample can be used to pre-test the survey instrument of a larger sample (Sudman, 1976). A pre-test using a sample of critical units (e.g., experts) can identify problem questions and these can be corrected before the larger survey is implemented

⁸ In this study, the use of a check list helped.

(Dillman, 2000). Thus, in order to establish whether or not respondents would understand the questions and measures used and also provide appropriate responses, the instrument 'pre-tested' with the coordinator of CCAG in Happisburgh. The author had previously visited this case study⁹, thus a working relationship with coordinator was already in place. Additionally, the group was strategically chosen, as it was known for its long campaign¹⁰ on shoreline management issues (CCAG, 2008a; National Voice of Coastal Communities, 2013d)

The response obtained was compared with the study objectives and it became evident that the interview schedule was very reliable. A few inadequacies were, however, identified in the design. These included the ordering of themes and questions in some of the schedules and repetition of issues in a few questions. These were corrected to improve the quality of the instrument before using it in the main fieldwork.

4.6.3 Conducting the Interviews

The duration of the main survey was six months, commencing on 18 July 2014, this period included the sending of reminders. Aware of the challenges involved in elite interviews (Burgess, 1984; Cotterill & Letherby, 1994), adequate preparations were made to maximise the chances for successful interviews. The first approach was contacting the interviewees (namely the coordinators of CAGs, shoreline management authorities and shoreline planning consultants) via email to inform them of the purpose of the study and to request interviews with them (Appendix One).

Copies of the interview schedules were attached to the letters of introduction to let the potential interviewees know the issues to be covered in the interviews, expected duration and recording (audio recording with permission). This aimed to ensure that all questions were clear and concise and to allow other significant matters to arise during the processes. Close to the appointed time on the interview day itself, e-mails were sent to the interviewee to be sure they were ready for the meeting. Those who

⁹ MSc research was conducted in Happisburgh in 2009, titled "*An investigation of local residents' views and best practice for public consultation in Shoreline Management Plans*"

¹⁰ CCAG commenced their campaign in 1998.

could not partake in the interview had their dates and times rescheduled (in some cases several times) (Figure 4.22).

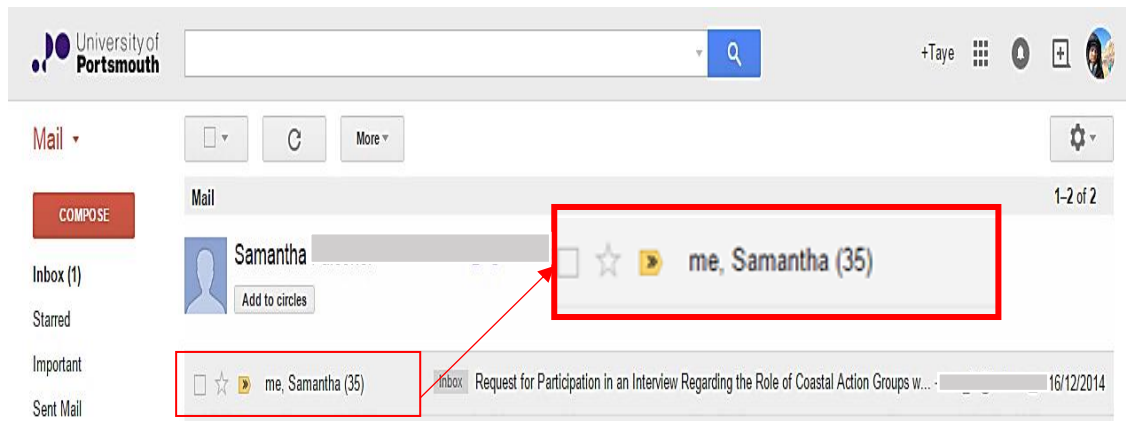


Figure 4.22- Number of emails in the conversation between the researcher and an interviewee

Across the twelve cases, a total of eighteen formal interviews were undertaken with participants, with six interviewees being involved with most of the groups considered in the study. In the case of empirical data, the more interviews carried out, the more explanations can be supported, qualified or expanded (Gillham, 2005). A data log of participant interviews is shown in Table 4.2.

Table 4.2- Data log of participant interviews.

Participants	Numbers of People Interviewed	Length of Interviews (Hours)
CAG Coordinators	12	14:28 Average: 01:19
Shoreline Management Authorities	4	4:13 Average: 01.03
Planning Consultants	2	2.33 Average: 1.17
TOTALS	18	21:34

In this study, the interviews were conducted in a setting of the interviewees' preference. Most of the interviews were conducted during the interviewees' free time

at their preferred locations to minimise disruption to their daily work. Coordinators of CAGs were either interviewed individually or if they preferred with member of their group. In one instance three members were interviewed together. The locations of the interviews were selected by the interviewees; however, most of them were conducted at the interviewees' homes. This was helpful as they were the scene of the flooding and coastal erosion event and interviewees would often point out certain objects or areas of the home when explaining something. Such in situ interviewing is believed to result in more honest responses since people feel more comfortable in their own environment (Weiss, 1998). For the semi-structured interviews with government officials and planning consultants, the interviews were mostly conducted during standard working hours in their preferred locations (mostly in their offices).

The interviews were conducted based on the interview checklists which included a set of predetermined and key questions that indicated the significant points to be revealed. The interview checklists were designed to provide a framework of gathering information from respondents. It contained introductory questions that aimed to identify the background information of a particular government agency, community-based action group, or a shoreline management practitioner followed by questions designed to identify and explore key topics and issues that were central to this study.

Before the interview, interviewees were briefed on the nature of the study, and the confidentiality of the information that they were providing (this is common practice, see Kvale, 1996). Additionally, they were also given some background information on the study in the form of a leaflet which included the expected outcome of the study and researcher's contact details (Appendix Two). Interviewees were asked to give consent to their interview being recorded and then used later for analysis (Appendix Four), an important ethical practice in qualitative research (Weiss, 1994; Kvale, 1996). At the end of each interview, it was explained that interview transcriptions would be sent to interviewees post-interview for verification. The interviewees were also encouraged to contact the researcher with any further comments or questions, but none did.

In the case of this study, semi-structured interviews have been used in order to keep interviews focused on the topics of the study but also to gain detailed responses. In

some cases, interviews became less structured as interviewees moved between topics even after a particular question had been asked. This presented challenges as it sometimes made it difficult to keep track of the questions, although it also produced some interesting extra information. Ideally interviews should be held in a comfortable, easily accessible location, uninterrupted and free from background noise (Longhurst, 2003; Gillham, 2005). This would have been the ideal situation for the interviews to take place, however due to the nature of the research this was not always possible¹¹. However, in other cases, quiet, separate rooms were available for the interviews, which was ideal for concentrating on and recording the interview.

The duration of these interviews ranged from fifty minutes to seventy minutes; however, some interviews lasted around ninety minutes. With the permission of the interviewees, all of the interviews were recorded on auto recorder, and, then transcribed verbally. These transcribed interviews were used in the analysis of the results discussed in Chapters Five, Six and Seven of this thesis. The careful use of pseudonyms and anonymity is important in protecting participants' identity (De Laine, 2002). To ensure interviewee confidentiality it was felt necessary, in light of the nature and sensitivity of some questions, to keep the interviewees anonymous.

4.6.4 Focus Group

Focus groups are basically group interviews (Bryman, 2004; Leedy & Ormrod, 2005). However, focus groups can be differentiated from group interviews. According to Bryman (2004), while focus groups concentrate on a particular theme, group interviews may take on a wider span. He continues to note that the purpose of focus groups is to understand how people discuss an issue as “members of a group” (Bryman, 2004, p. 346). This method provides a natural setting for information elicitation by lessening researcher influence and allowing meaningful dialogue amongst the participants (Louis *et al.*, 2007). Such dialogue allows participants to express opinions, hear the opinions of others, question and probe one another, reflect

¹¹ Some interviews were carried out in a community hall, seafront, in one case, a group coordinator's favourite coffee shop (during a busy period).

on similarities and differences in viewpoints, and causes individuals to critically examine their own presuppositions.

In this study, a focus group discussion was held with a group of four CAG members, who were involved in the campaign against the development on Carlyon Bay beach. Discussion was based on the opportunities they had to participate in the decision to build residential properties on the beach, the extent to which they were actively involved in the consultations, and whether there were any learning and action outcomes resulting from the involvement. This was intended to complement the quantitative data that was collected through questionnaire survey with the other members of the group.

4.6.5 Validation of the Interview Data

To achieve validity of the interview data obtained from the respondents, the interview transcripts were later presented to them to comment on. The few changes they suggested were accommodated before the data were used for the analysis. According to Miller and Brewer (2003) validity checks can be made by comparing the verbal reports of respondents with other sources. Thus, some of the responses obtained from interviewees were compared with documentary sources such as policy documents and operating guidance relating to shoreline management as well as information on the groups' websites. Through this, validity of the interview data was confirmed.

4.7 Documentary Analysis

Document analysis formed an important tool for the collection of secondary data for this study. As observed by Miller and Brewer (2004) documents are better place to search for answers and they provide a useful check on primary information gathered through interviews and questionnaires. Furthermore, documentary sources can help to construct a conceptual framework, and also help to inform survey development and the analysis of the results (Spencer *et al.*, 2003).

During the research, useful publications and documents were used to support the study, in particular government-produced documents, including policy documents and

operating guidance relating to flood and erosion risk management¹². As part of the data collection process, these sources were critically examined for information relating to the issue of shoreline management in England. The documents, publications and websites produced by the groups are considered in combination with other information gathered on the groups such as minutes of meetings, lists of participants, committees and organisers of public participation activities and campaign reports were used to increase understanding for this research.

Additionally, all the group websites identified were also studied¹³. Particular issues arise in the study of websites, both in terms of textual and visual components with websites regularly changed and updated. Ten of the twelve groups considered in this study had their own individual websites at some point during the period of investigation (2012 - 2015) which displayed certain characteristics of the groups and all the groups were still present on the internet at the last search in summer 2014, with the exception of one group¹⁴.

The documentary data thus obtained were used to supplement the information gathered from the interviews, the CAGs member questionnaire survey and field observations. After conducting the research, documentary analysis was also applied in the data analysis processes. Substantive data from research and publications were used as important evidence for arguing, debating, and supporting the results of this thesis. The reviews and analysis of relevant documents were used in combination with the results of the interviews to make recommendations for future improvement of local community participation practice.

¹² Documents such as: National flood and coastal erosion risk management strategy for England; Adapting to coastal change: developing a policy framework; A strategy for promoting an integrated approach to the management of coastal areas in England.

¹³ Some new websites emerging during the period of the research – and some were disappearing.

¹⁴ Save Our Selsey group shut down their website after the completion of Medmerry Managed realignment Scheme in 2012.

4.8 Field Observation

The phenomenon under the study, shoreline management, is one which lends itself to direct field observation. According to Yin (1982), observations are form of evidence that do not depend on verbal behaviour, and the method enables the investigator to observe the phenomenon under study directly. Thus, in addition to questionnaires and interviews, field observation was also used as part of the data collection exercise. This involved the observation of shoreline conditions and other coastal hazards that could affect the management process in the study areas such as effects of: tidal flooding; storm surges; and wave overtopping of coastal structures.

In this study, field observations were carried out with CAG coordinators during the semi-structured interviews (with the exception of one interview that was conducted a few miles away from the coastline). Viewing of the coastal hazard/risk zones were typically over a period of minutes rather than a lengthier field observation study. This was deemed satisfactory due to the participant observation element being used as part of a multi-method study rather than as the main source of data. However, the field observations still enabled a viewing of the shoreline management issues, rather than just a reported account of what was happening along the coast. In the course of the field observation, photographs were taken of eroded cliffs and failing flood defences. The field observations were used to compare the witnessed shoreline management issues with the information gathered through interviews, CAG members' questionnaire survey and documentary analysis.

4.9 Data Analysis

Both quantitative and qualitative data were gathered for the study using questionnaires, interviews, field observation and documentary sources. Data analysis refers to any practices undertaken in the management and reporting of data but, more narrowly, it can be defined as “systemic procedures in order to identify essential features and relationships” (Wolcott, 1995, p. 24). Typically, raw data in qualitative research are voluminous, messy, unwieldy, and available in non-standard format (Miles & Huberman, 1994; Denscombe, 2002). The questionnaire data for each

participant were registered in Excel according to the questions and opinion statements appearing in Appendix Three.

Before analysis of interviews can take place they are transcribed, to allow a detailed examination of what was said by the interviewee. Accordingly, qualitative data analysis requires a careful, creative and systematic approach (Ritchie *et al.*, 2013). “Transcribing involves translating from an oral language, with its own set of rules, to a written language with another set of rules. Transcripts are not copies or representations of some original reality; they are interpretative constructions that are useful tools for given purposes” (Kvale 1996, p. 165).

Since the raw data of the interviews are quotations, the most suitable format would be full transcriptions of interviews (Patton, 1987). As far as possible the transcripts were transcribed word for word. However, some grammatical inconsistencies and speaking hesitations such as “*um*” and “*oh*” were removed; in addition, punctuations were added to clarify speech and also used to retain the sense of the original conversation. To reduce the likelihood of this, and to ensure quality, all the transcripts were checked against the original recording and mistakes corrected or gaps filled in as far as possible. The aim was to remain as close as possible to the original whilst providing clarity for the reader. Exact quotations were essential here because they constituted the empirical data, and, were evidence, dealing with the effectiveness of public participation of this study. Since data in this thesis were mainly qualitative, these quotations represented the points of participants’ perspectives found in their interviews.

4.9.1 Codes and Coding Process

The coding stage of qualitative analysis is a means of indexing a large amount of text so that it can be retrieved in different ways (Coffey & Atkinson, 1996). The basis for this is for the researcher to become more familiar with the data, to make the data more accessible for the next stage of data analysis, and to start to find patterns, and structures within the data (Weston *et al.*, 2001; Cope, 2005). In this study, interview data, including observation data, were transcribed verbatim and encoded to maintain the anonymity of the respondents. In the presentation of findings and results of this thesis, direct quotations from the transcribed interviews based on interview questions and the

interviewee answers were used. These direct quotations were coded accurately and presented in italics.

4.9.2 Atlas. *ti*

It is possible to analyse qualitative data, in particular interview transcripts, by hand or using computer analysis programmes, which perhaps are increasingly used in contemporary research (Cresswell & Plano, 2007). However, using computer analysis seemed to be more convenient and had many advantages over hand coding (Bazeley, 2007). To assist with the analysis, the software programme- Atlas.*ti* vers. 7.0 was applied. Atlas.*ti* is a qualitative data management application (Friese, 2014) which provides an organised storage file system that enables the management of interview data more quickly and easily by locating material and storing it in one place (Wilson, 2004). This makes it more convenient to retrieve data associated with codes, themes, or documents (Bazeley, 2007; Cresswell, 2007). Atlas.*ti* is a workbench for qualitative analysis of large bodies of textual, graphical, audio, and video data – a systematic approach to unstructured data, e.g., data that cannot be meaningfully analysed by formal, statistical approaches (Friese, 2014).

To streamline the data analysis process, the transcribed data were fed into the Atlas.*ti* programme, and then the questionnaire data were coded into thematic categories. Whilst Atlas.*ti* has been gaining in popularity there have been some concerns and criticisms. Some researchers are worried about computer use in qualitative analysis (see Gibbs *et al.*, 2002; Charmaz, 2000; Weitzman, 2000). For example, Atlas.*ti* requires the users to clearly understand how to use the programme as its instructions could be varied. To run the programme to process data effectively, competence and knowledge are essential¹⁵ (Cresswell, 2007).

¹⁵ For this study, the researcher attended a number of training courses for the Atlas.*ti* programme in order to increase levels of skill and competence to effectively facilitate the software in order to analyse the research data.

4.10 Ethical Considerations

The principle that underpins ethical research is the view that research is not just a matter of collecting information, but is concerned with the dignity, rights, safety and well-being of those who take part in research (Piper, & Simons, 2005). The ethical issues concerned in this thesis are informed consents, anonymity and confidentiality. These ethical concerns were addressed throughout the research processes, in particular during the interview and data presentation phases. Details of each issue are described below.

4.10.1 Confidentiality and Anonymity

A number of ethical issues were addressed in the course of the research including confidentiality and anonymity. Confidentiality refers to an avoidance of the attribution of information in any reports or presentation of the research to identify the participants while anonymity means the identification of a person who take part in the research must not be known (Ritchie *et al.*, 2013). In this study, the interviewees were guaranteed anonymity and all data were guaranteed for confidential protection. The information was securely kept and inaccessible. A code number was used to prevent the participants' information from being identified.

Conducting interviews with CAGs revealed issues of conflict and confidential information being shared. To ensure not only anonymity but also confidentiality it has been necessary to not only provide interviewee names but also to withhold some information. This way, it becomes impossible to trace any information to a particular participant. In the case of government officials who provided 'sensitive' information, these have been presented in a manner that does not allow anyone to trace the information to their providers.

The researcher's understanding of the interview participants is that they are all either professionals, coastal managers, consultants or volunteer CAG coordinators. They are accustomed to representing, explaining and publicising their views and even if all names were removed from transcripts it may still be possible for knowledgeable third parties to guess the identities of interviewees from their comments. Nonetheless, all

participants were treated equally, allow them to choose freely and respect the relevant conditions of whichever of the consents that they have given.

4.10.2 Informed Consent

In any research study, an informed consent to the research participants are crucial and must be made clear and guaranteed (Ritchie *et al.*, 2013). With regard to consent, Robson (1993, p. 471) advised that “whenever possible, the investigator should inform all participants of the objectives of the investigation and all aspects of the research or intervention that might reasonably be expected to influence willingness to participate”. The investigator is further required to “explain all other aspects of the research or intervention about which the participants require” (Robson, 1993, p. 471).

In the conduct of this research a consent form was provided to the interviewees before the interviews were commenced, so that participants can freely choose to answer or not answer any questions in the course of the interview, knowing what is involved and the likely outcomes (see Appendix Four). The contents of the consent form used for this study included: a general topic of the inquiry, the purpose of the study and its basic procedures, an identification of the researcher, the contact name and address of the researcher, a guarantee that all responses will be kept confidential and anonymous. Obligations to participants was given most consideration. Individuals were asked to talk about an upsetting experience. This was treated with sensitivity and not seen simply as an opportunity for the researcher. Importantly, if participants became upset during the interview they were informed that they could withdraw at any time.

Dissemination and use of the findings needs to be addressed. The interviewees were allowed to ask any questions about the interview processes that were not included in the consent form such as how the data and conclusion might be used. Participants who requested to see the transcript of the interview were sent a copy¹⁶. There were no objections made by any of the interviewees.

¹⁶ A number of the shoreline management planning authority officers and practitioners involved requested a copy of the thesis once it is in its final form, this will be sent to them post PhD process.

4.11 Positionality

The first person tense is used intermittently in this section as it becomes very difficult to discuss this issue sensibly in the third person. I am an African (Nigerian) which many of my research participants might have found a little unusual. It raises issues of my cultural understanding (familiarity with British cultural values) and of participant reactions to a foreign scientist interested in a local English phenomenon. Positionality is a term used to describe how people are defined, that is “not in terms of fixed identities, but by their location within existing networks of relationships which can be analysed and changed” during research process (Maher & Tetreault, 1994, p.164).

A number of researchers (O'Connor, 2004; Piper, & Simons, 2005; Milner, 2007; Chavez, 2008) have argued that in qualitative research involving interaction with people, such as in interviews or observations, the researcher's identity in relation to his subjects and his background and experience in relation to the research topic can either enhance or ruin the data gathered and hence the results of the study. Coteerill and Letherby (1994) suggest that when the participants in a study perceive the researcher as an insider with whom they share similar experiences, they are less likely to be suspicious about his intentions and the purpose of the research. This means that a researcher's familiarity with the study environment can enhance the research process. Krefting (2007) is, however, of the counter opinion that the researcher's background and experience in relation to the research topic can be a hindrance to promoting understanding.

The contrasting views on the effects of researcher positionality on the research process are both important and it cannot be denied that participants' perception of the researcher can have an impact on their interactions with the researcher and hence the data collected (Piper, & Simons, 2005). Whilst the methodological approach to the study required me to be an 'outsider', my familiarity with the communities in the study setting made me an 'insider'. Throughout the data collection exercise, I was, therefore, mindful of the issue of positionality and regarded my position in relation to my research subjects as an important factor that could either enhance or hinder the research process. Some kind of rapport is needed to create a successful relationship

with an interviewee, but rapport can be based on a partial identity and it is unlikely that a shared identity could be based on all indicators.

As a Nigerian, conducting research on the management of shoreline in England, I do not consider myself exclusively Nigerian, although neither could I in any straightforward way claim a British identity. Thus, I would largely be regarded as an outsider by most of the people I talked to. Apart from my skin colour, I retain an undoubtedly strong African accent, which occasionally made it possible for my interviewee to guess where I was originated. In some situations, interview participants in the community considered me as an outsider because of my nationality, colour and accent. On the other hand, others considered me as an insider because of my familiarity with the study setting and ability to engage in regular conversation regarding issues surrounding their coastlines.

Understanding and mobilising positionality is crucial to effective data collection and analysis because various identities of the researchers may influence and shape encounters, processes and outcomes of the studies (Valentine, 2002; Vanderbeck, 2005). Sometimes people would ask where I was from. I would usually explain that I was based in Portsmouth where I was researching, that I have lived in the UK for over a decade but that I was born in Nigeria. This was an attempt to honestly answer the question, which is not as straightforward as it might at first appear. To some extent I was claiming a British identity (through naturalisation¹⁷) and therefore positioning myself with my interviewees, claiming something in common, slightly improved connection.

This blended insider-outsider position had benefits, challenges and implications for the research process. In terms of benefits, the participants shed any suspicions they may have held about my intentions when I first approached them. This was shown in the high level of co-operation most of them presented in the interviews which allowed acquisition of inside and in-depth knowledge that enriched the data. Also, because of my previous study on similar coastal issues, the participants showed eagerness to

¹⁷ Naturalisation is the legal act or process by which non – citizen in a country may acquire citizenship or nationality of that country.

cooperate and be part of the research process. They were keen to learn about the research findings to inform the further decision on participatory approach. However, 'insider' positionality also posed challenges to the research process. The insider positionality could negatively affect the data collection process. Researchers in this position could have biases in interviewing (Zavella, 1996) or may not seek in-depth understanding of the issues as they consider themselves as 'knowers' of the issues being investigated (see also limitations of the study, Section 4.12).

To minimise the confounding effects of positionality, I always explained the purpose of my study to my respondents and conduct myself decently as a researcher to gain the confidence and trust of my respondents. My safety was also a consideration. Interviewing alone in a subjects home is potentially dangerous. A list of interviewees' names, addresses and times were left with my wife, who expected me to call in at regular intervals.

4.12 Strengths and Limitations of the Research Methods

One of the strengths of this study is in the setting methods for data collection. As mentioned, study data were collected using a combination of multiple techniques, whereby data from one technique were integrated and compared with those from other techniques. This helped to verify and strengthen the results of the research study. The results are also strengthened through the triangulation of both quantitative and qualitative data. In this study, both the quantitative and qualitative results have been complementing each other. In addition, this research gathered data primarily in the forms of words rather than numbers. This approach is useful in understanding causal processes, and in facilitating action based on the research results (Kaplan & Maxwell, 2005).

There are some limitations of the research methodology in this study that need to be acknowledged. First, as mentioned earlier, although the case study approach may provide rich insights into a specific situation, it is difficult to make generalisations about the studies as a whole (Yin & Heald, 1975; Yin, 2003b). Whilst it is hoped that the research will provide insight into some of the processes of local community

participation in shoreline management decision making, building on what is already known, the study has not sought to investigate all decision makers and all action groups. There are also of course other equally valid ways of examining role of CAGs which would uncover different aspects, such as funding, political, and psychological or network analysis approaches. In a similar way it can never be possible to present all of the findings in a singular PhD research project. This means that inevitably those ideas presented are a partial and selected sample of the whole.

In this research, the sample of respondents is not intended to be statistically representative and therefore it cannot be used for that purpose. The study encompasses significant parts of England, did not cover Wales and Scotland, and even within this geographical coverage no doubt many other types of environmental campaign groups exist. There may be other groups which cover environmental interests that were not identified, as some groups may not have been advertised or known widely, or may just have not had a presence in the spheres of investigation during the study. The inclusion of a case study examining the activities of CAGs within these locations would have strengthened the research in a number of ways. However, due to time and resource constraints, the selection of a smaller geographical scope is considered valid.

Another limitation of the research could be inaccurate information supplied by the respondents. Some of the information about the groups provided by individual members may be uncertain or incorrect. For example, some members had an idea when the group was founded but were not exactly sure of the year and others suggested founding years which were different to that stated on the groups' documentation or websites. Therefore, there must be some flexibility when considering group facts which may vary according to memory or opinion. However, some practices as a means to establish validity and address reliability were discussed and recommended in Section 4.6.2.

4.13 Summary

This Chapter has detailed the research methodology of this thesis, from the designing of the research instruments used in this study (questionnaire and interview checklists) to using those instruments in the field. The Chapter further describes the data collection methods employed (semi-structured interviews, group members questionnaire survey, field observations and document analysis) and the rationale that supports their choice.

It is important to note, however, that the use of a combination of multiple methods in this study was adopted because of the need to achieve broader and better data in order to improve the validity of the results while complementing and comparing the findings of one method with that of another. This Chapter also explained how to attain valid and reliable data that supports the research's results and conclusions and how to conduct this study to comply with ethical issues. Finally, the Chapter presented in detail how the data were analysed, along with the reliability and validity, and considered a number of strengths and limitations associated with each of the approaches taken. Having described the research methods used for the study, the resulting data from the questionnaire is analysed in Chapter Five.

Chapter Five: The Questionnaire Survey

5.1 Introduction

This Chapter presents the analysis of data and interpretation of results from the methodology described in Chapter Four. The Chapter in particular focuses on Objective Four of this thesis, which is to “examine personal motivations and experiences of CAG members”. As discussed in Section 3.5.3, various studies have been carried out on environmental groups and their activities. However, none of this research considers the characteristics, commonalities and differences amongst a collection of different CAGs based in a particular geographical area.

This Chapter does not focus on interview responses as they are presented in Chapters Six and Seven of this thesis. However, it analyses the data collected from the CAG members’ questionnaire. The overall analysis is structured according to the methodology described in Chapter Four. The 26 questions included single-choice questions, multi-choice questions, Likert-scale questions and open-ended questions to explain the quantitative results. In addition, text boxes were provided for those respondents who opted for “Others” in the preceding question. The findings from the analysis are integrated and compared with those from field observations and semi-structured interviews (discussed in Chapters Six and Seven). This will verify and strengthen the survey findings while drawing and bringing together views from different CAG members in the study area.

The Chapter is split into six sections. Section 5.1 provides the general introduction; Section 5.2 considers the group mode of activity and function. Section 5.3 explores the group’s current participation in shoreline management. Section 5.4 examines the future expectations from the shoreline management. 5.5 examines the background of the respondents. The final section (5.6) provides the summary of the results that brings together key points and issues raised in the Chapter. Although CAGs may in some way differ from other groups (see Section 1.3.2) studied by different researchers (Merchant, 2005, Halpin, 2006; Wheaton, 2007; Jones, & Eiser, 2010; Hauck, 2015) under the banner of ‘Pressure group’; Lobbying group’; Interest group’; and ‘Environmental group’, this does not mean that the analysis of the groups are irrelevant to this investigation.

5.2 The Group Mode of Function

As mentioned in the methodology Chapter (Section 4.5.4), the response rate to the questionnaire was 78% (78/100). The highest percent of the respondents were from the Coastal Concern Action Group (CCAG) which could be regarded as the pioneer CAG. Thus they provided significant insights and informed responses to the survey. There was no response from SOS and HRG (Figure 5.1)¹⁸.

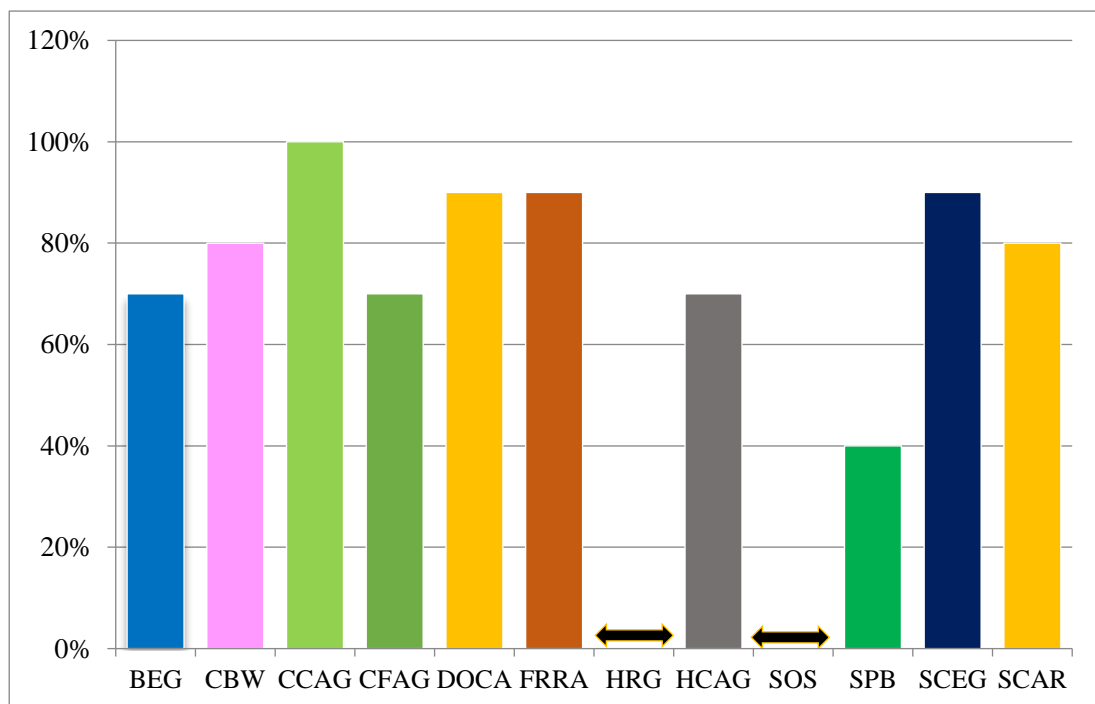


Figure 5.1- Percentage of questionnaire respondents.

The response rate to the questionnaire showed considerable variation in the mode of activity and function between the selected case studies. This section aims to consider reasons behind the formation of CAGs in relation to shoreline management and their various campaign activities, thus providing an understanding of the context in which each of the case studies operates.

¹⁸ Both SOS and HRG were part of MStAG, which was dissolved after the agreement on Medmerry Managed Realignment Scheme (Sections 4.37 and 4.3.9).

5.2.1 Basis of Group Formation

CAGs tend to be formed by concerned local communities in response to a particular event with the aim of changing the situation as soon as possible (Kempton *et al.*, 2001). Their impact on policy making is varied depending on the issue in which they are campaigning. Their primary tool for attempting to achieve their goal is advocacy – trying to influence local government decision-makers (Cundill & Rodela, 2012). Evidence of this can be seen through the detailed analysis portrayed in Chapter Six of this thesis.

In order to assess the understanding of the group's activities through its members, Question 1 asked respondents to explain how and why their group had formed. It is apparent that there is a variety of reasons for groups to form. The main reasons mentioned by the group members were: campaign for the protection of shoreline and social justice issues such as fairness of treatment and compensation. Previous research has indicated that in surveys the majority of people claim to be concerned or worried about most environmental issues (Defra, 2001a; Bord *et al.*, 2000).

More groups in this study were found to have developed due to wanting to protect than for any other reason. Overall, nine groups formed because they wanted to protect their shorelines, and this motivation was most important amongst combined CAGs groups. These results suggest that local residents hope that social justice considerations would produce a different outcome. The results support the findings of Cooper and McKenna (2008) and the analysis of interviews with group co-ordinators in Section 6.2 also supported this. One survey respondent for example, underlined in an open-ended response that:

“We were seeing major erosion but what we were not seeing is anybody doing anything about it even in replacing the defences”

More revealing results have been found from measuring particular environmental concerns in the broader context of a range of environmental, personal and social issues (e.g., Poortinga & Pidgeon, 2003; Norton & Leaman, 2004). The most common reason for the foundation of CAGs was due to there being a gap in the involvement of local

communities in the shoreline management decision-making processes. Despite this, they nevertheless all formed in different ways. The results show that none of the CAGs investigated in the study were founded as early as the 1990s, the time period during which SMPs had not been initiated (Section 2.5.1). However, CCAG did form in 1999.

Interestingly, across the population, 83% of groups were formed after 2000. This was the period in which the second generation of SMPs was launched (Figure 5.2; Table 5.2). Other groups considered in this study were formed toward the end of first generation in 1999. This coincided with increasing high level of local community concerns that flood and coastal erosion risk is likely at the case study locations and the need for government interventions (Cooper & McKenna, 2008).

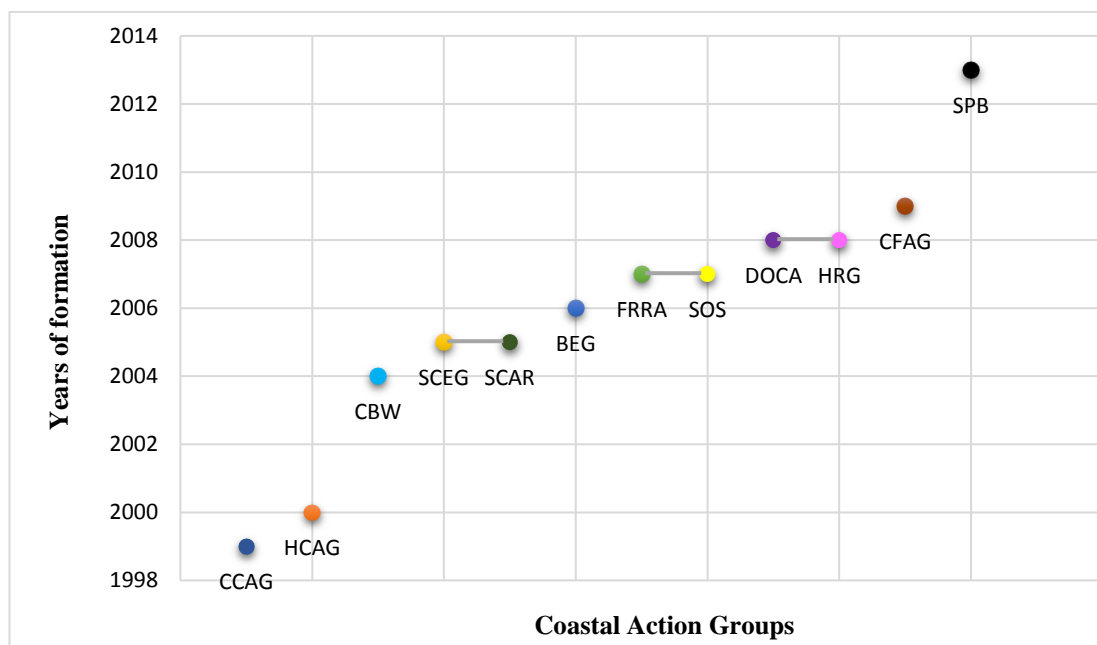


Figure 5.2- CAGs Years of formation

5.2.2 Geographical Level of Involvement in Shoreline Management

Question 2 was close-ended and provided four options. Respondents could select more than one option if applicable and were requested to tick level of geographical scale best describes their group’s interest/involvement in shoreline management in the text box provided below the question.

It was not surprising that majority of the respondents i.e. 88.4% (69/78) stated that their group is interested in the local shoreline management. The data is presented in Table 5.1

Table 5.1- Geographical level of involvement in shoreline management

Geographical Levels	Number of Responses	Percentage (%)
National	2	2.6
Regional	7	9.0
Local	69	88.4
All together	0	0
Total	78	100

CAGs do not merely aim to influence government; they also direct their attention at other centres of power such as international associations, the EU and private corporations (CCAG, 2008b). Even so, 88 percent of the sample revealed that local issues had been what initially motivated them to become active. Kempton *et al.* (2001) suggest local groups are vital because they are the key to building the social and cultural infrastructure necessary for sustained environmental practises. Thus, CAGs are not simply a less influential version of the larger environmental pressure groups, but are significant in their own right. This perhaps reflects the increasing focus on local shoreline management campaign (Mcglashan & Williams, 2003). From these results it was evident that respondents were more concern about how the risk of flood and erosion could be managed locally (Few *et al.*, 2007).

These findings agree with report by Begg and Kuhlicke (2015) that localism has become a relevant part of a new paradigm of flood risk management. Local communities at risk are gradually being transformed into ‘risk managers’ by taking responsibility for making their properties more resistant and/or resilient to floodwaters through the government policy strategies of “Making Space for Water” (Defra, 2005). As such, the Local Flood Risk Management Strategy (LFRMS) was developed by local authorities aimed to engage the communities in preparing for floods, responding to flood events, collaborating on flood risk studies and investing in flood improvements (Daly *et al.*, 2015).

5.2.3 Typologies of CAGs

Question 3 was specifically designed to explore perceptual differences between the groups, establish relationships, and to mark the move from purely descriptive to explanatory analysis. Respondents were asked to select the category best describes the way their group campaigns and operates. The question was kept open-ended because it was thought that there could be different opinions to this question. To prevent respondents from getting confused, the questionnaire gave help with different types of CAGs, in addition clarification was provided in bracket that: the description or typology of CAGs was prepared by the researcher and may not fit all groups. Apart from this explanation, an answer box was also provided for any other option that was not listed (see instructions on the questionnaire in Appendix Three).

Kempton *et al.* (2001) asserted that environmental groups can be classified into three: oppositional, single-issue groups; environmental justice groups; and radical groups. As discussed in Section 3.5.3, various environmental group typologies have been suggested with a view to analysing principles that operate across them rather than attempting to analyse groups in isolation. The purpose of these typologies is to assist analysis of CAGs and to suggest particular classificatory models. Table 5.2 presents the summary of each of the case studies. It illustrates the typology and objectives and the years of formation of CAGs investigated in this study.

Table 5.2- CAGs typology and objectives

Group Names	Group Types	Core Interests	Date of Establishment
Blyth Estuary Group	Oppositional, single-issue	Campaign to oppose the Blyth Estuary Strategy and challenge the managed realignment proposals by the EA.	2006
Carlyon Bay Watch	Oppositional, single-issue	Campaign against development at Carlyon Bay under banner headline “Let’s Get Our Beach Back”	2004
Coastal Concern Action Group	Oppositional, single-issue	Campaign against the local SMP’s ‘do nothing’ sea defences option and demanded compensation with increasing progress on local community consultation and communication.	1998
Cockermouth Flood Action Group	Environmental justice	Set up in working with the agencies responsible for flood prevention in the local area to achieve reductions to the flood risk in the area.	2009
Defend Our Coast Association	Oppositional, single-issue	Committed to the continued need for sustainable defence of the coastline, and the rejection of ‘managed realignment’ policy option.	2008
Faversham Road Residents Association	Environmental justice	Campaigned to promote the common interests of all residents who live in Faversham Road and the surrounding area.	2007
Ham Residents Group	Oppositional, single-issue	Established to consider, co-ordinate and present the views of Ham community on the impact of SMP Coastal Defence Strategy.	2008
Hopton Coastal Action Group	Oppositional, single-issue	Campaigned against the government decision of “No active intervention” in Hopton.	2000
Save Our Selsey	Oppositional, single-issue	Campaigned for short and long term strategies for a sustainable solution to coastal defence in Selsey.	2007
Save Pagham Beach	Oppositional, single-issue	Campaigning to protect the Pagham community and the surrounding countryside from risk of flooding and coastal erosion.	2013
Scratby and California Environment Group	Environmental justice	Campaigned to protect and conserve the beaches, cliffs, coastline and land at Scratby and California, by getting the government and the population to be aware of the problems that lie ahead.	2005
Suffolk Coast Against Retreat	Oppositional, single-issue	Campaigning for continuous maintenance of Suffolk coastline, tidal river and surrounding land area by ‘Holding the line’.	2005

5.2.3.1 Oppositional, Single-Issue Groups

As the name suggests, these are groups that focus all of their energy on a single defining issue. Their membership is often quite devoted to the issue, and motivated by personal experiences or to oppose particular environmental threats. Other studies (Kemp, 1990; Wolsink, 2000; Jones & Eiser, 2010; Hauck, 2015) have highlighted the uncomplimentary label ‘*NIMBY*’ (Not In My Backyard) often given to these groups. Oppositional, single-issue groups vary in number of participant and include loosely organised community association (Ford, 2003). Their campaign activity ranges from organising protest and rallies to provisioning of financial and human resources to other groups (Kempton *et al.*, 2001) A criticism made of some single issue movements is that they tend to be less effective with regard to challenging broader social issues including issues of capital and power (Jordan, 1999).

5.2.3.2 Environmental Justice Groups:

The concept of environmental justice was borne out of the movement against the site of a landfill for a hazardous waste by the residents of Warren County, North Carolina in 1982 (Agyeman *et al.*, 2003). The term environmental justice gained momentum, broadening the scope of the movement to include marginalised residents of all races who face inequitable distribution of environmental damage (Sze & London, 2001).

Environmental justice is both a distributive and participative issue. Distributive environmental justice involves fair allocation of environmental risks (e.g., poor air quality, hazardous work environments, and toxic run-off) and resources (e.g., clean water and pollutant free air) where people live, work, and play, regardless of race, ethnicity and national origin. Participative justice involves the meaningful inclusion of all stakeholders in the environmental decision-making process, from needs identification to planning, building, maintenance, and enforcement, again regardless of race, ethnicity and national origin (DeLuca, 2007).

Jamieson (2007) claims that justice should be at the heart of environmentalism. When it is, environmentalism’s similarity to the environmental justice movement becomes apparent, as both distributive justice (equal sharing of the costs and benefits of natural

resources) and participatory justice (the opportunity to influence decisions that affect the environment) are key components of both (Jamieson, 2007). Agyeman (2005) further argues that mainstream environmentalists should adopt social justice aims. He contrasts the mainstream sustainability movement's success in creating consensual visions through a proactive approach with the reactivity of the environmental justice movement, but contends that justice and equity must be central to sustainable community initiatives.

5.2.3.3 Radical Groups:

Radical groups could be regarded as grassroots organisations that are committed to participatory forms of decision making and perhaps anti-institutional (Doyle, 2000; Carter, 2001). Radical protests emerged first in the United States out of frustration with the perceived bureaucratising of mainstream environmental organisations such as the Sierra Club and Greenpeace in the early 1980s (Scarce, 2000). The groups began to adopt lobbying methods and policies that were more conservative and acceptable to government and industry as well as their failure to achieve environmental goals (Doherty, 1999; Brulle, 2000 & 2001; Carter, 2001). In the UK, radical environmentalism has a less biocentric perspective (Hay, 2002; Rootes, 2003; Doherty *et al.*, 2007).

Radical groups are defined in this study as people who use consensus decision making and are willing to use direct action tactics to oppose government decisions that they perceive as environmentally unjust. While the embrace of direct action is a common part of radical group activity, it is important to understand that some radical groups eschew direct action and use conventional social and political processes to understand the roots of the environmental crisis and offer effective solutions to it (e.g., the World Wildlife Fund) (WWF, n.d).

The understanding of the above classifications was translated into a shoreline management context and therefore was used to illustrate the inherent diversity of CAGs, each reflecting particular groups of different typologies, different areas of concern but similar general environmental interests (Table 5.2).

The response to Question 3 showed considerable variation between the case studies. The results are presented in Figure 5.3.

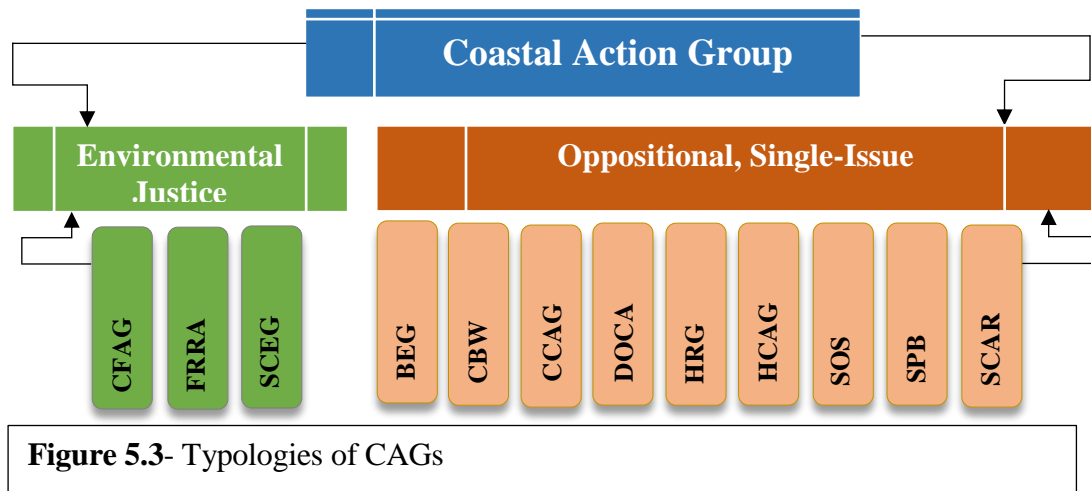


Figure 5.3- Typologies of CAGs

Interesting, the results show a similar classification initially proposed by the Author (See Table, 5.2). The results were categorised into groups with three main types of interest: “Environmental justice”, “Oppositional, single-issue” and “Radical group” covering type of campaigns.

Groups classified as “Environmental justice” included those with a focus on creating awareness of shoreline management issues such as conservation of beaches and raising awareness of flood and coastal erosion risk in the local community. This group makes 25.0% of the CAGs investigated.

Groups classified as “Oppositional, single-issues” included those with a focus on a diverse array of issues including management strategies (short and long term), compensation, and social justice. Because of their singular focus, these groups are known for the intensity of their lobbying (Ford, 2003). The majority of the groups (66.7%) in this study are in this category.

None of the respondents in this study described their group as “Radical”. One respondent commented in text box provided that:

“We are not radicals, we campaign for our rights, rights to be listened to”.

This finding disagrees with the initial categorisation made by the Author and Kempton *et al*, (2001) (Section 5.2.3.3) as vast majority of members believe that the main aim of their group was to ‘influence the policy, and campaign to protect their shoreline’. Another reason for this disagreement might be the conceptual and practical difficulties of understanding what the term “Radical” means. Using these classifications, there were nine Oppositional, single-issue groups, three Environmental justice groups and no Radical group (Figure 5.3). During the study it also became apparent that some groups had more diverse interests than their typologies initially indicated¹⁹.

Despite a number of typologies operating within pressure group discourse, their use is only of benefit if they increase understanding and ameliorate the degree of confusion that can exist when examining classificatory types and groups (Castles, 1967; Marsh 1983). One purpose of formulating typologies has been to examine general principles that operate across different pressure groups rather than attempting to analyse specific groups in isolation.

Grant (1989) suggests a typology that focuses on ‘insider’ and ‘outsider’ groups. The typology distinguishes between the two groups suggesting that insider groups are considered legitimate organisations by government and as such engage with government in the development of public policy through various consultative frameworks. In terms of the effectiveness of a group in achieving its aims, insider status can bring responsibilities which in turn might undermine its ability to pursue policies and strategies that are fundamental to its aims and rationale (Nettl, 1965). Conversely, outsider groups do not want to engage in a consultative process with government and as a consequence of this stance do not acquire the status or recognition of insider groups. Grant (1989) further suggests that such groups might be viewed as ‘protest’ groups because their interests fall outside ‘mainstream’ politics.

In this study some CAGs who campaigned against changes in the shoreline management policy share many of the characteristics of NIMBYs including their memberships being primarily activist-orientated and anti-authoritarian (Coastal

¹⁹ Some groups originally classified as Environmental justice groups also turned out to have Oppositional single-issue interests, and vice versa.

Concern Action Group, 2008a). Whilst many CAGs chose not to align themselves with any traditional political party, Wheaton (2007) found that some pressure groups whilst not involved in party politics did see themselves as politically motivated. However, this was not reported in any of the sampled CAGs.

5.2.4 Factors Influencing Members to Join the Group

Question 4 obtained information about reasons for joining a CAG. A Likert type scale had been used in the question for responding: Likert type scale of LOWEST DRIVE 1 to HIGHEST DRIVE 5. Apart from these options, one more option was given namely ‘Other’. Answer box was also provided for respondents to specify their reasons if required. Thus for each factor scores were obtained. The scores were used to rank the factors. The data is presented in Table 5.3.

Table 5.3- Reasons for joining CAG

Reasons	Score	Percentage	Rank
Environmental concern	70	89.7	5
Recreational activities (water sports, fishing, sightseeing)	43	55.1	4
Community service	15	19.2	3
Employment	5	6.4	2
Other*	1	1.2	1

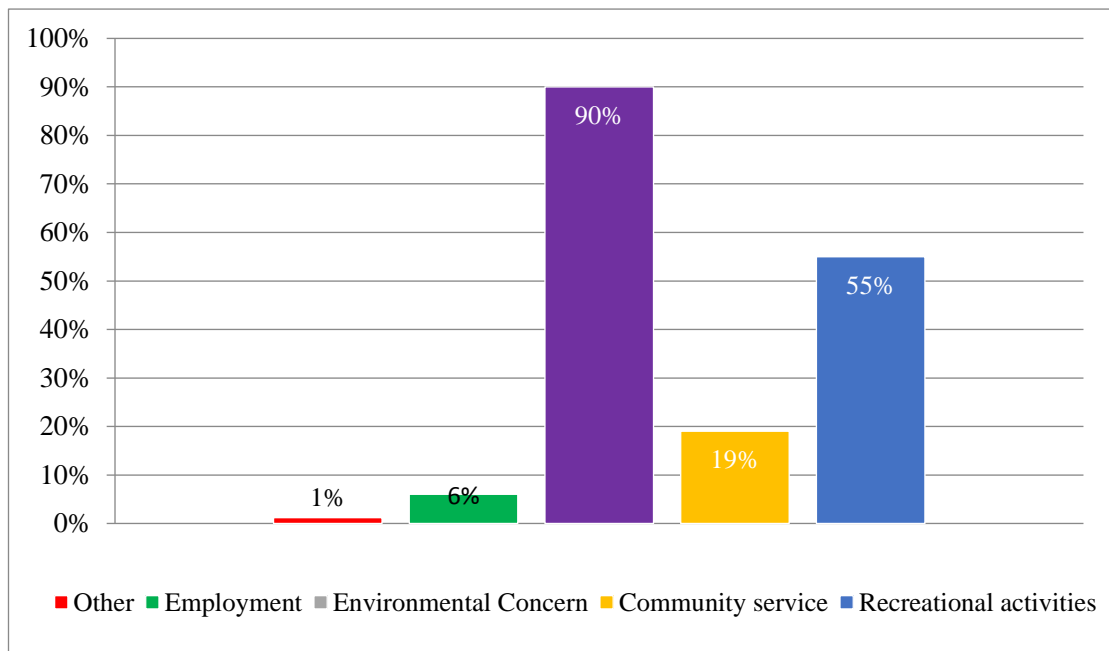


Figure 5.4- Reasons for joining CAGs

The findings in Figure 5.4 identifies that ‘Environmental concern’ and ‘Recreational activities’ were the most reasons for joining the group (i.e. 70 securing highest rank followed by 43). It is important to note that ‘Employment’ (6.5% i.e. 5 respondents) is not an important reason for them to join a particular CAG. As mentioned by one respondent, another reason for belonging to their group was: sustainability for future generations, local economy or livelihood, and recreation. So it may be deduced that the respondent’s desire was to achieve a goal of having healthy environment. Similar results were found by Said and Whiteley (1992) who suggested that joining single-issue pressure groups and social movements is seen by many as an effective way of achieving desired goals.

The formation of CAGs was largely in response to perceived institutional inaction (Section 3.5.3). Respondents felt that the ‘voice’ of the community with regard to the management of their shorelines was ignored by authorities. This resulted in a sense of alienation from decision-making and a lack of identification with official information. These findings reflect those of Wynne (1991) and others who have exposed the knowledge hierarchy that has tended to detrimentally exclude lay expertise in understanding and responding to environmental risks. There were, however, encouraging signs that inclusion of the local communities is beginning to be considered by management authorities (Defra/EA, 2011), particularly the EA.

5.2.5 Experience of Flood and Coastal Erosion Risk

Question 5 aimed to know whether the respondents' home or properties have been affected or potentially affected by the risk of coastal hazard such as erosion, flooding and land slip. The question was kept open-ended and respondents were asked to give brief details including any significant historic events in text box provided below the question. As it was thought that there could be different opinions of respondents to this question thus no option was listed.

The primacy of experience in coastal hazard perception is consistent with the wider risk literature, reviewed in Section 3.4.3. However, it was observed that a larger percentage of respondents had not been 'directly' affected by the risk of coastal hazard. About 88.4% (69) of respondents mentioned that their home had not been flooded. It is noteworthy that considerable 6.4% (5) respondents skipped this question. Only four respondents (5.1%) had given details of their experience with coastal erosion. One respondent stated that in the next few years, she would probably be homeless if no action was taken against the fast eroded shoreline in her community and the other mentioned about the business that had been stopped as a result of no save access to the beach. This perhaps indicates that different outcomes occur when asking open-ended versus closed questions: respondents may not associate flood and coastal erosion risk with their lives, but when explicitly asked, find it easier to agree that they are or will be affected. This type of acquiescence bias is well-known in survey research (Ray, 1990).

There is considerable evidence that disaster such as floods can have a positive effect, and create or reinforce a sense of community (Tapsell *et al.* 1999; Tapsell 2000). However, when the result was compared with Question 4 which asked respondents reasons for joining CAG, It was very evident from the results that the majority of respondents joined the group for the interests of their wider community rather than flood risk experience. Previous research has also indicated that in surveys the majority of people claim to be concerned or worried about most environmental issues (Defra, 2001a; Bord *et al.*, 2000). More revealing results have been found from measuring particular environmental concerns in the broader context of a range of environmental, personal and social issues (e.g., Poortinga & Pidgeon, 2003; Norton & Leaman, 2004).

5.3 Group’s Current Participation in Shoreline Management

In this section, a subsequent set of questions were asked to gather information about the group involvement in shoreline management. There were eleven questions asked which dealt with the barrier to participation, availability of shoreline management information, status of shoreline management policies and responsibility of management authorities. In addition questions were asked to ascertain the group relationship with other CAGs.

5.3.1 Level of Involvement in Shoreline Management Policy Process

It is evident from the response to Question 3 (Section 5.2.2) that the majority of the groups are concerned with local shoreline management. Question 6 solicited the stage(s) of shoreline management policy process that the groups contributed to. The question was close-ended list with five options and respondents were asked to select as many options as applicable to them. In addition, respondents were invited to include their opinions in the space provided below the question; however no one gave an answer other than those provided. The responses are shown in Figure 5.5.

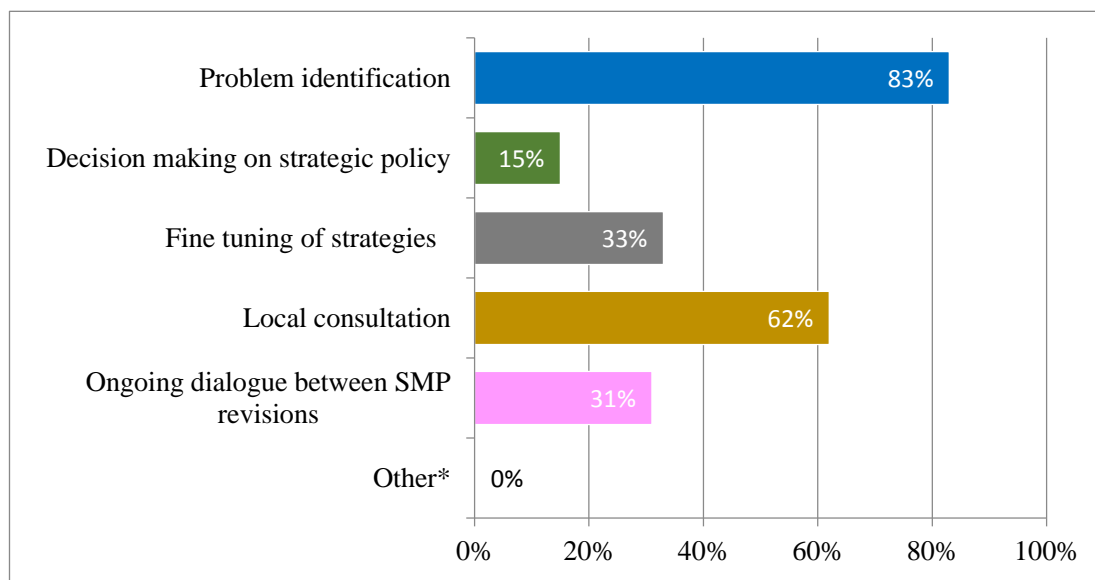


Figure 5.5- The stages of involvement in the shoreline management policy

In summary, Figure 5.5 revealed that majority of the respondents (83%) had been involved at the “Problem identification” stage. Contributions to the consultation process were by 62% (48) of the respondents. Unsurprisingly, a larger percentage of respondents were recorded for these stages. As it was expected, far fewer campaigners (15%) reported participating in the decision making. The survey responses show that there are significant gaps in the level of participation in shoreline management process (Mcglashan & Williams, 2003).

Consistent with these findings, Creighton (2005) found that community members declined to participate when they perceive that they were only given an opportunity to receive information about the decision rather than an opportunity to provide constructive dialogue or to influence the decision (Section 3.5.3). In order to promote a significant level of participation, it is vital to include the community in the process as individuals are more likely to accept plans if they believe their opinions and input are valued (Appelstrand, 2002).

5.3.2 Level of Involvement in the Shoreline Management Decision-Making Process

Robert (2004) identified that as public scrutiny of government policy and practices have become more widespread, public participation has become increasingly common as a way of improving the legitimacy of decision-making. Considering, this Question 7 obtained similar response as Question 6. The question allowed respondents to select only one answer per column. An answer box was also provided for respondents to explain their answers if required (see instructions on the questionnaire in Appendix Three). The results of this question are shown in Figure 5.6.

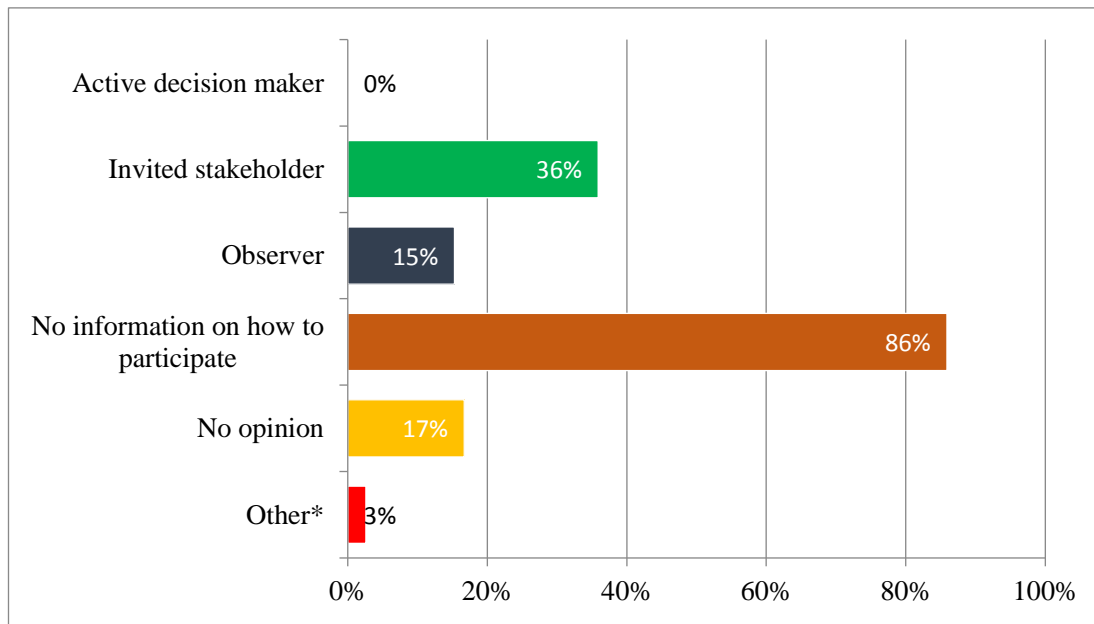


Figure 5.6- The stages of involvement in the shoreline management decision making process

With reference to Figure.5.6, higher percentage of respondents (86%) stated there was no information provided to them on how to participate in the shoreline management. This was followed by 35.9% of respondents who considered themselves as “Invited stakeholders”. Two respondents had commented in the answer box. This indicated that respondents had different perceptions of the level of their involvement. One respondent mentioned “*they don’t really care we exist*” and another mentioned about the group’s effort to contact the management authorities on their concerns regarding a particular shoreline management option and got no response. The result was compared with Question 6 (seen in Figure 5.5) i.e. involvements in the shoreline management policy process in which similar results were found.

In line with the discussion provided in Section 3.3.5, an increasing decline in local community trust on management authorities is pointed out as one of the reasons behind a significant public willingness to participate in decisions that might affect them (MacNaghten & Jacobs, 1997; O’Riordan & Ward, 1997; White, 2001; Vari, 2004) The availability of sources of information such as the Internet, function as both learning and an empowerment making it possible for individuals to challenge decision makers. Therefore, the responses obtained in this question might reflect a general opinion on the local communities’ willingness to participate (Petts, 1999). As

suggested by Farrell (2000, p. 31) the promotion of public participation with the government can “enhance user involvement, promote democratic legitimacy and develop the responsiveness of organisations to one of their key stakeholders”

5.3.3 Links with other Groups and Organisations

Question 8 determines the types of links the groups have with other groups and/or agencies. The question was close-ended listed with five options and the respondents were requested to choose more than one option if applicable. None of the respondents gave an answer other than those provided. The findings are summarised in Figure 5.7.

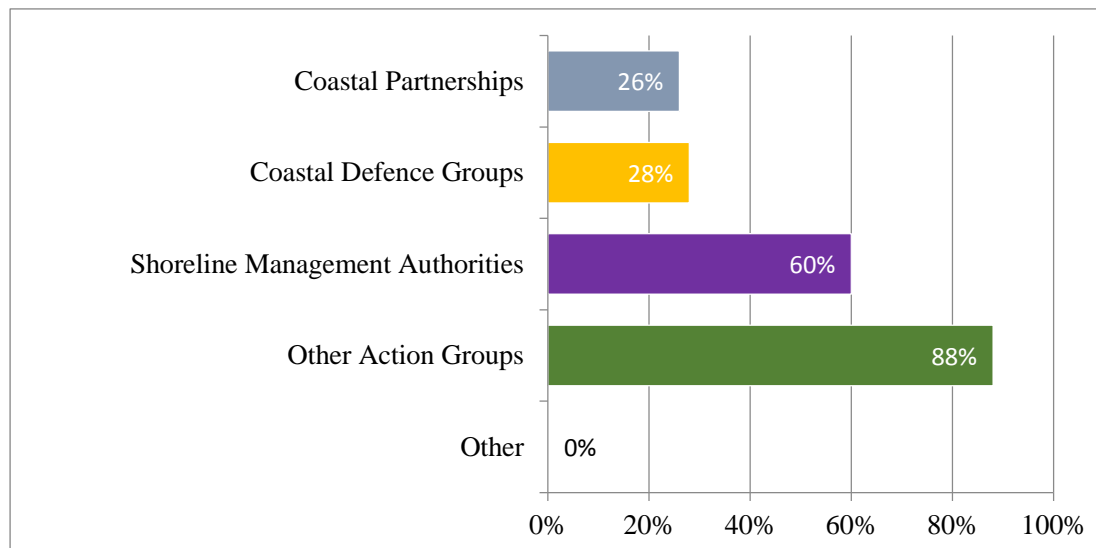


Figure 5.7- Links with other groups and agencies

Working together can benefit groups through the sharing of resources and experiences (Potts, 1999; Carter *et al*, 2000; Fletcher, 2003; Midgley, 2004; Stojanovic & Ballinger 2009; Ballinger *et al.*, 2010). The relationship between groups and the management authorities can also determines the effectiveness of the group. Wheaton (2007, p. 290) found, that some activists, were ‘avid environmentalists and anti-capitalists’ and demonstrated their commitment to change through active participation in other pressure groups. In terms of involvement, the majority had indicated that their groups are linked to other groups or organisations in some way. Links can either be through direct association or by loosely working together. A majority (88.5%) of the respondents mentioned having links with other CAGs, while 60.2% (47) respondents had associated with the shoreline management authorities. Nearly equal percentage of

respondents had connection with Coastal Partnerships (25.6% i.e. 20 respondents) and Coastal Defence Groups (28.2% i.e. 22 respondents).

5.3.4 Sources of Shoreline Management Information

Question 9 identified sources of useful information on shoreline management. The question was close-ended, listed 9 options and the respondents were asked to select more than one option if applicable. The results are presented in Figure 5.8.

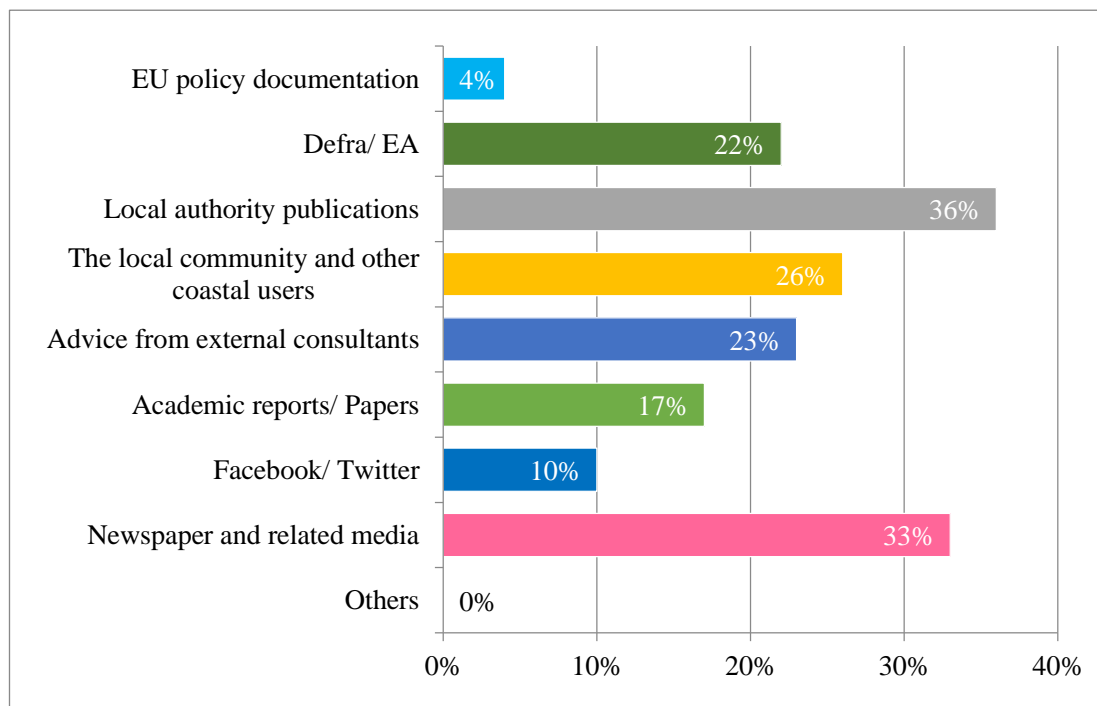


Figure 5.8- Sources of shoreline management information

It was noted that there was low response to this question. However, two categories dominate the responses. For sources of information on shoreline management, the findings identify that local authority publications were the most common, with 28 (35.9%) respondents. These findings support those of Few *et al.* (2007) and Tompkins *et al.* (2008) who both identified that the majority of information on local shoreline management were made available through the local authorities. There were also 22 (28.2%) respondents who received advice from planning consultants. The EU policy documentation has the lowest response rate of 4% from the respondents. Wynne (1991) has similarly argued that lay expertise can be more valid than scientific expertise in the context of local risk issues precisely because it is specific to the local

situation; by contrast, scientific knowledge strives to distinguish itself from its context and to provide abstract and generalisable facts.

It may be deduced that local communities tended to rely on their own experiences, observations and local knowledge as well as on informal, social networks for sources of information and help with regard to flooding and coastal erosion risks. As others have noted (e.g., Katz & Lazarsfield, 1966; Rayner & Rickert, 1988), social networks are prolific and credible sources of information. Since these risks are very much a shared, community experience (Few, 2003), CAGs became key sources of information about the shoreline management problems and potential solutions, as well as providers of social support (Section 3.5.3). Furthermore, through community action, some residents felt they were able to achieve more than they could on an individual basis. The implications of this for fostering public action in response to shoreline management (through campaign activities) are discussed in Chapter Six.

5.3.5 Barriers to Public Participation

Question 10 asked respondents the barriers that are likely to inhibit participation in shoreline management. Six potentially inhibiting factors were listed and respondents were asked to rate those factors on a Likert type scale. Responses to this question were graded on Likert type scale of LEAST SERIOUS 1 to MOST SERIOUS 5. (Least Serious = 1; Somewhat Serious =2; Serious = 3; More Serious = 4; Most serious= 5). Thus for each activity scores were obtained. Apart from these options, two more options were given namely “Not applicable” and “Others”. In addition, short explanations were given to the meaning of each listed barrier (see instructions on the questionnaire in Appendix Three). The scores were used to rank the activities, and are identified in Table 5.4.

Table 5.4- Barriers to shoreline management participation

Barriers	Score	Percentage	Rank
Communication issue: more dissemination of information is required	72	92.3	5
Consultation issue: more time is required during the consultation process	68	87.2	4
Gap in information: not enough information is provided	55	70.5	3
Access issue: information is not freely available	44	56.4	2
Gap in understanding: information given is not relevant or easily understood	41	52.5	1
Not applicable: No information or consultation is needed	4	5.1	0
Other*	0	0	0

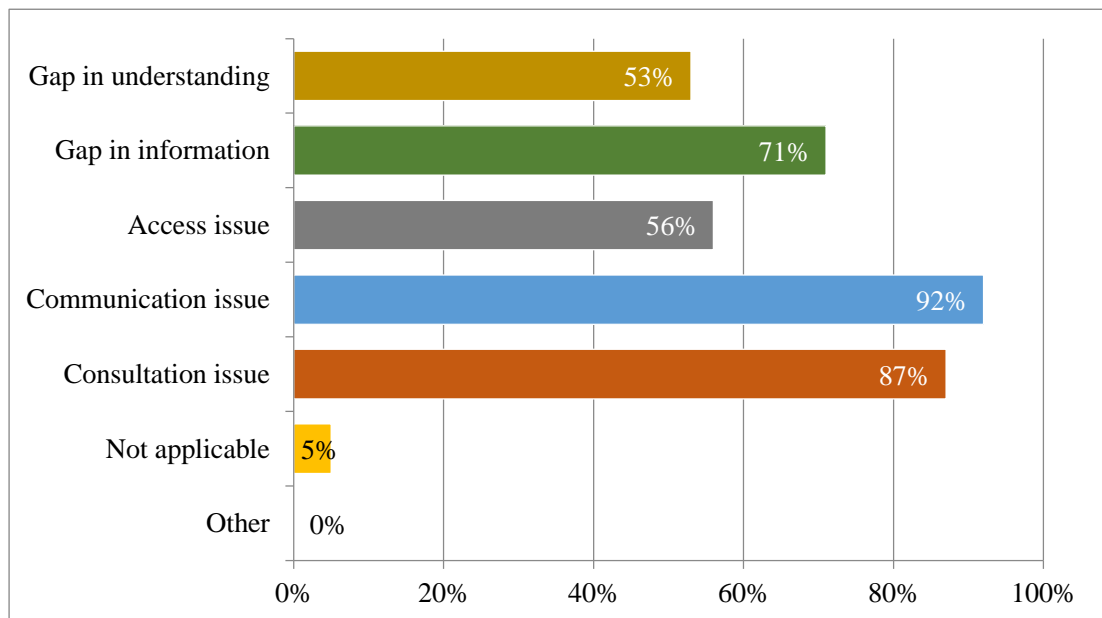


Figure 5.9- Barriers to shoreline management participation

Canter (1996) define participation as a continuous, two-way communication process which involves promoting full public understanding of the process and mechanisms through which environmental problems and needs are investigated and solved by the responsible agency. (Canter, 1996, p.587). The analysis of the data clearly shows that inadequate dissemination of information has been recognised by respondents as the most serious barrier to participation (ranked 5 by 92.3% respondents) and thus forms the basis for much thinking about the areas in which groups are able to find information about issues relating to the management of their shorelines. Lack of sufficient consultation time was another important factor which was ranked 4 by 87.2% respondents. Less likely factors to inhibit their ability to participate were ‘Gap in information’ (ranked 3), ‘Insufficient availability of information’ (ranked 2), and closely followed by the least rank which was ‘Lack of understanding of provided information’.

The results of the question relating to barriers to shoreline management have provided further insights into local communities’ understanding of the responsibilities of management authorities identified in Section 2.4.2. In contrast to direct experience and information from the local authorities (Section 5.3.4), official shoreline management information, advice and warnings on policy changes (e.g., from the EA) were often perceived to be too generic, obvious, and of little practical value.

Participation has been described as the e These findings support the literature review of Section 3.3.5 including that of Hedelin (2008) who identifies that sharing of information and encompassing knowledge from different disciplines is not only important for addressing the subject of integration, between organisations and individuals of different sectors, but also helps in trying to address issues of uncertainty. “Opening up” planning and management processes to diverse communities, reflecting upon the communicative process and arenas of debate can bring about greater integration by widening the scope of discussion to include a broader range of stakeholders at levels of governance and decision making (Petts, 1999; Natcher & Hickey, 2002; Jennings, 2004; Frew, 2012; Fowler *et al.*, 2013).

5.3.6 The Identification of Management Options

Question 11 sought the understanding that local community may have about the responsibilities of management authorities in identify a long term shoreline management option for each part of the coast. As similar to Question 10 where respondents were questioned about the reasons for lack of participation in shoreline management processes. The question was also used to compare the findings of Question 12 that aimed to find out the most preferred policy options that could be considered for shoreline management. The question was close-ended and listed five options. Respondents were requested to choose one option. Regarding this question if any respondent wanted to write any comment then they were provided with a text box below the question. The results are shown in Table 5.5.

Table 5.5- *Identification of long term shoreline management option*

Opinions	Number of Responses	Percentage
Very reasonable	2	2.6
Reasonable	9	11.5
Somewhat reasonable	21	26.9
Not reasonable at all	46	59.0
No opinion	0	0

It can clearly be seen from Table 5.5 that the majority (59.0% i.e. 46) of respondents felt it was not reasonable for Defra to determine any type of management option (whether long or short term) for the shoreline management. For this question the time scale of the ‘long term’ was not specified. It has been considered that perceptions of the long term management could be aided by specifying time periods of a short term of 0-20 years, a medium term of 20-50 years and a long-term of 50-100 year intervals (EA, 2010). This could be said to be particularly useful for structuring management policy (Lorenzoni *et al.*, 2007), but local communities have been noted to have difficulty in visualising the longer time scale, and therefore it was not specified in this question (Tonn *et al.*, 2006). However, since the survey did not explicitly specify the time scale of the “long- term”, the proportion response of this term may be variable.

Only a small proportion of survey respondents (2.6%) felt it was “reasonable” for Defra to determine the type of management option. These results largely reflect divided perceptions of responsibilities of management authorities amongst the local communities (Section 2.4.2) evident in other studies (Potts, 1999; Cooper *et al.*, 2002; Ledoux *et al.*, 2005; O’Connor *et al.*, 2010). This study suggests a need for increased awareness-raising among the local communities to clarify the responsible authorities and to whom to address shoreline management issues. This could be a problem that inhibits participation. This is discussed further in Chapter Eight of this thesis.

5.3.7 Consideration of Additional Policy Options

Question 12 aimed to obtain information about additional policy options that could be considered for shoreline management. Respondents were asked to select from the various policy options listed as: 1) limited intervention; 2) accommodated risks; 3) sacrificial coast; 4) regeneration; 5) no opinion and; 6) other. A Likert type scale had been used in the question for responding: Likert type scale of LEAST IMPORTANT 1 to MOST IMPORTANT 5. (Most Important =5; Very Important = 4; Important =3; Somewhat Important = 2; Least Important = 1; No Opinion = 0). Apart from these options, two more options were given namely ‘No opinion’ and ‘Other’. Help was given by providing respondents with short explanation of each option and an answer box was also provided for any other option that was not listed (see instructions on the questionnaire in Appendix Three). Thus for each policy option scores were obtained. The scores were used to rank the additional policy options. The breakdown of the responses is shown in Table 5.6 and Figure 5.10.

Table 5.6- Additional policy options to the shoreline management

Policy Options	Score	Percentage	Rank
Sacrificial coast	71	91.0	5
Regeneration	68	87.2	4
Accommodate risks	45	57.7	3
Limited intervention	33	42.3	2
No opinion	0	0	0
Other	0	0	

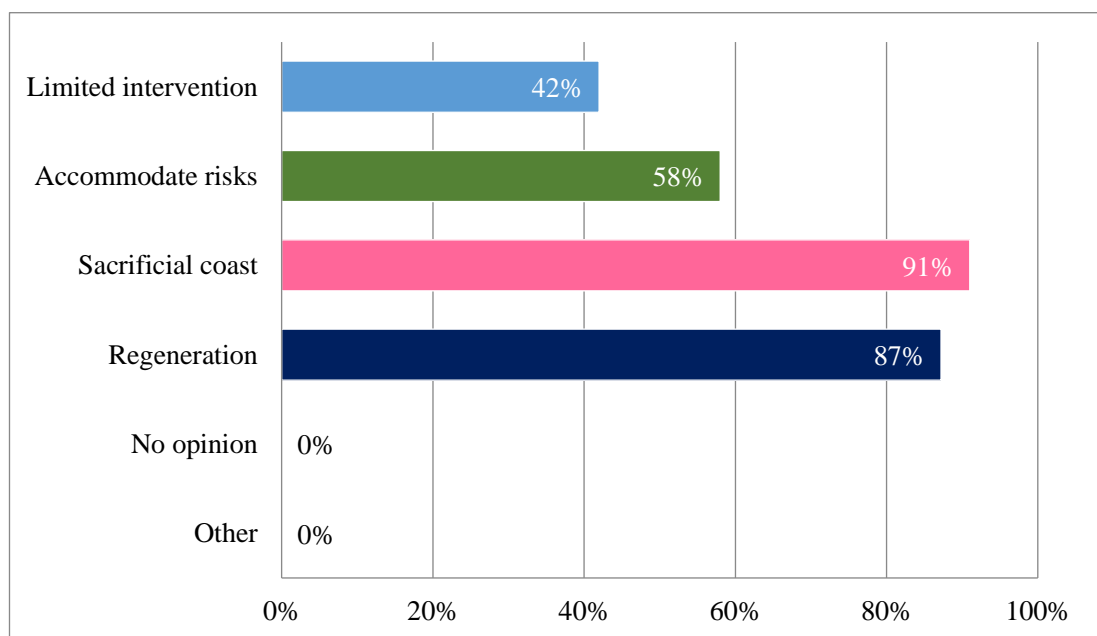


Figure 5.10- Additional policy options to the shoreline management

Looking broadly at the questionnaire responses (Figure 5.10), the findings are slightly higher and show that respondents had multiple choices regarding which other policy options could be added to the current management options. In general, the majority of respondents (i.e. 91%) most strongly agree to sacrificial coast; a process by which the government provide compensation for those communities that lost their properties as a result of flood and coastal erosion risk. Similar results were found by Cooper and McKenna (2008) who carried out an empirical study examining the consideration of social justice in coastal erosion management. The study argues that efforts to limit compensation to those whose property lies in the area currently at risk of flood and

coastal erosion, “can be criticised as inherently unjust” (Cooper & McKenna, 2008, p. 304).

Majority (87.2%, i.e. 68) of respondents evidently felt that measures to re-invigorate local community in the policy should be considered. There seems to be a strong recognition by respondents that the local communities should have an increasing role in the shoreline management decision-making process (as mentioned in Section 3.4). Evidently, as noted in other research into public participation (Arnstein, 1969; Webler *et al.*, 1995; Child, 1996; Fitzpatrick & Sinclair 2003; Sinclair & Diduck, 2009), participation empowers community members as it supports decentralised, non-hierarchical decision-making processes that strengthen the autonomy of the individuals in the community.

A significant number of respondents (42.3%, i.e. 33) considered limited intervention to the management of shorelines. This finding is consistent with Defra’s (2002) research, which shows that the UK public opposes policy measures in which individuals have to pay for environmental improvements; and tend to support policies that improve facilities or invest in alternative technologies. Furthermore, this indicates support for both expectance-value theories of behaviour (e.g., Ajzen, 1991) and Stern *et al.* (1993) contention that egoistic concerns most commonly motivate environmental action.

5.3.8 Warning of Policy Changes

Question 13 asked the respondents about their opinion on implementation of plans that provide warning of policy changes, for example, to warn the withdrawer or relaxation of current defences. The question was kept open-ended because it was thought that there could be different opinions of respondents to this question. An answer box was also provided for respondents to explain their answers. The data is recorded in Table 5.7.

Table 5.7- Needs to implement plans that provide warning of policy changes

Opinions	Responses	Percentage
Yes, it would forewarn residents already dwelling in the area	74	94.8
Yes, it would forewarn people potentially seeking to move into the area	71	91.0
No, it would blight businesses and properties already within the area	16	20.5
Other	2	2.60

Policy changes for a number of reasons (Olsen, 1993; Hooke, 1999; Urwin & Jordan, 2008). A change of administration or government departments, a new issue arising that needs attention, a particular problem becoming more urgent, or a crisis (Solecki & Michaels, 1994). The change in policy from a ‘Hold the Line’ to other policy options such as ‘Managed Realignment’ or ‘No Active Intervention’, (Section 2.4.1.2), often provoked the local communities to become concerned about the changes proposed. Unsurprisingly, the question about warning of change in policy received a high response from the respondents. This gives an indication that information ahead of policy changes is essential to the residents within the area at risk.

It is clearly observed from Table 5.7 that majority of respondents 94.8 (74) felt that provision of warning of policy changes would forewarn people already dwelling in the area. This was closely followed by 91.0% (71) respondents who felt that implementation of the same process would forewarn people potentially seeking to move into the risk areas. Slightly smaller percentage of the respondents (20.5%) agreed that warning residents of policy changes would impair the smooth running of businesses already in the area. There were 2.60% (2) respondents who expressed their views in “Other” category. This indicated that respondents had different reasons on the implementation of the plan in question. One respondent stated that the provision of warning would create awareness of problem ahead and another respondent mentioned about how the process will aid their group mobilisation for campaign.

In line with the discussion provided in Section 3.3.4, to address the problem effectively there is a need to engage with as many local residents as possible who have an interest, or who may be concerned in the future, about the planning or management of the shorelines. Planning for a changing coastline should include local experience as part of a development towards pluralistic science. This will not only include scientists’, research managers’, policy makers’ and coastal managers ‘input into decision making but also the perspective of the general public (Chilvers, 2007).

5.3.9 Possible Outcomes of Provision of Warning on Policy Changes

Further to Question 13, respondents were asked to state the possible outcome of provision of warning on policy changes. The question was close-ended with four choices and respondents were asked to select more than one option if applicable. Regarding this question respondents were referred Question 13 and if any respondent wanted to explain their answer then they were provided with the text box to write comments if any. The data is presented in Table. 5.8.

Table 5.8- Impacts of implementation of plans that provide warning of policy changes

Opinions	Number of Responses	Percentage
A fair distribution of impacts	9	11.5
An unfair distribution of impacts	3	3.9
A balanced distribution of impacts	7	8.9
An unpredictable distribution of impacts	3	3.9

Looking at the responses provided by the respondents, it can be seen that a small number of participants (28.2% i.e. 22 respondents) responded to this question. This may have been because they were unsure of the impacts or they were reluctant to give any answer. “Fair distribution of impacts” was the choice for most (11.5% i.e. 9 respondents). This was followed by “Balanced distribution of impacts” (8.9% i.e. 7 respondents). The least favoured choices were “Unfair distribution of impacts” (3.9% i.e. 3 respondents) and “Unpredictable distribution of impacts” (3.9% i.e. 3 respondents).

Responses obviously vary in this question. A concern with the reaction of local communities to change in policy option as well as methods of enabling greater inclusion in the shoreline management process is a recognised problem by researchers and management authorities (Dalton 2006; Webler & Tuler, 2006). The views of the respondents for the low response to the question cannot be explained without asking them. However, due to the method of survey (Section 4.5), this question was answered in the semi-structured interviews with the group coordinators discussed in Chapter Seven.

5.3.10 Components of Public Consultation

Respondents were asked in Question 15 to evaluate the likely effectiveness of the component of public consultation. The question was close-ended listing six options. Respondents were requested to choose more than one option, which were applicable to them. The responses were quantified using a Likert type scale: LEAST EFFECTIVE 1 to MOST EFFECTIVE 5. (Most effective = 5; Very Effective = 4 Effective = 3; Somewhat Effective = 2; Least Effective = 1). Apart from these options, one more option was given namely ‘Other’ with a provision of an answer box for any other option that was not listed. Thus for each type of mechanism, score were obtained. The scores were used to rank the mechanisms, which is presented in Table 5.9.

Table 5.9- Components of Public Consultation

Components of Public Participation	Score	Percentage	Rank
Local community workshops (public meetings)	75	96.2	5
Invited stakeholder meetings (small groups)	75	96.2	5
Other written communication (leaflets, posters)	71	91.0	4
Online/ forum message board	69	88.5	3
Individual contact between planning authorities and local communities	67	85.9	2
Focus groups (single issue)	61	78.2	1
Other*	0	0	0

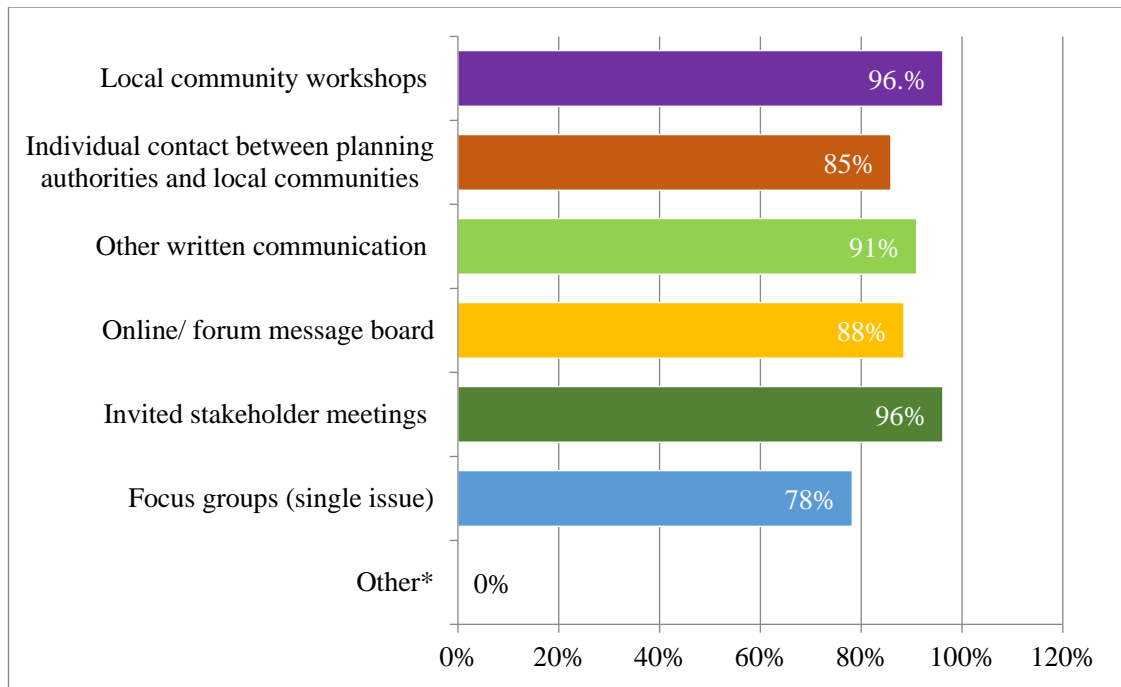


Figure 5.11- Components of public consultation

Grant (1989, p. 25) observed that pressure groups are important channel of communication between the government and governed and act “as a counter weight to undue concentrations of power”. The quantitative results indicate that respondents had multiple choices regarding the best way in which they prefer to be consulted (Figure 5.11). Equal percentage of respondents (96.2% i.e. 75 respondents) felt that enabling local community workshops and organising meeting with stakeholders would encourage participation. Respondents felt that meetings/workshops are necessary to ascertain whether decisions and actions are bringing about continuous improvement in the problem situation, and to take control actions if necessary. As mentioned in Section 3.3.2, it is essential to involve the local residents all of the way through. While this may be expensive and time consuming, it may save time in the long run as objections may be prevented later on in the process (Glasson *et al.*, 1999).

The use of written communication such as leaflets and posters (91.0% i.e. 71 respondents) was found to be the second effective way of engaging the communities in consultation process. If residents have no prior knowledge or understanding of the development proposal they are often unwilling to participate (as was found while conducting this research) therefore it is necessary to publish some information prior to the implementation of plans. Another 88.5% (69) respondents felt that the use of

online/ forum board was another effective component. Nearly equal percentage of respondents (85.9% i.e. 67 respondents) agreed ‘Individual contact between planning authorities and local communities’ was found to be least effective component of public consultation. It was interesting to note that this question received a high response rate; this is largely due to the fact that all respondents, despite their differences in terms of campaign objectives, and their locations, had the same feeling that the level of local community’s participation in the shoreline management decision-making processes should be encouraged.

5.3.11 Measuring Group Success

Question 16 asked respondents about their opinion regarding the possibility of group achieving its objective. The question was close-ended with three options and the respondents were requested to select single option. The options were: a) Yes; b) No; and c) Don’t know. Regarding this question if any respondent answered ‘yes’, they were requested to write the expected achievement in the text box provided.

Unsurprisingly ‘Yes’ was the choice for most. Only one third of the respondents offered comments in the text box. Nearly half of the comments were about consideration for social justice and compensation for the residents at risk. This is consistent with the finding, mentioned in Section 5.3.7, that a significantly higher proportion of respondents felt that plans should be put in place in order to ensure that responsibility for shoreline management is accepted equitably and the system is made fairer. This was because they implicitly acknowledged that shoreline management problems are collective, but evidently had no trust in the management authorities (O’Riordan & Ward, 1997).

5.4 Future Expectations from the Shoreline Management

In this section set of questions were asked to obtain information concerning the future management of shoreline and best approach to local community participation in the shoreline management decision-making process.

5.4.1 Opinion about the Management of Risks to Coastal Communities

Given that communities' vulnerability to disasters such as floods, and therefore also their resilience, is rooted in their everyday lives (Gaillard, 2010), it is necessary to understand who should be responsible for its management. Question 17 was asked to know who should take lead role in the management of coastal erosion and flood risks to communities. The question was close-ended and provided three options. Respondents could select more than one option if applicable and were requested to rank on Likert type scale of MOST RESPONSIBLE 4 to LEAST RESPONSIBLE 1. (Most responsible= 5; Very responsible = 4; Responsible =3; Somewhat Responsible = 2; Least Responsible = 1). Thus for each level of responsibility scores were obtained. The scores were used to rank who should be responsible. Table 5.10 presents the results based on ratings of the respondents.

Table 5.10- *Role of individual / management authority*

Organisation / Individual	Score	Percentage	Rank
Private individuals and property owners	12	15.3	1
Local Authority	73	93.4	5
Defra/ Environment Agency	58	74.4	3

The highest percentage of respondents i.e. 93.4% (73) agreed that the local authority should be the most responsible for the management of shoreline. This was ranked 5. As discussed in section 2.4.2.1, Defra policy from Making Space for Water in 2004 (Defra, 2008) and the Flood and Water Management Act 2010 (Defra, 2012b), cite the EA as the lead organisation with strategic overview for coastal risk management and funding decisions. However, this study has identified that the Local Authority is preferred to undertake the leading role in the consideration of generic policy options for the shoreline, identifying possible acceptable policy options, together with the process assessment and objective appraisal for each shoreline management activity.

The EA was identified as most responsible by a significant number of people 74.4% (i.e. 58) in this survey. Many respondents (15.3%) to this research also identified that 'Private individuals and property owners' should have, or there should be plans for them

to have an increased responsibility for flood protection along their own coast and river boundaries (Johnson & Priest, 2008). In other words, the idea of individuals taking responsibility for managing their frontages was not supported by the respondents.

When analysed in detail, particularly by examining and comparing scores of various respondents, it seems there was a broader range of responses as well as multiple choices regarding who should be the most responsible for management of shoreline between the EA and Defra. Question 18 was a follow-on question. The respondents were asked to offer any other opinion in relation to Question 17. Only one respondent attempted the question. As it was already discussed in Question 17 that majority of respondents agreed for the Local Authorities to be the most responsible for future management, so this might be the reason for not providing any further opinion. He stated in his response:

“I can’t think of any other organisation; I think we could consider which one is best among those you have suggested”

Overall, the responses to Question 17 and Question 18 generally reiterate the discussion on local community participation in shoreline management in Chapter Three. However, there are three key points which merit further consideration. First, the participants felt that stakeholders should be involved as much as possible in the decision-making process (Renn *et al.*, 1993; Glicker, 2000), and in particular, that there should be more involvement from statutory bodies as well as from coastal landowners and shoreline managers (Stojanovic *et al.*, 2004). Furthermore, that there should be a designated body to facilitate and guide the decision-making process through the various stages. Second, the decision-making process should focus less on analysing the options for future management interventions, and more on developing shared understandings and practices to bring about management interventions.

5.4.2 Improving Participation in the Shoreline Decision-Making Process

The practicalities of encouraging participation is examined by Parry *et al.* (1992) who suggest that pressure groups offer an important means of support, enabling individuals through encouragement and practical support to participate in a range of activities.

Respondents were asked in Question 19 to rate how public participation in the shoreline management decision-making process could be improved. This important question was close-ended listing four options. Respondents were requested to choose more than one option, which were applicable to them. The responses were quantified using a Likert type scale: HIGHEST IMPACT 4 to LEAST IMPACT 1. (Highest Impact =5; Higher Impact = 4; High Impact =3; Low Impact = 2; Least Impact = 1). Apart from these options, two more options were given namely No Opinion and Other. Thus for each impact score were obtained. The scores were used to rank the impact, which is presented in Table 5.11. In addition, an answer box was provided for any other option that was not listed.

Table 5.11- *Ways by which public participation could be improved*

Impact	Score	Percentage	Rank
Information provision e.g. <i>leaflets, newspaper articles or exhibitions, internet</i>	69	88.5	3
Information collection e.g. <i>questionnaire surveys or interviewing of the public.</i>	55	70.5	2
Consultation (two-way): <i>exchange of information between residents and authorities</i>	73	93.6	4
Local residents participation: <i>assist in making decisions on shoreline management</i>	74	94.9	5
No opinion	0	0	0
Other	0	0	0

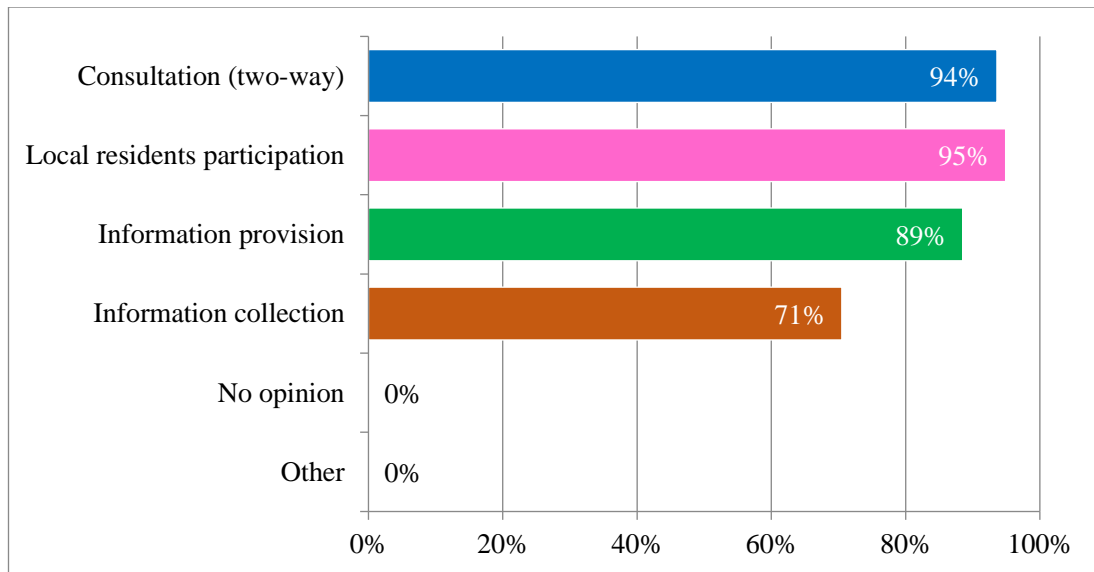


Figure 5.12- Methods of improving public participation

Overwhelmingly with a 90% and above response (Figure, 5.12), similar to the findings in Table 5.8 regarding community preferred means of consultation, the results indicate that there was a central tendency among the respondents to support the idea of assisting local residents in making decisions on shoreline management (94.9%). This level of involvement again scored the highest rank. Nearly equal percentage of respondents (93.6% i.e. 73 respondents) agreed with the idea that local community should have a voice in the decision-making process through exchange of information with the management authorities. The third highest scores (88.5%) belonged to the method of information provision through newspaper, leaflet and the internet. Respondents agreed that local use of information sources, such as the village show, schools events and local magazines, are ways to inform and engage with more of the local community.

Information collection through questionnaire surveys or interview was the last among the four options that were supported (ranked 3). Flows of information may be constricted, and the systems to find out information controlled and closed (Mosse, 2001), to a considerable extent it is thought that these difficulties can be overcome with greater efforts to be more inclusive in the participation and decision making-process (Bond *et al.*, 2004; Midgley & McGlashan, 2004; O'Riordan *et al.*, 2005). Respondents did not provide any further methods that they considered being appropriate ways of involving them in the shoreline management.

This present study provided recognition that there was a need for communities to be involved in the shoreline management process. Buckle *et al.*, (2001, p. 21) has similarly argued that “successful management of the hazards, risks, impacts and consequences is not possible without community commitment and involvement”

5.4.3 Willingness to Participate in the Shoreline Management Process

Consistent with previous research (White *et al.*, 2010; Zhang & Lei, 2012), this study highlights the local community willingness to participate in shoreline management process. Question 20 asked the respondents to state how often they would be willing to participate in the meetings concerning shoreline management decision-making process. The question was close-ended with four options and the respondents were requested to select single option. The four options were: a) Very regular i.e. attend meetings more than one per year; b) Regular i.e. attend meetings once per year c) Infrequent and; d) Attend meetings only when issues occur.

The analysis indicates that a significantly smaller proportion of respondents (11.5% i.e. 9 respondents) would only attend the community meetings when there are shoreline management issues. In contrast, a much higher proportion of the respondents (69.2% i.e. 54) would attend frequent meetings on shoreline management more than once in a year. Few respondents 15.4% (12) were not willing to attend frequent meetings.

It could be argued that concern about flood and coastal erosion risk can be felt more keenly by people that are directly affected. (Section 5.2.5). Respondents that were attending meetings frequently may still have concerns about shoreline management issues in their communities. These results would seem to validate this finding. More revealing results have been found from measuring particular environmental concerns in the broader context of a range of environmental, personal and social issues (e.g., Poortinga & Pidgeon, 2003; Norton & Leaman, 2004).

5.4.4 Necessary Changes to the Existing Shoreline Management Process

The final question in this section was opened-ended which solicited respondents to provide their opinion on changes that could be made to the existing shoreline management process. The reason for the question being open-ended was that opinion could be diverse. The respondents' comments to support their opinions are discussed separately in Section 7.3 (Chapter Seven).

5.5 Background of the Respondents

The question of what influences the conception of environmental concern has stimulated a considerable amount of research (Barkan 2004; Gelissen, 2007; Franzen & Meyer, 2010). A popular approach points to socio-demographic characteristics as potential determinants of environmental concern. This section focuses on respondents' socio-economic demographic characteristics such as gender, age, education, level of qualification as well as their job titles.

5.5.1 Gender

Question 23 was specifically designed to know the gender of the respondents who filled data in the questionnaire. The question was closed-ended and required respondents to tick whether they are male or female. It was observed that out of 78 respondents, who had filled the questionnaire, 43 were female (55.1%) and 35 were male (44.9%) (Table 5.12).

Table 5.12- Respondents gender

Gender	Frequency	Percentage
Female	43	55.1
Male	35	44.9
Total	78	100

The survey suggests that approximately equal numbers of males and females act as members of CAGs. These percentages are in accordance with the British population generally, where males and females are fairly equal in numbers up to the age of around 70 years old (Office for National Statistics, 2009). Similar results were found by Tindall *et al.* (2003) who identified that unlike some spheres of political life, women tend to be well represented in environmental organisations.

The study revealed that women belong to as many, if not more, formal and informal groups as do men. Furthermore, Bord and O'Connor (1997) found that when measures of general environmental concern explicitly focus on risk perceptions, women consistently express comparably higher levels of concern. It was concluded that both men and women express similar levels of fondness for the natural environment, but women perceive the threat of environmental problems more acutely, and are thus better able to recognise risks involved in allowing environmental problems to continue.

This survey supports the findings of (Merchant, 1992; Davidson & Freudenburg, 1996; Blocker & Eckberg, 1997; Bord & O'Connor, 1997), who have shown that women are moderately more concerned about general environmental issues than men. However, the findings of this study disagree with MacDonald and Hara (1994) report that because males tend to be more likely to be politically active, and more involved in community issues, they also tend to be more concerned about environmental problems.

5.5.2 Age Group

Question 24 was close-ended with six options, which asked respondents about their age group. The age of respondents were ranged into six groups: 17-24; 25-34; 35-44; 45-54; 55-64; and 65 and over. The data is presented in Table 5.13

Table 5.13- Age distribution of respondents

Age Group	Frequency	Percentage
17-24	0	0
25-34	7	8.9
35-44	11	14.1
45-54	36	46.2
55-64	19	24.4
65 plus	5	6.4
Total	78	100

Much of the existing studies on age and environmental attitudes (Van Liere & Dunlap, 1980; Barkan 2004; Gelissen, 2007; Franzen & Meyer, 2010) has shown that it is primarily the young who are interested in environmental matters. This is because younger members of the public are less integrated into the social order, and are thus more open to change. Comparatively, older members of the public are more integrated and accustomed to certain ways of doing things, and as such, are more likely to feel threatened by change.

The findings of this survey contradict the reports by Parry *et al.* (1992) that amongst all the age groups, those between 18 and 29 were more likely to show concern for the environment. The age distribution of the sample is perhaps surprising. While the over 65 category was not particularly well represented, data from the survey indicates that the highest percentage of the respondents are between the age of 45 and 54.

5.5.3 Education

Question 26 was close-ended with seven options and respondents were asked to select all that applicable. It solicited respondents to select their qualifications or the nearest equivalent. The level of the respondents' education is explored in order to investigate the relationship between education and the public participation processes. Van Liere and Dunlap (1980) proposed that environmental concern is positively associated with increased levels of education. In this study, the sample as a whole is very heavily skewed towards those with educational qualifications. In total 67.3% of the

respondents reported that they had been educated to at least degree level, and a further 24.4% said that they have 'A' levels. This gives an indication that those with higher education are able to assimilate environmental information more quickly, therefore increased the probability of these individuals possessing more knowledge about environmental problems. It could be argued that possession of higher educational qualifications is prevalent amongst CAG members. These results support research reported by Ingram *et al.*, (1995) that people who join environmental groups differ most strongly from the public as a whole in the level of higher education they receive.

5.5.4 Occupation

Question 26 which was close-ended asked respondents about the employment group they belong to. The question was stated with eight options and the respondents were requested to select more than one option if applicable. Overall, the analyses revealed that over half describe the sort of work they do (or if they were not currently working, what they did in their last job) as skilled manual (55.1%) or professional occupation (16.7%). The responses generally reiterate the report of Sanne (2002) that the middle/upper classes have a greater concern for the natural environment than lower classes. A notable finding was that the next largest groupings described themselves as retired (23.1%). This contradicts Defra (2010) report on public attitudes and behaviour toward the environment in England that people beyond retirement age tended to express more pessimistic attitudes than younger people about the state of the global environment. Only a small proportion of the sample (1.5%) said they were unemployed. In addition, some respondents had more than one job, such as, a respondent who had a resort business and also was an engineer at the same time. However, only the main occupation was selected.

5.6 Summary

As mentioned in Section 5.1, the aim of the sampling strategy adopted was to ensure adequate representation of a number of key members of groups in relation to the research objectives, as well as to achieve a broadly representative sample of the total population. This Chapter presented the results of the individual questions of the survey,

complemented by an interpretation and discussion. The survey included 78 responses from 10 case studies. Members of CAGs (referred to as respondents) were anticipated to give different opinions towards local community participation in management. All were aware of shoreline management issues in their different communities, and most considered social justice as the way forward to participation.

Participation has been described as a process by which public concerns, needs, and values are incorporated into governmental and corporate decision making (Creighton, 2005), as an inclusive dialogue between government, citizens, stakeholders and interest groups (Renn *et al.*, 1993), as a process of engagement, where people are enlisted into the decision process to contribute to it (Petts, 1999), and as ways for the public to influence and share control over development initiatives, decisions and resources which affect them (World Bank, 1996). These definitions vary considerably; some have a broad outlook and encompass the total area of participation, while others focus on specific parts i.e. of interactions. Some have the local community's perspective, and others have the management authority's point of view. Although they are somewhat overlapping and congruent, however, they give an overall impression of a broad, many-sided, complex, and rather blurred area.

The key findings of this chapter are that, the diversity of CAGs and the extent to which they are willing to participate in the shoreline management process is determined by many factors including the availability of information and communication with the management authorities. Beierle and Cayford (2002) argued that whenever public participation is limited, conflicts will usually occur. In order to effectively solve the issues relating to community participation, attention must be paid to differences in societal viewpoints, interests and concerns (Creighton, 2005). A disclosure of factual information on the management of the shoreline to the wider community residents is essential (Tompkins *et al.*, 2008). Importantly, public participation in the decision-making processes must be encouraged, this will lead to a greater chance of achieving a consensus (Keen *et al.*, 2005, Tritter & McCallum, 2006).

The findings show that the local communities were encouraged to participate in the shoreline management decision-making process, however, some participants claimed

that it could be better if it was done in the early stage before the final implementation of plans.

The findings in this thesis imply that decision-making is a dynamic process where respect and dialogue are important influential factors, and where all stakeholders in principle aim at shared decision-making. The findings indicate a local community participation continuum where the CAG capabilities to communicate (and the management authorities' abilities to facilitate the communication) determine the degree of influence upon the decision-making. While this chapter investigated knowledge, practice and opinions about shoreline management among the group members, the next chapter (Chapter Six) presents the analysis of the semi-structured interviews with group coordinators.

Chapter Six: Assessing the Activities of
Coastal Action Groups in the
Shoreline Management
Context

6.1 Introduction

Chapters Six and Seven present and interpret the interview data. Before investigating both the campaign activity and participation of CAGs in shoreline management, it is essential to understand the specific process of group formation, and the key contributing factors to the management of shoreline. This chapter begins by examining the general formation of CAGs and the degree of tendency for individuals to join.

In Section 6.3, the range, and extent, of campaigns that CAGs undertake, aimed at protecting the shoreline or improving its condition will be considered. As previously examined in Chapter Five, lack of local communities involvement in the shoreline management decision-making processes has been considered to be the main reason for the majority of CAG campaigns. Section 6.4 examines the campaign tactics, in accordance with the data from the semi-structured interviews with the group coordinators. Furthermore, Section 6.5 facilitates a comparative analysis of the group activities.

Different group coordinators' comments is analysed to present a more detailed discussion of how CAGs participate in the shoreline management process, and how they view the effectiveness of their group campaigns.

6.2 Reasons for Group Formation

CAGs in this study began to form from the late 1990s onwards. Initial investigations (Section 5.2.1) indicated that the earliest of the CAGs to form was the Coastal Concern Action Group in 1999 (Section 4.3.3), followed by the Defend Our Coast Association in 2000 (Section 4.3.5). Therefore, these two groups formed prior to the initiation of SMP2 in 2001 (Defra, 2001b). Similar to Question 1 of the questionnaire survey, the interview sought to investigate in more detail how long has the groups been established, and the reasons for its foundation. It is apparent that there is a variety of reasons for groups' formation (as discussed in Section 5.2.1). Amongst the main reasons mentioned by the coordinators were: campaign for social justice in shoreline management (Cooper *et al.*, 2008), provision of compensation for affected local

residents (Win *et al.*, 2003) and participation in the shoreline management decision-making (Section 5.2.5). These reasons were clearly explained by one of the coordinators.

“It starts originally by the people on the other end of the marsh area, they were living in quite vulnerable cottages and they were told that if their properties were destroyed by sea, there was no compensation and so that was the impetus for these people to get together.” (P17:3)

Another reason for the formation of CAGs, as mentioned by two coordinators, was the feelings of abandonment and lack of consultation by the management authorities. One of the coordinators expressed that:

“It was never my intention to get involved but there was no alternative. They went from ‘hold the line’ to ‘no active intervention’; it changed overnight without any consultation or nothing. We are a little bit different from the other coastline. We have been directly affected down the Outer Harbour, the other ones aren’t. A few years ago, the other communities were getting more cooperation from the Borough Council than we were because the Borough Council did not want anything to be said against the Outer Harbour.” (P4:3)

The group acted as a communication point, bringing together information from a range of sources on behalf of the community. However, from the interviews, it was found that lack of information on the shoreline management process was another reason for group formation to challenge the decisions of management authorities. One interviewee explained that: *“when we first started off, it was a blank wall; we got no information, nothing from the Borough Council at all.” (P4:5)*. Confirming this concern, Lyster (1998) pointed out that unequal access to information on environmental policies and related data can cause a significant problem.

6.2.1 Group Composition

This section considers how the groups are organised and the nature of their membership. The findings from the interviews revealed that the majority of the groups

were ‘vehicles’ to express the local residents’ concerns and to bring about change in the shoreline management process. By coming together and initiating campaigns, it was hoped that the residents’ ‘voice’ would be heard. Hence, a shared ideology (Jordan & Maloney, 1997) is a central feature of CAGs. Their goals, such as a rejection/modification of management option for instance, could be supported by everyone regardless of social or economic status. Therefore, CAGs do not usually place any restrictions on membership as they are based on shared attitudes and values; people join because they want to support their objectives.

6.2.1.1 Number and Size

In terms of numbers, the group size ranges between seven and 300 members, with the size of groups with signed up members ranging up to 1200. However, this does not always represent the number of actively involved members. One interviewee pointed out that:

“Yes Save Our Selsey had about 1200 signed up members which were more than 10 percent of our population but I wish that was the number of active members.” (P11:18)

The smallest group was the Save Pagham Beach (Section 4.3.10) which at the time of study only had five members. The other groups with less than 15 members are the Carlyon Bay Watch (Section 4.3.2) and the Blyth Estuary Group (Section 4.3.1). The largest groups recorded are the disbanded Save Our Selsey (Section 4.3.9) and the Coastal Concern Action Group (Section 4.3.4), which each have several hundred members.

Research conducted in the East Midlands by Bell *et al.* (2003) found many people to be authentic members of environmental groups, but not necessarily actively involved. Choosing to be an active member rather than a group contributor usually involves a greater level of commitment (Sparrowe *et al.*, 2001) as stated by this coordinator:

“I think it's probably fair to say the full time residences are more invested in the group. What worth looking at is the number of people who attended meetings.” (P14:9)

In distinguishing between ‘contributor’ and ‘member’ of a group, these findings are in agreement with the results of study carried out by Smith (1990). He pointed out that ‘contributors’ make financial donations to the group, while ‘members’ exhibits full involvement in the group’s activities. The majority of members of the community contributes to CAGs in different manners. Contributing could be through critiques, suggestions for overall group campaign, submitting petitions or making donations toward the groups’ activities. As the residents interact more with the group, they become interested in the groups’ activities and perhaps become an active member.

6.2.1.2 Group Ethos

On examination of the ethos of the groups, there were various attitudes and opinions mentioned by the group coordinators. The most common ethos expressed was that their groups had always maintained an open attitude toward the wider community. For example, one of the coordinator stated that:

“We had a meeting in the local church hall and literally the morning after that, the group was actually formed. Originally I think they were six, I was brought in a few weeks later because I wrote a bit of article in the local paper on my reaction and next thing the guys are knocking on my door saying come and join the group.” (P3:3)

There were limits to openness, nonetheless, the group coordinator interviewed from Hopton Coastal Action Group stresses the fact that they would not disclose some information with members of the community. He explained that:

“We have regular meetings in my house with the leader of the Council, the Chief Executive and representatives from Bunn Leisure and a lot of these things are discussed here in my house. It’s not minute and all of the things we said are confidential. If something is going to happen in future, this is how I’ll

find out but I'm not allowed to go and speak about it in the village.” (P17:22-23)

Clearly in this case, many group activities were conducted in a discrete way to pursue a political or social agenda (Binderkrantz, 2008) to promote peoples' participation in shoreline management. As a result of this, members therefore provide maximum support to the group in return and this enables the group to be more effective in championing its goals as it will have the required support from its members (Wuthnow, 1994).

6.3 Campaign Focus

In line with the discussion provided in Sections 5.2.3.1 to 5.2.3.3, the focus of CAGs campaigns determines the differences between the groups. Interviewees highlighted campaign priorities that became a focus at specific times during the course of the campaign, these are: to challenge the shoreline management policies; to encourage greater participation in decision making and; to mobilise community members as well as stakeholder to meet and discuss solutions to shoreline management issues. These three reasons reflects the concept of sustainable development in integrating the environmental, economic and social issues (Ciegis *et al.*, 2015). The primary target for most campaigns against management policies are to seek and achieve social justice as discussed in Section 3.5. The next section examines the campaign methods by CAGs.

6.3.1 Campaign Methods

This section investigates the range, and extent of campaign activities that CAGs undertake in protecting their shorelines or improving its management. In today's society the community is often active than passive wanting to get involved in environmental activity (McManus *et al.*, 2012). Local communities are becoming more concerned with issues that is aimed to make the government consider policy change. This supports Baggott (1995, p. 172) who comments on the role of the public in relation to campaign activities:

“There are signs that people are increasingly willing to undertake collective action in such circumstances, although this still remains a less popular option than other forms of participation, such as signing petitions and contacting MPs on an individual basis”.

6.3.1.1 *Orthodox Methods of Campaign*

These are range of actions undertaken by CAGs in their campaigns (Section 3.5.3) such as making a donation, signing petitions and wearing badges. Such activities are deemed part of the conventional political process (Inglehart & Catterberg, 2002). They are all relatively low-cost activities in terms of the time and effort required to perform them. A significant number of CAGs also engage in these actions in order to support various causes. Taking part in high-cost forms of participation such as having personal contact with the management authorities or attending a decision-making meeting is comparatively less common. However, it is expected to find that some groups participate more frequently in a range of actions than the other, since they have different campaign objectives.

One of the group coordinators closely worked together with researchers, academics, and NGOs. He organised the local meetings with the resident in their community. They claimed that it is their right to make decisions for their own needs and they tried to organise their campaign through: sending letters to both central and local authorities, staging demonstrations, and attracting widespread media attention.

“We lobbied local politicians, we used the local press, national press as well, I did some radio interview and I’ve spoken in conferences, worked with local NGOs and mingling with others groups via Malcolm Kirby whose name was given to me by Local Authority coastal engineer, they represented a selected committee.” (P14:28)

6.3.1.2 *Unorthodox Methods of Campaign*

The unorthodox campaign methods is not unique to CAGs in this study (Section 5.2.3.3). This method of campaign involves public demonstration and sit-in or street

demonstration (Lubet, 2001). Although, fewer activists reported that they had taken part in unconventional action in order to support shoreline management campaign. None of the interviewees had used force against properties or buildings during the course of their campaign activities. This was clearly explained by one of the interviewees:

“We are not radicals; we are not here to throw stones at Defra or the Environment Agency representatives! We are just a group trying to work out how to raise our walls, made of clay and 400 years old. We are trying to work out how high to make them, what slope to make them, what is the best method and how to do it.” (P4:37)

Consistent with this finding, the research by Inglehart and Catterberg (2002) found that only a few percent of British citizens had ever taken part in public demonstration. This is because unorthodox methods of campaign are arguably more resource-intensive than the act of signing petitions and writing letters to the management authorities. The report of Inglehart and Catterberg closely mirrors the finding from the group members’ questionnaires in Section 5.2.3.3. The majority of the CAG embrace lobbying as a more conservative method of campaign.

6.3.2 Media Influence

CAGs employ different strategies in order to attract the attention of the management authorities. They believe it is importance to raise issues to the public via the media (Pinkleton *et al.*, 2001); this is often done by the two most important methods, the press ‘Newspapers’ and broadcast ‘Radio/Television’ (Machill & Beiler, 2009) ensuring issues are communicated generally and broadly to sustain a growing mass interest. Constant coverage is vital as it gives an update on the group’s activities, reassuring members its activeness within the group as well as its growth. Some participants believed the internet remained their preferred option when seeking to influence large numbers of people (Harrison *et al.*, 2006) in order to gather support for the campaign. One group coordinator claimed that:

“I think the website has been a great help and practically all the newsletters and information are on that site. They could be sent out electronically and there is a possibility that a good number of people would be reached through their emails.” (P17:11)

Comparable findings were evident in research by Baggott (1992) which showed that four out of five were in contact with the media at least once a day and that 13 percent of those surveyed perceived media campaigning to be their most important source of influence.

6.3.3 Community Opinions and Group Activities

Most members of coastal communities have opinions or preferences about many issues that affect their shorelines (Myatt *et al.*, 2003; Treby *et al.*, 2004; Tompkins *et al.*, 2008). These range from preferences about the management options to the objectives of the group representing their views. Community opinion is varied and it includes the ideas and attitudes a number of residents hold about CAGs and their objectives. The members interviewed were pleased by the way the groups could work together in making the ‘voice’ of the community to be heard. It could be argued that members of the communities have become more aware of issues surrounding their shorelines and more appreciative of their action groups.

While the groups pay attention to community opinion and the way they are being represented, not all residents accepted the campaign of the group (as seen in the case of CBW). This is because different community residents hold diverse opinions on the representation of the groups on issue that affects them. One of the basic criticisms of direct engagement in policy is that it can cause issues of injustice if there is not an equal representation of the whole community’s views (Martin, 2001). This was the case in one of the community investigated. The residents accused the CAG of having a self-centred and narrow-minded opinion on the development along the beach. As a result, community opposition emerged. One coordinator, when asked how well the local community is aware of the group and its objectives explained as follow:

“How well or how badly? We’ve got people who have regarded us as NIMBY. We’ve been called NIMBYs as well as other names. I think the group is well known as an organisation that against development on beach, that’s what people will say. They know about us, well known in the area, I don’t think they actually know the objective of the group, we are not opposing development.”
(P8:28-29)

This was the most explicit accusation levelled at the group. Some residents also indicated that they were also uncomfortable with the effects in which lobbying by localised groups had on their businesses. One of the coordinators of the group presented his view on this issue:

“There were some who wanted to go very public about this and some who didn’t. Just to give you an idea, there were those who thought our complains might start affecting house prices and owner of the caravan park didn’t want to scare his customers by saying lots of publicity about that so, there are always those tensions.” (P14:39)

The extent to which CAG motives truly represent the interests and views of their community is evidently in question. However, even if they do not fully represent the opinions of their area, their role should not necessarily be completely discounted (Eden, 1996). The important aspect to distinguish when community groups become actively involved in policy-making is whether they are conducting issue based lobbying or whether they claim to be community advocates (Howgate & Kenyon, 2009). This could be hard to define; even though the majority of CAGs investigated are issue based by name and nature, when they advocate changes to shoreline management policy using the words “we want...”, it is unclear exactly who they are referring to – only members of the group or residents of the area more broadly.

To address this problem, this study suggests that the group should increase transparency by disclosing pertinent information to the community, and conducting regular meetings to establish the community’s opinions prior to commence a reaction to policy or any decisions by the management authority (O’Riordan & Ward, 1997; O’Riordan 2001 & 2004). When the community become involved with direct

democracy, there can be problems around unmediated lobbying, not only because the views may be unrepresentative, but also because they may be put forward in an inappropriate way (Parvin, 2007). One Coastal Engineer recounted his experience of one such unmediated event:

“Some groups formed in the process where they haven’t been engaged properly at the proceeding level. People normally reject something because of lack of previous engagement or lack of understanding of the process. We’ve come across quite a lot of difficult organisations when we were working on the SMP groups of people come around with understanding issues.” (P10:7-10)

Whilst this was not a characteristic picture of all CAGs, it demonstrates the risks of unmediated public activism and the negative effects that this can have on the process (Parry *et al.*, 1992; Ostrom *et al.*, 1999).

6.4 Campaign Tactics

In order to achieve specific campaign aims, a variety of tactics were used by CAGs when bringing their cause and ideas to the attention of their communities. Whilst the number and types of tactics employed by participants in this study were far reaching, three areas of activity were identified as being significant and prevalent across most campaign and CAGs: networking through writing letters, emails and contact through the internet; contact through newsletter and the use of campaign websites (Parry, 2007).

6.4.1 Writing Letters and Networking

Most group coordinators suggested they felt confused and inexperienced when beginning the task of campaigning against policy change. Many felt unprepared for the roles they had to take. Despite this, several indicated that writing letters or emails; attending meetings, conferences and other venues to network became a means of mobilising the community members in joining the group campaigns (Gil de Zúñiga *et al.*, 2012). As one interviewee expressed:

“We had a number of public meetings; we wrote letters of invitation to the locals and representatives from the Environment Agency. The original concept was to attack the big bad Environment Agency but my approach has always been cooperation and I always said you catch more flies with honey than you do with vinegar. There were some people who had thought I was too soft on it, we should be out there attacking the government but we eventually had a good working relationship.” (P17:5-6)

Although attending the group meeting is an opportunity for networking and finding possible solution to the shoreline management issue in the community, many attend meetings and group events to glean information and knowledge with a view to improving the effectiveness of the group campaign (Lowe & Goyder, 1983). One interviewee stated:

“Some of our members had an overall knowledge of the defences of the marsh, there are others who will give the impression that they got knowledge, but we’ve got an officer among us that got a background. We have one chap who was born on the marsh and gone up the ladder to be senior engineer at Sheppey.” (P17:19)

It could be argued that the task of letter writing and networking with members was something that most group coordinators believed they could do (Lebert, 2003). The activity was to provide the member with the confidence to engage in campaign strategies they employed and facilitates community participation.

6.4.2 The Group Websites

The use of websites has now become a familiar campaign tactic used by action groups to gain publicity (Leizerov, 2000; Taylor *et al.*, 2001). The sites play an important role in communicating with the majority of the groups (Lilleker & Jackson, 2013). In particular, this has provided the groups with opportunities to disseminate information and encourage others to join the campaign, with some groups just having one page, whilst others have many pages and sections.

A number of CAGs use their websites to seek donations and pledges from the public, for example, The Scratby and Carlifornia Environment Group (Section 4.3.11) states on its website that for the group to achieve success in their campaign, a constant flow of money is needed. Similarly, Cockermouth Flood Action Group (Section 4.3.4) invites other organisations to support schemes within the town. Some of the group websites include links to various other websites and documents such as the SMP and other publications by the government in relation to the management of their shorelines (NVCC, 2013). The Defend Our Coast Association also allows viewers to submit pictures of eroded shoreline and provide an opportunity to suggest additional links to the website, while the Carlyon Bay Watch group has an online petition form, and downloadable newsletters.

The internet provide groups with opportunities to contact other groups for the purposes of mutual support (Leizerov, 2000; Taylor *et al.*, 2001). One interviewee describes the importance of their website to the members:

“There was a website under NVCC (National Voice of Coastal Communities). The reason why I created NVCC was simply because I didn't want to do everything for everybody. I wanted respective communities to do it themselves. But I wanted us all to work under one umbrella, so if we're all singing from the same hymn sheet, the government's got no alternative but to listen.” (P5:24)

Another growing trend in campaign tactics is the use of social networking sites like Facebook, Myspace, Twitter and videos on YouTube (Lomax, 2011). In some cases the groups manage their own Facebook site which then permits members of the community to communicate and comment on issues affecting their shoreline. The following quote demonstrated the significance of the use of social media:

“I will say the best place to judge the public feeling about group and our activities is the Facebook page. Because there is nothing stopping posting there, there is also nothing stopping anybody deleting posts.” (P13:9)

It could be said that representation on the Internet now has an important role. A range of information on the groups is available, as well as some opportunities for submitting

information and contributing to the groups' activities. Where individual group websites are not set up, local village and information websites provide opportunities for the groups to be promoted via the Internet. However, the constantly changing nature of the group websites makes it difficult to use as a stable research resource.

6.4.3 Group Publications

In terms of communicating with the public, almost three-quarters of the groups produce some form of publication such as newsletter, leaflets or flyers. These are used to communicate a range of information about the groups, such as aims, activities, membership, benefits and to keep members up to date with shoreline management issues and possible solutions (Deegan, 2001). An example of publication produced by a CAG is the monthly magazine, called 'Village news' produced by the Hopton Coastal Action Group (Appendix Six).

A group coordinator highlighted how they use publications and other media to bring the group's activities to the attention of wider public:

"I stand up at every meeting and say something about coastal erosion, or the harbour, what's happening down there. I always make some comment, that's written into the minute of the meeting and the minute, is published in our magazine which means whatever I said goes into 1200 houses in the village. This has made us a good representative of our community" (P4:33)

In agreement, Bosso (2003); Jordan and Maloney (1998) consented that the mode of communication highly determines the effectiveness of group. Communication in CAGs are often unofficial which could limit their level of participation in decision-making process, and possibly reduce the effectiveness of the groups (Enayati, 2002).

6.5 Measuring Group Effectiveness

A study of CAGs must be concerned not only with how they operate, but also with what they are able to achieve. This section considers the factors influencing CAGs campaigns in terms of their leadership, availability of resources and their concern for the local environment which in turn are influenced heavily by their relationships with management authorities. CAGs which are well supported, well financed and well led are more likely to be effective in their campaigns. A large number of membership means that members can help more effectively with activities such as leafleting, writing to the press, MPs and local councillors as well as participation in campaigns. It should be noted also, however, that small CAGs concerned with small scale local issues such as repair of defences can be effective even with small membership (Hart & Van Vugt, 2006) and that the quality of membership may sometimes be as important as the quantity.

6.5.1 Campaign Leadership

The leadership style adopted by CAGs becomes more important in determining the effectiveness of the group (Euwema *et al.*, 2007). For groups to be successful in their campaigns, they require knowledgeable, authoritative and probably energetic leaders who can deal effectively with the government, and who can also help to enthuse existing members and attract new ones (Barrett, 2006). Baggott (1995) suggests that active leadership is an important component of action groups because they often have to incorporate many different views of their members that might lead to conflict.

Some groups in this study have vibrant leaders who take up an active role that guarantee success in achieving desired goals. This has helped in making them more effective in their campaigns than other groups who adopt 'soft' and 'diplomatic' approaches in carrying out their campaigns. Some participants agreed on the importance of leadership, they felt that some coordinators were more experienced and that these individuals often took a lead during campaign meetings. However, their role was not of hierarchical or managerial seniority. One of the coordinators expressed that:

“Malcolm formed the group called National Voice for Coastal Communities and he was the main engine behind it. Malcolm fought tooth and nail for compensation or some actions to help those along the coast.” (P3:1)

Conversely, another coordinator gave her opinion about the support and encouragement received by an experienced campaign leader:

“Malcolm supported us in the early days. Even Malcolm said I doubt if you’ll ever get money for defences, he said the only chance is we might get some form of compensation.” (P17:15)

A form of weak leadership was observed in one of the disbanded group. While responding to reasons for the failure of the group, one coordinator explained that:

“The whole reason for the group was technically flawed. Then there's a technical flaw in their argument, total bad leadership! The argument was that they wanted the shingle ridge built up by bulldozers and the sea perfectly capable looking after it. And I never supported them, I thought they should leave it alone, I never joined and eventually they got a report which cost three thousand quid and that said leave it alone! So there was no point in the group. Everybody left the group and so it died.” (P7:4-6)

Baggott (1995) suggests that conflict can lead to action group fragmentation. The participants in this study indicated there was no serious conflict within their campaigns and that their shared connection with the community often assuaged disagreements between members. Whilst several participants suggested there might be advantages in having a recognised leader in terms of networking and liaising with the management authorities, most believed that having a more centralised approach to decision-making might affect the solidarity and commitment of members (Schmitter & Streeck, 1981; Whiteley & Winyard, 1987).

6.5.2 Concerns for the Environment

A variety of environmental problems have prompted CAGs to have become involved with shoreline management campaigning (Sections 5.2.1 and 5.2.4) However, a lack of participation in decision-making process was identified to be the most important issue when it comes to inspiring them to take action, with majority of the members of the group (Section 5.3.2) and coordinators citing this reason. When addressing such problems, Seyd and Whiteley (1992) suggest that joining single-issue pressure groups and social movements is seen by many as an effective way of achieving desired goals. More traditional methods of exerting influence, such as joining political parties, is viewed as less effective because these are mainly concerned with power or forming governments. This will be analysed in detail in Chapter Seven of this thesis.

Surprisingly, the information from one of the coordinators supported the fact that CAGs do not only aim to influence government; they also focus their attention at other centres of power such as international and local organisations, (as discussed in Section 5.2.2). He explained that:

“I still keep banging on about the management of our shoreline and social justice. I was a member of an All-party Parliamentary Group on coastal and marine issues. I've been to Holland three times, I've been to Belgium, and I've spoken to the European Commission in Brussels so I've become a reference point in all of these places. I keep getting contacts from the government officials and various parties. I will strongly say that's what keep the group going really.” (P5:8)

In light of these views, it could be said there was widespread concern amongst the majority of the activists about future prospects for the environment.

6.5.3 Funding and Resources

The financial positions of CAGs can influence the groups' performances (Maloney *et al.*, 1994). It is perhaps not surprising that the large majority of coordinators interviewed felt that obtaining funding was difficult and that their campaign was

limited as a result. Of course, this is to be expected as nearly all of these groups are small, non-profit organisations. Locating adequate funding is problematic for any group with limited capacity (Fellowes *et al.*, 2004), no matter what the type of campaign involved (Austen-Smith, 1987). Financial resources are important to a group in the sense that if it is going to engage in the detailed monitoring of policies, and attempt to influence the content of such policy. This suggests that the group will require a substantial amount of money to employ experts and administrators and to finance campaign activities.

The majority of the group coordinators indicated that the quality and effectiveness of their campaign would be significantly improved if financial resources were made available. Most, however, had a limited source of income and their campaigns were often hampered by financial constraints. The groups that do not have means of funding neither find an alternative way of fundraising nor depend on member or individual donations for support. Few of the groups investigated expressed frustration with having to rely entirely on members who typically are retired from their jobs with low pension income.

The inability to secure adequate funding is seen by many of the groups to be one of the more limiting factors in whether or not they can develop their groups and expand their campaigns. Some participants suggested that one reason why funding seemed to be inadequate was simply because the group itself was new with small followers. One coordinator explained their difficulties:

“Having been sitting on the fundraising side, certainly we can’t actually do anything currently because we haven’t got enough member or specific project to raise funds against. People won’t give us money to say we are looking for solution to a problem, they want to know what we are going to do and then we’ll be able to raise fund.” (P13:16)

Still, while many of the groups in this study view funding availability as the determining factor in terms of how to meet their objectives, some however refuse to allow a lack of funding to hinder the direction of their campaigns (Maloney *et al.*, 1994). They found creative and low-budget ways to disseminate their messages and

they tried to live within their means. One group coordinator, for example expressed the extent to which the group solicit for funding. He argued that:

“To raise money at all what we do is we collect scrap metal so in other words, I get local neighbours if they’ve got scrap metals, give me a ring and I’ll arrange another committee member which has got a truck, he would go down and collect. We actually got a licence to collect scrap metals and that actually fund our course.” (P3:7)

Thus, while there are no groups who believe that their campaign should be funded at the expense of their members, many do not see how this concern can be ameliorated. The importance of funding for these groups should not be underestimated. It is clear from the responses of those interviewed that they have not been able to fund their campaigns to the extent that they would prefer, which has strongly limited their ability to act. Some also mentioned that much of their time spent engaged in fundraising activities, although some of them viewed finding money to be indirectly contributing to the achievement of their objectives.

In spite of this, there is an admirable optimism in the groups that the importance of its campaign can override financial limitations. One interviewee summed up this sentiment well in saying that funding does affect his group’s efforts in many of the ways discussed above, he stressed that the group’s aims and objectives met the community expectations and therefore money has nothing to do with their campaigns.

6.5.4 Links and Developments

As noted in Section 5.3.3, CAG’s power may well depend upon its ability to form links with other organisations (Tilt, 1994). In terms of interaction between the groups studied, the majority are linked to other groups or organisations in some way. Links can either be through direct association or by loosely working together. For example, some of the groups in this study had links with one another or had mutual links while others are affiliated with the National Voice of Coastal Communities (NVCC).

The NVCC came into being during 2008 as a website for community action groups and individuals campaigning against government policies on shoreline management, and as a focus of national campaigning (NVCC, n.d). Then, in 2009 it was reconfigured as a membership organisation and aimed to act as a conduit between relevant coastal communities and central government (NVCC, n.d). The founder of NVCC stated an interesting reason behind its formation:

“It was really intended to be a vehicle for people to hook onto, for communities to hook onto where they could get the complete background..... So that’s what I want NVCC to do. Everybody had a hook and if you like, a commonality shows central government couldn’t pick any one community off. I mean they love doing that, if they can pick one off, then they will but the whole thinking of NVCC was you hurt Happisburgh, you hurt other coastal communities in the country or if you hurt some coastal communities on the other side of the country, Happisburgh will have a voice in that because you’re hurting us as well. Together we demand a socially just way forward.” (P5:28-30)

These findings support the results of the group members questionnaire in Section 5.3.3 that working together with different organisations can benefit the groups through the sharing of resources (Potts, 1999; Carter *et al*, 2000; Fletcher, 2003; Midgley, 2004; Stojanovic & Ballinger, 2009; Ballinger *et al.*, 2010). For example, the Hopton Coastal Action groups carried out a study at the expense of Bunn Leisure to determine the cause of coastal erosion along their shoreline. The coordinator claimed that:

“Bunn Leisure is the biggest operator in Europe. They own a lot of Holiday Camps. They have turnover of about 600 Million, so they are big players. Bunn Leisure was forced into some action because last year they lost some of their cliff and their caravans that are close to the edge of the cliff. They had to move them back. So they went on to say they would do something about this and they will use their own money. They brought some rock in and did some emergency works which probably cost about half a million pound, just to stop things getting any worse.” (P4:12-13)

Consistent with this supposition, the empirical evidence obtained by Bonnell (2002) showed that, basically, an implementation of a development project often involves multiple parties.

6.6 Summary

This chapter brings together information on the various activities of CAGs in the context of shoreline management. It considered the reasons for formation, campaign focus, and distinctiveness of these groups in terms of tactics and activities. The chapter has identified a number of key points in relation to community participation in shoreline management. The findings have revealed that the reasons for the groups forming are varied although some common themes can be identified including gaps in consultation, feelings of abandonment and the need for social justice in shoreline management - which ties in with other research.

According to the results, relatively all of the groups are run by voluntary members and they range vastly in size. However, some of the groups are made up predominantly of retired individuals which raises some concerns when considering the way of funding the group activities. The chapter, through a series of statements given by the respondents, has identified variable campaign methods. Some of the groups decided to opt for unconventional publicity actions, large demonstrations and perhaps more confrontational direct action as measures of seeking publicity.

The majority of the groups are involved in a variety of activities including writing to the press, MPs and local councillors, increasing awareness and campaigning for the protection of their shorelines through participation in demonstrations. Publications are used by groups for advertising themselves, generating revenue and sharing information. However, the Internet is the most common form of communication across the groups and group websites are constantly developing and changing.

Contributions to the groups are generally made up of donations and fundraising, however even with substantial funding success groups may still struggle for local support and new membership. Developing and maintaining relationships and links

with other groups and the stakeholders plays an important role in the groups' achievements, activities and success, which include links with other groups within this study. The case studies examine in-depth examples of how different groups have developed and operate and the challenges they face. The individual group's participation in the current shoreline management are considered in more detail in Chapter Seven.

The results suggest that the local residents are aware of the issues surrounding their communities, therefore they supported all CAGs, activities in order to make their 'voice' heard through fund raising and publications. The results also show that there was a tendency for the groups to be more successful in their campaigns where there is sufficient funding and effective leadership. Arnstein's (1969) ladder represents a continuum of power to make decisions – from the lowest level, where those participating are “educated” or “employed” but do not participate in decision-making, to the three highest levels where the citizen is in partnership (level 6), has delegated power (level 7), or is in full control (level 8). Responsibility for decision-making is thus increasing up the ladder (Arnstein 1969). Arnstein described the top rung as situations where citizens have the majority of the decision-making seats and thereby full managerial control. In Arnstein's (1969) model decision-making is the crux of user participation, and transference of power means that users gain power to make decisions. The degree of decision-making power thus determines the level of participation.

Chapter Seven: Evaluating the
Perceptions of Local
Community Participation
in the Shoreline
Management Process.

7.1 Introduction

This Chapter includes the perceptions of management authorities and planning consultant as to how they value local communities' participation, and their views towards effective participation. It presents the results of semi-structured interviews held with the shoreline management authorities and planning consultants (Table 4.3) and also discusses and compares these views with the findings from coordinators of CAGs. The aim of this method is to understand their approach regarding the involvement of local communities in the shoreline management decision-making processes. Representatives from different government departments and the shoreline planning consultancy companies were involved in these interviews. Each respondent is varied in terms of their professional positions, however, they are all involved in the development of SMPs in England (Section 4.4).

The shoreline management authority representatives were chosen from various departments because it diversifies the richness of the data. In certain circumstances, respondents appeared to show a variance of opinion towards some topics and issues regarding the role of CAGs. For instance, the results of the semi-structured interviews showed that respondents' understanding varied towards 'social justice' definitions. However, some consideration is given to how the term is generally understood. Their understanding was associated with the respondents' professional position. Therefore, the following sections distinguish and integrate the connection between respondents' opinions and the role of respondents' expertise.

7.2 Local Community Participation As Perceived By the Management Authorities

The majority of government officials interviewed, particularly coastal engineers who are responsible for management of coastal erosion and maintenance of flood defences, perceive that people will only participate in consultation on shoreline management when they have time. Conversely, one of the leaders of the groups claimed that:

“Government will only tick the box on consultation and it’s done, but they haven’t allowed the people on the ground to have a really proper stake and to get involved.” (P11:21)

The difference of the two sides of perception in shoreline management participation is clearly presented in the follow argument.

“I think local communities or individuals probably did not necessary have time to get involved or let me put it this way, they won’t get involved because they haven’t got the time. It’s sometimes difficult to get people interested because you get lots of leaflets through the door. There is so much information sent on different topics so I think something that has to be bore in mind is that you are actually involving people.” (P9:7)

This statement was strongly contradictory with a comment from a group coordinator:

“One of the problems is that the authorities have certain groups that would give them the answers they want. They’ll say to one another, you go out, you find those stakeholders who are suitable for this consultation because we have this plan that will affect this bit of coastline. In the knowledge, the group they asked will come up with similar people who they can easily do business with and then the Authority can say to the rest of the community, ‘well we already have stakeholders, you have to speak to them because they’re your local representatives in one way or another but of course they bypassed what the people on the ground actually want.” (P11:14-16)

According to these dissimilarities, the local communities refused to listen to opinions of management authorities and retained their own values. This concern was also observed as one of the significant cause of lack of participation in the case studies. However, an officer from the Local Authority, understand the value of direct community participation, and he pointed out that Local Authorities are just implementers of government decisions; the policy is formulated by the policymakers at the central level, and officials at local level have been asked by the government to work with the local communities (Defra, 2011).

Comparable findings are evident in studies of public participation by Lyster (1998), Schneider *et al.* (1998), and Tippet *et al.* (2005). The research showed that individuals and stakeholders had different perspectives, criteria and values which influence a determination of what the problem was and how to deal with it.

7.2.1 The Understanding of Shoreline Management Planning

Further compounding the difficulties of local community participation is the lack of understanding about the shoreline management planning process. Coastal officers admitted during interviews that the complexity of shoreline management planning was not fully known to the communities and this was reflected in their approach to participation. This was highlighted with comments such as:

“I think the issues surrounding the SMP are complicated as it is, the best thing is to do a better job of explaining, things like using visuals and moving away from technical terms. That also means things can take some time and you might have to include other round of consultation or find another way involving the local people.” (P2:11)

This quote refers to the difficulties that the public may face in interpreting how SMPs operate (Leafe *et al.*, 1998). Similarly, research has shown that these problems with interpretation also extend to experts when dealing with erosion rate along the shoreline (Fisher & Overton, 1998).

7.2.2 Dealing with Uncertainties

Management authorities are often forced to make decisions about policy and implementation in very short spaces of time, which does not leave much space for exploring the technical uncertainties generated by scientific research (Roberts, 2004). The issue of uncertainties were noted on a number of occasions by interviewees from the government departments involved in shoreline management. Uncertainty and its associated concepts, such as risk and ambiguity, are prominent features of decision-making (Kahneman *et al.*, 1982; Renn *et al.*, 2011). They represent a major obstacle

to effective decision-making (Corbin, 1980; McCaskey, 1982). Presented with contradictory information, opinions, and arguments, selecting a course of action from a number of options may be a significant challenge to decision makers, as one interviewee stated:

“There is a point I’ll like to make, if we go back in quite a few years, we were developing some strategic work on the Suffolk Coast and had developed some proposals that we know it won’t be palatable to the community and when we went out to the local community our fear was confirmed and they were quite upset by the proposals and it was quite a difficult time for everybody.” (P9:6)

Such an approach leaves room for uncertainty and varying probabilities in the management methods. Furthermore, it suggests some lack of understanding about how shoreline management issues can be approached and the way that some people involved in decision-making perceive the dynamics of the coastline. A disjuncture somehow persists between the policy makers’ understandings and their practices; despite understanding the issues of uncertainty, they continue operating within a system which only seems to either quantify or eliminate uncertainty (Roberts, 2004). Policy-makers operating within a modern neoliberal system use cost-benefit analyses to make decisions (Turner *et al.*, 2007) and therefore it becomes clearer why they demand quantifiable options to fit this approach. This also allows decision-makers to avoid blame in the event of a conflict because they can show how and why they took a decision without having to take responsibility for that decision.

7.2.3 Finance

As discussed in Section 2.4.3, flood and coastal erosion risk management projects are funded directly by the central government (Defra, 2011). However, lack of financial capacity was cited in an interview with one of the government representatives as a major barrier to effective consultation (P9:38). Due to funding limitations, the government officer claim that they have limited opportunities to conduct long consultation periods. Nevertheless, it is difficult to assess how true this is in reality because funding is an easy target for people to blame due to the current government spending budget cuts (BBC, 2015). The officer indicated that extending the period of

consultation would require more resources which could exacerbate the government financial crisis. As a result of a limited timeframe for consultation, some of the communities in this study did not adequately facilitate substantial dialogue that is so important for participation.

There are more concerns being raised about who should be responsible for providing resources for improving participation, especially because some consultation processes in shoreline management are required by the Local Authorities (Department for Communities and Local Government, 2012). As one interviewee claimed:

“As it currently work, I think from flood defence, they are funded on project to project basis. If you know you are going to need to quite a lot of engagement, you can build that into your package to the Environment Agency, but I do think that the people who are running project or the Local Authority should pay for cost of longer consultation exercise.” (P10:20)

This quote highlights the fact that funding could be difficult to secure for longer consultation periods to address shoreline management issues. Local Authorities can compete for funding for local schemes from the national government or apply through the EA to undertake large infrastructure projects in their areas (Defra, 2014). However, funding tends to be easier to secure in a time of crisis – national funds are more forthcoming under political pressure (Penning-Rowsell *et al.*, 2006). The provision of funding for longer periods of consultation would encourage a meaningful community participation. Therefore, citing lack of funding as a problem is not necessarily indicative of a real limitation on the capacity of the management authorities in encouraging adequate participation.

7.2.4 Managing Community Expectations

Shoreline management authorities may have little awareness of community expectations, but similarly residents have little understanding of organisations’ responsibilities (Section 2.4.2). Residents had little awareness of what the organisations were legally obliged to do for them, however expectations were often unrealistically high (Howgate & Kenyon, 2009). The media has been the major source

of information for the general public and as a result the media has a huge potential to influence public opinion and a large role to play in managing perceptions and expectations (Slovic, 1986).

The division of responsibilities meant that not only before an occurrence of flood and coastal erosion event were the local communities unaware of who could assist them, even after an event residents were often unaware of the work that had been carried out by different departments or organisations. This uncertainty could add to the feelings that little had been done for them. This finding was confirmed by a coastal manager:

“The Environment Agency is task by Defra in having a strategic overview on the coast and so we have responsibilities in terms of being Operating Authority with regards to managing coastal flood risk, so we are not just focusing on the coast and ignore other issues surrounding the coastline and we worked very closely. This is one of our responsibilities, unfortunately the public refuse to understand.” (P10:1)

This combination of uncertainty of responsibilities and lack of awareness of type of defence work to be carried out becomes problematic when shoreline managers are attempting to work with the community. Residents were largely, at least initially, mistrustful of the authorities and as one of the officers describes, sometimes overtly hostile to participation. Again this strains the relationship between the local communities and the management authorities. Research indicates, for example, that people are more likely to be pro-active in social protest about coastal risks if they believe it to be in some way human-caused, rather than entirely natural (Rochford & Blocker, 1991). Studies of other types of hazard have similarly shown that having a clearly identifiable person or group to blame for an environmental threat can motivate public response (Rich, *et al.*, 1995; Harvey, 1996).

7.3 Local Community Participation- As Perceived by the Planning Consultants

The majority of planning consultants interviewed acknowledged the significance of community participation in the shoreline management process. Among them, the most commonly cited benefits of integrating public opinion and knowledge included gathering a broad range of views and opinions to reduce future conflict. This adds value to the management process, meets the needs of the community, creates relationships amongst groups and categories of stakeholders, and enables practitioner learning (Ledoux *et al.*, 2005; Milligan *et al.*, 2009). A consultant acknowledged the value of taking into consideration a diversity of viewpoints during the shoreline management process. He argued that:

“If you are able to use any risk related SMP to bring in the planners and bring in the other organisation with local ambition and local knowledge; moreover if you use the process that you are setting up to do more than just manage the risk but to incorporate everyone involved with intent of sustainable management, then its brilliant, that it's the way to go.” (P2:6)

Furthermore, another consultant provided an example of a case where local knowledge challenged a draft SMP, and subsequently added value to the process:

“An example of public consultation where we worked with the representatives of the public so that elected members were closely involved, came up with the draft plan then that was sent out to the public and they objected and the plan was changed. At the moment we have a group of people of active local representatives and actively involved, they have really influenced the process and their amount of local knowledge shows it's not just what do you prefer or what do you want to pay for that's important but it also make sense to acknowledge that there's a local.” (P2:17-19)

According to the consultant, opinion and information from the local residents were merged with expert knowledge from an engineering team and effective mitigation

measures were formulated. In considering a diversity of views, plan designs became more compatible with the local context and negative unintended outcomes were avoided.

Another consultant specified that integrating public opinion and knowledge is especially important as a pro-active measure to reduce potential future conflict and increase positive stakeholder reception of the draft plans following implementation:

“As a consultant of course we have to generalise but there's a lot of value in having the local knowledge to be part of decision making and so yeah I will say that's what participation is about.” (P4:20)

The latter quote also implies that local community engagement in such processes allows for the maintenance of relationships amongst various stakeholders and creates an opportunity for future cooperation. The observed benefits of integrating local community participation into the shoreline management process in England align with those frequently denoted in the wider shoreline management literature (e.g. Leafe *et al.*, 1998; Ledoux *et al.*, 2005; O'Riordan, 2005; White *et al.*, 2010) outlined in Chapter Three of this thesis.

While the acknowledged benefits of local community participation in the shoreline management process are many, unsurprisingly, the consultants also spoke of the challenges associated with the endeavour. The most commonly cited challenges in conducting an effective consultation process include overcoming a lack of political and proponent will and engaging a public that has little understanding of the management process. One consultant acknowledged that shoreline management is a complex process (Pontee, & Parsons, 2012) and that there is need on the part of the government to clarify the process to the wider public. He argued that:

“I think there is an element, the real barrier is that issues are complex and are complicated because there are so many facets to it and it seems it's quite difficult for a human being for example to think in small probabilities and uncertainty and much of shoreline management planning is about dealing with uncertainty. Is sea level rise actually going to happen? Making no regret

decisions to deal with that whole range of possible futures, there's quite a lot to explain.” (P15:6-7)

Additional information was added by another consultant. He commented that:

“What the SMP need to do is develop and narrative intent of management. A description, a paragraph or something that sets out something like....this is an issue; this is what as a society we want to achieve. Intent of management is the term.” (P4:27)

Precisely because of this point of non-intent of management, the practitioners noted that the local communities are sceptical that the government is willing to assist them in managing their shorelines. In spite of the apparent benefits of local community participation in shoreline management, there remain significant barriers to ensuring meaningful participant contribution to the process (Evans *et al.*, 2008; White *et al.*, 2010). Several of the challenges acknowledged by the management authorities interviewed in this research, including the issue of funding, the problematic nature of dealing with the expectations of members of the community, and non-understanding of the process, were also identified by the planning consultants.

7.4 Perceived Constraints by the Local Communities to Participation in the Shoreline Management Process

This section is substantial as a mean to explore, identify and analyse the barriers that have a significant influence on local community participation in shoreline management. The empirical results of the case studies drawn up from the interviewees’ perspectives from both semi-structured interviews and questionnaires, and relevant literature are presented and discussed here.

7.4.1 A Centralised Decision-Making Approach

Undoubtedly, the decision-making process is an essential subject and needs to be carefully considered when any change in policy needs to be implemented (Irvin &

Stansbury, 2004). Shoreline management planning in England is implemented through an integrated approach (Section 2.2.4) which reflect both national and local priorities (O'Connor *et al.*, 2009). With this approach, it could be argued that the government has tried to engage the local communities in the management process (Defra, 2007; 2009a; 2009b, Defra/EA, 2011); and, frequently, the residents have always been feeling excluded from decision-making processes, as occurred in the case studies. For example, a group member shared the following information that placed him on the degrees of tokenism grouping of the Arstein's (1969) ladder:

Degrees of tokenism – Consultation: “...*they don't really consult prior to the event, they publish their intentions and then launch a consultation and then they blithely ignore pretty much everything that everybody said.*” (P5:15)

Thus, through the above comment, it is revealed that the local communities have an intense desire to be involved, and pay more attention to the process of decision-making, problem solving, and monitoring the activities of the plans that may impact on their quality and way of lives and environment (Fraser *et al.*, 2006). It could be said that the practice of centralised decision-making without an adequate consultation of the local affected people in the case studies caused considerable lack of participation among the residents.

Similar issue of centralised decision-making approach in relation to environmental management was also a critical problem in practice in other countries, such as, Canada (Gauthier & Waaub, 2011; Sinclair & Diduck, 2001), Some European countries (Albrecht, 2015) and China (Li & Skitmore, 2012). These studies showed that a top-down approach of management presented few opportunities for public participation and this caused conflict in the society by impeding interaction and communication among stakeholders. Similarly, in this research, the local communities felt that the government was not receptive to their concerns and the decision was unilateral and unfair.

7.4.2 Decide-Announce-Defend (DAD) Management Approach

Most of the group coordinators interviewed perceive the Decide-Announce-Defend (DAD) approach to decision-making. Whenever the government thinks that a change in shoreline management policy is needed, they commonly plans and makes a decision before announcing the issue without informing the concerned communities, and when this escalate into conflicts, the government then tries to defend its decision. One of the coordinators gave information about this concern as.

“They haven’t asked the right questions as far as the people who will be affected are concerned, in term of stakeholder meetings and consultations and how you can genuinely influence what happens; often it looks like the decisions were made before the consultation. The consultation was then worked out with the questions in order get the answers they want.” (P11:31)

Clearly from the above quote, the decision has already been made by the management authorities before any information about the change in the management options were made available to the local communities. Thus, many of the affected residents claimed that they were never given any information about some of the controversial plans at the beginning. One of the coordinators argued that his community was informed as well as consulted about the plan; however, all activities were being carried out after the plan was approved and the policy options were chosen by the authority. He explained that:

“They claim to deliver their plan, that plan was to abandon us. If you didn’t meet the 8 to 1 benefit cost- ratio. Our estuary didn't and so it's been abandoned and they’ve said to us there nothing to discuss, there's nothing to engage. They can’t engage in it, the Environment Agency can’t engage in it, we’ve talked to them but they say ‘you have your opinion’ we have ours’ we will never agree.” (P7:29)

Unsurprisingly, the information from one of the coastal managers contradicted the fact that the public was not well informed about the change in policy. He claimed that:

“In terms of how we’ve taken Shoreline Management Plan from initiation to completion or to approval we have involved and really worked hard to involve communities, members of the public, other organisations help shape the policies. Various stages of involvement and engagement, seeking their views, expertise and knowledge to help come out with draft policies.” (P9:4)

Comparable findings are evident in studies of public participation by O’Riordan and Ward (1997), O’Riordan (2005) and Tompkins *et al.* (2008). The research showed that unsupported recommendations from the SMPs would be difficult to implement. Similarly, it could be argued that the affected residents in this research wanted to be informed and involved in the decision-making process of any plan that posed eminent hazards to their coastal environments. In this regard, Daniels and Walker (2001) suggested that a decision-making process should be more consultative and participatory in order to solve the conflicts from a lack of participation process. Sander (2011) proposed that a style of decision making, the DAD approach, was inappropriate and should be replaced by an Announce-Discuss-Decide (ADD) model. According to Sander (2011), ‘Discuss’ means discussing issues relating to the plans and the alternatives with the local communities before making a final decision.

7.4.3 Representative Democracy

The other aspect that was important and could be viewed as one of the main reasons for lack of local community participation was a representational issue. More often the local residents felt they were not politically represented. This position was clearly explained by one of the interviewee. He stressed that:

“Most of the problems are political which is ridiculous. District Councils are unfortunately political, they have political parties in them and that ruins things. Most Parishes are all very much in touch with their local people much more than the district councils. District Councils aren’t in touch with local

people; County councils are certainly not in touch with their local people. Parish councillors are the best, they are in touch.” (P11: 26)

As another interviewee added:

“There are some very sensible people in Parish Councils. So they are there if the government really wanted to get local community involvement. The Parish Councils would have probably a group of people who know their area, who have respect for the local community, hear the local community, and who have an idea of how to interact with government and authorities as well.” (P1:8)

The quotations above highlight some residents’ perceptions of political constraints between the management authorities and the local communities. Interestingly, the group coordinators clearly regarded the Parish Councils to possess the relevant expertise in the field of shoreline management and they clearly expected the Parish Councils and the planning consultants to share their expert knowledge in order for the local communities to assess the basis of their local needs and concerns. On the other hand, they perceived the role of District Councils as negative. They were alleged of failing to provide the appropriate information and contending the concerns of local residents.

As noted by Jaramillo and Wright (2015), encouraging participatory decision-making processes could be viewed as challenging representative democracy. Since, more often, residents were opposed to a policy or plan while their representatives were supportive of that proposal. This study indicated that a collaboration between the management authorities and the local communities were critical determinants for local participation in the shoreline management process. One of the major reasons is that local residents need chances to influence decisions-making because their lives could be affected by the consequence. In addition, broadened participation can be an irreplaceable source of insight and recommendation.

7.4.4 Lack of Community Awareness

From the Carlyon Bay case study (Section 4.3.2), evidence shows that the local community participation was completely omitted at the beginning of the building development project on the beach. One interviewee explained that:

“There was no public consultation, there was no committee consultation what so ever and they committed the new council to the new development.” (P8[3]:5)

More often, the preferred technique selected by the government to solve conflict is to conduct a public enquiry to listen to people’s opinions (Rahim, 2015). Indeed, the residents of Carlyon Bay requested the government to conduct a public enquiry when they first knew about the proposal for 511 multi-storey holiday homes on Carlyon Bay beach; and the planning consent for the design was not approved (Carlyon Bay Watch, n.d). An enforcement notice was given to the developers (Commercial Estates Group) to remove the structures (Figure 4.5) they had already erected on the beach. Even though the public enquiry was organised as a means of reducing the conflict, the situation became worse.

Further applications were made by the developers and they were granted an approval to commence on the building of 511 luxury apartments on the beach. Clearly, the public has no awareness of the planning project’s decision at any stages. A number of the opponents stated that the government refused to change their mind about the development regardless of the local community campaigns (P8[1], P8[2], P8[3]). This aspect was claimed as one of the important factors that caused the conflict in this project.

“The bit that really wound us up, very important as far as I’m concerned was a gentleman who was in charge of planning in Restormel Borough Council. He was given the same job when the new unitary council was formed and was put in charge of planning there. So one has to conclude that he hasn’t changed his mind and he was quite determined that this planning consent should be approved.” (P8[1]:7)

Importantly, a number of the protestors considered that the building development was illegal and unacceptable. They claimed that the public enquiry process was ‘staged’ because many decisions had been made and, significantly, the contract between the government and the developer has already been signed. The coordinator of the CAG presented his view of this issue:

“There is another important point that we find again extremely annoying, you surely aware of Section 106 Agreements and they are said to control developments. Well in this particular Section 106 Agreements, there is a clause which says ‘there shall be a liaison with the group and the liaison with group should be populated by people who can contribute their skills to the debate etcetera and it shall be agreed with Cornwall Council’. Cornwall Council willingly agrees to exclude Carlyon Bay Watch from that beach liaison group.” (P8[2]:22).

Clearly in this case, many campaign activities were conducted in a determined way. For example, a great number of the campaigners marched to the beach to protest against the government decision (Section 6.3.1.2). They remarked that their concerns were hardly considered until the formation of CAG. The following quote presents this issue:

“The first action then was to petition the Local Authority and arranged public exhibition of the fact and the problems associated with the proposal. We arranged a march upon the beach to demonstrate right of the local people to use beach which was attended by more than 300 people with police escort marched all way down to the beach. We held the first meeting on the beach. We started our campaign group the same year.” (P8[1]:2)

Confirming this issue, Bonnell (2003) and Bramati *et al.* (2014) stated that when the decision-makers did not consider the local stakeholders’ concerns and made a decision without involving the public or stakeholders, the affected people would fight for their rights and to protect what they are likely to lose. This could lead to strong opposition to policy initiatives or project implementation.

With respect to Carlyon Bay beach, its surroundings feature a number of recreational and tourist attractions. The proposed site was next to the sea and located along a stretch of the beach. Actually, local resident's preference is for the beach to be an attractive tourism place. One respondent stressed that:

“I wish they get on with something and start building rather than leaving the beach in that state or on the other extreme is there shouldn't be any building on beach at all and should be left on its own like a beach.” (P8 [3]:6)

Another respondent indicated his displeasure, she stated:

“In our beach in particular of course there is a beach management. In section 106 which is between Cornwall Council and the developer to which local residents have been having very little input. All we can do is to observe what they're doing and tell them what we think of the consequences for example the shuttering they constructed have moved the sand considerably, we told them that will happen they said it was not material. Tens of thousands of tonnes of sand has been moved by the shuttering which is now either landed on the seabed smothering the marine life or it's gone to the next beach because of the natural flow of the tidal rhythms.” (P8[3]:38-9)

In summary, it could be said that different perceptions on environmental values of stakeholders caused the controversies in this case study. The government and the developer have desire for economic prosperity at the expense of the environment. Whereas, the local communities preferred to maintain the sustainable use of the beach. They favoured conservation of the natural environment rather than the financial profit. To deal with this issue, Sidaway (2013) suggested that an awareness and understanding of people's different value system was a crucial step to resolve conflicts. Furthermore, Tosun (2006) and Blunkel *et al.* (2013) recommended that the differences of perspectives and values must be carefully demonstrated and handled to ensure stakeholder commitment and to improve satisfaction.

7.4.5 Insufficient and Misunderstanding Information

The controversy in the Blyth Estuary Group was as a result of incorrect and unreliable information presented by the management authorities in its sediment survey reports (Blyth Estuary Group, 2012). A number of Walberswick residents firmly remarked that the EA report was incomplete, incorrect and untrustworthy. Some of the members of BEG also claimed that the impacts claimed in the report were erratic and unreliable. As one respondent explained.

“He did some measurement and came to the flawed conclusion that the estuary was losing sediments and he was employed by Black and Veatch. They are consultants for the Environment Agency to work on the Estuary model and he claims that when he added sediment into the estuary model, it was washed out to sea. He did it from the modelling and he wrote the report. He did a bit of testing. I asked him on the phone, because I phone him up and said did you actually go out and measure the sediment, he said oh no I couldn't, it was too dangerous. He walked out a few feet on the mud and poked around and reckon there was no sediment there or very little.” (P7:10-12)

When this error in the report was spotted by the opposed residents, the final report was strongly protested and they requested the management authority to carry out another survey. The leader of the group explained that:

“We want you to find the Blyth estuary banks unsustainable and that's what they did and it was totally flawed but when I proved it to the Environment Agency, eventually I forced them to carry out a proper sediment survey and they paid about three thousand pounds, they made hundred and seventy core samples throughout the entire estuary, they pay for it and they agreed with my figure. It was about ten millimetres a year with the average sediment, or 9.7 and then they stopped talking about the increasing tidal prism and then they said 'oh it's got nothing to do with the tidal prism, our engineers say if we try and raise your banks they will collapse'. I said where was the evidence to support that statement? They replied 'That's the opinion of our coastal

engineers'. You have your opinion we have ours, we will never agree." (P7 17-21)

It could be said that inaccurate information, along with misunderstanding of technical information, were considered to be a significant basis for lack of participation in this case study. As identified by Mayer (2010) and Moore (2014), differences in analysis and interpretation process can result in misinterpretation of data, in particular, information about a proposed project. However, a reliable information and accurate data are essential for an effective participation process since they make the process transparent and credible (Haklay, 2003).

The majority of the groups are involved in a variety of activities including writing to the press, MPs and local councillors, increasing awareness and campaigning for the protection of their shorelines through participation in demonstrations. Publications are used by groups for advertising themselves, generating revenue and sharing information. However, the Internet is the most common form of communication across the groups and group websites are constantly developing and changing.

Contributions to the groups are generally made up of donations and fundraising, however even with substantial funding success groups may still struggle for local support and new membership. Developing and maintaining relationships and links with other groups and the stakeholders plays an important role in the groups' achievements, activities and success, which include links with other groups within this study. The case studies examine in-depth examples of how different groups have developed and operate and the challenges they face. The individual group's participation in the current shoreline management are considered in more detail in Chapter Seven.

7.5 Summary

A closer analysis of the qualitative data suggests that participants were in favour of local community participation in a more effective manner and at a medium level, as described in the participation typology in this thesis (Section 3.3.3). Thus, the affected residents called for innovative participation approaches which encouraged them to properly deliberate on the shoreline management issues and have more power in the participation process. Interestingly, when information from the interviews was further analysed using Arnstein's (1969) ladder (Figure 3.2), evidence from individual CAG members was concentrated in the middle grouping, called degrees of tokenism and represented by *placation, consultation, and informing*.

This chapter has taken the perceptions of local community participation in shoreline management as its focus, but like the previous chapter this has identified the weaknesses of the participation processes for each of the case studies. These include inadequate notice, document inaccessibility, lack of feedback and communication, and late analysis of alternatives. The combination of these deficiencies in the shoreline management process severely limited opportunity for active participation among the groups, especially insufficient and misunderstanding of information by the management authorities. While the local communities claimed that shoreline management consultations did not entirely fulfil the ideal conditions for participation, the research suggests that consultation should allowed for dialogue and critical reflection that resulted in instrumental, communicative, and participatory approach, as well as individual and community action for sustainability. This finding suggests that CAG members feels they lack a legitimate voice in the shoreline management decision-making process. However, what is less clear is whether this finding means that participation in the consultation process has been ignored by the group members.

In the next chapter, the recommendations for improving the participation process in shoreline management are presented and discussed.

Part Three: Recommendations and Conclusion

Chapter Eight: A Model to Improve
Shoreline Management
through Local
Community Participation

8.1 Introduction

An understanding of the local community participation process associated with shoreline management is an important part of this thesis (Section 1.2.2). In this Chapter, findings from the previous two Chapters are analysed collectively to identify: 1) ways of reducing, and 2) overcoming the barriers to establishing effective participation in shoreline management process. This Chapter also informed the mindset of different people (management authorities, shoreline planning consultants and CAG coordinators) towards local community participation in the shoreline management decision-making process, and their recommendations for future improvements.

The main objective of this Chapter is to overview the entire study, its preamble, issues discovered, and possible solutions. It presents recommendations from the respondents in the research as suggestions for improving local community participation in the future management of shoreline in England. The Chapter concludes with a summary that brings together key results from this Chapter.

8.2 Recommended Model of Local Community Participation

This section presents recommendations to promote future participation in shoreline management process. It is based upon a compilation of the results from all of the CAGs surveyed although specific examples are taken from individual CAGs as indicated in the text. To develop a more holistic approach to local community participation as well as to increase the effectiveness of the decision-making process, interviewees discussed their ideas which sometimes were different depending on their collective knowledge and experience. For instance, some respondents wanted the government to change their roles and to be more decentralised. Some wanted to see the decision-making process to be more transparent. Importantly, recommendations from this research exemplify not only how to increase community participation, but also how to implement an effective shoreline management by employing appropriate participatory approaches.

The majority of the recommendations were however derived on the basis of the described shortcomings that were discussed in Chapter 7, meaning that many of the proposed solutions are the logical counterpart to a problem described in the interviews. Some broad outlines on how local communities can be well engaged in the shoreline management process are given below. These are practical suggestions based on the research findings. Figure 8.1 illustrates the steps toward achieving an effective community participation.

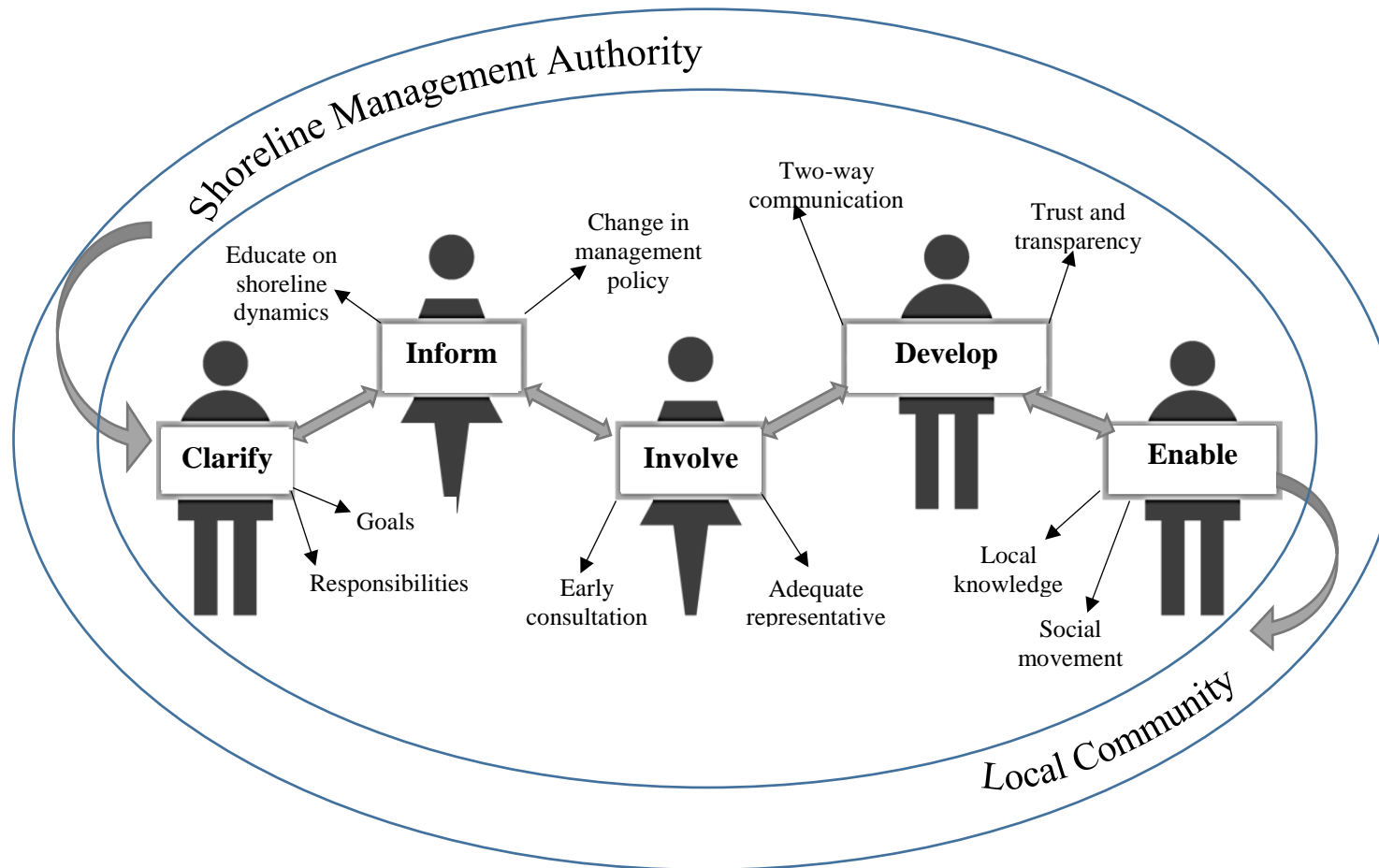


Figure 8.1- Local Community Participation Model (Source: Author's Own)

8.2.1 Clarification of Goals and Management Authorities' Responsibilities

As noted in previous research (e.g., Barnes, 1999; Tang & Waters, 2005; Tress *et al.*, 2005), clarification of the goals of participation as well as individual stakeholder and management authorities' roles are critical aspects of effective public participation. If local communities are to be involved in the shoreline management process, in some way then the goals of this need to be made much clearer. Clearly, in the Faversham Road Residents Association case, the public's views, in particular the local residents, who were directly affected by the change in policy options, have not been listened to and their views not appropriately incorporated into the decision-making process.

Similarly, the majority of members of the Blyth Estuary Group argued that they were not informed clearly about the purpose of the consultation process, their roles, and very importantly, what the outcomes of the process would be used. Frequently, in organising public consultation processes, unrealistic expectations and frustration from stakeholders, which might result from careless planning (Harding, 1998), could occur and might slow-down the decision-making process (Roberts, 1995). As noted by Antunes *et al.* (2009), if the participation process does not have clear goals, its outcomes would be partial and irrelevant to decisions. The results of a study carried out by Vari and Kisgyorgy (1998) identified that public participation would be effective where stakeholders clearly understand the goals of their participation, their role in the process and the concerned issues.

In agreement with Vari and Kisgyorgy (1998), this study, suggests that to avoid these problems of misunderstanding the basis of consultation and conflicting expectations from the public, it is crucial to ensure that the purpose, intentions and scope of the process are clearly identified and agreed before the process starts. Thomas (1995) similarly recommended that there is need for the authorities to explain how different levels and methods of participation were connected to the decision-making process in order to promote trust and transparency.

Sections 2.4.2.1 to 2.4.2.4 outlined the responsibilities of some of the statutory and non-statutory organisations in the shoreline management process, a number of which have been discussed in this thesis. Yet this only represents a small percentage, as many

lie outside the immediate concerns of the research. The division of flood and coastal erosion risk management responsibilities between organisations posed a number of difficulties for the interaction with the local communities. It is therefore the recommendation of this research that the government should give a clear explanation of their responsibilities to the wider community.

Shoreline management authorities may have little awareness of community expectation, but similarly local residents have little understanding of the authorities' responsibilities (Section 7.2.4). Nonetheless, making a decision without adequate consultation could result in an unnecessary loss of trust and trigger opposition that will yet again lead to lack of participation (Diduck & Sinclair, 2002). The issue of responsibility and blame was expressed differently in the case studies in this research. There was a strong feeling amongst the local residents that something should be done by the relevant authorities to prevent flooding and coastal erosion and this was the main focus of CAGs. Further to clear definition of responsibilities, the government needs to move towards a role of taking less 'decisions from above'. Instead, they have to become key actors supporting the quest for compromise especially between different stakeholders.

8.2.2 Educating and Informing the Public

Knowledge is recognised as an important factor for effective decision-making (Beierle & Cayford, 2002; Park *et al.*, 2006). This study has found that the low level of local community participation is due to limited understanding of the physical and environmental processes on the stretch of coastline, which occasionally determine its management approach. Therefore, it is recommended that supportive activities should be provided such as: seminars, focus group discussions and interviews, and innovative activities such as user-friendly material and information using sketches, plans, diagrams, pictures and models. It is essential to provide information in a format that is understandable for the lay public (Kingston *et al.*, 2000). Through this approach, not only will the information be delivered effectively, but it will also allow the local community to develop a real understanding for the behaviour and dynamics of the shoreline. Vintage and Marttunen (2005) have similarly suggested that public participation should be organised as a forum for social learning for all stakeholders.

This will serve to aid public understanding of the complexities associated with shoreline management. Furthermore, it can create a healthy relationship between the two parties involved (Creighton, 2005).

With regards to education/information, participants from the Scratby & California Environment Group and the Suffolk Coast against Retreat remarked not only that they were well informed of shoreline management issues in their local communities, but also about the benefits of working together with the management authorities to achieve common goals. Such acknowledgement of the need for cooperation may continue to facilitate reflection and result in the development of additional communication strategies that encourage individuals to participate in shoreline management process.

This study has indicated that to make local community participation more effective, a collaborative and constructive learning process is essential (Daniels & Walker, 1996; 2001; King *et al.*, 1998; Jabbour & Balsillie, 2003). To support the understanding of how alternative policy options are chosen, multi-layered maps and visual display, showing information such as movement of sediment along beaches by wave action might shed light on some of the key determinants that drive a decision to suggest a specific shoreline management option. Through this process the local communities will have a better understanding of why an approved management plan results in a specific decision but might nonetheless reject the details of the decision as such. In addition, where possible, consultations should include site visits to allow local residents to better visualize the implications of the physical area covered by the proposed plan rather than simply viewing representations on a map.

8.2.3 Early Involvement

As noted in previous studies (e.g., Richardson *et al.*, 1998; Konisky *et al.*, 2001; Garin *et al.*, 2002; Depoe *et al.*, 2004; Creighton, 2005; Tsouvalis & Waterton, 2012), public participation frequently occurs too late in the decision-making process. Sometimes it occurred even after the decisions have been already made, as evidently illustrated in the majority of the case studies. Ideally, participation should occur at early stages of planning to integrate the public input into the process. In many cases in this study, interviewees had criticised the process of community participation as occurring too

late. The affected members of the community felt that they had no chance to ‘air’ their concerns or any opinions at the very beginning of the plan’s implementation.

Similar to the incorporation of public opinions, the outcomes of this study highlighted a need for earlier involvement in the shoreline management planning. The concept of the local residents advocate could be launched and guidance be given on how to organise the local participation. This could include sessions to bring together concerns and ideas of the public and to develop alternatives that can then be suggested in the draft SMPs. Residents can be invited via postal mail, further announcements can also be put up at distinctive public places and published in all local newspapers. This will allow the local community to propose alternatives (if needed) based on local knowledge at an early stage and thus influence final decisions and outcomes (Child, 1996). Smith and McDonough (2001) similarly highlighted that early participation could help to ensure that no significant issues were omitted which could cause conflicts and costly delays if they were discovered later.

8.2.4 Inclusiveness and Adequate Representativeness

Research indicates that complex societal and environmental problems cannot be solved by only one perspective or power (Wagner, 1996). Similarly, in this study, several interviewees emphasised the significance of ensuring that local community participation is both inclusive and representative of the interested parties and stakeholders in order to be effective.

Although the representativeness of local community participation was perceived as a crucial aspect, a number of the group coordinators in the case studies argued that their communities were excluded from the shoreline management decision-making process. They further claimed that, neither the management authorities nor the planning consultants did not make enough effort to engage the right participants in the participation process (Section 7.4.2). Thus, the opinions and comments from the consultations could not represent the voice of all who were likely to be affected by the plans. Inclusiveness of local community opinion is considered to strongly support acceptance for approval decisions. If the residents perceive that its concerns are

actually influencing the design of final decisions, chances are much higher that they feel more at ease with the decision as such (Wittmer *et al.*, 2006).

Taking time for dialogue and to understand local community concerns and their underlying reasons will help in gaining broad support (Vari & Kisgyorgy; 1998), increasing transparency (O’Riordan & Ward, 1997) promoting greater understanding (Nisker *et al.*, 2003), increasing a sense of ownership (Treby *et al.*, 2004), finding reasonable and broadly accepted solutions (Beierle, 2002; Wittmer *et al.*, 2006). However, some research (eg., Bickerstaff *et al.*, 2002; Quantz & Thurston, 2006; Prager & Freese, 2009) has noted that both in principle and in practice, an identification of, and engagement with, all relevant stakeholders and interested parties (in particular the local community), and the selection of participants, could be problematic and difficult to manage. It is essential to recognise that for some representatives of the local community, a legitimate process is all they hope for and expect. Therefore, a more comprehensive conflict reduction can be achieved by moving towards a process that increases suitable representativeness.

8.2.5 Information Availability and Accessibility

In this study, the majority of the local residents claimed that they did not receive accurate information and found it very difficult to access and gain all relevant information related to shoreline management (Section 7.4.5). Although many of the documents or summaries are publicly available via the government websites, the means of distribution severely limits the accessibility of the information to the average community residents. As a result, many local residents had learnt how to respond to the risk of flooding and coastal erosion from their own experience, observations and local knowledge. The majority acknowledged information from the local authority could be useful and reassuring (Section 5.3.4).

Luyet *et al.* (2011) indicated that information is a fundamental element of a well-designed participation process. Similarly, it is the recommendation of this study that the extent of accessible information for the shoreline management should be more widespread and made early enough so that the local residents can look into it and possibly prepare its counter-arguments. This is essential in determining the quality of

the local community involvement. Other means, such as posters and pamphlets, should be used to distribute plans and outcomes directly to the concerned communities. These should contain non-technical and largely pictorial summaries and be distributed through the Local Authorities or various CAGs. Furthermore, local radio is a primary means of receiving information in local communities. This channel of communication could be an effective way to disperse consultation process and provide updates on the status of decision-making processes. If the public sees that its concerns are actually influencing the design of final decisions, chances are much higher that they feels more at ease with the decision as such (Sanda, 2011).

8.2.6 Multiple and Appropriate Participation Methods

There are moral, substantive and practical reasons for working towards more participatory modes of decision-making (Child, 1996; Treby *et al.*, 2004). Looking at the case of Carlyon Bay (Sections 4.2.3 and 7.4.4), clearly, the decision on the building project was already made before any public consultation programme was conducted. From the research findings, the developers (Commercial Estates Group) did apply several participation techniques to engage and provide information to those communities affected by the project. Enquiry unit was positioned on the beach in attempt to let the public know about the project and probably accept it. Due to the fact that these activities were not initiated at the early stage of the project and they were conducted later when the problem seemed to be unsolvable; as a result, these efforts were not effective in resolving these conflicts. Consistent with their earlier responses (Sections 7.4.2 and 7.4.3), residents claimed that the methods adopted did not allow them sufficient opportunities to be involved in the processes as well as engage in the discussion.

It is the recommendation of this study that members of the community should be actively encouraged to participate, instead of being treated as an ‘outsider’ (Brown *et al.*, 2004; Taylor, 2007). Occasionally, the problem of effective participation lies in the technique itself. A number of participation techniques have no integral mechanism to transfer the outcome of participation process to the decision-making process (Coenen, 2009). When participation process is conducted with appropriate methods, it is expected to help the management authorities to accurately identify the opinions

and expectations of the local residents and lead to consensus building among stakeholders.

8.2.7 Improved Two-Way Communication

Previous research has shown that effective channels of communication is the most useful tool in dealing with lack of government transparency (Kumar & Best, 2006; Liu, & Horsley, 2011; Lee & Kwak, 2012); to achieve stakeholder collaboration (Edelenbos & Klijn 2006; Morsing & Schultz, 2006) and to promote sustainability of planning and management (Reed, 2008; Tompkins *et al.*, 2008; Gopnik *et al.*, 2012). This study revealed that the relationship between the local community and the management authorities was strongly influenced by the lack of structures to effectively disseminate information, and the approaches of the authorities exacerbated this problem. This had led to CAGs active campaign for effective communication and widened participation, as indicated in Chapter Six.

The problem of communication largely stemmed from differing expectations. In Section 4.3.2, it was seen how the Carlyon Baywatch group had problems communicating with the management authorities and the developers. This was due to a lack of channels through which information could be carried. The residents argued that communication was mainly a one-way approach from the developers which was based on inappropriate time and dialogue. Fundamentally, in public participation processes the information exchange spectrum should have two-sided flows (Kangas *et al.*, 2010). One side is a flow of information from the government to the public, such as an update of information on a proposed plan and its options (Creighton *et al.*, 2005), while the other is a flow of information from the public to the government (Coenen, 2009).

To consider information provision and exchange in the case studies investigated, it could be said that there has been partial success. However, it can be suggested that during the shoreline management planning processes, it is essential to establish an effective means of communication so that any concerns about the plans can be reported back to the management authorities. Mosse (2001) argued that, flows of information may be constricted, and the systems to find out information controlled and

closed. To a considerable extent it is thought that this difficulty can be overcome with greater efforts to be more inclusive in the participation and decision-making process (Midgley & McGlashan, 2004; Bond *et al.*, 2004; O'Riordan *et al.*, 2005).

Communication strategies need to be more creative, use multiple methods and take advantage of existing communication routes. After consultation, it is suggested that a final meeting will be necessary to assess both the success of the plans and the satisfaction of the local communities for the consultation process, a regular newsletter is one possibility. During this meeting it is also necessary to allow individuals to take part in monitoring for any adverse effects. Through this strategy, not only will the information be delivered effectively, but it also allows the local community to have a channel to 'communicate' with different organisations involved in shoreline management. This is essential if/when the local community has issues or suggestions to make to the authorities.

As well as using the CAGs to disseminate information, strategic locations can also be used to display information. Ideal are locations which are often used by local residents, this may include for example local shops, pubs, village halls, particular roads, parks or bus shelters. The use of multiple channels will ensure more members of the communities are reached and improve communication between the management authorities and stakeholders.

8.2.8 Building Trust and Transparency

Transparency is an essential element in the facilitation of meaningful participation and a good working relationship relies on trust (Sinclair *et al.*, 2009). These in turn are reliant on an understanding of each other's responsibilities, processes and expectations (Petts, 2006). In line with the discussion provided in Section 7.2.4, the expectations of local communities is that the government should provide defences along every coastline (see discussion on social justice, Section 3.5). As a result, relationships between the local communities and management authorities were characterised by mistrust (O'Riordan & Ward, 1997). This was also evident in the findings from this study and the extensive research in other areas which suggests that trust is central in

the relationship between ‘officials/experts’ and ‘locals/lay people’ (Bickerstaff & Walker, 1999; 2002; Petts & Brooks, 2006; Bickerstaff *et al.*, 2008; Dunn *et al.*, 2008).

Based on the earlier discussion (Sections 7.4.1 to 7.4.5), it was clearly found that local community participation in the shoreline management decision-making process has not satisfied the transparency criterion. Current mistrust in the management authorities is based on different interviewees’ experiences. One element is the frequent perception that decisions on management options taken by the government is mostly carried out without adequate consultation (Section 7.4.2). The other primary source of mistrust is the recognition that the management authorities have been observed to intentionally hold back information or provide misinformation (Section 7.4.5). Especially in the majority of case studies, participants have evidently become disillusioned with the shoreline management process and are uncertain that their input has been used in the decision-making process due to a lack of communication and transparency.

With regard to both points highlighter above, to establish a trusted relationship, it is yet again a task of the management authorities to provide information and dialogue with the local communities to develop strategies to manage the risks of flooding and coastal erosion. Furthermore, the authorities have to show that it takes effective decisions in order to overcome future mistrust and maintain better communication with the local residents. This study highlighted that while the authorities have claimed the transparency of their decisions on planning and management, local communities have claimed differently. However, the majority of participants in this study, strongly agreed that the local community participation should be run with transparency and accountability.

Therefore it is recommended that ensured transparency throughout the decision-making process will allows participants to assess the means by which their input is integrated into final decisions and policy implementation. Under the light of the current frustration especially of members of CAGs of being treated as an outsider, it would make sense to proactively inform them about working group set ups and why certain planning consultant was chosen to develop an SMP. Posting this information to different CAGs and making it available on different relevant web-sites (such as Defra, EA and different County websites) could increase transparency.

Bauhr and Grimes (2012) suggested that, for the establishment of good governance, accountability must be accompanied by transparency, as such, governmental actions and operations must be visible to those directly or indirectly affected by them. In line with the request to have access to ‘non-misleading’ information, interviewee reported that they feel more comfortable if Defra/EA strategies show that a proposed solution is in their direct interest instead of claiming the solution is the only/best one possible (P8:33). Regained trust will result from a combination of various elements introduced so far. As mentioned earlier (Section 7.4.2), avoidance of ‘DAD’ approach will play a further important role in rebuilding trust.

8.2.9 Encourage Social Movement and Local Knowledge

Previous research (Worcester, 2001; Poortinga & Pidgeon, 2003) indicates environmental organisations are trusted to provide information about environmental issues. It is evident from the findings of this study that the management authorities or the planning consultants alone is not a sole repository of wisdom and information. Local residents, CAGs, and related parties also have important knowledge and insights which are important to shoreline management planning and the decision-making processes. Accordingly, in this study, the increased environmental awareness (Section 5.2.3) evidently prompted action that fosters local communities in setting up their own network (i.e. CAGs) to expand their knowledge and support their members (Sections 5.2.1 and 6.2).

As a logical consequence to the current shortcomings in actively involving the local communities in the shoreline management decision-making process, the outcomes of this research highlighted three key points which describe the importance of CAGs. Firstly, CAGs should be approached and encouraged to be actively involved in ongoing shoreline management planning as demonstrated in the Local Community Participation Model (Figure 8.1). Similarly, Adomokai and Sheate (2004) suggested that to achieve effective participation, all stakeholders should be encouraged to work together as a network to increase their awareness, knowledge and power. For specific consultation processes, if resources insufficient to include the wider community then efforts may be better focused at the CAGs since they represent their local communities. The management authorities should involve the CAGs in informal

meetings regarding the plans and hence assure they are able to closely follow discussions and underlying reasons for decisions that are taking place throughout the process. The previously introduced suggestion for measures of early, or awareness raising involvement should strengthen both the CAGs and the shoreline management authorities in representing the interests of the wider communities in an appropriate way.

Secondly, well-recognised CAGs should be treated in a similar way as less-active groups. Both CAGs (active and less-active) should be well informed about changes in management options as well as future plans, receive information and be invited to consultations in which the concerns of their communities are being discussed. It is particularly important that public participation starts at a point in time instead of doing so only reactively when pressure grows too strong. In this way, social networking, partnerships and relationship among different parties could be built (Quantz & Thurston, 2006).

The range of different expert statements with contradicting conclusions on shoreline management can be confusing to the local communities. Finally, to allow a more informed debate for all local residents, it will be a good idea for the management authorities and planning consultants to seek the experiences of active CAGs on shortcomings and possible improvements in local community participation. While some CAGs due to their past experience are certainly no longer interested in collaboration with the management authorities as a result of mistrust, interviews indicate that there are still some groups that would be happy if the authorities are were willing to learn from them and seek to improve details of the process. In agreement, Rydin (2007) and Raymond *et al.* (2010) highlighted that the use of local knowledge is an essential part of environmental management.

8.3 Summary

This Chapter presents the results and discussion, with a focus on how local community participation in the shoreline management can be improved. The Chapter highlighted the management authorities and planning consultant's views of community

participation in shoreline management process. From the research findings, a lack of participation in the shoreline management process resulted from a number of factors including: inadequate notice on change of management plans, lack of communication, and late analysis of alternatives. Particularly, the centralisation of shoreline management approach and a lack of public participation caused low acceptance of the management decisions. Whenever public participation is limited, conflicts will usually occur (Mayer, 2010; Dewey & Rogers, 2012). In order to have an effective participation, attention must be paid to differences in community viewpoints, interests and concerns. The findings in this thesis imply that decision-making is a dynamic process where respect and dialogue are important influential factors, and where all stakeholders in principle aim at shared decision-making. The findings indicate local community participation continuum where the CAG abilities to communicate (and the management authorities' abilities to facilitate the communication) determine the degree of altering, negotiation, and limitation of the decision-making.

From this study, recommendations for improving local community participation in shoreline management process (signposted in Figure 8.1) are illustrated in Sections 8.2.1 - 8.2.9. It stressed that public participation should be considered as obligatory in any implemented plans with potentially significant impacts and local communities should be empowered as equal planning consultants who should participate in activities related to shoreline management and planning, in particular, in the design, implementation, mitigation, and benefit sharing aspects. A disclosure of factual information of the plans to stakeholders is essential. Importantly, local community participation in decision-making processes must be encouraged. Involving the public in the shoreline management process should be seen as a tool to help authorities in taking more sound decisions rather than a time consuming hindrance. This will lead to a greater chance of achieving a consensus.

The next Chapter concludes the research. It considers the objectives of this study in light of the research findings and discussion in Chapters Five, Six and Seven, together with the major contributions of the thesis to knowledge.

Chapter Nine: Conclusion

9.1 Introduction

This chapter sets out the final conclusion for the thesis. It first recapitulates the aims and objectives of this study stated in Chapter One. Subsequently, it presents a summary of the key findings from the research with reference to the research objectives. This is followed by the contributions of this research to the existing body of knowledge along with possibilities for future research to develop the ideas proposed in this thesis. To conclude, a final suggestion for effective participation of local communities in the shoreline management process and the broader field of coastal management will be provided.

It is important to remember that the findings of this study were strengthened by its research strategy, a case study approach, which enabled: 1) the investigation at the local community level which has brought together perspectives from the members of CAGs, where little research on this topic has been carried out; 2) the involvement of multiple stakeholders which has explored perspectives from a range of participants (members of CAGs, coordinators of CAGs, representatives from the management authorities, and planning consultants) and; 3) the use of multiple methods (semi-structured interviews, field observations, document analysis, and questionnaires). Such an approach has improved the validity of the findings and successfully addressed the research objectives. Both quantitative and qualitative data generated from such techniques were analysed, integrated and compared, and were used to complement each other.

9.2 Findings in Relation to Research Aims and Objectives

The overall aims of this thesis were to investigate the process of active participation of local communities in shoreline management in England, and to evaluate the role of CAGs in developing participation. It can be argued that these aims have been achieved to a great extent. In particular, this research presented the details of what it will take to improve local community participation in the future to support acceptance without unnecessarily slowing down decision-making and shoreline management implementation processes. This section revisits the five research objectives that were

presented in Chapter One of this thesis, and indicates how the findings have addressed each of these objectives. The objectives are to:

- 1) Review and evaluate the theoretical context and practice of public participation in shoreline management in England through a comprehensive literature review.
- 2) Examine personal motivations and experiences of CAG members.
- 3) Critically assess the reasons for the formation of CAGs.
- 4) Investigate the views of local communities and management authorities on the shortcomings and achievements of CAGs.
- 5) Put forward a series of recommendations and requirements on how CAGs can promote local community participation in shoreline management.

9.2.1 Objective One: Public Participation in Shoreline Management Process

to review and evaluate the theoretical context and practice of public participation in shoreline management in England through a comprehensive literature review.

In meeting Objective One of the research, Chapters Two and Three reviewed a comprehensive set of literature on conceptual components of participation in relation to the shoreline management. This research noted that the responsibilities for decisions about flood and coastal erosion risk management still lies mostly with local authorities, the EA, Internal Drainage Boards and landowners. While the planning process being conducted by the EA demonstrates a tangible exertion of participation, it remains unclear how far they have been effective in enabling the understanding of the local communities, and involvement in their plans, which in this study mostly relates to the SMPs. However, it cannot be ignored that the degree to which the authorities are responsible determines the extent of local community participation in the shoreline management process.

Based on this study, it was found that the local community lack trust in the management authorities and their planning consultants. A number of interviewees pointed out that loss in public confidence over the engagement processes by the

management authorities causes further decline in confidence in the decision-making process. Thus, one recommendation is the need for details of each organisational responsibilities to be more clearly defined. It was indicated that the institutional arrangements for shoreline management must allow consideration of a wide range of alternatives to solve the problems of those communities at risks of flooding and coastal erosion, including those that may be outside of the specific responsibilities of the planning bodies.

In Chapter Three, much attention was given to exploring the meaning and different dimensions of participation which underpin shoreline management activities. The need for community participation in environmental decision-making has been emphasised in this study. The research further identified the advantages of community participation in addressing some problems between the management authorities and the members of local community. These are broadly summarised as follows:

- A participatory approach provides a structured framework for encouraging public inputs to decision-making;
- A participatory approach provides a mechanism for building consensus and more especially for transforming interests;
- A participatory approach is flexible; and
- A participatory approach has the potential to generate more stable policy outcomes.

It has been a criticism levelled at the EA, who have to explain policy options and decisions to the public that they need to be more aware of the nature and existing knowledge of the local communities (Raymond *et al.*, 2010). By taking into account this criticisms, this research identified ‘continuous and substantial’ involvement as one of many possible instruments that could be employed in order to achieve the goals of ‘incorporating public values’ and ‘improving the substantive quality of decisions’.

9.2.2 Objective Two: CAGs Members Experiences

to examine personal motivations and experiences of CAG members.

This objective relates specifically to Chapter Five. The Chapter sought to examine how CAGs were formed and the reasons behind their formation. Using the 78 responses from CAGs members in the twelve case-studies, findings from the thesis identify that the reactions observed by some local communities to changes in shoreline management policies led to the formation of CAGs and increase in their campaigns. The findings from the case studies show that the diversity of CAGs and the extent to which they are willing to participate in shoreline management is determined by many factors including the availability of information and communication with the management authorities.

It was identified therefore that without an adequate relationship between policy makers and the local communities, policies cannot be enacted. As noted previously, Beierle and Cayford (2002) argued that whenever public participation is limited, conflicts will usually occur. Although the management authorities endeavour to encourage local community participation, however, the moves toward involving the public has not been with much success. In this case, the findings of the study suggest that the management authorities should play an important role in seeking dialogue and actively encouraging the local communities in shoreline management processes.

Members felt strongly that the management authorities should grant the local community a role as an important carrier of knowledge and be willing to listen to and incorporate suggestions. Additionally, the authority should focus on the public's interest and opinion and reflect it in the decision. It is also imperative to clearly identify the purpose of the process and explain how decisions are being made and how the local community input could influence the final decision. Particularly, public participation should start at the earliest stages in the decision making process since it is then more likely to be publicly accepted.

9.2.3 Objective Three: Influential Factors

to critically assess the reasons for the formation of CAGs.

This objective has been met by a combination of the first phase of empirical work in Chapters Three, which examined the local community participation in shoreline management through a literature review, and the second phase of empirical work which is based on the case study research and reported in Chapters Five, Six and Seven. In Chapter Three, following an initial literature review, this thesis has identified that the reactions of local communities to change in the shoreline management options led to the formation of CAGs. During the analysis of questionnaires and semi-structured interviews data, three main factors were identified as having impact on participation of CAG in shoreline management decision-making process. These included: 1) Centralised decision-making approach; 2) Late consultation on management planning and; 3) Insufficient and misunderstanding information.

1. – Centralised decision-making approach: Clearly, in the case of the Coastal Concern Action Group (CCAG), the government initiated the management policy option which often did not get support from the affected communities. Drawn from this research, it can be seen that local communities feel helpless about the limited chances they get to actually influence the initiated policies. A participation culture, or the degrees of tokenism (“information”, “consultation” and “placation”) proposed in Arnstein’s (1969) ladder, are absent. From the CCAG, there was either little input or no identifiable comments from the local community in the decision-making process. However, the public participation process should not concentrate only on increasing the higher levels of participation but a full set of conditions for effective participation should be established.

Based on the results from this research, it could be implied that effective public participation is not a single event, but a carefully designed and planned process that applies a multiplicity of techniques suited to the situations, contexts and the communities involved. As suggested by different studies, and communicated by CAG coordinators during this research, the affected residents should be able to express their views and concerns and needed their input to influence the decision-making process

before its final approval. The management authorities should have a core role in explaining the plans related to future shoreline management and how this influences specific decisions affecting local communities. At the same time, the authorities need to move towards a role of taking a less 'top-down' approach to decisions and identify more solutions by seeking compromise between different stakeholders.

2. – Late consultation on management planning: While excluding opposition completely from the management and decision-making processes is barely impossible, seeking early and broad engagement will increase the chances of later success. Much can be achieved by early identification of what the local communities need to know, how information on specific management options can be provided in a comprehensive format and where it needs to come from so that it is considered trustworthy. Based on this study, it could be implied that the consultation process is not a single event, but a carefully designed and planned process that applies a multiplicity of techniques suited to the situations, contexts and the communities involved. Importantly, due to a variety of stakeholders' attitudes on what constitutes effective public participation, it is very difficult to design a public consultation programme to please every party (English *et al.*, 1993; Hartley & Wood, 2005). Understanding these limitations is vital to effective methods and duration of consultation.

Therefore, to achieve effective local community participation, it is essential to plan and execute the process of consultation very carefully, allowing adequate time and resources. The local community needs to be involved as early as possible in the shoreline management process; preferably from issues identification and assessment and, in particular, to the final implementation. The local communities need to be made aware that a change in the management process is about to commence and the authorities should explained the opportunities of participation. By this, it will provide moral justification for ignoring the claims of those who did not attend any consultation in due time. However, it should be noted that the participation process should be arranged in a clear and detailed manner allowing more time for every stakeholders with unusual working schedules the chance to participate.

3. – Insufficient and unclear information: This has been underpinned by both literature and respondents in the research. This research study found that local communities do

not have sufficient information, and perhaps also clear information on the shoreline management process. Shoreline management options need to be clearly framed and communicated before the processes are commenced. The consultation process should be employed in two-way communication and sufficient information should be exchanged. Management authorities need to perceive discussions and negotiations with the local communities as the most straight-forward way to learn about legitimate concerns and get access to substantial local information. Providing information without allowing further inquiries or collecting statements and objections without being willing to discuss them is clearly insufficient. Through allowing feedback from the communities, it can be expected that mutual understanding will be fostered and that a basis to cooperatively find compromises will be established.

This research found that a failure to achieve inclusiveness of local communities in the participation process led to a lack of trust and cooperation in the shoreline management decision-making process. The local community wanted their voice heard and their views to be recognised. Thus, whenever a new policy or approach is put forward, the public should be consulted. Encouraging public participation in decision-making processes can build trust among stakeholders through a good relationship. An effective participatory approach requires careful consideration of all the relevant stages, as presented in the participatory model of this study (Chapter 8).

9.2.4 Objective Four: Characteristics of CAGs

to investigate the views of local communities and management authorities on the shortcomings and achievements of CAGs.

For this objective, the thesis built on some early insights into the reasons for the formation and the activities of CAGs in Chapter Five. A key finding has been that the role of CAGs is still pertinent in the shoreline management process. CAGs developed their objectives based on the concept of participation covering wider issues together in coastal defence and social justice in decision-making. Although the overarching objectives have helped create awareness of shoreline management issues around their wider communities. However, it is evident that due to mistrust in the management authorities, an effective participation and commitment in the shoreline management

process could not be guaranteed. Therefore, the management authorities could re-establish trust by assuring fair management processes, transparent decisions, by treating the local communities as a valuable partner and listening to their concerns and advice in the consultations regarding the shoreline planning process and overall coastal management practice.

Undoubtedly, the public wants to participate in the decision-making process of any shoreline management issues that affects their lives. However, the majority of participants in this research argued that decisions were made without the public having an opportunity to participate in the decision-making process. The participation of the public did not make a significant difference, nor did it have any direct impacts on the decision-making process and failed to produce stakeholders' satisfaction and, indeed, even led to campaigns against the authorities. Even so it can be argued that the confrontational" participation achieved has enabled a partial ongoing approach in the case of CCAG at Happisburgh.

This research identified working in partnership with CAGs as one of many possible instruments that could be employed in order to achieve effective participation. By this, it can be suggested that the management authorities, and, particularly, EA continue to develop solid partnership networks with the CAGs, and have to more actively seek their input in both the local and regional shoreline management planning processes. CAGs at the same time have to fully buy-into the role of being a constructive discussion partner with the management authorities. This implies a need to recognise that defend all coastlines-or-nothing attitudes will not enhance substantial public participation.

9.2.5 Objective Five: Recommendations

to forward a series of recommendations and requirements on how CAGs can promote local community participation in shoreline management.

This objective has been met by reviewing the literature, reflecting the results of the case studies (Sections 8.2.1-8.2.9) and completed by the recommendations from the findings in relation to research aims and objectives featured in this Chapter. In this

study, it was found that CAGs had different backgrounds, interests and opinions, any of which might have limited their involvement in the shoreline management process. The recommendations from this study is to provide the authorities with methods to increase their ability to meaningfully encourage CAGs participation in the decision-making process. This was clearly demonstrated in the Local Community Participation Model (Figure 8.1).

Drawn from this study, it is stated that effective local community participation in shoreline management issues requires motivation and effort from all participants (CAGs, management authorities and planning consultants). The lack of trust shown by the local community in the management authorities, put together with the apprehensions of the regulators about public involvement in the shoreline management and planning process, will require a great deal of work to change. Open and inclusive debate between the CAGs and management authorities on what changes are needed in their relationships, and in the distribution of decision-making power, is essential. However, this will need more time to cultivate and develop. Particularly, it requires skills from the authorities and trust and confidence from the public. If public participation is credible, transparent, and legitimate, the process could simply reach an acceptable and desirable outcome for every stakeholder.

The recommendations made within this research, if implemented, will enable the achievement of an effective participatory approach in the shoreline management process.

9.3 Contribution of the Study

The findings of this research study contribute both theoretically and empirically. Theoretically they contribute to the present body of literature on participatory approach to shoreline management. As stated in Chapter One, there is little previous research, at an academic level, and no extensive research has been undertaken to investigate the activities of CAGs in the shoreline management context. In the broader perspective, there is also a lack of theory and no extensive body of knowledge regarding the role of CAGs in developing participation in the shoreline management

process and nor as a mechanism in practicing involvement in decision-making processes. Thus the thesis fills the gap in knowledge around incorporating public values into decision-making.

In addition, the thesis raises awareness of the reasons why management authorities may modify their planning policies to incorporate participation of local communities. The work reported in this research presents original data and adds new knowledge on the activities of CAGs (such as methods of campaign) to influence shoreline management policy options. Further research can use this data as a foundation to develop a theory for effective participation in the context of shoreline management in England in particular, and in other countries, in general. Management authorities and planning consultants can evaluate the results and use the arguments made in this study to develop a more effective community participation plan and review current guidance regarding local community inclusiveness in shoreline management process.

9.4 Recommendations for Future Research

This research study sets the ground for many further research studies. Five areas shall be pointed out that are considered of core interest in which further research might build on the findings from this study:

First, the case studies in this research are important because of their extensive characteristics which make it suitable for an evaluation study (as described in Chapter Four). Since the study focused only on local communities in England, future research should extend this type of in-depth analysis of local community participation in shoreline management to a representative nation-wide study. Such studies would provide the basis for comparison and offer grounds for establishing the generality of the findings.

Second, through analysis of questionnaires and interviews, some respondents claimed that the most effective means of addressing the shortcomings in shoreline management is to follow a bottom-up model that would allow the local communities to be treated much more like a distinct and recognised player, instead of being a somewhat

undefined mass. Further research is required to test comparing and contrasting top-down and bottom-up approaches for their efficiency, effectiveness and sustainability.

Third, this thesis provided valuable insights regarding the roles of CAGs in developing participation in the shoreline management process. The activities of the groups provided valuable lessons and suggestions that may be applicable to other action groups, particularly, in relation to environmental management. Future research should be expanded to include small, less formally organised action groups than those that participated in the present research. While the groups that were studied for the present research are perhaps the most substantial and visible in the campaign against perceived injustice in shoreline management, they certainly do not comprise the entire environmental movement. There are likely many other groups who have organised locally and who do not have websites, fewer members, or no active campaign, for instance. Nonetheless, they would constitute an important grassroots element of the study. Researching these other types of groups would help to present detail characteristics of action groups than is possible with the current study.

Fourth, one question that lingers throughout the semi-structured interviews with the coordinators of CAG is – Why can't the government pay compensation to those communities that are affected by flooding and coastal erosion? It is out of the scope of this research to look into how the government could pay compensation to individuals. Nonetheless, from a psychological perspective it could be argued that incentives such as payment of compensation to affected communities are areas that should be considered when thinking about increase participation of local communities in shoreline management. This deserves further qualitative investigation.

Finally, this thesis concentrated its focus on the role of CAGs in developing local community participation in shoreline management. Future research could be usefully focused on the role of the government in these processes.

9.5 Final Remarks

As a result of the research process and findings of this study, an original participatory model towards achieving effective participation in shoreline management was developed. Figure 8.1 presents the stages by which the management authorities could develop participation with groups or individuals with an interest in shoreline management. This study was further able to examine how environment issues are managed by the authorities who have the responsibilities as discussed in Section 2.4.2. This study notes that the participation of the local community in decision-making processes is still at a 'rudimentary' stage in managing the shoreline in England. Certainly, this is due to a limitation in the local community to 'voice' their opinions or be heard by the management authorities.

CAGs were seen as communication links between the authorities and the local communities. Nevertheless, neither the management authorities nor the planning consultants formally recognise the role of these groups in developing participation in the shoreline management process. The study applied the activities of CAGs to provide detailed analysis into participatory approaches to shoreline management challenges as depicted in Figure 8.1. These approaches provided the background upon which the empirical findings were analysed and interpreted. One of the challenges of participatory approaches has been the lack of consensus in determining who should make decisions, the mechanisms to be used and the stages of which participation should take place to what extent and at which stage it should take place.

This study argues that local community participation would be necessary in all phases of design and implementation of the development project. This would ensure that the shoreline is planned and managed in a way that is able to meet the local development needs and aspirations of the community. In the shoreline management context, genuine sustainability can only be truly achieved where effective participation of the local community and other actors exist. The participatory model (Figure. 8.1) indicates that conflicts arising from change in policy options can be best worked out through integrated planning and management that involves local communities and other stakeholder interest groups. The outcomes of this research further demonstrate clearly

that there is a need to perceive discussions and incorporate the views of CAGs as the most straight forward way to learn about the local community concerns and get access to substantial local information, thus help to maintain shared consensus and encourage active participation.

The strategy by the EA to develop community participatory approach through FCRM (Defra/EA, 2011) provided the background for examining the extent of local participation in shoreline management and the authorities' role in planning and management. This approach provided the mechanisms for identifying what involvement and responsibilities for the management of shoreline have been devolved to the local community, this has been one of the major critiques identified in this study. In this regards, there is a need for bottom-up approaches to planning and management, the process of local community participation should not be viewed simply as a 'tick box' exercise, but as a process from which mutual understanding can be fostered and compromises are established. Not only can it empower the local community to take an active role in participation, but from the authorities' perspective, the integration of a broad range of stakeholders and collaborative approaches to the needs of the public can reduce conflict and future rejection of management options, even if the final decision does not reflect what the public had hoped for. Furthermore, active participation of communities is seen by authorities as an important step towards greater community acceptance of their share of the mutual responsibilities for managing flood and coastal erosion risks.

References

- Adger, W., Arnell, N., and Tompkins, E. (2005). Successful adaptation to climate change across scales. *Global Environmental Change*, 15(2), 77-86.
- Agarwal, B. (2001). Participatory exclusions, community forestry, and gender: An analysis for South Asia and a conceptual framework. *World Development*, 29(10), 1623-1648.
- Agyeman, J. (2005). *Sustainable communities and the challenge of environmental justice*. New York: New York University Press.
- Albrecht, J. (2015). Legal framework and criteria for effectively coordinating public participation under the Floods Directive and Water Framework Directive: European requirements and German transposition. *Environmental Science and Policy*, 55(2), 368–375.
- Alvarez-Romero, J., Pressey, R., Ban, N., Vance-Borland, K., Willer, C., Klein, C., and Gaines, S. (2011). Integrated land-sea conservation planning: the missing links. *Annual Review of Ecology, Evolution, and Systematics*, 42(1), 381-409.
- Anderson, A. (2003). Environmental Activism and News Media. In S. Cottle, News, *public relations and power: Mapping the field* (pp. 119-133). London: Sage.
- Andrew, R. (2012). Building community resilience. In Proceedings of the *ICE-Civil Engineering* (Vol. 165, No. 6, pp. 59-64). London: Telford.
- Aparaschivei, P. A. (2011). The use of new media in electoral campaigns: Analysis on the use of blogs, Facebook, Twitter and YouTube in the 2009 Romanian presidential campaign. *Journal of Media Research*, 2(10), 39-60.
- Appelstrand, M. (2002). Participation and societal values: the challenge for lawmakers and policy practitioners. *Forest Policy and Economics*, 4(4), 281-290.
- Arnoldi, J. (2009). *Risk*. Cambridge: Polity Press.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.
- Ashford, N. A. (1999). *Public participation in contaminated communities*. Cambridge, MA: Centre for Technology, Policy and Industrial Development, MIT.
- Atkins (2009). *Severn Estuary Shoreline Management Plan review (SMP2)*. Retrieved March 25, 2015, from the Severn Estuary Coastal Group website: http://www.severnestuary.net/secg/docs/public%20consultation/dec10/Appendix%20I_PART%20A_SEA_FINAL_Dec2010.pdf
- Atkins. (2004). *ICZM in the UK: a stocktake*. London: HMSO.

Atkinson, A.J., and Fisher, E. (2004). Shoreline management plans: first review. In D. Green (Ed.), *Littoral 2004, 7th international symposium: Delivering sustainable coasts: Connecting science and policy* (pp. 199-204). Aberdeen, Scotland: Cambridge Publications.

Austen-Smith, D. (1987). Interest groups, campaign contributions, and probabilistic voting. *Public Choice*, 54(2), 123-139.

Badr, E. S. (2009). Evaluation of the environmental impact assessment system in Egypt. *Impact Assessment and Project Appraisal*, 27(3), 193-203.

Baggott, R. (1995). *Pressure groups today* (Vol.1). Manchester: Manchester University Press.

Baily, B., Hooke, J., and Bray, M. (2002). East Head Spit, West Sussex, Southern England: Identifying past change and monitoring present trends. *Shore and Beach*, 70(3), 41-47.

Ballinger, R. (1999). The evolving organisational framework for Integrated Coastal Management in England and Wales. *Marine Policy*, 23(4), 501-523.

Ballinger, R. (2005). A sea change at the coast: the contemporary context and future prospects of integrated coastal management in the UK. In H.D. Smith and J.S. Potts (Eds.), *Managing Britain's marine and coastal environment* (pp. 186-216). Abingdon: Routledge and the National Maritime Museum.

Ballinger, R., Pickaver, A., Lymbery, G., and Ferreria, M. (2010). An evaluation of the implementation of the European ICZM principles. *Ocean and Coastal Management*, 53(12), 738-749.

Ballinger, R., Potts, J., Bradly, N., and Pettit, S. (2000). A comparison between coastal hazard planning in New Zealand and the evolving approach in England and Wales. *Ocean and Coastal Management*, 43(10-11), 905-925.

Ballinger, R., Potts, J., Taussik, J., McInnes, R., and Fairbank, H. (2004). *Local authority coastal risk management pack*. London: LGA.

Ballinger, R., Taussik, J and Potts, J. (2002). Developing shared responsibility for managing coastal risk: improving the shoreline management - planning interface in England and Wales. In Proceedings of *Littoral 2002*. *The Changing Coast. EUROCOAST/EUCC* (pp. 303 – 311). Porto, Portugal.

Bamberger, M., Rugh, J., and Mabry, L. (2011). *Real world evaluation: Working under budget, time, data, and political constraints* (2nd ed). Thousand Oaks, CA: Sage.

Barkan, S. E. (2004). Explaining public support for the environmental movement: A civic voluntarism model. *Social Science Quarterly*, 85(4), 913-937.

- Barnhardt, T. M., and Geraci, L. (2008). Are awareness questionnaires valid? Investigating the use of post-test questionnaires for assessing awareness in implicit memory tests. *Memory and Cognition*, 36(1), 53-64.
- Barrett, A. (2011). Evaluation and initial learning from coastal change pathfinders, Coastal Flooding and Erosion Risk Management: Chartered Institute for Waste Management, (CIWM) Conference, Hamilton House, London, 20th October 2011.
- Barrett, D. J. (2006). Strong Communication Skills a must for today's leaders. *Handbook of business strategy*, 7(1), 385-390.
- Bassey, M. (1999). *Case study research in educational settings*. Buckingham: Open University Press.
- Bauhr, M., and Grimes, M. (2012). What is government transparency? *Quality of Government Working Paper Series*, 2012(16), 16.
- Baxter, P., and Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- Bazeley, P., and Jackson, K. (Eds.). (2013). *Qualitative data analysis with NVivo*. London: Sage Publications Ltd.
- BBC (2015). *Spending review: George Osborne 'secures deals' on 30% cuts*. Retrieved November 12, 2015, from the BBC New website: <http://www.bbc.co.uk/news/uk-34763261>
- Beatley, T. (2002). *An introduction to coastal zone management*. Washington D.C: Island Press.
- Beatty, C., and Fothergill, S. (2004). Economic change and the labour market in Britain's seaside towns. *Regional Studies*, 38(5), 459-478.
- Beck, U. (1992) *Risk society: Towards a new modernity*. London: Sage Publications Ltd.
- Begg, C., Walker, G., and Kuhlicke, C. (2015). Localism and flood risk management in England: the creation of new inequalities? *Environment and Planning*, 0-0.
- Beierle, T. C. (1999). Using social goals to evaluate public participation in environmental decisions. *Review of Policy Research*, 16(3-4), 75-103.
- Beierle, T. C. (2002). The quality of stakeholder-based decisions. *Risk Analysis*, 22(4), 739-749.
- Beierle, T. C., and Cayford, J. (2001). *Evaluating dispute resolution as an approach to public participation*. Washington, DC: Resources for the Future.

- Beierle, T. C., and Konisky, D. M. (2000). Values, conflict, and trust in participatory environmental planning. *Journal of Policy Analysis and Management*, 19(4), 587-602.
- Beierle, T., and Cayford, J. (2002). *Democracy in practice: public participation in environmental decisions*. Washington, DC: Resources for the Future.
- Bell, J. (2014). *Doing your research project: A guide for first-time researchers*. Berkshire: Open University Press.
- Bell, S., Ward Thompson, C., Findlay, C. Morris, N. Travlou, P., and Montarzino, A. (2003). *Nature for people: The importance of green spaces to East Midlands communities*. Peterborough: Natural England.
- Benton, L., and Short, J. (2000). *Environmental discourse and practice: A reader*, Oxford: Blackwell.
- Bergold, J., and Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *Historical Social Research*, 37(4)191-222.
- Berkes, F. (2009). Evolution of co-management: role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management*, 90(5), 1692-1702.
- Bickerstaff, K., and Walker, G. (1999). Clearing the smog? Public responses to air-quality information. *Local Environment*, 4(3), 279-294.
- Bickerstaff, K., and Walker, G. (2002). Risk, responsibility, and blame: an analysis of vocabularies of motive in air-pollution (ing) discourses. *Environment and Planning A*, 34(12), 2175-2192.
- Bickerstaff, K., Simmons, P., and Pidgeon, N. (2008). Constructing responsibilities for risk: negotiating citizen-state relationships. *Environment and planning A*, 40(6), 1312.
- Bickerstaff, K., Tolley, R., and Walker, G. (2002). Transport planning and participation: the rhetoric and realities of public involvement. *The Journal of Transport Geography*, 10(1), 61-73.
- Binderkrantz, A. S. (2009). Membership recruitment and internal democracy in interest groups: Do group–membership relations vary between group types? *West European Politics*, 32(3), 657-678.
- Blaikie, N. (2000). *Doing social research*. Cambridge: Polity Press/Blackwell.
- Blaikie, P., Cannon, T., Davis, I., and Wisner, B. (1994). *At risk: natural hazards, people's vulnerability, and disasters*. London: Routledge.

Blake, J. (1999). Overcoming the 'value-action gap' in environmental policy: Tensions between national policy and local experience. *Local Environment*, 4(3), 257-278.

Blanchfield, L., and Lawson, M. (2010). The millennium development goals: The September 2010 UN High-level Meeting. *Congressional Research Service*, 20.

Blocker, T., and Eckberg, D. (1997). Gender and environmentalism: Results from the 1993 general social survey. *Social Science Quarterly*, 78(4), 841-858.

Blunkell, C. (2008). Shoreline management in North Kent, In J. Michael. *Flooding: fifth report of session 2007-08: Vol. 2 Oral and written evidence*. London: The Stationery Office.

Blunkell, C., Evans, G., Foord, J., Walters, G., Williams, A., and Witting, A. (2013). UK case studies: Conflicts in the Portsmouth and Thames gateway coastal regions. *SECOA FP7 Research Project*, 4(1), 203-242.

Blyth Estuary Group (2012a). *Why was the Blyth Estuary Group formed?* Retrieved 12 November, 2012, from Blyth Estuary Group website:
<http://www.explorewalberswick.co.uk/blythestuargroup/index.php>

Blyth Estuary Group (2012b). *The Effects of 'Doing Nothing'*. Retrieved 12 November, 2012, from Blyth Estuary Group website:
<http://www.explorewalberswick.co.uk/blythestuargroup/action/aims.php>

Blyth Estuary Group (2012c). *The group's aims*. Retrieved 12 November, 2012, from Blyth Estuary Group website:
<http://www.explorewalberswick.co.uk/blythestuargroup/action/aims.php>

Blyth Estuary Group (2012d). *Who are we?* Retrieved 12 November, 2012, from Blyth Estuary Group website:
<http://www.explorewalberswick.co.uk/blythestuargroup/index.php>

Bond, A., Palerm, J., and Haigh, P. (2004). Public participation in EIA of nuclear power plant decommissioning projects: a case study analysis. *Environmental Impact Assessment Review*, 24(6), 617-641.

Bonnell, J. E. (2002). Working through environmental conflict: The collaborative learning approach. *The Journal of Environmental Education*, 33(3), 42.

Bonnell, J. E. (2003). Democracy in practice: Public participation in environmental decisions. *The Journal of Environmental Education*, 34(2), 40.

Bord, R. J., Fisher, A., and O'Connor, R. E. (1998). Public perceptions of global warming: United States and international perspectives. *Climate Research*, 11(1), 75-84.

Bord, R. J., O'Connor, R. E., and Fisher, A. (2000). In what sense does the public need to understand global climate change? *Public Understanding of Science*, 9(3), 205-218.

Bosso, C. J. (2003). Rethinking the concept of membership in nature advocacy organizations. *Policy Studies Journal*, 31(3), 397-411.

Bowlby S. and Lowe M., (1992), Environmental and green movements. In A. Mannion, and S. Bowlby (Eds.), *Environmental Issues in the 1990s* (pp. 161-175). Chichester: Wiley.

Bowling, A. (2005). Mode of questionnaire administration can have serious effects on data quality. *Journal of Public Health*, 27(3), 281-291.

Boyes, S. J., and Elliott, M. (2015). The excessive complexity of national marine governance systems—Has this decreased in England since the introduction of the Marine and Coastal Access Act 2009? *Marine Policy*, 51(1), 57-65.

Bradford, R., O'Sullivan, J., Van der Craats, I., Krywkow, J., Roku, P., Aaltonen, J., Bonaiuto, M., De Dominicis, S., Waylen, K., and Schelfaut, K. (2012). Risk perception—issues for flood management in Europe. *Natural Hazards and Earth System Science*, 12(7), 2299-2309.

Bramati, M. C., Musella, F., and Alleva, G. (2014). What drives environmental conflicts in coastal areas? An econometric approach. *Ocean and Coastal Management*, 101(Part B), 63-78.

Bray, M., and Cottle, R. (2003). *Solent Coastal Habitat Management Plan, Volumes 1 and 2: Report to English Nature and Environment Agency*. Portsmouth: University of Portsmouth and Posford Haskoning.

Briceño, S. (2004). Global challenges in disaster reduction. *The Australian Journal of Emergency Management*, 19(1), 3-5.

Brilly, M., and Polic, M. (2005). Public perception of flood risks, flood forecasting and mitigation. *Natural Hazards and Earth System Science*, 5(3), 345-355.

Brooks, S. M., and Spencer, T. (2010). Temporal and spatial variations in recession rates and sediment release from soft rock cliffs, Suffolk coast, UK. *Geomorphology*, 124(1), 26-41.

Brown, J. (2013). Can participation change the geography of water? Lessons from South Africa. *Annals of the Association of American Geographers*, 103 (2), 271-279.

Brown, J., and Damery, S. (2002). Managing flood risk in the UK: towards an integration of social and technical perspectives. *Transactions of the Institute of British Geographers, New Series*, 27(4), 412-426.

Brown, K., Few, R., Tompkins, E. L., Tsimplis, M. and Sortti, X. (2005). *Responding to climate change: inclusive and integrated coastal analysis: Tyndall Centre Technical Report 24*. Norwich: Tyndall centre for Climate Change Research, University of East Anglia.

- Brown, M., Dijkers, M., Gordon, W., Ashman, T., Charatz, H., and Cheng, Z. (2004). Participation objective, participation subjective: a measure of participation combining outsider and insider perspectives. *The Journal of head trauma rehabilitation*, 19(6), 459-481.
- Bryman, A. (2004). *Social Research Methods* (2nd ed.). Oxford: University Press.
- Buckle, P., Marsh, G. and Smale, S. (2001). *Assessing resilience and vulnerability: principles, strategies and actions*. Canberra: E.M. Australia.
- Bulkeley, H., and Kern, K. (2006). Local government and the governing of climate change in Germany and the UK. *Urban Studies*, 43(12), 2237-2259.
- Bullard, R. (Ed.). (2005). *The quest for environmental justice: Human rights and the politics of pollution*. San Francisco: Sierra Club Books and University of California Press.
- Bullard, R., and Johnson, G. (2000). Environmentalism and public policy: Environmental justice: Grassroots activism and its impact on public policy decision making. *Journal of Social Issues*, 56(3), 555-578.
- Burgess, R. G. (2002). *In the field: An introduction to field research*. London: Routledge.
- Burton, T. L., and Cherry, G. E. (1970). *Social research techniques for planners*. London: Allen & Unwin Ltd.
- Camacho, D. (1998). *Environmental injustices, political struggles: Race, class and the environment*. Durham: Duke University Press.
- Canon, T. (2000). Vulnerability analysis and disasters. In D. Parker (Ed.). *Floods*. (Vol. 1, pp. 45-55). London: Routledge.
- Canter, L., (1996). *Environmental Impact Assessment* (2nd ed.). New York: McGraw Hill Inc.
- Carlyon Bay Watch (n.d). *25 Years of planning blight*. Retrieved 12 March, 2013, from Carlyon Bay Watch website: http://www.carlyonbaywatch.com/home_19.html
- Carnes, S., Schweitzer, M., Peelle, E., Wolfe, A., and Munro, J. (1998). Measuring the success of public participation on environmental restoration and waste management activities in the US Department of Energy. *Technology in Society*, 20(4), 385-406.
- Carr, A. P. (1988). Geomorphology and public policy at the coast. In J. M. Hooke (Ed.), *Geomorphology and environmental planning* (pp. 189-210). London: Allen and Unwin Ltd.
- Carter, D., Taussik, J., Bray, M., and Hooke, J. (2000). Regional coastal groups in England and Wales: the way ahead. *Periodicum Biologorum*, 102(1), 215- 220.

- Castles, F. (1967) *Pressure Groups and Political Culture*. London: Routledge.
- Chanotis, P., and Stead, S. (2007). Interviewing people about the coast on the coast: appraising the wider adoption of ICZM in North East England. *Marine Policy*, 31(4), 517-526.
- Charlier, R.H. (2003). Hold the sea back- is it sustainable? Retrospective and projection. *Journal of Coastal Research*, 19(4), 875-883.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. Denzin and Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 509-535). London: Sage.
- Charuvichaipong, C., and Sajor, E. (2006). Promoting waste separation for recycling and local governance in Thailand. *Habitat International*, 30(3), 579-594.
- Chava, F., and David, N. (1996). Research methods in the social sciences. London: University of Wisconsin.
- Chavez, C. (2008). Conceptualizing from the inside: Advantages, complications, and demands on insider positionality. *The Qualitative Report*, 13(3), 474-494.
- Cheong, S. M. (2008). A new direction in coastal management. *Marine Policy*, 32(6), 1090-1093.
- Chess, C., and Purcell, K. (1999). Public participation and the environment: Do we know what works? *Environmental Science and Technology* 33(16): 2685- 2692.
- Child, M. (1996). Taking plans forward through consultation and participation: are plans sustainable? In C. A. Fleming (Ed.), *Coastal management, putting policy into practice* (pp. 361- 371). London: Institution of Civil Engineers, Thomas Telford.
- Chilvers J (2009) Deliberative and participatory approaches in environmental geography. In N Castree, D., Demeritt, D., Liverman, and B., Rhoads (Eds), *A Companion to Environmental Geography* (pp. 400–417). Oxford: Blackwell.
- Chouinard, O., Plante, S., and Martin, G. (2008). The community engagement process: A governance approach in adaptation to coastal erosion and flooding in Atlantic Canada. *Canadian Journal of Regional Science*, 31(3), 507-520.
- Christie, P., and White, A. (2007). Best practices for improved governance of coral reef marine protected areas. *Coral Reefs*, 26(4), 1047-1056.
- Chua, T. E., and Scura, L. F. (Eds.). (1992). *Integrative framework and methods for coastal area management*. In Proceedings of the Regional Workshop on Coastal Zone Planning and Management in ASEAN: Lessons Learned (Vol. 12, pp. 28-30). Bandar Seri Begawan, Brunei Darussalam: World Fish.

Churchman, A. and Sadan, E. (2004). Public participation in environmental design and planning. In C. Spielberger (Ed.), *Encyclopedia of Applied Psychology* (pp. 793–800). Oxford: Elsevier.

Cicin-Sain, B., and Belfiore, S. (2005). Linking marine protected areas to Integrated Coastal and Ocean Management: a review of theory and practice. *Ocean and Coastal Management*, 48(11), 847-868.

Cicin-Sain, B., and Knecht, R.W. (1998). *Integrated coastal and ocean management: concepts and practices*. Washington DC: Island Press.

Cicin-Sain, B., Knecht, R., and Fisk, G. (1995). Growth in capacity for integrated coastal management since UNCED: an international perspective. *Ocean and Coastal Management*, 29(1), 93-123.

Cicin-Sain, B., Knecht, R., Vallega, A., and Harakunarak, A. (2000). Education and training in integrated coastal management: lessons from the international arena. *Ocean and Coastal Management*, 43(4), 291-330.

Ciegis, R., Ramanauskiene, J., and Martinkus, B. (2015). The concept of sustainable development and its use for sustainability scenarios. *Engineering Economics*, 62(2).

Clark, J.R. (1996). *Coastal zone management handbook*. New York: CRC Lewis Publishers.

Clark, J.R. (1998). *Coastal sea: the conservation challenge*. Oxford: Blackwell Science.

CoastNet (n.d). About CoastNet. Retrieved 10 April, 2016, from the CoastNet website: <http://www.miraglobal.com/coastnet/About%20us/about-coastnet-people>

CoastNet (2007). All Party Parliamentary Group on Coastal and Marine Issues – Social justice and coastal flood and erosion risk management. CoastNet Briefing Paper No. 3, January, 2007.

Coastal Concern Action Group (2008a). Background to the situation at Happisburgh. Retrieved 16 October, 2013, from Happisburgh Village website: <http://www.happisburgh.org/ccag/background>

Coastal Concern Action Group (2008b). *April 2009 Comments - The first ten years are the worst*. Retrieved 16 October, 2013, from Happisburgh Village website: <http://www.happisburgh.org/comments/apr09.html>

Coastal Partnership Network (2011). *What do Coastal Partnerships offer?* Retrieved May 4, 2015, from the Coastal Partnership Network website: <http://www.coastalpartnershipsnetwork.org.uk/about-us/>

Cockermouth Flood Action Group (2012). *Cockermouth Flood Action Group*. Retrieved 22 January, 2015, from Cockermouth Flood Action Group website: <http://www.cockermouthfloodactiongroup.org.uk/welcome/>.

- Coenen, F. (Ed.). (2009). *Public participation and better environmental decisions: The promise and limits of participatory processes for the quality of environmentally related decision making*, New York: Springer.
- Coffey, A. and Atkinson, P. (1996). *Making sense of qualitative data: Complementary research strategies*. London: Sage.
- Cohen, A., P. (1985). *The symbolic construction of community*. New York: Tavistock.
- Cole, S. (2006). Information and empowerment: The keys to achieving sustainable tourism. *Journal of Sustainable Tourism*, 14(6), 629-644.
- Coleby, A., Miller, D., and Aspinall, P. (2009). Public participation and participation in wind turbine development. *Journal of Environmental Assessment Policy and Management*, 11(1): 69-95.
- Cooper, J. A., and McKenna, J. (2008). Social justice in coastal erosion management: The temporal and spatial dimensions. *Geoforum*, 39(1), 294-306.
- Cooper, L. M., and Elliott, J. A. (2000). Public participation and social acceptability in the Philippine EIA process. *Journal of Environmental Assessment Policy and Management*, 2(03), 339-367.
- Cooper, N. J. (2003). The use of 'managed retreat' in coastal engineering. *Proceedings of the ICE-Engineering Sustainability*, 156(2), 101-110.
- Cooper, N., and Pontee, N. (2006). Appraisal and evolution of the littoral 'sediment cell' concept in applied coastal management: Experiences from England and Wales. *Ocean and Coastal Management*, 49(7-8), 498-510.
- Cooper, N., Barber, P., Bray M., and Carter, D. (2002). Shoreline management plans: a national review and engineering perspective. *Water and Maritime Engineering*, 154(3), 221-228.
- Cope, M. (2005). Coding qualitative data. Qualitative research methods in human. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (pp. 310–324). Oxford: Oxford University Press.
- Corbin, R.M. (1980). *Decisions that might not get made*. In T.S. Wallsten (Ed.), *Cognitive processes in choice and decision behaviour* (pp. 47–67). Hillsdale, NJ: Erlbaum.
- Coteerill, P., and Letherby, G. (1994). The “person” in the researcher. In R. G. Burgess (Ed.), *Studies in qualitative methodology: Issues in qualitative research* (pp. 107 136). Greenwich, CT: JAI.
- Coumou, D., and Rahmstorf, S. (2012). A decade of weather extremes. *Nature Climate Change*, 2(7), 491-496.

- Covell, C. L., Sidani, S., and Ritchie, J. A. (2012). Does the sequence of data collection influence participants' responses to closed and open-ended questions? A methodological study. *International journal of nursing studies*, 49(6), 664-671.
- Crawford, D. (1992). The injured coastline- a parliamentary report on coastal protection in Australia. *Coastal Management*, 20(2), 189-198.
- Creighton, J. (2005). *The public participation handbook: Making better decisions through citizen involvement*. San Francisco: Jossey Bass.
- Creighton, J., Chalmers, A., and Branch, K. (1981). Integrating planning and assessment through public involvement. *Environmental Impact Assessment Review* 1(4), 349-354.
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed). London: Sage.
- Creswell, J. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. London: Sage.
- Creswell, J., and Clark, V. (2007). *Designing and conducting mixed methods research*. London: Sage.
- Crichton, D. (2004). *Temporary local flood protection in the United Kingdom – An Independent Assessment*. London: Benfield Hazard Research Centre, University College London.
- Crowfoot, J., and Wondolleck, J. (1990). *Environmental disputes: Community involvement in conflict resolution*. Washington, DC: Island Press.
- Cullen, P. (1982). Coastal zone management in Australia. *Coastal Management*, 10(3), 183-212.
- Cundill, G., and Rodela, R. (2012). A review of assertions about the processes and outcomes of social learning in natural resource management. *Journal of Environmental Management*, 113(1), 7-14.
- Dalton, T. M. (2006). Exploring participants' views of participatory coastal and marine resource management processes. *Coastal Management*, 34(4), 351-367.
- Daniels, S., and Walker, G. (1995). Managing local environmental conflict amidst national controversy. *International Journal of Conflict Management*, 6(3), 290-311.
- Daniels, S., and Walker, G. (1996). Collaborative learning: improving public deliberation in ecosystem-based management. *Environmental Impact Assessment Review*, 16(2), 71-102.
- Daniels, S., and Walker, G. (2001). *Working through environmental conflict: The collaborative learning approach*. Westport, CT: Praeger.

Davidson, D. J., and Freudenburg, W. R. (1996). Gender and environmental risk concerns a review and analysis of available research. *Environment and Behaviour*, 28(3), 302-339.

Davis, G. (1996). *Consultation, public participation and the integration of multiple interests into policy making*. Paris, France: Organization for Economic Cooperation and Development (OECD).

Dawson, R., Dickson, M., Nicholls, R., Hall, J., Walkden, M., Stansby, P., Mokrech, M., Richards, J., Zhou, J., Milligan, J., Jordan, A., Pearson, S., Rees, J., Bates, P., Koukoulas, S., Watkinson, A. (2009). Integrated analysis of risks of coastal flooding and cliff erosion under scenarios of long term change. *Climatic Change*, 95(1-2), 249-288.

Day, G. (2006). *Community and everyday life: The new sociology*. London: Routledge.

Day, S., O'Riordan, T., Bryson, J., Frew, P., and Young, R. (2015). Many stakeholders, multiple perspectives: Long-term planning for a future coast. In R. Nicholls, R., Dawson and S., Day (Eds.), *Broad Scale Coastal Simulation* (pp. 299-323). Netherland: Netherlands.

De Laine, M. (2002). *Fieldwork, participation and practice: Ethics and dilemmas in qualitative research*. London: Sage.

Deegan, D. (2001). *Managing Activism, A Guide to Dealing with Activists and Pressure Groups*. London: Kogan Page.

Defend Our Coast Association (2014a). *Why was DOC formed*. Retrieved 04 March, 2014, from Defend Our Coast Association website:
<http://www.defendourcoast.org.uk/>

Defend Our Coast Association (2014b). *DOC aims*. Retrieved 04 March, 2014, from Defend Our Coast Association website: <http://www.defendourcoast.org.uk/doc-aims/>

Defend Our Coast Association (2014c). *DOC exit statement*. Retrieved 04 March, 2014, from Defend Our Coast Association website:
www.defendourcoast.org.uk/2014/12/04/doc-exit-statement

Defend Our Coast Association (2015). *Day of Syn 25.08.2008*. Retrieved 9 June, 2015, from Defend Our Coast Association website:
<http://www.defendourcoast.org.uk/photos/day-of-syn-25082008/>

Denscombe, M. (2002). *The good research guide: for small-scale social research projects*. Buckingham: Open University Press.

Denzin, N. K. (1989). *The research act. A theoretical introduction to sociological methods* (3rd ed.). New Jersey: Prentice Hall.

Department for Communities and Local Government (2012). *National planning policy framework*. London: The Stationary Office.

Department for Environment, Food and Rural Affairs (2001a). *The environment in your pocket*. London: HMSO.

Department for Environment, Food and Rural Affairs (2001b). *Shoreline Management Plans: a guide for Coastal Defence Authorities*. London: Defra

Department for Environment, Food and Rural Affairs (2002). *Safeguarding our seas: A strategy for the conservation and sustainable development of our marine environment*. London: Defra.

Department for Environment, Food and Rural Affairs (2005). *Making space for water: Taking forward a new Government strategy for flood and coastal erosion risk management in England*. London: Defra.

Department for Environment, Food and Rural Affairs (2006a). *Shoreline Management Plan Guidance volume 1: aims and requirements*. London: Defra.

Department for Environment, Food and Rural Affairs (2006b). *Shoreline Management Plan Guidance volume 2: procedures*. London: Defra.

Department for Environment, Food and Rural Affairs (2007). *Summary of responses to the consultation: promoting an integrated approach to management of the coastal zone in England: Marine planning and coastal integration*. London: Defra.

Department for Environment, Food and Rural Affairs (2008). *Coastal groups in England - the Environment Agency strategic overview of sea flooding and coastal erosion risk management*. Retrieved May 8, 2015, from the Defra website: <http://www.defra.gov.uk/environment/flooding/documents/who/cgreport.pdf>

Department for Environment, Food and Rural Affairs (2009a). *Marine and Coastal Access Bill policy document. Last updated: 29 June 2009*, London: Defra.

Department for Environment, Food and Rural Affairs (2009b). *A strategy for promoting an integrated approach to the management of coastal areas in England*. London: Defra.

Department for Environment, Food and Rural Affairs (2009c). *Consultation on coastal change policy*. London: Defra.

Department for Environment, Food and Rural Affairs (2010a). *Survey of public attitudes and behaviours toward the environment, 2009*. Retrieved December 10, 2015, from the UK Data Service website: <http://dx.doi.org/10.5255/UKDA-SN-6366-1>

Department for Environment, Food and Rural Affairs (2010b). *United Kingdom report to the European Commission: Implementation of the ICZM recommendation 2006-2010* (pp. 1-28). London: Defra.

Department for Environment, Food and Rural Affairs (2010c). *Adapting to coastal change: developing a policy framework*. Retrieved March 15, 2015, from the Jurassic

Coast website:

http://jurassiccoast.org/downloads/pathfinderproject/adapting_to_coastal_change__developing_a_policy_framework.pdf

Department for Environment, Food and Rural Affairs (2011). *Marine and Coastal Access Act 2009: The current situation*. London: Defra.

Department for Environment, Food and Rural Affairs (2012a). *The Habitats and Wild Birds Directives in England and its seas: Core guidance for developers, regulators & land/marine managers*. Retrieved January 12, 2015 from the UK Government website: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/8276/habitats-simplify-guide-draft-20121211.pdf.

Department for Environment, Food and Rural Affairs (2012b). *Flood and Water Management Act 2010: Progress Report on Implementation*. Retrieved June 14, 2015, from the UK Government website: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69625/pb13844-fwma-progress-report201212.pdf

Department for Environment, Food and Rural Affairs (2014). *Defra funding for lead Local Flood Authorities in England for 2015-16*. London: Defra.

Department for Environment, Food and Rural Affairs (2015). *Central Government funding for Flood and Coastal Erosion Risk Management in England*. London: Defra.

Department for Environment, Food and Rural Affairs / Environment Agency (2004). *Developing the cost-benefit framework for the appraisal of flood and coastal erosion risk management projects*. London: Defra.

Department for Environment, Food and Rural Affairs / Environment Agency (2008). *Social justice in the context of flood and coastal erosion risk management: a review for policy and practice summary report*. London: Defra.

Department for Environment, Food and Rural Affairs / Environment Agency (2011). *Understanding the risks, empowering communities, building resilience*. London: Defra.

Depoe, S. P., Delicath, J. W., and Elsenbeer, M. F. A. (2004). *Communication and public participation in environmental decision making*. Albany, NY: SUNY Press.

Deutsch, M., Coleman, P., and Marcus, E. (Eds.). (2011). *The handbook of conflict resolution: Theory and practice*. Canada: John Wiley and Sons.

Devoy, R. J. (Ed.). (2012). *Sea surface studies: a global view*. London: Springer Science and Business Media.

Dewey, J., and Rogers, M. L. (2012). *The public and its problems: An essay in political inquiry*. University Park, PA: Penn State University Press.

Diduck, A., and Sinclair, A. J. (2002). Public involvement in environmental assessment: the case of the nonparticipant. *Environmental Management*, 29(4), 578-588.

Dillman, D.A., (2000). *Mail and internet surveys*. Canada: John Wiley and Sons.

Donald, P., Sanderson, F., Burfield, I., Behrman, S., Gregory, R., and Waliczky, Z. (2007). International conservation policy delivers benefits for birds in Europe. *Science*, 317(5839), 810-813.

Dornbusch, U., Bradbury, A., Curtis, B., and Lane, G. (2011). *Beach management plans for mixed beaches: Review and ways forward*. Belfast: ICE.

Ducrottoy, J. P., and Pullen, S. (1999). Integrated coastal zone management: commitments and developments from an international, European, and United Kingdom perspective. *Ocean and Coastal Management*, 42(1), 1-18.

Dunn, C., Crowley, P., Bush, J., Pless-Mulloli, T., and McKinney, P. (2008). Expertise and scientific uncertainty: understanding trust amongst professional stakeholders in environment and health. *Environment and Planning A*, 40(3), 696.

East Anglian Daily Times (2008). *Protesters' SOS in battle of the Blyth*. Retrieved June 22, 2013, from the East Anglian Daily Times website: http://www.eadt.co.uk/news/protesters_sos_in_battle_of_the_blyth_1_187015

Eastern Solent Coastal Partnership (2015). *Beach Management Plan (BMP)*. Retrieved March 12, 2015, from the Eastern Solent Coastal Partnership website: <http://www.escp.org.uk/beach-management-plans>

Edelenbos, J., and Klijn, E. H. (2006). Managing stakeholder involvement in decision making: A comparative analysis of six interactive processes in the Netherlands. *Journal of Public Administration Research and Theory*, 16(3), 417-446.

Eden, S. (1996). Public participation in environmental policy: considering scientific, counter-scientific and non-scientific contributions. *Public Understanding of Science*, 5(3), 183-204.

Edwards, P., Roberts, I., Clarke, M., DiGiuseppi, C., Prata, S., Wentz, R., and Kwan, I. (2002). Increasing response rates to postal questionnaires: systematic review. *The British Medical Journal*, 324(7347), 1183.

Edwards, S., Jones, P., and Nowell, D. (1997). Participation in coastal zone management initiatives: a review and analysis of examples from the UK. *Ocean and Coastal Management* 36(1-3): 143-165.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.

Enarson, E., and Morrow, B. (Eds). (1998). *The gendered terrain of disaster*. London: Praeger.

Enayati, J. (2002). The Research: Effective communication and decision-making in diverse groups. In M., Hemmati (Ed.), *Multi-stakeholder processes for governance and sustainability – beyond deadlock and conflict* (pp. 73–95). London: Earthscan.

English, M., Gibson, A., Feldman, D., and Tonn, B. (1993). *Stakeholder involvement: Open processes for reaching decisions about the future uses of contaminated sites*. Knoxville: Waste Management Research and Education Institute, University of Tennessee.

Environment Agency (2007). *Planning for the future: Pagham to East Head coastal defence strategy 2007*. Worthing: Environment Agency.

Environment Agency (2009a). *Cumbria 2009 floods: Lessons identified report*, Bristol: Environment Agency.

Environment Agency (2009b). *Flooding in England: A national assessment of flood risk*, Bristol: Environment Agency.

Environment Agency (2010). *The coastal handbook*. Retrieved June 13, 2015, from the Environment Agency website: <http://publications.environmentagency.gov.uk/pdf/GEHO0610BSUE-e-e.pdf>

Environment Agency (2012). *Hampshire Avon Catchment Flood Management Plan*. Exeter: Environment Agency.

Environment Agency (2014a). *Draft update to the river basin management plan for the Thames River Basin District*. Retrieved 23 February, 2015, from the Environment Agency website: https://consult.environmentagency.gov.uk/portal/ho/wfd/draft_plans/consult?pointId=s1405418030714

Environment Agency (2014b). *Flood and coastal erosion risk management: Long-term investment scenarios (LTIS) 2014*. Retrieved 18 July, 2015, from the Government services and information website: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/452961/Feb_LIT_10059_for_Republishing_v5.xlsx

Esteves, L. S. (2013). Is managed realignment a sustainable long-term coastal management approach? *Journal of Coastal Research*, 65(1), 933-938.

European Commission. (2014). *Coastal zone policy: Member States reports on the implementation of ICZM*. Retrieved October 10, 2014, from the European Commission website: http://ec.europa.eu/environment/iczm/nat_reports.htm

European Commission. (2014a). *The Habitats Directive*. Retrieved March 28, 2015, from the European Commission website: http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm#interpretation

European Commission. (2014b). *The Birds Directive*. Retrieved March 28, 2015,

from the European Commission website:

http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

European Commission. (2014c). *Fitness check of EU Nature Legislation (Birds and Habitats Directives)*. Retrieved March 28, 2015, from the European Commission website:

http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm

Euwema, M. C., Wendt, H., and Van Emmerik, H. (2007). Leadership styles and group organizational citizenship behaviour across cultures. *Journal of Organizational Behaviour*, 28(8), 1035-1057.

Evans, E., Ashley, R., Hall, J., Penning-Rowsell, E., Saul, A., Sayers, P., Thorne, C., and Watkinson, A. (2004a). *Foresight future flooding. Scientific summary: Volume I - Future risks and their drivers*. Office of Science and Technology, London.

Evans, S., Gebbels, S., and Stockill, J. (2008). Our shared responsibility: Participation in ecological projects as a means of empowering communities to contribute to coastal management processes. *Marine Pollution Bulletin*, 57(1), 3-7.

Fankhauser, S., Smith, J., and Tol, R. (1999). Weathering climate change: some simple rules to guide adaptation decisions. *Ecological Economics*, 30(1), 67-78.

Farrell, C. M. (2000) Citizen Participation in Governance *Public Money and Management* 20(1): 31-37.

Fellowes, M., and Wolf, P. (2004). Funding mechanisms and policy instruments: how business campaign contributions influence congressional votes. *Political Research Quarterly*, 57(2), 315-324.

Fenn, P. T. (1925). Justinian and the Freedom of the Sea. *American Journal of International Law*, 19(4), 716-727.

Few, R., Ahern, M., Matthies, F. and Kavas, S. (2004). *Floods, health and climate change: a strategic review*. Norwich, United Kingdom: University of East Anglia.

Few, R., Brown, K., and Tompkins, E. (2007a). Climate change and coastal management decisions: insights from Christchurch Bay, UK. *Coastal Management*, 35(2-3), 255-270.

Few, R., Brown, K., and Tompkins, E. (2007b). Public participation and climate change adaptation: avoiding the illusion of inclusion. *Climate Policy*, 7(1), 46-59.

Fielding, K., McDonald, R., and Louis, W. (2008). Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology*, 28(4), 318-326.

Finn, M., Elliott-White, M. and Walton, M. (2000). *Tourism and Leisure Research Methods Data Collection, Analysis and Interpretation*, New York: Longman.

- Fiorino, D. J. (1990). Citizen participation and environmental risk: A survey of institutional mechanisms. *Science, Technology and Human Values*, 15(2), 226-243.
- Fisher, J. S., and Overton, M. F. (1994). Interpretation of shoreline position from aerial photographs. *Coastal Engineering Proceedings*, 1(24).
- Fitzpatrick, P., and Sinclair, A. J. (2003). Learning through public involvement in environmental assessment hearings. *Journal of Environmental Management*, 67(2), 161-174.
- Fleming, C.A. (1992). The Development of Coastal Engineering. In Barrett, M.G. (Ed.), *Coastal Zone Planning and Management: Proceedings of the Conference Coastal Management '92: Integrating Coastal Zone Planning and Management in the Next Century*, (pp. 5-20). London: Telford.
- Fletcher, S. (2003). Stakeholder representation and the democratic basis of coastal partnerships in the UK. *Marine Policy*, 27(3), 229-240.
- Fletcher, S. (2007a). Converting science to policy through stakeholder involvement: an analysis of the European Marine Strategy Directive. *Marine Pollution Bulletin*, 54(12), 1881-1886.
- Fletcher, S. (2007b). Influences on stakeholder representation in participatory coastal management programmes. *Ocean and Coastal Management*, 50(5), 314-328.
- Fletcher, S., and Potts, J. (2008). Coastal and marine governance in the United Kingdom Editorial. *The Geographical Journal*, 174(4), 295-298.
- Fletcher, S., Jefferson, R., Glegg, G., Rodwell, L., and Dodds, W. (2014). England's evolving marine and coastal governance framework. *Marine Policy*, 45, 261-268.
- Fletcher, S., McKinley, E., Buchan, K. C., Smith, N., and McHugh, K. (2013). Effective practice in marine spatial planning: A participatory evaluation of experience in Southern England. *Marine Policy*, 39, 341-348.
- Flew, A. (1999). *Equality and liberty in justice*. New Jersey: Transaction Publishers.
- Franzen, A., and Meyer, R. (2010). Environmental attitudes in cross-national perspective: A multilevel analysis of the ISSP 1993 and 2000. *European Sociological Review*, 26(2), 219-234.
- Fraser, E, Dougill, A., Mabee, W., Reed, M., and McAlpine, P. (2006). Bottom up and top down: Analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management. *Journal of Environmental Management*, 78(2), 114-127.
- Freebody, P. (2003). *Qualitative research in education: Interaction and practice*. London: Sage Press.
- French, P. W. (2004). The changing nature of, and approaches to, UK coastal

management at the start of the twenty-first century. *The Geographical Journal*, 170(2), 116-125.

French, P. W. (2006). Managed realignment—the developing story of a comparatively new approach to soft engineering. *Estuarine, Coastal and Shelf Science*, 67(3), 409-423.

French, P.W. (2001). *Coastal defences: Processes, problems and solutions*. USA: Routledge.

Friese, S. (2014). *Qualitative data analysis with ATLAS. ti*. London: Sage.

Gaillard, J. C. (2010). Vulnerability, capacity and resilience: perspectives for climate and development policy. *Journal of International Development*, 22(2), 218-232.

Garande, T., and Dagg, S. (2005). Public participation and effective water governance at the local level: a case study from a small under-developed area in Chile. *Environment, Development and Sustainability*, 7(4), 417-431.

Gardiner S., Hanson S., Nicholls R. J., Zhang Z., Jude S. R., Jones A., Richards J. A., Williams, A. Spencer S., Coggins P. C. C., Gorczynska M., Bradbury A. P., McInnes R., Ingleby A. and Dalton H., (2007). The habitats directive, coastal habitats and climate change – case studies from the south coast of the U.K. In R. McInnes (Ed.), *Proceedings of the ICE International Conference on Coastal Management 2007* (pp. 193-202). London: Thomas Telford.

Garin, P., Rinaudo, J., and Ruhlmann, J. (2002). Linking expert evaluations with public consultation to design water policy at the watershed level. *Water Science and Technology*, 46(6-7), 263-271.

Gauthier, M., Simard, L., and Waaub, J. P. (2011). Public participation in strategic environmental assessment (SEA): Critical review and the Quebec (Canada) approach. *Environmental Impact Assessment Review*, 31(1), 48-60.

Gehrels, W., Dawson, D., Shaw, J., and Marshall, W. (2011). Using Holocene relative sea-level data to inform future sea-level predictions: An example from southwest England. *Global and Planetary Change*, 78(3), 116-126.

Gelissen, J. (2007). Explaining popular support for environmental protection: A multilevel analysis of 50 nations. *Environment and Behaviour*, 39(3), 392-415.

Gibbert, M., Ruigrok, W., and Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*. 29(13), 1465-1474.

Gibbs, G., Friese, S., and Mangabeira, W. (2002). The use of new technology in qualitative research. *Qualitative Social Research*, 3(2).

Gibson, J. (2005). Coastal zone law in the UK: Lessons for the new millennium. In H. Smith and J. Potts (Eds.), *Managing Britain's marine and coastal environment* (pp.171- 185). Oxon: Routledge.

- Giddens, A. (1990). *The consequences of modernity*. Cambridge: Polity Press.
- Gifford Associated Consultants (2000). *The Severn Estuary Shoreline Management Plan: The non-technical summary. Final report to Severn Estuary Coastal Group*. Retrieved May 04, 2015, from the Severn Estuary Coastal Group website: http://www.severnestuary.net/secg/docs/nontechnical_summary.pdf
- Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication*, 17(3), 319-336.
- Gillham, B. (2000). *Developing a questionnaire*. London: Continuum.
- Gillham, B. (2005). *Research interviewing: The range of techniques*. Maidenhead: Open University Press.
- Glicken, J. (2000). Getting stakeholder participation 'right': a discussion of participatory processes and possible pitfalls. *Environmental Science and Policy*, 3(6), 305-310.
- Gopnik, M., Fieseler, C., Cantral, L., McClellan, K., Pendleton, L., and Crowder, L. (2012). Coming to the table: Early stakeholder engagement in marine spatial planning. *Marine Policy*, 36(5), 1139-1149.
- Grant, W. (1989) *Pressure Groups, Politics and democracy in Britain*. London: Philip Allan.
- Green, D. (2007). Legal bid to stop the erosion of cliffs: East Anglian Daily Times, Ipswich. Saturday September 15th 2007: p2.
- Griffiths, M. (2002). The European Water Framework Directive: an approach to integrated river basin management. *European Water Management*, 5, 1-14.
- Grix, J. (2004). *The Foundations of research*. London: Palgrave.
- Gummesson, E. (2000). *Qualitative methods in management research*. London: Sage
- Güneş, Y., and Coşkun, A. (2005). Legal structure of public participation in environmental issues in Turkey. *Journal of Environmental Assessment Policy and Management*, 7(03), 543-568.
- Guy, M. (2011). Revealing the Rot: How to use social media to expose corruption and mismanagement at both local and national levels. *Quinnipiac University's Interactive Communications*, 1-13.
- Hadley, D. (2009) Land use and coastal zone. *Land Use Policy*, 26(1), 198–203.
- Haklay, M. E. (2003). Public access to environmental information: past, present and future. *Computers, Environment and Urban Systems*, 27(2), 163-180.

- Halcrow (1997). *Shoreline Management Plan, Subcell 3C: Lowestoft to Harwich. Process Unit: ORF Management Unit Divisions*. Peterborough: Environment Agency.
- Hall, J., Evans, E., Penning-Rowse, E., Sayers, P., Thorne, C., and Saul, A. (2003). Quantified scenarios analysis of drivers and impacts of changing flood risk in England and Wales: 2030–2100. *Global Environmental Change Part B: Environmental Hazards*, 5(3), 51-65.
- Hall, J., Meadowcroft, I., Sayers, P., and Bramley, M. (2003). Integrated flood risk management in England and Wales. *Natural Hazards Review*, 4(3), 126-135.
- Hardiman, N. (2011). Coastal risks and the new national flood and coastal erosion risk management strategy for England. Risk Management Understanding Change: Risk and Organisational Responses. In S. Jacqueline (Ed.), *Improving participation of the public in coastal flood management: A case study from the Suffolk coast, UK*. PhD thesis: University of East Anglia.
- Harding, R. (Ed.). (1998). *Environmental decision-making: The roles of scientists, engineers, and the public*. Sydney: Federation Press.
- Hartley, N., and Wood, C. (2005). Public participation in environmental impact assessment—implementing the Aarhus Convention. *Environmental Impact Assessment Review*, 25(4), 319-340.
- Harries, T., and Penning-Rowse, E. (2011). Victim pressure, institutional inertia and climate change adaptation: The case of flood risk. *Global Environmental Change*, 21(1), 188-197.
- Harrison, T., Waite, K., and Hunter, G. (2006). The internet, information and empowerment. *European Journal of Marketing*, 40(9/10), 972-993.
- Hart, C. M., and Van Vugt, M. (2006). From fault line to group fission: Understanding membership changes in small groups. *Personality and Social Psychology Bulletin*, 32(3), 392-404.
- Hartley, T. W. (2006). Public perception and participation in water reuse. *Desalination*, 187(1), 115-126.
- Harvatt, J., Petts, J., and Chilvers, J. (2011). Understanding householder responses to natural hazards: flooding and sea-level rise comparisons. *Journal of Risk Research*, 14(1), 63-83.
- Harvey, D. (1996). *Justice, nature and the geography of difference*. Malden, MA: Blackwell.
- Hassan, J. (2003). *The seaside, health and the environment in England and Wales since 1800*. London: Ashgate.

Hauck, D. (2015). Not In My Backyard activism and information. In S. Friedrich, K. Andrea, and R. Johannes (Eds.), *Political Economy and Instruments of Environmental Politics* (pp. 229). Cambridge: MIT Press.

Hedelin, B. (2008). Criteria for the assessment of processes for sustainable river basin management and their congruence with the EU Water Framework Directive. *European Environment*, 18(4), 228-242.

Heiland, S. (2007). Requirement and methods for public participation in SEA. In M. Schmidt, E. João, and E. Albrecht (Eds.). *Implementing strategic environmental assessment*. (Vol. 2, pp. 421-432). Berlin: Springer Verlag.

Hering, D., Borja, A., Carstensen, J., Carvalho, L., Elliott, M., Feld, C.K., Heiskanen, A.S., Johnson, R.K., Moe, J., Pont, D. and Solheim, A.L. (2010). The European Water Framework Directive at the age of 10: a critical review of the achievements with recommendations for the future. *Science of the Total Environment*, 408(19), 4007-4019.

Hewitt, K. (1997). *Regions of Risk: A geographical introduction to disasters*. Essex, U.K: Longman.

Hilhorst, D. and Bankoff, G. (2004). Introduction: Mapping vulnerability. In G. Bankoff, G. Frerks, and D. Hilhorst, (Eds.). *Mapping vulnerability: Disasters, development and people*. (pp.1-9). Sterling, VA: Earthscan.

HM Government. (2011). *UK Marine policy statement*, London: HMSO

Hoare, A. G. (2002). Natural harmony but divided loyalties: the evolution of estuary management as exemplified by the Severn Estuary. *Applied Geography*, 22(1), 1-25.

Holland, P. G. (2002). The Water Framework Directive. *Flow Measurement and Instrumentation*, 13(5), 277-279.

Hollick, M. (1986). Environmental impact assessment: an international evaluation. *Environmental Management*, 10(2), 157-178.

Horlick-Jones, T., Rowe, G., and Walls, J. (2007). Citizen engagement processes as information systems: the role of knowledge and the concept of translation quality. *Public Understanding of Science*, 16(3), 259-278.

Hostovsky, C., Maclaren, V., and McGrath, G. (2010). The role of public involvement in Environmental Impact Assessment in Vietnam: Towards a more culturally sensitive approach. *Journal of Environmental Planning and Management*, 53(3), 405-425.

House of Common Select Committee on the Environment (1992). *Coastal zone protection and planning. Second report*. London: HMSO.

Howarth, W. (2002). *Flood defence law*. Crayford: Shaw and Sons.

Howell, S. (1974) *The Seaside*. London: Studio Vista.

Howgate, O., and Kenyon, W. (2009). Community cooperation with natural flood management: a case study in the Scottish Borders. *Area*, 41(3), 329-340.

Huntley D., Leek G., and Walling D. (2001). *Land-Ocean interaction measuring and modelling fluxes from river basins to coastal seas*. London: IWA Publishing.

Hussein, A. (2009). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined. *Journal of Comparative Social Work*, 1(8), 1-12.

Hutchison, J., and Leafe, R. (1996). Shoreline management: A view of the way ahead. In C. Flemin (Ed.), *Coastal management: Putting policy into practice*. (pp. 352-359). London: Thomas Telford.

IAP2. (2003). *Core Values for the Practice of Public Participation, Foundations of Public Participation*. Retrieved April, 29 2015 from the International Association for Public Participation website: <http://www.iap2.org/>

Inglehart, R., and Catterberg, G. (2002). Trends in political action: The developmental trend and the post-honeymoon decline. *International Journal of Comparative Sociology*, 43(3-5), 300-316.

Ingram, H., Colnic, D., and Mann, D. (1995). Interest groups and environmental policy. In: J. Lester (Ed.). *Environmental Policy and Politics* (pp. 115-14). Durham, NC: Duke University Press.

Innes, J. E. (1999). Evaluating consensus building. In Susskind, McKearnan and Thomas-Larmer, (Eds.), *Handbook: A comprehensive guide to reaching agreement* (pp. 631-675). Thousand Oaks, CA: Sage.

Innes, J., and Booher, D. (2004). Reframing public participation: strategies for the 21st century. *Planning Theory and Practice*, 5(4), 419-436.

IPCC. (2013). *Climate change 2013: The physical science basis*. Retrieved June 12, 2014, from the Intergovernmental Panel on Climate Change website: <http://www.climatechange2013.org/>

Irvin, R. A., and Stansbury, J. (2004). Citizen participation in decision making: is it worth the effort? *Public administration review*, 64(1), 55-65.

Jabbour, J. R., and Balsillie, D. (2003). The effectiveness of public participation in forest management: A case study analysis of the Morice Innovative Forest Practices Agreement. *The Forestry Chronicle*, 79(2), 329-341.

Jaramillo, M., and Wright, G. D. (2015). Participatory democracy and effective policy: is there a link? Evidence from rural Peru. *World Development*, 66 (1), 280-292.

Jary, D., and Jary, J. (2000). *Collins Dictionary, Sociology*. London: HarperCollins.

Jemmett, A. (1998). Implementing estuary management plans - a case study from the

Dee Estuary. *The Geographical Journal*, 164(3): 307-318.

Jess, P. (2000). *Medina Estuary Management Plan: A Strategic framework*. Retrieved November 14, 2014, from the Green Blue website: <http://www.thegreenblue.org.uk/pdf/z%201160.%20Medina%20Estuary%20Management%20Plan-%20A%20Strategic%20Framework.pdf>

Jha-Thakur, U., Gazzola, P., Peel, D., Fischer, T., and Kidd, S. (2009). Effectiveness of strategic environmental assessment-the significance of learning. *Impact Assessment and Project Appraisal*, 27(2), 133-144.

Johnson, B., and Turner, L. (2003). Data collection strategies in mixed methods research. In A. Tashakkori and C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 297-320). Thousand Oaks, CA: Sage.

Johnson, C., and Priest, S. (2008). Flood risk management in England: A changing landscape of risk responsibility? *International Journal of Water Resources Development*, 24(4), 513-525.

Johnson, C., Penning-Rowsell, E., and Parker, D. (2007a). Natural and imposed injustices: the challenges in implementing 'fair' flood risk management policy in England. *The Geographical Journal*, 173(4), 374-390.

Johnson, C., Penning-Rowsell, E., and Tapsell, S. (2007b). Aspiration and reality: flood policy, economic damages and the appraisal process. *Area*, 39(2), 214-223.

Jones, C. R., and Eiser, J. R. (2010). Understanding 'local' opposition to wind development in the UK: How big is a backyard? *Energy Policy*, 38(6), 3106-3117.

Jones, R. (1982). *Town and country chaos: A critical analysis of Britain's planning system*, London: Adam Smith Institute.

Jordan, G. (1998). Introduction. In F. Ridley and G. Grant (Eds.), *Protest politics cause groups and campaigns* (pp. 27-51). Oxford: Oxford University Press.

Jordan, G., and Maloney, W. (1997). *The protest business? Mobilising campaign groups*. Manchester: University Press.

Jordan, G., and Maloney, W. (1998). Manipulating membership: supply-side influences on group size. *British Journal of Political Science*, 28(2), 389-409.

Juda, L. (2006). The report of the US Commission on Ocean Policy: State perspectives. *Coastal Management*, 34(1), 1-16.

Juda, L. (2007). The European Union and ocean use management: the marine strategy and the maritime policy. *Ocean Development and International Law*, 38(3), 259-282.

Kahneman D., Slovic P., Tversky A. (Eds.). (1982). *Judgment under uncertainty: Heuristics and biases*. Cambridge: Cambridge University Press.

- Kaika, M. (2003). The Water Framework Directive: a new directive for a changing social, political and economic European framework. *European Planning Studies*, 11(3), 299-316.
- Kangas, A., Saarinen, N., Saarikoski, H., Leskinen, L. A., Hujala, T., and Tikkanen, J. (2010). Stakeholder perspectives about proper participation for Regional Forest Programmes in Finland. *Forest Policy and Economics*, 12(3), 213-222.
- Kaplan, B., and Maxwell, J. (2005). Qualitative research methods for evaluating computer information systems. In J. Anderson, C. Aydin, and S. Jay (Eds.), *Evaluating the organizational impact of healthcare information systems* (pp. 30-55). New York: Springer.
- Kasperson, R., Renn, O., Slovic, P., Brown, H., Emel, J., Goble, R., Kasperson, J., and Ratick, S. (1988). The social amplification of risk: A conceptual framework. *Risk Analysis*, 8(2), 177-187.
- Kay, R., and Alder, J. (1999). *Coastal Planning and Management*, London: Routledge.
- Kearney, J., F. Berkes, A. Charles, E. Pinkerton, and M. Wiber. (2007). The role of participatory governance and community-based management in integrated coastal and ocean management in Canada. *Coastal Management* 35(1), 79–104.
- Keen, J., and Packwood, T. (1995). Case study evaluation. *British Medical Journal*, 311(7002), 444-446.
- Keen, M., Brown, V., and Dyball, R. (2005). *Social learning in environmental management: towards sustainable future*, Oxford: Earthscan.
- Kemp, R. (1990). Why not in my backyard? A radical interpretation of public opposition to the deep disposal of radioactive waste in the United Kingdom. *Environment and Planning A*, 22(9), 1239-1258.
- Kempton, W., Holland, D., Bunting-Howarth, K., Hannan, E., and Payne, C. (2001). Local environmental groups: A systematic enumeration in two geographical areas. *Rural Sociology*, 66(4), 557-578.
- Kent Life. (2015). *Coastal shift*. Retrieved 19 June, 2015, from Kent Life website:http://www.kent-life.co.uk/out-about/places/coastal_shift_1_1634627
- Kiefer, C., and Benjamin, M. (1993). Solidarity with the Third World. Building an International Environmental-Justice Movement. In R. Hofrichter (Ed.), *Toxic struggles: The theory and practice of environmental justice* (pp. 144-152). Philadelphia: New Society Publishers.
- King, C., Feltey, K., and Susel, B. (1998). The question of participation: toward authentic public participation in public administration. *Public Administration Review* 58(4): 317-327.

- King, G. (1999). *Participation in the ICZM processes: Mechanisms and procedures needed*. Thematic study for the European demonstration programme on ICZM. Swansea: Hyder Consulting.
- Kingston, R., Carver, S., Evans, A., and Turton, I. (2000). Web-based public participation geographical information systems: an aid to local environmental decision-making. *Computers, Environment and Urban Systems*, 24(2), 109-125.
- Kitchen, R., and Tate, N. (2000). *Conducting research in human geography*, Harlow, Essex: Pearson Education Limited.
- Klijn, F., Samuels, P., and Van Os, A. (2008). Towards flood risk management in the EU: State of affairs with examples from various European countries. *International Journal of River Basin Management*, 6(4), 307-321.
- Konisky, M., Thomas C., Beierle, D. (2001). Innovations in public participation and environmental decision making: Examples from the Great Lakes Region. *Society and Natural Resources*, 14(9), 815-826.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy*, 45(3), 214-222.
- Krelling, A., Polette, M., and DelValls, A. (2008). CoastLearn: Lessons learnt from a web-based capacity building in Integrated Coastal Zone Management (ICZM). *Ocean and Coastal Management*, 51(12), 789-796.
- Kumar, R., and Best, M. (2006). Impact and sustainability of e-government services in developing countries: Lessons learned from Tamil Nadu, India. *The Information Society*, 22(1), 1-12.
- Kunreuther, H., and Pauly, M. (2006). Rules rather than discretion: Lessons from Hurricane Katrina. *Journal of Risk and Uncertainty*, 33(1-2), 101-116.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. London: Sage.
- Kvale, S. (2007). *Doing interviews*. London: Sage.
- Lamont, M., and Molnár, V. (2002). The study of boundaries in the social sciences. *Annual Review of Sociology*, 28(1), 167-195.
- Laudicina, M. (2015). World War I: The Definitive Encyclopedia and Document Collection. *Reference and User Services Quarterly*, 54(4), 75.
- Lawrence, L., Debbie A., and Deagen, R. (2001). Choosing public participation methods for natural resources: a context-specific guide. *Society and Natural Resources*, 14(10), 857-872.
- Leafé, R., Pethick, J., and Townend, I. (1998). Realizing the benefits of shoreline management. *The Geographical Journal*, 163(4), 282-290.

- Lebert, J. (2003). Wiring human rights activism. In M. McCaughey and M. Ayers (Eds.), *Cyberactivism: Online activism in theory and practice* (pp.209-231). New York: Routledge.
- Ledoux, L., Cornell, S., O’Riordan, T., Harvey, R., and Banyard, L. (2005). Towards sustainable flood and coastal management: Identifying drivers of, and obstacles to, managed realignment. *Land Use Policy*, 22(2), 129-144.
- Lee, E. M. (1993). The political ecology of coastal planning and management in England and Wales: policy responses to the implications of sea-level rise. *The Geographical Journal*, 159(2), 169-178.
- Lee, G., and Kwak, Y. (2012). An open government maturity model for social media-based public engagement. *Government Information Quarterly*, 29(4), 492-503.
- Leedy, P., and Ormrod, J. (2005). *Practical research: Planning and design*. New Jersey: Pearson Education International.
- Leizerov, S. (2000). Privacy Advocacy Groups Versus Intel: A Case study of how social movements are tactically using the internet to fight corporations. *Social Science Computer Review*, 18(4), 461-483.
- Li, T., Ng, S., and Skitmore, M. (2012). Public participation in infrastructure and construction projects in China: From an EIA-based to a whole-cycle process. *Habitat International*, 36(1), 47-56.
- Lilleker, D., and Jackson, N. (2013). *Political campaigning, elections and the Internet: Comparing the US, UK, France and Germany* (Vol. 4). London: Routledge.
- Liu, B. F., and Horsley, J. S. (2007). The government communication decision wheel: Toward a public relations model for the public sector. *Journal of Public Relations Research*, 19(4), 377-393
- Loberfeld B. (2004). *Social justice: code for communism*. Retrieved 17 August, 2015, from frontpagemag website:
<http://archive.frontpagemag.com/readArticle.aspx?ARTID=13978>
- Longhurst, R. (2003). Semi-structured interviews and focus groups, In Clifford, N. J. and Valentine, G. (Eds.), *Key methods in geography* (pp. 117-132). London: Sage.
- Lorenzoni, I., and Pidgeon, N. (2006). Public views on climate change: European and USA perspectives. *Climatic Change*, 77(1-2), 73-95.
- Louis, C., Lawrence, M., and Keith, M. (2007). *Research methods in education*. New York: Routledge.
- Lowe, J., and Gregory, J. (2005). The effects of climate change on storm surges around the United Kingdom. *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 363(1831), 1313-1328.

- Lowe, P., and Goyder, J. (1983). *Environmental groups in politics*. London: Allen Unwin.
- Lubet, S. (2001). Judicial campaign conduct committees: Some reservations about an elegant solution. *Indiana Law Review*. 35(1), 807-881.
- Lupton, D. (1999). *Risk*. London: Routledge.
- Lynn, P. (2001). The impact of incentives on response rates to personal interview surveys: Role and perceptions of interviewers. *International Journal of Public Opinion Research*. 13(3), 326–336.
- Lyster, R. (1998). Should we mediate environmental conflict: A justification for negotiated rule making. *Sydney Law Review*. 20(4): 579-598.
- MacDonald, W., and Hara, N. (1994). Gender differences in environmental concern among college students. *Sex Roles*, 31(5-6), 369-374.
- Machill, M., and Beiler, M. (2009). The importance of the Internet for journalistic research: A multi-method study of the research performed by journalists working for daily newspapers, radio, television and online. *Journalism Studies*, 10(2), 178-203.
- MacNaghten, P., and Jacobs, M. (1997). Public identification with sustainable development: investigating cultural barriers to participation. *Global Environmental Change*, 7(1), 5-24.
- MacQueen, K., McLellan, E., Metzger, D., Kegeles, S., Strauss, R., Scotti, R., Blanchard L., and Trotter, R. (2001). What is community? An evidence-based definition for participatory public health. *American Journal of Public Health*, 91(12), 1929-1938.
- Maguire, B., Potts, J. and Fletcher, S. (2011). Who, when, and how? Marine planning stakeholder involvement preferences – A case study of the Solent, United Kingdom. *Marine Pollution Bulletin*, 62(11), 2288-2292.
- Maguire, B., Potts, J. and Fletcher, S. (2012). The role of stakeholders in the marine planning process – Stakeholder analysis within the Solent, United Kingdom. *Marine Policy*, 36(1), 246-257.
- Maher, F. A., and Tetreault, M. K. (2001). *The feminist classroom: Dynamics of gender, race, and privilege*. New York: Rowman and Littlefield.
- Maloney, W., Jordan, G. and McLaughlin, A. (1994). Interest groups and public policy: the insider/outsider model revisited. *Journal of Public Policy*. 14(01), 17-38.
- Manzo, L., and Perkins, D. (2006). Finding common ground: the importance of place attachment to community participation and planning. *Journal of Planning Literature*, 20(4), 335-350.

- Marsh, D. (Ed.) (1983). *Pressure politics: Interest groups in Britain*. London: Junction.
- Marshall, C., and Rossman, G. (1999). *Designing qualitative research* (3rd ed). London: Sage.
- Marshall, N. and Roberts, R. (1997). That thing called Public involvement. *Plan Canada* 37(3), 8-11.
- Martens, T., Garrelts, H., Grunenbergh, H., and Lange, H. (2009). Taking the heterogeneity of citizens into account: flood risk communication in coastal cities—a case study of Bremen. *Natural Hazards and Earth System Science*, 9(6), 1931-1940.
- Martin, R. (2001). Geography and public policy: the case of the missing agenda. *Progress in Human Geography*, 25(2), 189-210.
- Marttunen, M., and Suomalainen, M. (2005). Participatory and multi-objective development of water course regulation: Creation of regulation alternatives from stakeholders' preferences. *Journal of Multi-Criteria Decision Analysis*, 13(1), 29-49.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed). London: Sage.
- Mayer, B. (2010). *The dynamics of conflict resolution: a practitioner's guide*. New York, United State: John Wiley and Sons.
- McCaskey M. (1982). *The executive challenge: Managing change and ambiguity*. Boston: Pitman Publishing Inc.
- McGlashan, D. (2002). Coastal management and economic development in developed nations: the Forth Estuary forum. *Coastal Management*, 30(3), 221- 236.
- McGlashan, D., and Williams, E. (2003). Stakeholder involvement in coastal decision-making processes. *Local Environment*, 8(1), 85-94.
- McInnes, K., Walsh, K., Hubbert, G., and Beer, T. (2003). Impact of sea-level rise and storm surges on a coastal community. *Natural Hazards*, 30(2), 187-207.
- McKenna, J., and Cooper, A. (2006). Sacred cows in coastal management: the need for a 'cheap and transitory' model. *Area*, 38(4), 421-431.
- McKenna, J., Cooper, A., and O'Hagan, A. (2008). Managing by principle: A critical analysis of the European principles of Integrated Coastal Zone Management (ICZM). *Marine Policy*, 32(6), 941-955.
- McManus, P., Walmsley, J., Argent, N., Baum, S., Bourke, L., Martin, J., Pritchard, B. and Sorensen, T., (2012). Rural community and rural resilience: What is important to farmers in keeping their country towns alive? *Journal of Rural Studies*, 28(1), 20-29.

- McMillan, D., and Chavis, D. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6-23.
- Merchant, C. (1992). *Radical ecology*. New York: Routledge.
- Merchant, C. (2005). *Radical ecology: The search for a liveable world* (2nd ed). New York: Routledge.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. California: Jossey-Bass, Inc.
- Met Office (2014). *The recent storms and floods in the UK*. Retrieved, August 22, 2014, from the Met Office website:
http://www.metoffice.gov.uk/media/pdf/n/i/Recent_Storms_Briefing_Final_07023.pdf
- Midgley, S., and McGlashan, D. J. (2004). Planning and management of a proposed managed realignment project: Bothkennar, Forth Estuary, Scotland. *Marine Policy*, 28(5), 429-435.
- Miles, M., and Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*. (2nd ed). London: Sage.
- Miller, R., and Brewer, J. (Eds.). (2004). *The A-Z of social research*. London: Sage.
- Milligan, J., O’Riordan, T., Nicholson-Cole, S., and Watkinson, A. (2009). Nature conservation for future sustainable shorelines: lessons from seeking to involve the public. *Land Use Policy*, 26(2), 203-213.
- Milner, H. R. (2007). Race, culture, and researcher positionality: Working through dangers seen, unseen, and unforeseen. *Educational Researcher*, 36(7), 388-400.
- Ministry of Agriculture, Fisheries and Food (1995). *Shoreline Management Plans: a guide for Coastal Defence Authorities*. London: MAFF
- Ministry of Agriculture, Fisheries and Food (2000). *A review of shoreline management plans 1996-1999*. London: MAFF.
- Ministry of Agriculture, Fisheries and Food/Welsh Office (1993). *Strategy for flood and coastal defence in England and Wales*. London: MAFF
- Mitchell, D. (2000). *Cultural geography - A critical introduction*. Oxford: Blackwell Publishers Ltd.
- Mitchell, J., and Ericksen, N. (1992). Effects of climate change on weather related disasters. In M. Mintzer (Ed.), *Confronting climate change: Risks, implications and responses*. (pp. 141-152). Cambridge: Cambridge University Press.
- Moore, C. W. (2014). *The mediation process: Practical strategies for resolving conflict* (4th ed) New York: John Wiley and Sons.

Morris, R. K. (2008). English Nature's estuaries initiative: A review of its contribution to ICZM. *Ocean and Coastal Management*, 51(1), 25-42.

Morris, R. K. (2012). Managed realignment: A sediment management perspective. *Ocean and Coastal Management*, 65(1), 59-66.

Morsing, M., and Schultz, M. (2006). Corporate social responsibility communication: stakeholder information, response and involvement strategies. *Business Ethics: A European Review*, 15(4), 323-338.

Mosse, David (2001) People's Knowledge, participation and patronage: Operations and representations in rural development. In C., Bill and K., Uma (Eds.) *Participation, the new tyranny?* (pp. 16-35). London: Zed.

Motyka, J. M., and Brampton, A. (1993). *Coastal management: mapping of littoral cells*. Hydraulics Research Wallingford. Report SR 328; Oxfordshire, UK: HR Wallingford.

Mowen, A., Graefe, A., and Virden, R. (1998). A typology of place attachment and activity involvement. In *Proceedings of the 1997 North-eastern Recreation Research Symposium* (pp. 89-92).

Murray, V., and Ebi, K. (2012). IPCC special report on managing the risks of extreme events and disasters to advance climate change adaptation (SREX). *Journal of epidemiology and community health*, 66(9), 759-760.

Myatt, L., Scrimshaw, M., and Lester, J. (2003). Public perceptions and attitudes towards a forthcoming managed realignment scheme: Freiston Shore, Lincolnshire, UK. *Ocean and Coastal Management*, 46(6), 565-582.

Natasha, B., and Tracey, H. (2007). ICZM and Coastal Partnerships: Working together. Retrieved November 23, 2015 from the European Commission website: <http://webcache.googleusercontent.com/search?q=cache:7nTr8W3Z4pEJ:ec.europa.eu/ourcoast/download.cfm%3FfileID%3D796+&cd=5&hl=en&ct=clnk&gl=uk>

National Voice of Coastal Communities (n.d). *About this site*. Retrieved May 14, 2014, from the National Voice of Coastal Communities website: <http://www.nvcc.org.uk/about/>

National Voice of Coastal Communities (2013a). *Faversham Road Residents Association*. Retrieved 9 August, 2013, from National Voice of Coastal Communities website: <http://www.nvcc.org.uk/frra/>

National Voice of Coastal Communities (2013b). *Save Our Selsey*. Retrieved 12 August, 2013, from National Voice of Coastal Communities website: <http://www.nvcc.org.uk/save-our-selsey/>

National Voice of Coastal Communities (2013c). *Defend Our Coast Association*. Retrieved 11 July, 2013, from National Voice of Coastal Communities website: <http://www.nvcc.org.uk/defend-our-coast-association/>

National Voice of Coastal Communities (2013d). *Coastal Concern Action Group, Happisburgh*. Retrieved 5 July, 2013, from National Voice of Coastal Communities website: <http://www.nvcc.org.uk/ccag/>

Natural England (2015). *What we do*. Retrieved March 8, 2015 from the UK Government website: <https://www.gov.uk/government/organisations/natural-england>.

Nettl, J. P. (1965). Consensus or elite domination: The case of business. *Political Studies*, 13(1), 22-44.

Newell, R., (1995). Questionnaires. In: N. Gilbert (Ed.). *Researching social life* (pp. 94-115). London: Sage.

Nicholls, R., and Mimura, N. (1998). Regional issues raised by sea-level rise and their policy implications. *Climate research*, 11(1), 5-18.

Nicholls, R., and Klein, R. (2004). Climate change and coastal management on Europe's coast. In: J. Vermaat, L. Bower, K. Turner, and W. Salomons (Eds), *Managing European coasts: past, present and future* (pp. 199-226). Berlin: Springer.

Nicholls, R., Townend, I., Bradbury, A., Ramsbottom, D., and Day, S. (2013). Planning for long-term coastal change: Experiences from England and Wales. *Ocean Engineering*, 71, 3-16.

Nisbet, R. A. (1967). *The sociological tradition*. London: Heinemann.

North Norfolk District Council (2004). *Kelling to Lowestoft Ness Shoreline Management Plan - Document for Consultation*. Norwich: North Norfolk District Council.

Norton, A. and Leaman, J. (2004). *The day after tomorrow: Public opinion on climate change*. London: MORI Social Research Institute.

Nye, M., Tapsell, S., and Twigger-Ross, C. (2011). New social directions in UK flood risk management: moving towards flood risk citizenship. *Journal of Flood Risk Management*, 4(4), 288-297.

O'Connor, M., Lymbery, G., Cooper, J., Gault, J., and McKenna, J. (2009). Practice versus policy-led coastal defence management. *Marine Policy*, 33(6), 923-929.

O'Riordan T. (2001). On participatory valuation in shoreline management. In R. Turner, I., Bateman, and W., Adger (Eds.), *Economics of coastal and water resources: Valuing environmental functions* (pp. 323-340). Dordrech: Kluwer.

O'Riordan, T. (2005). Inclusive and community participation in the coastal zone: Opportunities and dangers. In J. Vermaat and R. Turner (Eds.), *Managing European Coasts* (pp. 173-184). Berlin: Springer.

O'Riordan, T., and Ward, R. (1997). Building trust in shoreline management: creating participatory consultation in shoreline management plans. *Land Use Policy*, 14(4), 257-276.

O'Riordan, T., Watkinson, A., and Milligan, J. (2006). *Living with a changing coastline: Exploring new forms of governance for sustainable coastal futures*. Tyndall Centre for Climate Change Research, Technical report No 49. Norwich: Tyndall Centre for Climate Change Research.

O'Sullivan, J., Bradford, R., Bonaiuto, M., De Dominicis, S., Rotko, P., Aaltonen, J., Waylen, K., and Langan, S. (2012). Enhancing flood resilience through improved risk communications. *Natural Hazards and Earth System Science*, 12(7), 2271-2282.

Oakes, T.A. (1992). Coastal groups. In M.G. Barrett (Eds.), *Coastal zone planning and management* (pp. 311-321). London: Thomas Telford.

Obi, C. I. (1997). Globalisation and local resistance: The case of the Ogoni versus Shell. *New Political Economy*, 2(1), 137-148.

O'Connor, P. (2004). The conditionality of status: experience-based reflections on the insider/outsider issue. *Australian Geographer*, 35(2), 169-176.

Office for National Statistics. (2009). *National population projections, 2008-based projections*. Retrieved March 18, 2015, from the Office for National Statistics website: <http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2008-based-projections/index.html>

Ogunlana, S., Yotsinsak, T., and Pisa, S. (2001). An assessment of people's satisfaction with the public hearing on the Yadana Natural Gas Pipeline project. *Environmental Monitoring and Assessment* 72(2), 207-225.

Okome, O. (2000). *Before I am hanged: Ken Saro-Wiwa, literature, politics, and dissent*. Trenton, NJ: Africa World Press.

Olsen, S. B. (2000). Educating for the governance of coastal ecosystems: the dimensions of the challenge. *Ocean and Coastal Management*, 43(4), 331-341.

Olsen, S., and Christie, P. (2000). What are we learning from tropical coastal management experiences? *Coastal Management*, 28(1), 5-18.

Oppenheim, A. N. (1992). *Questionnaire design and attitude measurement*. London: Heinemann.

Oppenheim, A. N. (2000). *Questionnaire design, interviewing and attitude measurement* (2nd ed). London: Bloomsbury Academic.

- Ostermann, O. P. (1998). The need for management of nature conservation sites designated under Natura 2000. *Journal of Applied Ecology*, 35(6), 968–973.
- Ostrom, E. (1990). *Governing the commons: the evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Ostrom, E., Burger, J., Field, C., Norgaard, R., and Policansky, D. (1999). Revisiting the commons: local lessons, global challenges. *Science*, 284(5412), 278-282.
- Park, M., Moon, J., and Kang, C. (2006). A study on the degree of deliberation and meditation of cyber poll respondents for nuclear-related decision making. *Annals of Nuclear Energy*, 33(2), 163-169.
- Parry, G., Moyser, G. and day, N. (1992) *Political participation and democracy in Britain*. Cambridge: Cambridge University Press.
- Parvin, P. (2007). *Friend or foe? Lobbying in British democracy*. London: The Hansard Society.
- Patrick, D., and Wickizer, T. (1995). Community and health. In B. Amick, S. Levine, and A Taylor. (Eds.), *Society and health* (pp. 46-92). New York, NY: Oxford University Press.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. California: Sage.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed). Thousand Oaks, CA: Sage.
- Pegram, M. (2000). What is case study research? *Nurse Research*, 7(2), 5-16.
- Penning-Rowsell, E., Johnson, C., and Tunstall, S. (2006). ‘Signals’ from pre-crisis discourse: lessons from UK flooding for global environmental policy change. *Global Environmental Change*, 16(4), 323-339.
- Penning-Rowsell, E., Priest, S., Parker, D., Morris, J., Tunstall, S., Viavattene C., and Owen, D. (2014). *Flood and coastal erosion risk management: a manual for economic appraisal*. Routledge: London.
- Penning-Rowsell, E., Tunstall, S., Tapsell, S., and Parker, D. (2000). The benefits of flood warnings: real but elusive, and politically significant. *Water and Environment Journal*, 14(1), 7-14.
- Penning-Rowsell, E., Johnson, C., Tunstall, S., Tapsell, S., Morris, J., Chatterton, J., and Green, C. (2005). *The benefits of flood and coastal risk management: a manual of assessment techniques*. Middlesex University Press: London
- Pettit, S., and Potts, J. (1997). *Shoreline planning management: Adaptations and adjustments to coastal geo-hazards*. Department of Maritime Studies and International Transport; Occasional Papers No. 41. Cardiff: University of Wales,

Petts, J. (1999). Public participation and Environmental Impact Assessment. In J. Petts (Ed), *Handbook of Environmental Impact Management*. (pp 145-173.). Oxford: Blackwell Science.

Petts, J. (2006). Managing public engagement to optimize learning: Reflections from urban river restoration. *Human Ecology Review*, 13(2), 172.

Petts, J., and Brooks, C. (2006). Expert conceptualisations of the role of lay knowledge in environmental decision making: challenges for deliberative democracy. *Environment and planning A*, 38(6), 1045.

Phillips, H. (2008). In the know of adaptation? *Town and Country Planning* 77 (10), 411-415.

Pinkleton, E, Erica W., and, Austin, B. (2001). Individual motivations, perceived media importance, and political disaffection. *Political Communication*, 18(3), 321-334.

Piper, H., and Simons, H. (2005). Ethical responsibility in social research. In B. Somekh and C. Lewin (Eds.), *Research methods in the social sciences* (pp.56-63). London: Sage.

Pitt, M. (2008). *Learning lessons from the 2007 floods*. Retrieved May 15, 2015 from the Cabinet Office website:
http://webarchive.nationalarchives.gov.uk/20100807034701/http://archive.cabinetoffice.gov.uk/pittreview/_/media/assets/www.cabinetoffice.gov.uk/flooding_review/pitt_review_full%20pdf.pdf

Pongsoi, P., and Wongwises, S. (2013). A review on nuclear power plant scenario in Thailand. *Renewable and Sustainable Energy Reviews*, 24, 586-592.

Pontee, N. I., and Parsons, A. P. (2012). Adaptation as part of sustainable shoreline management in England and Wales. *Proceedings of the ICE-Maritime Engineering*, 165(3), 113-129

Poortinga, W. and Pidgeon, N. F. (2003). *Public perceptions of risk, science and governance*. Norwich: UEA/ MORI.

Poortinga, W., Steg, L. and Vlek, C. (2002). Environmental risk concern and preferences for energy saving measures. *Environment and Behaviour*, 34(4), 455-478.

Portman, M., Esteves, L., Quynh, L., and Mahsud, A. (2012). *Progress in ICZM: A handbook for scholars and practitioners*. Jerusalem: Hebrew University.

Pottier, N., Penning-Rowsell, E., Tunstall, S., and Hubert, G. (2005). Land use and flood protection: contrasting approaches and outcomes in France and in England and Wales. *Applied Geography*, 25(1), 1-27.

Potts, J. (1999). The non-statutory approach to coastal defence in England and Wales: Coastal Defence Groups and Shoreline Management Plans. *Marine Policy*, 23(4-5), 479-

500.

Potts, J., Carter, D., and Taussik, J. (2005). Shoreline management: The way ahead. In H. Smith and J. Potts (Eds.), *Managing Britain's Marine and Coastal Environment* (pp. 239-271). London: Routledge and the National Maritime Museum, London.

Prager, K., and Freese, J. (2009). Stakeholder involvement in agri-environmental policy making—learning from a local-and a state-level approach in Germany. *The Journal of Environmental Management*, 90(2), 1154-1167.

Purnell, R. G. (1996). Shoreline management plans: national objectives and implementation. In C. A. Fleming (Ed.), *Coastal management: putting policy into practice* (pp. 4-16). London: Thomas Telford.

Pye, K., and Blott, S. J. (2006). Coastal processes and morphological change in the Dunwich-Sizewell area, Suffolk, UK. *Journal of Coastal Research*, 22(3), 453-473.

Quantz, D., and Thurston, W. E. (2006). Representation strategies in public participation in health policy: The Aboriginal Community Health Council. *Health Policy*, 75(3), 243-250.

Ragin, C. C. (1994). *Constructing Social Research: The unity and diversity of method*. Thousand Oaks, CA: Pine Forge Press.

Rahim, M. A. (2015). *Managing conflict in organizations* (4th ed). New Brunswick, CT: Transaction Publishers.

Rahmstorf, S. (2012). Sea-level rise: towards understanding local vulnerability. *Environmental Research Letters*, 7(2), 1-3.

Rawellffe, P. (1998). *Environmental pressure groups in transition*. Manchester: University Press.

Ray, J. J. (1990). Acquiescence and problems with forced-choice scales. *Journal of Social Psychology*, 130, (3), 397-399.

Raymond, C., Fazey, I., Reed, M., Stringer, L., Robinson, G., and Evely, A. (2010). Integrating local and scientific knowledge for environmental management. *The Journal of Environmental Management*, 91(8), 1766-1777.

Reed, M. S. (2008). Stakeholder participation for environmental management: a literature review. *Biological Conservation*, 141(10), 2417-2431.

Reed, M., Fraser, E., and Dougill, A. (2006). An adaptive learning process for developing and applying sustainability indicators with local communities. *Ecological Economics*, 59(4), 406-418.

Renn, O. (2004). Prediction of risks. *Toxicology Letters*, 149(1), 405-413.

- Renn, O. (2006). Participatory processes for designing environmental policies. *Land Use Policy*, 23(1), 34-43.
- Renn, O. (2008). *Risk Governance: Coping with uncertainty in a complex world*. London: Earthscan Publications Limited.
- Renn, O., Klinke, A., and van Asselt, M. (2011). Coping with complexity, uncertainty and ambiguity in risk governance: A synthesis. *Ambio*, 40(2), 231-246.
- Renn, O., Webler, T., and Weidemann. (1995). *Fairness and competence in citizen participation - Evaluating models for environmental discourse*. Netherlands: Kluwer Academic.
- Renn, O., Webler, T., Rakel, H., Dyne, P., and Johnson, B. (1993). Public participation in decision making: A three-step procedure. *Policy Sciences*, 26(3), 189-214.
- Rich R., Edelstein M, Hallman W., and Wandersman, A. (1995). Citizen participation and empowerment: the case of local environmental hazards *American Journal of Community Psychology* 23(5), 657-676.
- Richardson, T., Dusik, J., and Jindrova, P. (1998). Parallel public participation: an answer to inertia in decision-making. *Environmental Impact Assessment Review*, 18(3), 201-216.
- Ricketts, P. J. (1986). National policy and management responses to the hazard of coastal erosion in Britain and the United States. *Applied Geography*, 6(3), 197-221.
- Ritchie, J., Lewis, J., Nicholls, C. M., and Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. London: Sage.
- Roberts, J. (2004). *Environmental policy*. London: Routledge.
- Roberts, R. (1995). Public involvement: From consultation to participation. In F. Vanclay and D. Bronstein (Eds.), *Environmental and social impact assessment* (pp. 221-246). New York: John Wiley and Sons.
- Robinson, M., and Bond, A. (2003). Investigation of different stakeholder views of local resident involvement during environmental impact assessments in the UK. *Journal of Environmental Assessment Policy and Management*, 5(01), 45-82.
- Robson, C. (1993). *Real world research. A Resource for social scientists and practitioner-researchers* (2nd ed). Massachusetts: Blackwell.
- Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers* (Vol. 2). Oxford: Blackwell.
- Rochford, E., and Blocker, T. (1991). Coping with 'natural' hazards as stressors: The predictors of activism in a flood disaster. *Environment and Behaviour*, 23(2), 171-194.

- Roe, M. (2000). Landscape planning for sustainability: community participation in estuary management plans. *Landscape Research*, 25(2), 157-181.
- Rosener, J. B. (1981). User-oriented evaluation: A new way to view citizen participation. *The Journal of Applied Behavioural Science*, 17(4), 583-596.
- Rouquette, J. (2013). *Ecosystem services and Flood and Coastal Erosion Risk Management*. Retrieved April 25, 2012, from the Yorkshire Dales Rivers Trust website: <http://www.yorkshiredalesriverstrust.com/wp-content/uploads/2014/12/Ecosystem-Services-and-FCERM-PDF-3.01-MB.pdf>
- Rowe, G., and Frewer, L. (2004). Evaluating public-participation exercises: A research agenda. *Science, Technology and Human Values*, 29(4), 512-556.
- Sander, A. (2011). *From 'Decide, Announce, Defend' to 'Announce, Discuss, Decide'. Suggestions on how to Improve Acceptance and Legitimacy for Germany's 380kV Grid Extension*. Retrieved November 25, 2014, from the International Institute for Industrial Environmental Economics (IIIEE), Lund University website: <http://lup.lub.lu.se/luur/download?func=downloadFile&recordId=2172946&fileId=2172960>
- Sanoff, H. (2000). *Participation methods* (Vol. 2). New York: J. Wiley & Sons.
- Sapsford, R.J. (1999). *Survey research*. London: Sage Publishing.
- Saunders, M., Lewis, P., and Thornhill, A. (2000). *Research methods for business students* (2nd ed). England: Pearson Education Limited.
- Save Our Selsey (n.d). *About us*. Retrieved 17 February, 2012, from Save Our Selsey website: http://www.saveourselsey.org/about_sos.htm
- Save Pagham Beach (2014a). *The problem*. Retrieved 22 May, 2013, from Save Pagham Beach website: <http://www.savepaghambeach.com/>
- Save Pagham Beach (2014b). *What we do*. Retrieved 22 May, 2013, from Save Pagham Beach website: <http://www.savepaghambeach.com/#!/about/c22qt>
- Sayers, P., Galloway, G., Penning-Rowsell, E., Shen, F., Wen, K., Chen, Y., and Le Quesne, T. (2012). *Flood risk management: A strategic approach*. London: UNESCO.
- Scheyvens, R. (2002). *Tourism for development: Empowering communities*. London: Prentice Hall.
- Schmidt, L., Gomes, C., Guerreiro, S., and O'Riordan, T. (2014). Are we all on the same boat? The challenge of adaptation facing Portuguese coastal communities: Risk perception, trust-building and genuine participation. *Land Use Policy*, 38, 355-365.
- Schneider, E., Oppermann, B., and Renn, O. (1998). Implementing structured participation for regional level waste management planning. *Risk*, 9(4), 379-395.

Scott, W. (2009). *Guidance for Community Adaptation Planning and Engagement (CAPE) on the coast*. London: Scott Wilson Ltd.

Scratby and California Environment Group (2015a). *About us*. Retrieved 12 May, 2015, from Scratby and California Environment Group website: http://www.sc-environment-group.org/?page_id=674

Scratby and California Environment Group (2015b). *Objectives and mission statement*. Retrieved 12 May, 2015, from Scratby and California Environment Group website: <http://www.sc-environment-group.org/>

Scratby and California Environment Group (2015c). *Latest news*. Retrieved 12 May, 2015, from Scratby and California Environment Group website: http://www.sc-environment-group.org/?page_id=690

Seawright, J., and Gerring, J. (2008). Case selection techniques in case study research a menu of qualitative and quantitative options. *Political Research Quarterly*, 61(2), 294-308.

Severn Estuary Coastal Group (2009). *The Severn Estuary Coastal Habitat Management Plan*. Retrieved July 15, 2015 from the Severn Estuary Coastal Group website: http://www.severnestuary.net/secg/docs/executive_summary.pdf

Shennan, I. (1993). Sea-level changes and the threat of coastal inundation. *The Geographical Journal*, 159(2), 148-156.

Shepard, P. (2002). Advancing environmental justice through community-based participatory research. *Environmental Health Perspectives*, 110(Supplement 2), 139-140.

Shrader-Frechette, K. (2002). *Environmental justice: Creating equity, reclaiming Democracy*. Oxford: University Press.

Sidaway, R. (2013). *Resolving environmental disputes: from conflict to consensus*. London: Routledge.

Simm, J., and Samuels, M. (2006). Telling good stories: engaging in dialogue with communities about flood and coastal erosion risk management in a post-modern society. In *Defra flood and coastal management conference, 4-6 July 2006*. York, UK: HR Wallingford.

Sinclair, J., Sims, L., and Spaling, H. (2009). Community-based approaches to strategic environmental assessment: Lessons from Costa Rica. *Environmental Impact Assessment Review*, 29(3), 147-156.

Sinclair, J., and Diduck, A. (2001). Public involvement in EA in Canada: a transformative learning perspective. *Environmental Impact Assessment Review*, 21(2), 113-136.

Sinclair, J., and Diduck, A. (1995). Public education: An undervalued component of the environmental assessment public involvement process. *Environmental Impact Assessment Review*, 15(3), 219-240.

Sinclair, J., and Diduck, A. (2009). Public participation in Canadian environmental assessment: enduring challenges and future directions. In K. Hanna (Ed.) *Environmental Impact Assessment: practice and participation* (2nd ed. pp. 53-74). Ontario: Oxford University Press.

Slovic, P. (1986). Informing and educating the public about risk. *Risk Analysis*, 6(4), 403-415.

Smith, H., Ballinger, R., Stojanovic, T., Reis, J., Potts, J. S., and Carter, D. (2009). The management, planning and governance of the UK marine and coastal environment. *Ocean Yearbook*, 23(1), 251-277.

Smith, H., and Potts, J. (Eds.). (2005). *Managing Britain's marine and coastal environment – towards a sustainable future*. London: Routledge and the National Maritime Museum.

Smith, H. (Ed.). (2004). *The Oceans: key issues in marine affairs*. London: Kluwer Academic Publishers.

Smith, K. (2004). *Environmental hazards: Assessing risk and reducing disasters* (4th ed). London: Routledge.

Smith, L. (1997). The converging dynamics of interest representative in resources management. *Environmental Management* 21(2), 139-146.

Smith, P., and McDonough, M. (2001). Beyond public participation: Fairness in natural resource decision making. *Society and Natural Resources*, 14(3), 239-249.

Smith, T. (1990). Trends in voluntary group membership: Comments on Baumgartner and Walker. *American Journal of Political Science*, 34(3), 646-661.

Sorensen, J., and McCreary, S. (1990). *Institutional arrangements for managing coastal resources and environments*. Washington D.C: Int. Affairs Office.

Southern Coastal Group (2009). *The SMP2 Quality Review Group [2009-2010] Terms of reference*. Retrieved June 01, 2015, from the Southern Coastal Group website:http://southerncoastalgroup.org.uk/SCGMeeting_24.04.09/Paper%20D%20%28ii%29.pdf

Sparrowe, R., Liden, R., Wayne, S., and Kraimer, M. (2001). Social networks and the performance of individuals and groups. *Academy of management journal*, 44(2), 316-325.

Spencer, L., Ritchie, J., Lewis, J., and Dillon, L. (2003). *Quality in qualitative evaluation: a framework for assessing research evidence*. London: Cabinet Office.

Spiller, G. (2004). Improving community and citizen engagement in flood risk management decision making, delivery and flood response. *R&D technical report; SC040033/SR3*.

Stake, R. (1995). *The art of case study research*. London: Sage.

Stake, R. (2005). *Qualitative case studies*. In N. Denzin, and Y. Lincoln (Eds.). *Handbook of qualitative research* (pp. 443-466). London: Sage Publications.

Standing Conference on Problems Associated with the Coastline (2014). *Implementing coastal risk management*. Retrieved October 12, 2014 from the Standing Conference on Problems Associated with the Coastline website: <http://webcache.googleusercontent.com/search?q=cache:5WH8zP9yOLYJ:www.scopac.org.uk/pdfs/Implementing%2520Coastal%2520Risk%2520Management.pdf+&cd=18&hl=en&ct=clnk&gl=uk>

Standing Conference on Problems Associated with the Coastline (2015). *Coastal Groups of England*. Retrieved May 15, 2015 from the Standing Conference on Problems Associated with the Coastline website: <http://www.scopac.org.uk/coastal-groups.html>

Steinke, I. (2004). Quality criteria in qualitative research. In F., Uwe, K., Ernst and S., Ines (Eds.), *A companion to qualitative research* (pp. 184–190). London: Sage.

Stewart, J., and Sinclair, A. (2007). Meaningful public participation in environmental assessment: perspectives from Canadian participants, proponents, and government. *Journal of Environmental Assessment Policy and Management*, 9(02), 161-183.

Stojanovic, T., and Ballinger, R. (2009). Integrated coastal management: a comparative analysis of four UK initiatives. *Applied Geography*, 29(1), 49-62.

Stojanovic, T., and Barker, N. (2008). Improving governance through local coastal partnerships in the UK. *The Geographical Journal*, 174(4), 344-360.

Stojanovic, T., Ballinger, R., and Lalwani, C. (2004). Successful integrated coastal management: measuring it with research and contributing to wise practice. *Ocean and Coastal Management*, 47(5), 273-298.

Strang, V. (2004). *The meaning of water*. Oxford: Berg.

Stratton, J. A (1969), *Our Nation and the sea. A plan for National Action. Report of the Commission on Marine science, engineering and resources*. Washington D.C: Government Printing Office.

Strobl, J., and Bruce, N. (2000). Achieving wider participation in strategic health planning: experience from the consultation phase of Liverpool's 'City Health Plan'. *Health Promotion International*, 15(3), 215-225.

Stroud, J., Bush, M., Ladd, M., Nowicki, R., Shantz, A., and Sweatman, J. (2015). Is a community still a community? Reviewing definitions of key terms in community ecology. *Ecology and Evolution*, 5(21), 4757-4765.

Sudman, S. (1976). *Applied Sampling*. New York: Academic Press.

Suffolk Coast against Retreat (2015). *Position statement*. Retrieved 18 April, 2015 from Suffolk Coast against Retreat website:
<http://www.suffolkcoastagainstretreat.co.uk/>

Suffolk Coast Forum (2015). *Membership*. Retrieved 8 February, 2015, from Suffolk Coast Forum website: <http://www.greensuffolk.org/about/suffolkcoastforum/>

Sutton, R., Douglas, K., and Murphy, A. (2012). *Engaging coastal communities in climate mitigation and adaptation measures: A review of relevant psychological science*. Retrieved 18 June, 2015 from the International River Foundation Website: http://www.riverfoundation.org.au/admin/multipart_forms/mpf__resource_115_1___Psychological%20barriers.pdf

Sydee, J., and Beder, S. (2006). The right way to go? Earth sanctuaries and market-based conservation. *Capitalism Nature Socialism*, 17(1), 83-98.

Syme, G., and Nancarrow, B. (2001). Social justice and environmental management: An introduction. *Social Justice Research*, 14(4), 343-347.

Tapsell, S., Tunstall, S., and Wilson, T. (2003). *Banbury and Kidlington four years after the flood: an examination of the long-term health effects of flooding*. Report to the Environment Agency, Thames Region. Enfield: Flood Hazard Research Centre, Middlesex University.

Tapsell, S., and Tunstall, S. (2001). *The health and social effects of the June 2000 flooding in the North East Region: Report to the Environment Agency*. Enfield: Flood Hazard Research Centre.

Tapsell, S., Tunstall, S., Penning-Rowel, E., and Handmer, J. (1999). *The health effects of the 1998 Easter flooding in Banbury and Kidlington: Report to the Environment Agency*. Enfield: Flood Hazard Research Centre.

Taussik, J. (1998). The contribution of town and country planning to the management of coastal resources: England / Wales and Sweden. *Scandinavian Housing and Planning Research*, 15(3), 175-182.

Taussik, J. (2000a). The role of town and country planning in implementing shoreline management strategies. *Proceedings of the 35th MAFF Conference of River and Coastal Engineers*. London: MAFF.

Taussik, J. (2000b). Implementing shoreline management strategies: the need for integration with spatial planning systems. *Periodicum Biologorum*, 102, 391-394.

- Taylor, M. (2007). Community participation in the real world: opportunities and pitfalls in new governance spaces. *Urban Studies*, 44(2), 297-317.
- Taylor, M., Kent, M., and White, W. (2001). How activist organizations are using the Internet to build relationships. *Public Relations Review*, 27(3), 263-284.
- Tebaldi, C., Strauss, B., and Zervas, C. (2012). Modelling sea level rise impacts on storm surges along US coasts. *Environmental Research Letters*, 7(1), 014032.
- Teddle, C., and Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioural sciences. In A. Tashakkori and C. Teddle (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 3-50). Thousand Oaks, CA: Sage.
- Thaler, T., and Levin-Keitel, M. (2015). Multi-level stakeholder engagement in flood risk management: A question of roles and power: Lessons from England. *Environmental Science and Policy*, 55(2), 292–301.
- The Cabinet Office (2009). *Marine and Coastal Access Act 2009*. Retrieved December 10, 2014, from the UK legislation website: http://www.legislation.gov.uk/ukpga/2010/29/pdfs/ukpga_20100029_en.pdf
- The National Archives (2011). *Coast Protection Act 1949*. Retrieved May 18, 2015, from the UK legislation website: <http://www.legislation.gov.uk/ukpga/Geo6/12-13-14/74/contents>
- The UK Government (2010). *Flood and Water Management Act*. Retrieved April 10, 2015, from the UK legislation website: http://www.legislation.gov.uk/ukpga/2010/29/pdfs/ukpga_20100029_en.pdf
- The World Bank Data (2014). *Countries and economies*. Retrieved November 15, 2014, from the World Bank Group website: <http://data.worldbank.org/country>
- Theodori, G. L. (2005). Community and community development in resource-based areas: Operational definitions rooted in an interactional perspective. *Society and Natural Resources*, 18(7), 661-669.
- Theophilou, V., Bond, A., and Cashmore, M. (2010). Application of the SEA Directive to EU structural funds: Perspectives on effectiveness. *Environmental Impact Assessment Review*, 30(2), 136-144.
- Thomas, K. (2014). Managed realignment in the UK: The role of the Environment Agency. In *Managed realignment: A viable long-term coastal management strategy?* (pp. 83-94). Netherlands, Dordrecht: Springer.
- Thompson B, Kinne S. Social change theory: applications to community health. In: Bracht N (Ed.), *Health promotion at the community level* (1st ed., pp. 45-65). Newbury Park (CA): Sage.
- Tickner, L. (2011), Case study: The Cockerthorpe flood recovery strategy. In

Technical report on disaster reduction. University of Salford: Centre for Disaster Resilience.

Tiefenbacher, J., and Cunningham, C. (2008). Evaluating the effectiveness of public participation efforts by environmental agencies: repermitting a smelter in El Paso, Texas, USA. *Environment and Planning C: Government and Policy*, 26(4), 841-856.

Tilt, C. A. (1994). The influence of external pressure groups on corporate social disclosure: some empirical evidence. *Accounting, Auditing and Accountability Journal*, 7(4), 47-72.

Tindall, D., Davies, S., and Mauboulès, C. (2003). Activism and conservation behaviour in an environmental movement: The contradictory effects of gender. *Society and Natural Resources*, 16(10), 909-932.

Tippett, J., Searle, B., Pahl-Wostl, C., and Rees, Y. (2005). Social learning in public participation in river basin management—early findings from HarmoniCOP European case studies. *Environmental Science and Policy*, 8(3), 287-299.

Tompkins, E., Adger, W., Boyd, E., Nicholson-Cole, S., Weatherhead, K., and Arnell, N. (2010). Observed adaptation to climate change: UK evidence of transition to a well-adapting society. *Global Environmental Change*, 20(4), 627-635.

Tompkins, E., Few, R., and Brown, K. (2008). Scenario-based stakeholder engagement: incorporating stakeholders' preferences into coastal planning for climate change. *Journal of Environmental Management*, 88(4), 1580-1592.

Tosun, C. (2000). Limits to community participation in the tourism development process in developing countries. *Tourism Management*, 21(6), 613-633.

Tosun, C. (2006). Expected nature of community participation in tourism development. *Tourism Management*, 27(3), 493-504.

Townend, I. (1992). Shoreline management: a question of definition. In M.G. Barrett (Ed.), *Coastal zone planning and management* (pp. 195-210). London: Thomas Telford.

Treby, E., and Clark, M. (2004). Refining a practical approach to participatory decision making: an example from coastal zone management. *Coastal Management*, 32(4), 353-372.

Tress, B., Tress, G., and Fry, G. (2005). *Defining concepts and the process of knowledge production in integrative research.* Heidelberg Germany: Springer.

Tritter, J., and McCallum, A. (2006). The snakes and ladders of user involvement: moving beyond Arnstein. *Health Policy*, 76(2), 156-168.

Tsakiris, G., Nalbantis, I., and Pistrika, A. (2009). Critical technical issues on the EU flood directive. *European Water*, 25(26), 39-51.

Tsouvalis, J., and Waterton, C. (2012). Building 'participation' upon critique: The Lowes Water Care Project, Cumbria, UK. *Environmental Modelling and Software*, 36, 111-121.

Tunstall, S., Johnson, C., and Penning-Rowsell, E. (2004.). Flood hazard management in England and Wales: from land drainage to flood risk management. *In Proceedings of the World Congress on Natural Disaster Mitigation* (pp. 19-21) New Delhi, India.

Tunstall, S., Tapsell, S., and Fernandez-Bilbao, A. (2007). *Vulnerability and flooding: a re-analysis of FHRC data: Country report for England and Wales*. Report to the FLOODsite Project. UK: HR Wellington.

Turner, R. (2000). Integrating natural and socio-economic science in coastal management. *Journal of Marine Systems*, 25(3), 447-460.

Turner, R., and Luisetti, T. (2014). Toward adaptive management in coastal zones. In G., Bruce, P., Mick, K., Robert, T., Ailbhe (Eds.). *Climate Change and the Coast: Building Resilient Communities* (pp 417-596). Florida, USA: CRC Press.

Turner, R., Burgess, D., Hadley, D., Coombes, E., and Jackson, N. (2007). A cost-benefit appraisal of coastal managed realignment policy. *Global Environmental Change*, 17(3), 397-407.

Turner, R., Lorenzoni, I., Beaumont, N., Bateman, I, Langford, I, and McDonald, A. (1998). Coastal management for sustainable development: analysing environmental and socio-economic changes on the UK coast. *Geographical Journal*, 164(3), 269-281.

UNCED (1992). Rio Declaration on Environment and Development, *The United Nations Conference on Environment and Development*, Rio de Janeiro 3-14 June 1992.

UNEP/MAP-Plan Bleu. (2010). *Mediterranean marine ecosystems: the economic value of sustainable benefits*. Valbonne: UNEP/MAP-Plan Bleu.

United States Government. (1972). *Coastal Zone Management Act*. Retrieved April 15, 2015, from the Office for Coastal Management website: <http://coast.noaa.gov/czm/act/>

Valentine, G. (2002) People like us: negotiating sameness and difference in the research process. In P. Moss (Ed.), *Feminist Geography in Practice: Research and Methods*. (pp. 116-126). Oxford: Blackwell.

Vallaster, C., and Koll, O. (2002). Participatory group observation-a tool to analyse strategic decision making. *Qualitative Market Research: An International Journal*, 5(1), 40-57.

Vallega, A. (1999) *Fundamentals of integrated coastal management*. Dordrecht: Kluwer Academic Publishers.

Van Ast, J., and Boot, S. (2003). Participation in European water policy. *Physics and Chemistry of the Earth, Parts A/B/C*, 28(12), 555-562.

Vanderback R (2005) Masculinities and fieldwork: widening the discussion *Gender, Place and Culture* 12(4): 387-402.

Van Liere, K. D., and Dunlap, R. E. (1980). The social bases of environmental concern: A review of hypotheses, explanations and empirical evidence. *Public Opinion Quarterly*, 44(2), 181-197.

Väntänen, A., and Marttunen, M. (2005). Public involvement in multi-objective water level regulation development projects-evaluating the applicability of public involvement methods. *Environmental Impact Assessment Review*, 25(3), 281-304

Vári, A. (2004). Hungarian experiences with public participation in water management. *Water International*, 29(3), 329-337.

Vari, A., and Kisgyorgy, S. (1998). Public participation in developing water quality legislation and regulation in Hungary. *Water Policy*, 1(2), 223-238.

Vasseur, L., Lafrance, L., Anseau, C., Renaud, D., Morin, D., and Audet, T. (1997). Advisory committee: a powerful tool for helping decision makers in environmental issues. *Environmental Management*, 21(3), 359-365.

Vega-Leinert de la, A., and Nicholls, R. (2008). Potential implications of sea-level rise for Great Britain. *Journal of Coastal Research* 24(2), 342-357.

Vernberg F., and Vernberg W. (2001). *The coastal zone - past, present and future*. South Carolina: University of South Carolina Press.

Walker, G., and Burningham, K. (2011). Flood risk, vulnerability and environmental justice: Evidence and evaluation of inequality in a UK context. *Critical Social Policy*, 31(2), 216-240.

Walton, J. K. (1997). The seaside resorts of England and Wales, 1900-1950: growth, diffusion and the emergence of new forms of coastal tourism. In: G. Shaw and A. Williams (Eds.). *The rise and fall of the British coastal resorts: cultural and economic perspectives* (pp. 21-48). London: Pinter.

Wang, Y. and Wall, G. (2005). Sharing the benefits of tourism: a case study in Hainan, China. *Environments Journal*, 33(1), 41-59.

Webler, T., and Tuler, S. (2006). Four perspectives on public participation process in environmental assessment and decision making: Combined results from 10 case studies. *Policy Studies Journal*, 34(4), 699-722.

Webler, T., Tuler, S., and Krueger, R. (2001). What is a good public participation process? Five perspectives from the public. *Environmental Management*, 27(3), 435-450.

- Weiss, C.H. (1998). *Evaluation: Methods of studying programmes and policies*. London: Prentice-Hall.
- Weston, C., Gandell, T., Beauchamp, J., McAlpine, L., Wiseman, C., and Beauchamp, C. (2001). Analysing interview data: The development and evolution of a coding system. *Qualitative Sociology*, 24(3), 381-400.
- Wharton, G., and Gilvear, D. (2007). River restoration in the UK: Meeting the dual needs of the European Union Water Framework Directive and flood defence? *International Journal of River Basin Management*, 5(2), 143-154.
- Wheater, H. S. (2006). Flood hazard and management: a UK perspective. *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 364(1845), 2135-2145.
- Wheaton, B. (2007). Identity, politics, and the beach: Environmental activism in surfers against sewage. *Leisure Studies*, 26(3), 279-302.
- Wheeler, D., Fabig, H., and Boele, R. (2002). Paradoxes and dilemmas for stakeholder responsive firms in the extractive sector: Lessons from the case of Shell and the Ogoni. *Journal of Business Ethics*, 39(3), 297-318.
- White, I., Kingston, R., and Barker, A. (2010). Participatory geographic information systems and public engagement within flood risk management. *Journal of Food Risk Management*, 3(4), 337-346.
- White, S. (2001). Public participation and organizational change in Wisconsin land use management. *Land Use Policy*, 18(4), 341-350.
- Whiteley, P., and Winyard, S. (1987). *Pressure for the Poor*. London: Methuen.
- Wilby, R., and Keenan, R. (2012). Adapting to flood risk under climate change. *Progress in Physical Geography*, 36(3), 348-378.
- Wilby, R., Orr, H., Hedger, M., Forrow, D., and Blackmore, M. (2006). Risks posed by climate change to the delivery of Water Framework Directive objectives in the UK. *Environment International*, 32(8), 1043-1055.
- Wilcox, D. (1994). *The guide to effective participation*. Brighton, UK: Partnership.
- Wilson, T. D. (2004). Talking about the problem: A content analysis of pre-search interviews. *Information Research*, 10(1), 10-1.
- Winn, P, Young, R., and Edwards, A. (2003). Planning for the rising tides: the Humber estuary Shoreline Management Plan. *Science of the Total Environment*, 13(30), 314-316.
- Wisner, B., Blaikie, P., Cannon, T. and Davis, I. (2004) *At risk: natural hazards, people's vulnerability and disasters* (2nd ed.). Abingdon: Routledge.

- Wittmer, H., Rauschmayer, F., and Klauer, B. (2006). How to select instruments for the resolution of environmental conflicts? *Land Use Policy*, 23(1), 1-9.
- Wolcott, H. (1995). *Transforming qualitative data*. Thousand Oaks: Sage Publications.
- Wolsink, M. (2000). Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support. *Renewable Energy*, 21(1), 49-64.
- World Bank (1996). *The World Bank participation sourcebook*. Washington DC: World Bank.
- World Commission on the Environment and Development (1987). *Our common future (The Brundtland report)*. Oxford: Oxford University Press.
- Worsley, P. (1987). *New introductory sociology* (3rd ed.). London: Penguin.
- Wuthnow, R. (1994). *Sharing the journey: Support groups and America's new quest for community*. New York: Simon and Schuster.
- Wynne, B. (1991). Knowledges in context. *Science, Technology and Human Values*, 16(1), 111-121.
- Yin, R. (2003a). *Applications of case study research*. (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. (2003b). *Case study research: design and methods*. (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R., and Heald, K.A. (1975). Using the case survey method to analyse policy studies. *Administrative Science Quarterly*, 20(3), 371-381.
- Zavella, P. (1996). Feminist insider dilemmas: Constructing ethnic identity with Chicana informants. In D. L. Wolf (Ed.), *Feminist dilemmas in fieldwork* (pp. 138-159). Boulder, CO: Westview Press.
- Zhang, H., and Lei, S. (2012). A structural model of residents' intention to participate in ecotourism: The case of a wetland community. *Tourism Management*, 33(4), 916-925.
- Zsomboky, M., Fernández-Bilbao, A., Smith, D., Knight, J., and Allan, J. (2011). *Impacts of climate change on disadvantaged UK coastal communities*. York, UK: Joseph Rowntree Foundation.

Appendix One: Email Inviting Respondents to Take Part in the Semi-Structured Interview

Taye Famuditi <[redacted]>

Request for Participation in an Interview Regarding the Role of Coastal Action Groups within Shoreline Management in England
16 messages

Taye Famuditi [redacted]23 July 2014 at 17:29

To: [redacted]

Dear [redacted]

My name is Taye Famuditi. I'm currently undertaking a PhD at the University of Portsmouth, evaluating the role of Coastal Action Groups (CAGs) within shoreline management activities in England. The initial phase of data collection is comprised of a number of semi-structured interviews with coordinators of CAG, environmental consultants and authorities currently involved in the shoreline management in England and was wondering if you would be willing to participate.

In this study Coastal Action Groups are groups of voluntary bodies and stakeholders which seek as one of its aims to influence decision making within shoreline management authorities to secure appropriate and sustainable coastal governance and social justice in the interest of their community. CAGs represent a reaction by local communities to local shoreline management policies that the communities fail to understand or perceive as detrimental especially decisions involving withdrawal or relaxation of defences.

I am asking you to share your knowledge, experiences and views with me by means of an interview since you either perform an important role within a CAG or are involved in preparation and/or implementation of shoreline management initiatives. The interview should take no longer than an hour to complete, it is expected that many will require less than one hour of your time.

It is important for me to stress that your participation in this study is voluntary and you can choose not to answer any particular question and can withdraw from the study at any time. To help you decide if you wish to participate in the study I have also attached copies of both the list of questions that I intend to ask in the interview, and the interview consent form which I will ask you to complete just before the interview begins.

Please can you let me know whether or not you are or are not interested in participating in the study. If you have any questions regarding the study or wish to discuss the research further before deciding whether to participate, please do not hesitate to contact me (Tel: [redacted]). If you decide to participate in this study, I will contact you to schedule a time and location to conduct the interview that is the most convenient to you.

If there is someone within your group/organisation that you feel would be more appropriate for me to speak to, I would be very grateful if you would forward them this email and ask them to contact me.

I look forward to speaking with you soon.

Yours sincerely,

Taye Famuditi, PhD Researcher

University of Portsmouth
Department of Geography,
Buckingham Building,

Appendix Two: Research Brief

“A critical evaluation of the role of Coastal Action Groups in developing local community participation in shoreline management in England.”



Research Overview

Aim of the study

The study aims to investigate the processes of active participation by local communities in shoreline management and to identify and critically evaluate the role of Coastal Action Groups (CAGs) in developing participation. This involves the wider context of factors influencing local community participation in shoreline management and more specifically an investigation of the nature and influence of CAG involvement in shoreline management decision making processes.

Objectives of study

The specific research objectives set to achieve these aims are to:

1. Evaluate the theory and practice of public participation in shoreline management in England through a comprehensive literature review;
2. Determine how CAGs become established and grow, how they operate, how they attain status and achievements and also what their potential shortcomings are;
3. Appraise the critical factors that affect CAG operation, performance and their influence on the shoreline management decision making process through community case studies;
4. Investigate the extent to which CAGs interact with and represent local communities;
5. Generate recommendations on how local community participation in shoreline management in England can be taken forward.

Expected outcomes

This research will provide a comprehensive and critical evaluation of the key opportunities, gaps, barriers and factors affecting community engagement in shoreline management in England. It will also evaluate the roles of CAGs in these processes and identify their strengths and weaknesses.

This will assist in putting forward robust recommendations on how to further develop and improve community participation in shoreline management in England. It will also identify and critically evaluate the resources available or additional efforts required if the roles currently fulfilled by CAGs are to become more formally recognised by shoreline management authorities.

What you will be asked to do

As a participant of the interview, I would like your permission to record the interview (optional); this is to provide me with the opportunity to go over our discussion at a later stage and make sure that I have correctly noted and interpreted your comments and our discussion. I will ask you to sign a consent form.

Study design

The study design of this research project include questionnaire which focuses only on CAG members. Literature reviews, and a case study will also be a part of this study. Other study elements involve structured interviews with: coordinators of each of the CAGs, shoreline management authorities and external consultants.

Possible risks and discomforts

This study poses minimal risk to participants. Those who are CAG group members potentially could experience discomfort if recalling a coastal experience, issue or situation that is frustrating or upsetting to you, but you should set this against the opportunity to “tell your story” from your perspective and for your views to be recounted and appraised alongside the views of professionals. The researcher will be able to anticipate and detect sensitivities and will pause and redirect questions where appropriate.

Possible benefits

No direct benefits of participation to the participants are expected. You have the opportunity to share your views, but the research will analyse those views impartially alongside the views of others. An anticipated indirect benefit of the study is a contribution to new knowledge. If this new knowledge proves useful it might be used in new ways of addressing the role of CAG within shoreline management in England.

Confidentiality and anonymity

All information gathered will be handled with confidentiality and your identity will not be attached to your comments unless you agree otherwise. I should, however, point out that due to your position of responsibility and/or influence within the CAG or within shoreline management planning it may be possible for knowledgeable third parties to guess your identity from your comments. For this reason you are offered the opportunity via the consent form (attached) to agree to being named in your transcript. Electronic data collected will be encrypted and sent to a secure server on the University of Portsmouth.

Please note that a worthwhile interview can still be conducted even if you prefer not to be recorded, not to be named and not to be quoted. In those cases notes would be taken, your name would not be listed and direct quotations would not

be taken or used. In all other respects all participants will be treated equally and will be offered the opportunity to review, edit and approve their transcripts prior to their use in the research. This procedure should assist the accuracy of transcription and help you ensure that no potentially sensitive statements are included.

Plans to provide results of the study to participants

An overview of the results will be made available to all participants following completion of research – please send me an e-mail request for a copy of the results. Digital copies of the entire thesis will be made available to study participants upon request.

Problems or concerns

In the event that you have any uncertainties with, or questions about, any aspect of your participation in this study, you may contact my research supervisor Dr Jonathan Potts, Course Leader- MSc Coastal and Marine Resource Management, Department of Geography University's Office for assistance:

Taye Famuditi, PhD Researcher

University of Portsmouth
Department of Geography,
Buckingham Building,
Lion Terrace,
Portsmouth
PO1 3HE

Tel: +44 (0) [redacted]

Fax: +44 (0) [redacted]

Email: [redacted]

<http://www.port.ac.uk/departments-of-geography/staff/taye-famuditi.h>

Appendix Three: CAG Member Questionnaire



Department of Geography

THE ROLE OF COASTAL ACTION GROUPS WITHIN SHORELINE MANAGEMENT IN ENGLAND

Section 1 - Participant information

This section of the questionnaire explores your individual membership and perceptions regarding the formation of the group you belong to.

You may wish to expand your comments on the separate sheet of paper provided throughout the questionnaire should the provided spaces become insufficient.

[Q.1] In your opinion, why was this group set up? Please explain your answer in the box provided.

[Q.2] What level of geographical scale best describes the group's interest / involvement in shoreline management? Please tick (✓) all that apply.

National [] Regional [] Local [] All of these []

[Q.3] What category best describes the way the group campaigns and operates? Please tick (✓) all that apply or specify other type.

To assist with your response please assess different types of Action Groups below. Please note that the description or typology of Coastal Action Groups (CAG) was prepared by the researcher and may not fit all groups so please clarify your answer below if necessary.

Oppositional, single issue groups: are formed to oppose particular environmental threats eg erosion / flooding affecting a single community.	(✓)
Environmental justice groups: create awareness of Environmental problems that lies ahead and encourage the engagement of the community in management.	
Radical groups: use consensus decision making, and use 'direct action' tactics by organising demonstrations which could be confrontational.	
Not applicable	
Other*	

* Please specify:

[Q.4] What drives you to be part of this group? Please tick (✓) all that apply and rank each driving factor from lowest driver to highest driver (Starting with "1" for lowest driver) and add any that are missing.

	(✓)	(Rank)
Recreational activities (water sports, fishing, sightseeing)		
Community service		
Environmental concern		
Employment		
Other*		

* Please specify:

[Q.5] Is your home affected or potentially affected by the risk of coastal hazard such as erosion, flooding and land slip? If so, please give brief details including any significant historic events. Please tick (✓) one box only.

Yes [] No []

Please explain your answer in the box provided.

Section 2 - The group and current participation

This section of the questionnaire collects information on the group's participation, if any, in relation to the shoreline management decision making process?

[Q.6] Which stage (s) of the shoreline management policy process does the group contribute to? Please tick (✓) all that apply.

	(✓)
Problem identification / information gathering	
Decision making on strategic policy	
Fine tuning of strategies i.e. types of defences	
Local consultation	
Ongoing dialogue between SMP revisions	
Other*	

* Please specify:

[Q.7] What involvement do you feel the group has in the shoreline management decision making process? Please tick (✓) all that apply. (✓)

Active decision maker	
Invited Stakeholder (participation is encouraged)	
Observer (consulted but difficult to participate)	
No information about how to participate in shoreline management	
No opinion	
Other*	

* Please specify your answer in the box provided.

[Q.8] What other groups / agencies does your group have involvement with in relation to the shoreline management review and monitoring processing? Please tick (✓) all that apply. (✓)

Coastal Partnerships	
Coastal Defence Groups	
Shoreline management authorities (Defra, EA)	
Other Action Groups	
Other*	

* Please specify:

[Q.9] What sources of information do you find useful for your work as a contributor to your group within the shoreline management? Please tick (✓) all that apply. (✓)

EU policy documentation	
DEFRA / Environment Agency	
Local authority publications	
The local community and other coastal users	
Advice from external consultants	
Academic reports / papers	
Facebook / Twitter	
Newspaper and related media	
Other*	

* Please specify:

[Q.10] In your opinion what are the barriers that prevent public participation in shoreline management? Please tick (✓) all that apply and rank each barrier from least serious to most serious (Starting with "1" for least serious) and add any that are missing. (✓) (Rank)

Gap in understanding: information given is not relevant or easily understood		
Gap in information: not enough information is provided		
Access issue: information is not freely available		
Communication issue: more dissemination of information is required		
Consultation issue: more time is required during the consultation process		
Not applicable: No information or consultation is needed		
Other*		

* Please specify:

[Q.11] To what extent is it reasonable for the Department for Environment, Food and Rural Affairs (Defra) to require the shoreline management process to identify a long term shoreline management option for each part of the coast? E.g. Hold the line, retreat, advance and do nothing? Please tick (✓) to indicate your opinion.

Very [] Reasonable [] Somewhat [] Not reasonable [] No opinion []
reasonable reasonable at all

* Please explain your answer to the above question in the box provided.

[Q.12] Which additional policy options could be considered? Please tick (✓) all that apply and rank each type of policy option from least important to most important (Starting with "1" for least important) and add any that are missing. (✓) (Rank)

Limited intervention: slow down erosion or reduce flooding but not halt it.		
Accommodate risks: provide warning system and flood resistance measures		
Sacrificial coast: provide compensation for those affected by coastal hazard		
Regeneration: apply measures to re-invigorate local community in the policy		
No opinion		
Other*		

* Please specify in the box provided:

[Q.13] Is it reasonable to implement plans that provide warning of policy changes? E.g. to warn of withdrawal or relaxation of current defences? Please tick (✓) all that apply. (✓)

Yes, it would forewarn residents already dwelling in the area	
Yes, it would forewarn people potentially seeking to move into the area	
No, it would blight businesses and properties already within the area	
Other*	

* Please explain your answer in the box provided.

[Q.14] With respect to Q13, do you think that implementation of such time dependant policies would be likely to generate the following? Please tick (✓) to indicate your opinion. (✓)

A fair distribution of impacts	
An unfair distribution of impacts	
A balanced distribution of impacts	
An unpredictable distribution of impacts	

* Please explain your answer to the above question in the box provided.

[Q.15] Please evaluate the likely effectiveness of the following as a component of public consultation? Please tick (✓) all that apply and rank each type of mechanism from least effective to most effective (Starting with "1" for least effective) and add any that are missing. (✓) (Rank)

Local community workshops (public meetings)		
Individual contact between planning authorities and local communities		
Other written communication (leaflets, posters)		
Online/ forum message board		
Invited stakeholder meetings (small groups)		
Focus groups (single issue)		
Other*		

* Please specify:

[Q.16] In your opinion, do you consider your group to be successful and likely to achieve the purpose it was set for? Please tick (✓) one box only. If 'Yes' what are the achievements?

Yes* [] No [] Don't know []

*Type of achievement:

Section 3 - Future expectations

This section of the questionnaire is designed to obtain information concerning the future management of shoreline and best approach to public participation in shoreline management decision making process.

[Q.17] Who should take responsibility for the management of coastal erosion and flood risks to communities? Please tick (✓) all that apply and rank from least responsible to most responsible (Starting with "1" for least responsible). (✓) (Rank)

Private individuals and property owners		
Local authority		
Defra/Environment Agency		

[Q.18] Do you have any other opinion to offer in response to Q.17? Please explain your answer to the above question in the box provided.

[Q.19] How could public participation in the shoreline management decision making process be improved? Please rank each level of impact (Starting with "1" for least impact). (Rank)

Information provision e.g. leaflets, newspaper articles or exhibitions, internet	
Information collection e.g. questionnaire surveys or interviewing of the public.	
Consultation (two-way): exchange of information between residents and authorities	
Local residents participation: assist in making decisions on shoreline management	
No opinion	
Other*	

* Please specify:

[Q.20] How often would you be prepared to participate as a member of the group in the shoreline management decision making process? Please tick (✓) one box only.

Very regular [] Regular [] Infrequent [] Only when []
 (meetings >1/year) (meetings 1/year) major issues occur

[Q.21] What incentives could help encourage your greater interaction with the group's work in the shoreline management process? Please tick (✓) all that apply. (✓)

Grant active decision-making power in the shoreline management process	<input checked="" type="checkbox"/>
Improved opportunities to contribute opinion to the policy assessment process	<input type="checkbox"/>
Permit access to shoreline management data, and guidance	<input type="checkbox"/>
Funding to keep up group activity	<input type="checkbox"/>
No incentive required	<input type="checkbox"/>
Other*	<input type="checkbox"/>

* Please specify in the box provided.

[Q.22] Do you have any views on changes that should be made to the existing shoreline management process? Please provide your answer in the box provided.

Section 4 - About you

This section of the questionnaire refers to background information. I am aware of the sensitivity of the questions in this section; the information will allow me to compare groups of respondents. Once again, I assure you that your response will remain anonymous. Your co-operation is appreciated.

[Q.23] Are you: Female Male

[Q.24] Which age group do you belong to? Please tick (✓) one box only.

17 – 24 25 – 34 35 – 44 45 – 54 55 – 64 65 plus

[Q.25] Which of these qualifications do you have? Please tick (✓) all that apply or, if not specified, the nearest equivalent.

O-levels / CSEs / GCSEs
 A-Levels / AS levels
 NVQs / HNDs
 First degree (e.g. BA, BSc)
 Higher degree (e.g. PGCE, MA, PhD)
 Other (e.g. City and Guilds, BTEC)
 No qualifications

[Q.26] Which employment group do you belong to? Please tick (✓) all that apply.

Professional Manager Non-manual Skilled manual
 Unskilled manual Student Unemployed Retired
 (if retired please classify according to your employment prior to retirement) *Other

* Other.....

Thank you very much for completing this questionnaire.

Please append any comments or further information on separate sheets if applicable.

Please return this completed questionnaire in the stamped self addressed envelope provided.

If you would like to find out about the results of the survey, please contact me using the details provided below.

Taye Famuditi, Postgraduate Researcher
 University of Portsmouth,
 Department of Geography,
 Buckingham Building, Lion Terrace,
 Portsmouth,
 PO1 3HE.

Tel: +44 (0) [redacted]

Email: [redacted]

Appendix Four: Semi-Structured Interview Questions

RESPONDENT DETAILS

1. Name	
2. Date	
3. Contact details	
4. Interview location (<i>not detailed</i>)	
5. Role	

A. ABOUT THE GROUP

1. What was the basis of formation of this group?
 - What is the year of establishment?
 - How many members make up the group and how are they recruited?
 - In your opinion, what constitutes a member of your CAG?
 - What is the stability and membership turnover?
 - What difficulties have you experienced in putting this group together?
2. What are your group's specific interests within shoreline management process?
3. How are decisions made within the group?
 - What means of communication do you use to reach the members?
4. What do you understand by the term 'social justice'?
 - Do you campaign proactively or only when issues arise?
 - Do you use a specific campaigning method?
 - If YES which are the most effective and why?
 - Who is the main target audience of your campaigns?

5. What steps has the group taken to promote their campaigns?
 - If any, what kind of reaction did these campaigns receive from the management authorities?
 - For a stronger campaign, do you think that your group should extend their membership to incorporate a greater range of stakeholders?
 - If so, who?

B. COMMUNITY AWARENESS OF THE GROUP

1. How well do you think the local community is aware of your group and their objectives?
 - To what extent do the community accept the group, for example, are they willing to join the group?
 - What do you consider to be the main benefits, if any, of this group to the community?
 - Are there any negative feelings from the community associated with your campaigns?
2. Do members of the community need to be encouraged to join in your campaigns?
 - How do you encourage community members to participate in the campaign?
3. What is the nature and level of the group's coordination with other agencies / other CAGs?

C. SHORELINE MANAGEMENT AND COMMUNITY PARTICIPATION

1. From a practical viewpoint, participation is an important aspect of shoreline management:
 - Have you been consulted prior to changes made by the government in managing your coastal area?
 - What role does the group play in shoreline management consultation processes?

- What shoreline management issues have you noticed during a consultation process?
 - If any, what was your recommendation on how these issues can be tackled?
2. In your opinion, do you receive sufficient information and guidance on shoreline management issues from organisations such as the EA, DEFRA, your local authority etc?
- If yes, who should provide this information?
 - What type of information would be useful to you?
3. If information on changes in policy e.g. withdrawal of defences were made available to you, would you actively encourage members of your community to accept such changes?
4. Has there been any rejection of the EA/ DEFRA shoreline management proposals in this community by the public or by the group?
- If yes, what were the reasons for rejection?
 - If no, are there any particular reasons why they were accepted?
5. Do you agree that there is heightened awareness amongst local community of shoreline management issues?
- Can you name any project or campaign that has been particularly successful in your community in raising awareness of coastal issues?
 - What made the campaign so successful?

D. FUTURE NEEDS FOR SHORELINE MANAGEMENT

1. There are options which could be considered for shoreline management? In your opinion, what additional to the four DEFRA strategic options used in SMP2 would you consider for inclusion?
- **Limited intervention?** (slow down erosion or reduce flooding but not halt it)
 - **Accommodate risks?** (Provide warning system and flood resistance and resilience measures where flood cannot be prevented)
 - **Sacrificial coast?** (long term plan to give ground with planning setback and compensation arrangements)

- **Regeneration?** (can include any of the Defra options but with measures to re-invigorate the local community)
- **Adaptive management based on monitoring?**

2. Do you think that improving public participation in shoreline management would improve decision making?
- Who should be responsible for providing the resources for this?
3. Do you agree that effective community participation is a key role in effective shoreline management?
- If yes, how and up to what extent?
 - If no, what else might be needed?
4. Do you consider Shoreline Management Plans to be the effective way of managing future risk?
- Do you think it would be more successful for shoreline management to be addressed from a more national, regional or local approach?
 - What other alterations could make SMPs more effective?
5. Is there any involvement with other CAGs/ agencies, e.g. meetings and sharing of problems that enable you to learn from their achievements and weaknesses in relation to the shoreline management review and monitoring process?
- If required, what changes would you like to see to improve CAG roles within shoreline management?
6. What do you consider to be the main issues/challenges, if any, facing your group in the future?
- How do you see your group having a successful campaign in the future?
7. Are there any key lessons that you have learnt through your experiences with your CAG?
8. Do you have any further comments you would like to add?
- Are you happy to be contacted for any further follow up information?

Thank you very much for taking part in this interview.

Appendix Five: Participant Consent Form

Consent Form

 **University of Portsmouth**
Department of Geography,
Buckingham Building,
Portsmouth |
PO1 3HE
Tel: +44 (0)23 9284 2504
Fax: +44 (0)23 9284 2512

Study Title: THE ROLE OF COASTAL ACTION GROUPS WITHIN SHORELINE MANAGEMENT IN ENGLAND.

Name of Researcher: Taye Famuditi

Please initial box

- | | | |
|----|--|--------------------------|
| 1. | I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. | <input type="checkbox"/> |
| 2. | I agree to take part in the above study. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. | <input type="checkbox"/> |
| 3. | I understand that data collected during the study may be looked at by individuals from the University of Portsmouth or from regulatory authorities. I give permission for these individuals to have access to my data. | <input type="checkbox"/> |
| 4. | I give permission for the interview to be audio-recorded (optional). I will be given the opportunity to review, my interview transcript to ensure accuracy. | <input type="checkbox"/> |
| 5. | I agree to being a named participant and quoted by name . I understand that I will be given the opportunity to review, my interview transcript to ensure accuracy (optional). | <input type="checkbox"/> |
| 6. | I give permission for direct quotes from my interview to be used in publications. I understand that I will be given the opportunity to review the quotes before publication to ensure accuracy (optional). | <input type="checkbox"/> |

Name of Person taking consent: Signature:..... Date:.....

Note

Consents 4 to 6 are optional. A worthwhile interview can still be conducted without these consents. In those cases notes would be taken, the participants name would not be listed and direct quotations would not be taken or used. (Please see the invitation letter for further details of these consents).

Appendix Six: Hopton Coastal Action Group Magazine (Source: Hopton Village News, 2014).

villagenews

December 2014 - Issue 12 Volume 4 A monthly magazine for the residents of Hopton-on-Sea FREE

Hopton sea defence update

As I am writing this update there is a large ship lying a mile out to sea called the Quinoco Pearl. It's carrying fifteen thousand tons of rock from Norway. Seven and a half thousand tons of that rock is to be unloaded onto Hopton Beach to finish off Bourne Leisure's new rock armour sea defence.

Hopefully by the time this is published providing we have decent weather, all the rocks will be placed in position, i.e. joining the groynes up to the cliff face and placing the last rocks in front of the concrete and sheet piling. The pathways through the groynes should be finished and the access platforms and concrete steps in place. This should just leave the metal steps at the north end to be built and the concrete ramps at the south end to be cast.

In the Mercury on the 7th November 2014 Liz Truss, MP and Secretary for the Environment, said she would consider applications from GYBC to alter Shoreline Management Plans. She pledged the assistance of the department in the formulation of any application. She was mainly speaking about Hemsby but she said this would also benefit Hopton. I will shortly be setting up a meeting with GYBC and Bourne Leisure to push ahead for the SMP to be altered for Hopton.

The "Drop In" at the village hall where officers from GYBC and Waveney were on hand to discuss and answer questions on Hopton's erosion and sea defences was a huge success. Something like two hundred people attended, Lowestoft only had seven

attend and twenty four at Corton, three of which came from Hopton. I would like to thank everyone who turned up on the day and a special thanks to the volunteers who helped me leaflet the village. I know some good will come out of this. Already an advisory body is to be set up from members of the public and this is only the first step. WDC have already contacted me giving me further information. Once again thank you to everybody.

The photograph shown was taken about the 5th November 2014 by Mike Page and shows all the rock groynes from the air, but not yet finished off. Already you can see how lagoons are forming between the groynes.

*Brian Hardisty, Chairman
Hopton Coastal Action Group*



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FORM UPR16

Research Ethics Review Checklist



Please include this completed form as an appendix to your thesis (see the Postgraduate Research Student Handbook for more information)

Postgraduate Research Student (PGRS) Information		Student ID:	433156
PGRS Name:	TAYE OLUKAYODE FAMUDITI		
Department:	GEOGRAPHY	First Supervisor:	DR JONATHAN POTTS
Start Date: (or progression date for Prof Doc students)	FEBRUARY, 2012		
Study Mode and Route:	Part-time <input type="checkbox"/>	MPhil <input type="checkbox"/>	MD <input type="checkbox"/>
	Full-time <input checked="" type="checkbox"/>	PhD <input type="checkbox"/>	Professional Doctorate <input type="checkbox"/>

Title of Thesis:	DEVELOPING LOCAL COMMUNITY PARTICIPATION WITHIN SHORELINE MANAGEMENT IN ENGLAND: THE ROLE OF COASTAL ACTION GROUPS
Thesis Word Count: (excluding ancillary data)	70,879

If you are unsure about any of the following, please contact the local representative on your Faculty Ethics Committee for advice. Please note that it is your responsibility to follow the University's Ethics Policy and any relevant University, academic or professional guidelines in the conduct of your study

Although the Ethics Committee may have given your study a favourable opinion, the final responsibility for the ethical conduct of this work lies with the researcher(s).

UKRIO Finished Research Checklist:
(If you would like to know more about the checklist, please see your Faculty or Departmental Ethics Committee rep or see the online version of the full checklist at: <http://www.ukrio.org/what-we-do/code-of-practice-for-research/>)

a) Have all of your research and findings been reported accurately, honestly and within a reasonable time frame?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
b) Have all contributions to knowledge been acknowledged?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
c) Have you complied with all agreements relating to intellectual property, publication and authorship?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
d) Has your research data been retained in a secure and accessible form and will it remain so for the required duration?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
e) Does your research comply with all legal, ethical, and contractual requirements?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

Candidate Statement:

I have considered the ethical dimensions of the above named research project, and have successfully obtained the necessary ethical approval(s)

Ethical review number(s) from Faculty Ethics Committee (or from NRES/SCREC):	SFEC 2013 058
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If you have *not* submitted your work for ethical review, and/or you have answered 'No' to one or more of questions a) to e), please explain below why this is so:

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Signed (PGRS):		Date: 14 th OCTOBER, 2016
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Appendix Seven: Ethics Confirmation



Faculty of Science
University of Portsmouth
St Michael's Building
White Swan Road
PORTSMOUTH
PO1 2DT

Taye Famuditi
Department of Geography
Date 11th February 2014

FAVOURABLE OPINION WITH MINOR AMENDMENTS/CONDITIONS

Protocol Title: SFEC 2013 058 A critical review of the role of Coastal Action Groups (CAGs) within shoreline management in England.

Date Reviewed: 11th February 2014

Dear Taye,

Thank you for submitting your protocol for ethical review. The proposal was reviewed by the Science Faculty Ethics Committee over the period Dec. 2013 to Jan. 2014. The reviewers thank you for your detailed responses to their questions.

I am pleased to inform you that your application has been given a favourable opinion subject to one minor amendments/condition (listed below) by the Science Faculty Ethics Committee:

- 1) Please review your letter of invitation for the questionnaire survey to see whether you can simplify the introductory material in order to aid participant understanding.

Please make any appropriate minor changes in your documentation – there is no need to resubmit any of your documents to the ethics committee. Please notify us in the future of any substantial amendments that may be required. On completion of the study please send the SFEC a final study report.

Good luck with the study.

Dr Malcolm Bray
Geography Dept. Science Faculty Ethics Committee