Joint Defra / Environment Agency Flood and Coastal Erosion Risk Management R&D Programme

Improving stakeholder engagement in flood risk management decision making and delivery

R&D Technical Report SC040033/SR2

Product Code: SCHO0406BKSB-E-P











The Environment Agency is the leading public body protecting and improving the environment in England and Wales.

It's our job to make sure that air, land and water are looked after by everyone in today's society, so that tomorrow's generations inherit a cleaner, healthier world.

Our work includes tackling flooding and pollution incidents, reducing industry's impacts on the environment, cleaning up rivers, coastal waters and contaminated land, and improving wildlife habitats.

This report is the result of research commissioned and funded by the Environment Agency's Science Programme.

Published by:

Environment Agency, Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, BS32 4UD Tel: 01454 624400 Fax: 01454 624409 www.environment-agency.gov.uk

ISBN: 1844325547 Email Acquistions © Environment Agency March 2006 All rights reserved. This document may be reproduced with prior permission of the Environment Agency.

The views expressed in this document are not necessarily those of the Environment Agency.

This report is printed on Cyclus Print, a 100% recycled stock, which is 100% post consumer waste and is totally chlorine free. Water used is treated and in most cases returned to source in better condition than removed.

Further copies of this report are available from: The Environment Agency's National Customer Contact Centre by
Product code: SCHO0406BKSB-E-P emailing enquiries@environment-agency.gov.uk or by telephoning 08708 506506.

Author:

Sarah Cornell

Dissemination Status:

Publicly available / Restricted

stakeholder, engagement, participatory decision making, flood risk management

Research Contractor:

Collingwood Environmental Planning, 4.2.3. The Leathermarket, Weston Street, London, SE1 3ER.

Environment Agency's Project Manager:

Paula Orr, Social Policy Advisor

Science Project reference:

SC040033/SR2

Science at the Environment Agency

Science underpins the work of the Environment Agency. It provides an up-to-date understanding of the world about us and helps us to develop monitoring tools and techniques to manage our environment as efficiently and effectively as possible.

The work of the Environment Agency's Science Group is a key ingredient in the partnership between research, policy and operations that enables the Environment Agency to protect and restore our environment.

The science programme focuses on five main areas of activity:

- **Setting the agenda**, by identifying where strategic science can inform our evidence-based policies, advisory and regulatory roles;
- **Funding science**, by supporting programmes, projects and people in response to long-term strategic needs, medium-term policy priorities and shorter-term operational requirements;
- **Managing science**, by ensuring that our programmes and projects are fit for purpose and executed according to international scientific standards;
- **Carrying out science**, by undertaking research either by contracting it out to research organisations and consultancies or by doing it ourselves;
- **Delivering information, advice, tools and techniques,** by making appropriate products available to our policy and operations staff.

Steve Killeen

Head of Science

Steve Killeen

Executive summary

The Environment Agency's stakeholder engagement process is evolving in response to the Government's 'push' for greater efficiency and coherence in publicly funded environmental decision making, alongside regulatory requirements to engage with stakeholders and citizens. It is also responding to a 'pull' from the broader constituency involved in flood risk management (FRM) governance, as solutions increasingly draw on a much wider portfolio than before.

Stakeholders have to be engaged at different spatial levels and stages in FRM planning and delivery, but, at present, opportunities are being lost because the different levels are too disconnected. The top tier consists of the 'original' FRM decision makers. Formalised, statutory or contractual partnerships exist between the Environment Agency, local development planners, statutory consultees, and the funders and implementers of FRM. A second tier of engagement, informing and advising the decision makers, includes a wide range of institutional stakeholders. Some of these have more power than others, and many are also likely to be involved in other strategic processes of engagement relevant to FRM. Below them, with no clear understanding of how their views will be heard and used, are the citizens. Downward information flows in this hierarchy are well established, but for more sustainable and effective FRM, and for the potential to exploit new partnership opportunities in FRM delivery, information needs to be channelled better up and across the tiers.

Broadly speaking, the right stakeholders are now involved, and the portfolio of engagement methods means that decision making and delivery can be adaptive. The rise of community engagement demands a rethink of how their views and effort can be included more effectively. The public is now engaged at a late stage to facilitate (small-scale) scheme implementation, but in future they will need to interface better with the stakeholder processes of planning and delivery because they will need to adapt their priorities and behaviour on a much larger scale to prevent and manage flood risk.

Issues that need to be tackled are the **process** of engagement and the shift to **systems functions** at the catchment/coastal cell scale. This physical system scale crosses administrative boundaries, adding tension to today's locally negotiated partnership protocols. Regional institutions do not currently mesh with regional land and water resource use planning. Sources and causes of flood risk are dispersed across the catchment, so trying to tackle them all individually spreads available resources very thinly. Many participatory stakeholder groupings exist for various aspects of coast/catchment/estuary planning relevant to FRM, and several of these include formal partnerships, characterised by membership agreements and shared commitment to resourcing and outcomes. Often these forums have nested community engagement processes, but there is still an incomplete patchwork across the country: just major estuaries, some vulnerable stretches of coastline, and some site-specific areas where planning controls exist for environmental protection. These provide useful models for how to extend integrated strategic planning, but they could also provide a starting network for integrating engagement efforts.

There are high expectations for Shoreline Management Plans (SMPs) and Catchment Flood Management Plans (CFMPs) to improve FRM, but experience shows that cross-

plan integration is not simple, and stakeholder buy-in for one plan may not extend to the derivative plans after integration. The SEA, WFD and ICZM (Strategic Environmental Appraisal, Water Framework Directive and Integrated Coastal Zone Management) processes all require the scoping of plans and regulatory constraints, providing a framework for the Environment Agency to harmonise its participatory engagement processes, and to explore partnership opportunities.

Contents

1 Introduction	7
1.1 Objectives of the work	7
1.2 Research approach	7 7
1.3 Definitions of stakeholder engagement	7
2 Key issues in stakeholder engagement	9
3 Today's stakeholder engagement trends	11
3.1 The tiers of stakeholder engagement	11
3.2 Who are today's stakeholders in FRM?	14
3.3 Drivers for change in stakeholder engagement in FRM	18
4 Partnerships in FRM	22
4.1 Formalised partnerships for strategic FRM	22
4.2 Emerging 'sub-statutory' partnerships	24
5 Changing stakeholder engagement to encourage partnership	29
5.1 Widening participation	29
5.2 Cross-linking the tiers of stakeholder engagement	32
5.3 The timescale of stakeholder engagement	37
6 Conclusions and recommendations	40
References and bibliography	41
Abbreviations and acronyms	45

1 Introduction

1.1 Objectives of the work

The objectives of Part 3 of the research project 'Managing the Social Aspects of Floods' are:

- to outline the trends and experience to date in stakeholder engagement in flood risk management (FRM) decision making and delivery;
- to highlight particular aspects of current practices of stakeholder engagement that lead to greater effectiveness and efficiency in FRM;
- to scope ways to develop inclusiveness in decision making in the increasingly participatory context of flood response.

In meeting these objectives, we have drawn on current knowledge through discussion with key stakeholders and through other research outputs, and reviewed the current policy context that shapes the practice of stakeholder engagement in environmental decision making. We have liaised with experienced workers in government, particularly in Defra, within the more specific context of FRM decision making and delivery. On this basis, we make tentative recommendations for Environment Agency policy and process relating to effective stakeholder engagement in flood risk management.

1.2 Research approach

This research is based primarily on the collation and critical review of relevant research on stakeholder engagement. There is an increasing drive towards more participatory or partnership-based FRM decision making both globally (RESOLVE Inc, 2000) and nationally (e.g. Bloomfield *et al.* 2001, *Making Space for Water*, Defra 2004b). Several recent UK case studies that demonstrate aspects of this trend are assessed in this research. The principal case experiences examined are the plans for FRM in Broadlands and the Moray Firth, coastal flood and erosion risk management in north Norfolk, and estuary management and managed realignment schemes around the UK.

1.3 Definitions of stakeholder engagement

The general definition of stakeholders includes both those who influence the decisions and those who are affected by them. Stakeholder engagement is the process by which these different people or groups become involved in decision making and action.

In the context of FRM, these general definitions potentially include every household, landowner and business in the management area – and indeed a much wider degree of citizen engagement is increasingly recognised as a valuable and important way to improve the fairness of decision making and the effectiveness of delivery. Involving members of the public in decisions that affect them is a core principle in most current conceptions of sustainability (Guimaraes 2001). The 1998 Aarhus Convention (UNECE 1998) outlines the baseline principles that the public should be provided with information about environmental matters and given the opportunity to respond to that information.

Securing the Future (HM Government 2005), the UK Government's sustainable development strategy, envisions increasingly active and two-way community engagement in environmental decision making. This broadening of engagement with members of the public is addressed in detail in Part 4 (SC040033/SR3) of this set of reports (Speller and Twigger-Ross 2005).

Efficient and timely FRM decision making precludes the direct involvement of every individual with a stake in a given decision. 'Stakeholder engagement' in this context necessarily focuses on dialogue with representatives of the stakeholder groups. In this report, therefore, the term 'stakeholder' will be used to refer to institutional or organisational stakeholders. Involvement of the wider public will be termed 'citizen engagement' or 'community engagement'. Of course, the stakeholder group can include community leaders. The decision about whether to include community representatives will depend on the context and role of the stakeholder group, but there are several drivers, discussed in the following sections, that provide an impetus to include them more in future than they have been in the past. The nature of the engagement can vary from the simple provision of information by the Environment Agency about its activities through to a more consultative exchange of information and a more discursive approach to decision making.

There has been a strong shift in recent decades from top-down decision making based on narrow economic criteria towards a more diverse and inclusive process of governance (e.g. Davies 2002, Jordan et al. 2003) where multiple stakeholders are involved in steering decisions and practice. A trend towards what is termed 'partnership working' is particularly evident in the FRM context, where the Environment Agency has developed collaborative relationships with local planning authorities and other public bodies. Partnership working can cover a wide range of activities where two or more organisations have a common interest and work towards common goals, ranging from co-operative work-sharing agreements through to joint funding of activities. In this report, 'partnership' will be used to refer to co-operative relationships that operate with a formalised agreement for mutual engagement – whether these are cost-sharing (optimising public investment, joint funding, supplementary funding, private finance initiatives) or power-sharing (collaborative agreements, innovative decision-making forums, where actions provide indirect or less financially tangible benefit to each other) will be specified. Vital elements of such partnerships are:

- the appropriate selection of partners;
- an agreed mode of working (the definition of resourcing commitments, partner roles, responsibilities and leadership);
- · clarity, traceability and accountability, generally with some formal status and possibly legal standing;
- a process of development of collaborative strategies, and commitments to align internal policies with the agreed partnership strategies;
- a process for agreeing the partnership's evolution, lifetime and exit strategy (see also Doyle 2003).

2 Key issues in stakeholder engagement

Stakeholder engagement and improved partnership working is intended to add value to Environment Agency activities in terms of strategic effectiveness and efficiency, and to yield benefits in relations with the wider public (*Framework for Stakeholder Engagement*, Environment Agency 2005a). The context for today's engagement is changing (see section 3), and the crux question is, 'what kind of institutional change is needed in response?' This section briefly outlines the key issues that will be addressed in more detail in the remainder of the report.

Tiers in stakeholder engagement are deeply established. They are a pragmatic way to accommodate statutory responsibilities and multiple interests in decision making. A wide range of institutional stakeholders provides input, but, in the tiered system, this is done on an individualistic basis, shaped by the stakeholders' own narrow (and sometimes legally constrained) objectives. This current process does not easily allow for adaptive planning, or for new creative partnership opportunities to be discussed and accommodated. At its worst, it can be prone to locking in unsustainable behaviours because timely and relevant information flow up and across the tiers is so limited.

Community engagement is an increasingly powerful social force. Individuals are required to take a greater role in FRM compared with conventional state-provided flood protection (*Future Flooding*, Evans *et al.* 2004), so they need to be engaged in an ongoing way. Interfacing better between citizen-focused engagement (see Speller and Twigger-Ross 2005) and statutory and established institutional stakeholders is now an ethical and legal imperative. However, community-level engagement is still largely disconnected from established stakeholder processes, and there is no integrating strategy. Bringing community interests into the FRM process requires a process change, and this is addressed in various places in the remainder of this report. As a late-stage add-on in FRM, citizen engagement is neither fair, nor effective. Many other organisations, including the Environment Agency's local authority partners, also have to engage, consult, educate and persuade – a framework for a process of integrated citizen engagement may be more cost-effective than multiple single-issue encounters.

New institutional stakeholders may need to be considered. Apart from the need to include wider community interests, there is some scope for adjusting the mix of stakeholders for more effective FRM, as the sources of flood risk are increasingly dispersed and not directly linked to rivers and coasts. Possible candidates are insurers, educators, builders and developers, other businesses and the media. Other partnerships have been engaging this type of diverse, cross-sectoral group of stakeholders for several years in other integrated contexts (estuary and coastal management groups). Some of these partnerships can also be considered as small-scale demonstrations of how effective citizen engagement can be acceptably nested in the strategic planning process.

What kind of process would be able to accommodate community interests better, and simultaneously provide the wider engagement with institutions and organisations that would allow partnership opportunities to be identified and exploited? **Long timescales** are needed. **Partnership approaches** may need to operate with full commitment over

decades, to match the scales of social and environmental change. The re-establishment of ecosystems and community regeneration take longer than a typical term of office. Coastal Habitat Management Plans (CHaMPs), Shoreline Management Plans (SMPs) and some local authority development plans take a 20 year plus time horizon. Public-Private Partnership (PPP) programmes commit to FRM solutions over a time span of more than 25 years. This demands meaningful commitments, with trust, mutuality, and some degree of formalisation and agreed sharing of investment and roles. The agreement of a set of guiding principles for partnership must itself be part of the process.

Alignment with the physical scale of the flooding system is needed for strategic planning, but this replaces one set of engagement challenges with another. Regional planning at the catchment/coastal cell scale makes sustainability sense, but existing democratic structures at this level are unfamiliar and disconnected from communities. Partnership approaches need to extend the 'catchment consciousness' of all stakeholders, many of whom have operated at the very local management scale of single communities, sites, or schemes.

3 Today's stakeholder engagement trends

Responsibility for FRM decision making and delivery in the UK has long been dispersed among local government, drainage boards, government agencies and individuals. The shift from 'government' to 'governance' is seen in the FRM context as a shift from dispersed responsibility to shared responsibility. The original set of institutions is still involved in steering decision making and delivery, but others have increased their role. In particular, changes in the role of the insurance industry since 2000 have shifted the balance of FRM power and responsibility to a more complex public/private/citizen mix (Association of British Insurers 2001, Dlugolecki 2004, Huber 2004). There is a much more conscious awareness now of the need for an over-arching strategic vision for operating in a more sustainable way (Evans et al. 2004, HR Wallingford 2005, Milligan 2005). Two broad issues have emerged as forces for change: first, the desire for wider and more equitable participation in the processes and institutions that make up today's society and, secondly, a more systemic view of the natural environment, with people as part of the system, recognising that over-used environmental resources are degraded and at risk. Making Space for Water (Defra 2004b) highlights both these issues, and acknowledges that the FRM stakeholder constituency is changing as a result. This report therefore revisits the institutional landscape of FRM.

Clearly, the process of change in governance and FRM decision making over the last decade is still under way, and managing in the context of change presents particular challenges. In the following sections, we describe the present state of multi-stakeholder governance in FRM, and assess the key trends that shape the nature and practice of stakeholder-steered decision making.

3.1 The tiers of stakeholder engagement

The Environment Agency has a complex, multi-functional role in flood risk management, with involvement in risk evaluation, risk management decision making and delivery of solutions. In all these contexts it operates according to central government guidance (although it is involved in the development of over-arching policy, and *Making Space for Water* (First Government Response, Defra 2005) promises to strengthen this strategic influence in future). It must deliver through its regional (and increasingly *catchment*-defined) divisions, and it has to link closely into local democratic processes. The Environment Agency, itself a merged institution with an explicit integrating remit (water, air pollution, ecosystems), both relied on and – as a lead partner – developed more effective stakeholder engagement as a means to implementing environmental management plans, as described below. The drivers for this can be broadly defined as *effectiveness*, *ethics* and *demand* (Environment Agency 2005b).

The most visible early-stage stakeholder engagement focus for the Environment Agency was on local scales, with regional synthesis to channel information upward to government policy makers. Through its Catchment Management Plans (by the former National Rivers Authority) and Local Environment Agency Plans (LEAPs), and also in its role in local Flood Defence Committees, the main focus of stakeholder engagement was

on (outward) dissemination of information and prioritisation of issues, rather than the codevelopment of policy and practice. There was little scope for selection – the participating stakeholders were representatives of the other agencies with statutory roles, such as direct partners in funding of flood defences and delivery of flood management schemes, or the bodies with statutory advisory duties.

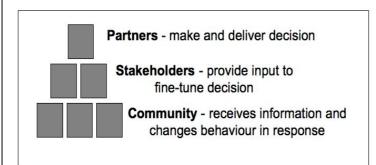
By the end of the 1990s, more formal and systematic stakeholder dialogue processes were being piloted. Some of these constituted partnership-working agreements (e.g. the strengthening of technical co-operations between the Environment Agency and local planning authorities through the first Memorandum of Understanding between the Agency and the Local Government Association in 1997, now superceded by *Working Better Together*, (LGA/EA, 2003)), with formally approved statements of shared roles and responsibilities, and some mechanism to align institutional actions with the co-developed strategic objectives. However, in FRM, in particular, the agreements tended to be more a demarcation of duties rather than a real commitment to working together for optimal solutions. These agreements developed alongside the general trend towards greater transparency and outreach to a wider stakeholder constituency.

A (perhaps accidental) consequence has been a two-tier stakeholder input in FRM. Using the terminology of the LEAPs, the *primary* consultees are the local authorities, statutory bodies and other FRM providers aiming for more **effective** public-service delivery, while *secondary* consultees are all the other organisations and interest groups who feel the impacts of any decision, and whose views therefore should be considered (the rights-based **ethical** component). In terms of the definitions used in this report, primary consultees have the most direct influence in the decision outcomes because of their statutory or contractual responsibility in the decision-optimising process, and are often likely to be the cost-sharing partners. The secondary consultees are the non-statutory stakeholders. This latter group can number several hundred different interests, feeding vital information into the process – but to start with this has generally happened in an individualistic way. As long as this is the case, it will remain difficult to agree an overall vision for a given area, and to exploit potential partnership opportunities involving this wide stakeholder group for implementing FRM plans (DETR 2000, Environment Agency 2005b).

This 'two-tier' engagement of stakeholders is still predominant in flood risk and environmental management. In fact, we are currently facing a 'three-tier' situation as the Environment Agency and its partners and other public bodies increase community engagement in response to more grassroots **demand** (Box 3.1).

Box 3.1

FRM decision making (and environmental decision making in general) operates on distinct tiers, with the Environment Agency engaging first with its statutory consultees and contractual partners, at another level with a range of stakeholders, and increasingly at yet another level with the wider public, with the aims of awareness-raising and persuasion. The inter-relationships and prioritisations among the tiers are very unclear. Information flows comparatively easily *down* the three tiers, but costs rise sharply as greater numbers of stakeholders and members of the public are involved. The information flow back *upward* to the decision makers is both more costly and much more difficult to manage and integrate into an overall vision. The current situation can be represented as follows:



Pros:

- low cost option
- addresses concerns pragmatically
- aligned with statutory duties and legal constraints on public bodies

Cons:

- favours one-way information flow
- issues with fairness and equity and Aarhus Convention
- high costs with difficult decisions

There are valid historical/regulatory and pragmatic reasons for a tiered approach to engagement, but it struggles in addressing the contentious issues that increasingly relate to flood risk management (stakeholder conflicts and multi-objective decision making are discussed in section 4). The problem does not necessarily lie with the tiers themselves, or with the use of different engagement mechanisms for different groups in society – FRM decisions will always be made at multiple geographical and political scales, from local to regional and national. Much of the problem lies in the current interfaces between tiers – at present these are often gaps rather than interfaces.

Information flow is one problem – the costs of managing bottom-up information flow through the tiers can become substantial. It is also not a straightforward process for a decision maker 'at the top' to compile and aggregate the multiple inputs from stakeholders and society. Yet, without this information, suboptimal solutions can be proposed for difficult decisions.

The balance of power in the tiered system can also be problematic. FRM decisions are increasingly complex (Evans *et al.* 2004), and what appear to be rational top-down decisions can sometimes be held up by unexpected conflicts or public inquiries – the very expensive means by which the bottom tier can affect the top-level decision makers.

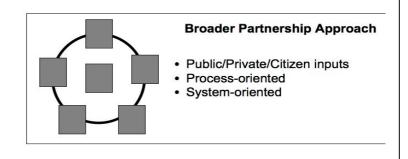
The involvement of the statutory stakeholders in the top tier itself has some constraints. The sectoral authorities and agencies are increasingly being expected to work together, but in contexts like flood risk management, at the interfaces of the natural and human systems, the rigidity of their operational remits is exposed. Public bodies in the UK are bound by the *ultra vires* rule, which means that they must be given authorisation to act,

and they must act only in accordance with their authorisation. Working together demands a degree of flexibility that sectoral operations previously did not need. These regulatory and institutional issues will be explored in section 4, using recent case examples to identify some of the tensions.

A vision of inclusive and participatory decision making seems to be the goal in both *Making Space for Water* (Defra 2004b) and *Securing the Future* (HM Government 2005), which point towards a much broader definition of the partnership approach. Today's agreements with statutory bodies and contractual partners ensure more effective post-decision publicly funded FRM delivery. The implied shift is towards greater power-sharing across the full portfolio of FRM planning and delivery. Box 3.2 shows an idealised version of this.

Box 3.2

- Partners and stakeholders would be involved together from the outset of the planning process, with transparency and accountability to the wider public.
- Stakeholders are identified in terms of their role or significance in the physical environmental system (catchment, coastal cell), not just by administrative boundaries or status in society – inclusion on this basis is one way to address the problem of passing risk elsewhere.



• Costs may be higher than for one-way, top-down information flow, but there is potential for greater benefits of legitimacy and effectiveness.

There are now some local-scale examples of a widened participatory approach to decision making, in particular the Shoreline Management Planning process, and the evolving process of River Basin Planning. There are also examples of partnerships that extend from deliberative and participatory planning through to delivery (several estuary management partnerships, and the Broadlands Flood Alleviation Project, discussed more fully in later sections).

In short, the intention is that more fully engaged stakeholders will allow new partnership opportunities to develop. Participation is a precursor to partnership.

3.2 Who are today's stakeholders in FRM?

3.2.1 Stakeholder roles

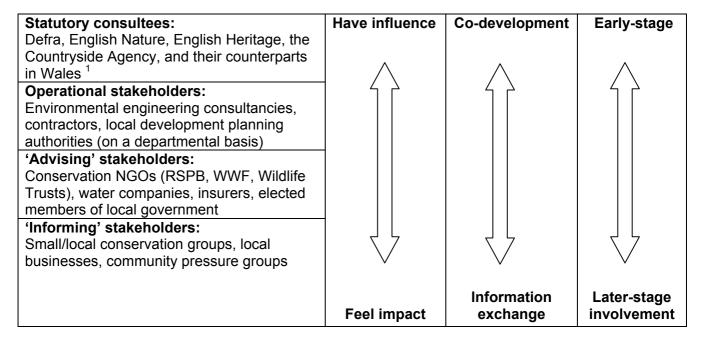
The process of stakeholder engagement must begin with the identification of the key stakeholders, generally using stakeholder-mapping methods (DETR 2000, Davies 2002). This identification stage is situation-specific – the group of people and organisations with a significant stake in one particular issue should not be assumed to be the right group in other contexts (O'Riordan 2002). Once key stakeholders have been identified, there is a broad suite of methods available to facilitate the engagement process, ranging from

information exchange to deliberative partnership (e.g. Pound 2004), discussed more fully in the following section.

Regulations are one means by which stakeholders are identified and defined. There are many levels of regulatory and legislative instruments that need to be considered by flood risk managers: common law, statutes, local and other subordinate legislation, European law, and international legal agreements. They define stakeholder rights and responsibilities – but not necessarily the interplay among the various authorities and agencies. Furthermore, many activities that have a bearing on FRM (and hence potential stakeholders) are not prescribed or proscribed by laws.

Roles are therefore another important means for defining stakeholders. Table 3.1 gives a generic outline of the Environment Agency's stakeholders in flood risk management.

Table 3.1 Outline of the Environment Agency's stakeholders in flood risk management



The table represents the still-predominant conventional approach to flood defence – the stakeholders' focus is on planning and action on a project-by-project basis. In the simplest mode (conventional flood defence), the stakeholder group consists of the assessor of risk (the Environment Agency), the funder (public or private funds) and the organisations providing the solution (consultant environmental engineers and contractors, guided by statutory consultees). In the UK, there are a comparatively small number of consultants and contractors providing flood defence solutions, and they have long-standing relationships with the Environment Agency and with Defra (and their precursor bodies). The top two rows of the table above are the stakeholders with direct influence, and, from the Environment Agency's perspective, mechanisms for effective multi-way communication among them are now robust and well established. That is not to say that the process itself always runs smoothly and effectively – links with planning

¹ Note the current moves towards defining joint/interfacing roles of the latter three stakeholders, in advance of the formation in 2006 of Natural England.

authorities are still often unwieldy, despite the formalisation of a working partnership (see section 4.1).

The second tier of engagement (the bottom two rows of the table) is where several challenges lie. Including these stakeholders should lead to more informed and thus more effective decision making, and it can add to the legitimacy of the process. Increasingly these stakeholders are involved in delivering elements of the flood risk management portfolio.² However, at the same time, their inclusion brings to the fore issues of conflict between sectors, and between national and local objectives. There is also often a bewildering complexity of potential solutions to the problems with no agreed approach to reaching consensus.

The arrows in the table indicate the differences in the *reasons* for engagement, the *nature* of the engagement and the *timing* of involvement. These are the controls on the methods and techniques of engagement that can be used (Harris 2004 gives a very useful and balanced discussion of the portfolio of options). Each of these factors will be discussed in more detail in section 5. The gaps in this situation relate to spatial and strategic planning (see below), and the meaningful interface with wider society (see section 5 and Speller and Twigger-Ross 2005). These gaps are already recognised as shortcomings in FRM, and represent particular challenges now for the Environment Agency.

3.2.2 The geography of stakeholder engagement

Table 3.2, taken from *Making Space for Water* (Defra 2004b), shows that within the confines of flood management there are multiple committees, groups and forums, and there is a strategy for a wide-ranging consultation and engagement process at all spatial scales. What this table does not show is how these multiple means of stakeholder engagement hang together, or, most importantly, how they fit into the consultation, engagement and decision-making processes of other statutory and non-statutory planning. These stakeholder engagement forums are a heterogeneous mix. They all add up to greatly widened participation in flood management, but there are major differences in the reasons for their existence, their composition, and their scope and power in decision making.

_

² The insurance industry is now particularly important in this context, following the 2002 end of the moratorium on household flood insurance. A detailed discussion of the public/private sector balance in flood risk management is beyond the scope of this study, but is discussed in Evans *et al.* (2004) and in Huber (2004).

Table 3.2 Stakeholder engagement at different levels of FRM planning. Table from *Making Space for Water* consultation document (Defra 2004b)

Level of plan	Output	Purpose of output	Means of stakeholder engagement
National level	National policy: England-wide assessment of flood and coastal erosion risks and management arrangements	To inform high- level policies and levels of national funding	 Flood Management Stakeholder Forum: run by Defra for key stakeholder organisations Meetings of the Environment Agency's Regional Flood Defence Committees chairs Meetings of the Coastal Forum for Coastal Group chairs National consultation exercises related to flood and coastal erosion risk management
Catchment level: river catchment/ coastal sediment cell or sub-cell	Regional policy: catchment flood/ shoreline/estuary management plans	Define risk, identify regional priorities and management objectives, short and long term	 Regional Flood Defence Committees (RFDCs) Consultative forums led by Environment Agency, with involvement of local authorities and Internal Drainage Boards and local interests Coastal Groups
Sub-catchment level: linked groups of major sub-catchments/ coastal process units	Appraisal of options: long-term strategy for the area	Further refinement of risk assessments and of management options	 RFDCs Consultative forums (Environment Agency, local authorities, IDBs and local interests) Coastal Groups Local stakeholder engagement forums
Scheme level: management units/individual schemes	Implementation: decisions on individual schemes	Further refinement of risk and selection of detailed management solutions	 RFDCs Consultative forums (Environment Agency, local authorities, IDBs and local interests) Coastal Groups Local stakeholder engagement forums

Three key types of mechanism are projected to be common through the operational and management levels (catchment to scheme): the single-tier RFDCs that will continue to determine priorities and allocate resources for FRM investment, consultative forums that operate in a similar way to the existing approach of engagement with statutory consultees, and Coastal Groups.

The Coastal Groups deserve particular attention because they provide the means to inform multi-objective decision making (see section 4.3.2 section 4.3.1), rather than just FRM decisions. If these work well, they represent the more equitable groupings for participatory decision making described in the previous section (Box 3.2), and allow for the evolution of responsive partnerships and joint working for FRM solutions. Including such groups as an integral part of a stakeholder strategy resolves some of the information and power balance problems of a rigidly tiered engagement process. Nesting

them at all spatial levels in the strategic planning process is vital. At present, however, not all stretches of coast have effective Coastal Groups, and their modes of working are not yet consistent.

3.3 Drivers for change in stakeholder engagement in FRM

3.3.1 'Catchmentisation' – a shift to catchment-scale focus in policy and practice

For several reasons (climate change and sea-level rise, degraded habitats, urbanisation and economics), the range of options for traditional/structural flood defence is increasingly constrained (Evans *et al.* 2004). These types of flood defence interventions were mainly planned and implemented locally in the past, with just the economic considerations (the direct impact on the national purse) acting as the principal large-scale policy constraint. Aggregation from the local up to regional and national strategies was a comparatively weak process (the RFDCs had oversight of the process, but little power in resource allocation).

In the FRM context, there have been important shifts towards more system-based approaches to the management of river catchments and coastal cells. The range of options for more sustainable and innovative flood risk management is now potentially much wider, but this demands much more integration of resource use/management planning, community planning and spatial planning (CoastNet 2004, Defra 2005). The last five years have seen substantive changes in the national mechanisms for regional integrated and environmental planning, but these are still controversial³ and not yet consistently effective. For example, the first round of Shoreline Management Planning is widely regarded as having had mixed success (Potts 2000, Halcrow/CSERGE/CCRU 2002, Defra 2003). In theory, the SMPs tackled the whole coastline in sections based on its physical structures and processes – a more logical strategic approach in a dynamically changing environment than one based on multiple arbitrary administrative boundaries – but, in practice, there was not enough consistency in the approach and detail to result in a strategic national plan. This has been a valuable learning process, though. The second round SMPs systematically bring together technical and scientific information with community buy-in and a long-term perspective. However, they produce advice that at present has no formal or consistent impact in informing development planning (Ledoux et al., 2005 see also section 4).

The European Water Framework Directive (WFD, 2000/60/EC) also shifts the scale of environmental management to one based on the river basin rather than just on established administrative boundaries. This is necessary for strategic sustainable planning, but decision making to fit this scale involves a mix of new liaisons between statutory bodies where administrations bridge catchment boundaries, and non-statutory partnership agreements where activities that contribute to FRM are outside the normal roles and remits of the public administrative bodies. The Environment Agency must be a key player in facilitating this scale-matching transition for catchment planning. What is

³ See the debate of the Second Standing Committee on Delegated Legislation of 8 February 2005 (http://www.publications.parliament.uk/pa/cm200405/cmstand/deleg2/st050208/50208s01.htm) on the issues surrounding the establishment of single-tier committees that balance power and strategic vision.

needed is clear guidance on good practice in developing the necessary mix of partnerships and shared control.

3.3.2 Streamlining effort for greater effectiveness

There are many new stakeholder engagement requirements emerging from a very wide range of organisations including local authorities, regional and other public bodies (e.g. Local Government Management Board 1999, Local Government Association 2000, 2002), and the private sector (corporate social responsibility activities, sustainability appraisals, environmental impact assessments, and so on). These multiple processes of engagement often still operate within narrow sectoral bounds and on local scales. There is an oft-expressed desire to streamline them⁴ (not least to avoid stakeholder fatigue, e.g. Hodge, 2001, Davis and Rees 2004).

The first motivation for streamlining is the resource requirements of engagement, particularly expressed by local councils whose cost-effectiveness is scrutinised annually by the general public with each council tax review. There is also the question of fairness in the process: 'professional' stakeholders (major conservation NGOs, government agencies) are comparatively well resourced for participation, but many other stakeholders (often the 'impactees' – businesses, community organisations) give up their time on a voluntary basis, so increasing the frequency of engagement can mean their important input is diluted.

The second important motivation is that multiple, ad hoc, local-scale consultations provide large amounts of information that would be a valuable contribution to strategic (longer-term, larger-scale) planning, if only it could be consolidated. Arguably, the problem of consolidation is a particular problem in the FRM context. In-depth scheme-byscheme consultation and stakeholder engagement is the norm, but this can rarely feed back into strategic consultation and planning. Different tools and techniques are used; as already discussed, different people are involved in local and strategic planning, and very local engagement tends to relate to time-specific actions that contribute to the implementation of strategic decisions that have already been made. Long-term options and consequences are not often part of the same discussions. This consolidation issue has effects in both directions in the FRM context. Firstly, many consultation processes exist for activities that have not been linked to conventional flood defence planning in the past, but that may be vital parts of effective flood risk management. Urban development and water and environmental management have links already, but other activities that may need to be brought in to the cycle of engagement for effective FRM could include building design, transport infrastructure, health, education and other community development. Using the outputs of such sectoral consultations and engagements is important for FRM today. Secondly, flood risk is increasingly a shaping force on these activities. Flood risk management thinking needs to be much better mainstreamed into the planning processes. It is in both these senses that ways of consolidating and streamlining engagement should be explored, rather than adding a further round of engagement as an extra step in the process.

Streamlined or consolidated stakeholder engagement may be possible, but it requires explicit awareness of organisational learning from the *process*, as well as learning from

Science Report Improving Stakeholder Engagement in FRM Decision Making and Delivery

⁴ Streamlining here refers to increasing efficiency, not necessarily just achieving a cost reduction.

the **outcomes** of a particular round of engagement for a particular issue. This implies a strong shift away from a reactive mode – adding more and more flood defence 'solutions' to an intrinsic flood risk problem created by ill-informed actions – towards an adaptive mode with an ongoing process of identifying and managing risky activities.

3.3.3 Stakeholder rights in a multi-participatory context

There are changes in both the regulatory and institutional context of FRM that compel a shift towards deeper partnership and more extensive stakeholder engagement (specific policy drivers for the Environment Agency are addressed in more detail in the review of the social context of the organisation's work; Environment Agency 2005b). The meaningful engagement of a wider range of stakeholders is a fundamental and essential aspect of sustainable development, and an internationally agreed requirement. The 1998 Aarhus Convention (UNECE 1998), the European Convention on Human Rights (enacted in UK law in the Human Rights Act, 2000), and the WFD are agreements that currently have a strong bearing on the development of stakeholder engagement, explicitly including community engagement, in flood and coastal management.

Environmental Impact Assessment in the past (EIA Directive 337/85/EEC), and now Strategic Environmental Appraisal (SEA Directive 2001/42/EC, for which the Environment Agency is developing guidance) are also important in flood risk management, and include clear requirements for stakeholder engagement. The Office of the Deputy Prime Minister's (ODPM's) guidance on SEA (2005) affirms that 'the public' should be consulted in a timely way, and in a way that not only allows citizens to voice their concerns, but that demonstrably considers their input with due care. There is still some 'two-tier' ambiguity in the guidance for the process, however:

'5.A.16 [the scoping stage] Responsible Authorities must seek the views of the Consultation Bodies on the scope and level of detail of the Environmental Report. Consultation at this stage helps to ensure that the Report will be robust enough to support the plan or programme during the later stages of full public consultation. Responsible Authorities may also find it useful to consult with other organisations and individuals concerned at this stage to obtain information and opinions.' (ODPM Guide to the SEA Directive 2005)

Early-stage wider consultation (see also section 5.B.10) is a cautiously promoted option in this general guidance. It is likely that responsible authorities will only consider this option if they can see material benefits in saved resources or time – there is a need for very clear good practice guidance. In effect, these laws (and the national guidance and regulations by which the UK demonstrates compliance) formalise the statutory right of all members of the public to be consulted. However, the way in which their input will be considered in the SEA process can still lie anywhere along a very long continuum (just like current stakeholder engagement): from simple one-way information provision for awareness right through to a fully integrated ongoing dialogue for the co-development of decisions.

In the past 'strong' government achieved its policy objectives – a good quality environment, manageable risks, and so on – through 'bureaucracy, legislation, financial control, regulation and force' (in the words of Richards and Smith 2002, p. 279). The means of getting to these policy goals are changing, particularly in cross-sectoral

contexts like that of FRM, where increasingly the strategic direction is planned and implemented by the private and community sectors working together with the Environment Agency and other state actors (Jordan *et al.* 2003).

The SEA and WFD in particular now provide the framework for 'mapping out' the current multiplicity of plans, programmes and objectives that shape and constrain flood risk management and for considering them all together (Box 3. 3. In this context, reappraisal of the effectiveness of the many non-statutory plans and strategies for catchment, estuary and coastal management is timely. In particular, the proactive accommodation of citizen engagement in this process will be needed, because, at present, citizen interests are generally treated separately (or subordinately), and in a reactive mode.

Box 3.3

The types of plans that will be considered together in the scoping stages of SEA and in the strategic planning under the WFD (see Figure 5.2 for the current planning context):

- Environment Agency plans and programmes (e.g. Environment Agency River Basin Management Plans and Water Resources Plans);
- plans at various geographical levels (Regional Development Agency strategies, Local Agenda 21 and local community planning, Regional Spatial Strategies, etc.);
- local authority plans from other sectors (e.g. Local Transport Plans, Community Strategies);
- Biodiversity Action Plans, including species and habitat action plans.

Many of these planning processes have some degree of citizen engagement. There is some impetus to consider the implementation of the plans in a coherent way (e.g. the Environment Agency's River Basin Planning Strategy), and recognition that stakeholder/citizen engagement to inform the process should be made more efficient (see the Environment Agency's Framework for Stakeholder Engagement –

http://www.environment-agency.gov.uk/yourenv/consultations/946103/?lang=_e).

4 Partnerships in FRM

4.1 Formalised partnerships for strategic FRM

More than ever before, flood risk management (particularly planning for changes in conventional flood defences) requires complicated manoeuvring in terms of land use, society and economics. Arguably, the reasons for the Environment Agency's development of stakeholder engagement in the first place related to the problems of inefficient ('unjoined-up') public sector decision making, rather than the effectiveness of flood risk management *per se*. The protocols for action⁵ that followed from the Environment Agency/Local Government Association agreement, *Working Better Together*, provide frameworks for technical co-operation with clear demarcation of the Environment Agency's and local authorities' roles. Each protocol outlines actions that clearly are in the best interests of the Environment Agency and local authorities, yet they increasingly allow for improved transparency through democratic systems, and for wider engagement and co-ordination.

It is hard to judge the success of this particular partnership from outside the Environment Agency and local authorities. The Environment Agency/Local Government Association protocols promised to 'encourage [LGA] members and [the Environment Agency's] Areas to develop and sign locally agreed protocols' based on the Part 2 template. This translation to the local level has been a reasonably successful paper exercise, but there are indications that this partnership is still some way from being a consistent and smooth-running process.

Key partnership activities for the Environment Agency in the FRM context are its role as a statutory consultee in development planning for certain categories of development (including forward planning), and in any EIA process. Guidance and procedures for EIA are now well developed; issues tend to relate to the improvement of the links with development planning:

- There is often a difficulty in accommodating the rigidity of multiple process deadlines and procedures. The experience in Cley-Kelling (Norfolk) showed how delays in reaching an agreement in one aspect of planning affected the others (English Nature 2003). In that particular instance the breaks in the process did not increase the flood risks to the community, but other vulnerable areas may not be able to accommodate repeated breaks in the cycles of planning and delivery. Paull Holme Strays, in the Humber Estuary, also was delayed because essential local planning deadlines were missed, taking the process back several stages in the whole sequence of planning consents.
- There are major resource implications, both in Environment Agency staff time and
 costs. The protocols commit the Environment Agency to providing timely and
 relevant advice for all pre-application discussions that the local authorities flag up,
 and giving expert flood-risk judgement at every determination hearing and appeal
 for new development applications. Without this input, inappropriate developments

⁵ Original protocols were agreed in 1999, revised in 2003. Latest versions available online on both the Agency and LGA webpages: http://www.lga.gov.uk/OurWork.asp?lsection=59&ccat=1107 and http://www.environment-agency.gov.uk/aboutus/233486/233534/504943/?version=1&lang=e

may be approved that increase downstream or run-off flood risk, but consistent provision of this input in the current terms is virtually unachievable (J. Holmes. Weightmans Solicitors, personal communication, HR Wallingford 2005). Largescale causers of increased flood risk (major new developments in the floodplain) are more likely to be detected and managed at modest cost, but much of the risk problem arises from the aggregation of very small-scale actions. These types of widely dispersed problems (diffuse pollution is another example) are a serious burden on the Environment Agency, and on the other public bodies concerned with land and environmental resource management. In the case of pollution management, the problem can be identified and measured comparatively easily, and the Environment Agency can draw on a long tradition of field-workers who engage in an ongoing basis with the people whose activities contribute to the process, offering practical guidance on better, cost-effective alternative options. In the context of escalating flood risk, there is a smaller team being stretched further. with less tangible and assessable options for tackling the wide range of behaviours and actions that contribute to flood risk. Awareness raising and persuasion are vital tasks that may demand an extension of existing partnership agreements.

A useful case study in this context is the £100 million Broadlands Flood Alleviation Project (BFAP, http://www.bfap.org/), for which Broadlands Environmental Services Limited (BESL) has been set up as a formal Public—Private Partnership (PPP) programme. The early stages of the process have been documented (Ayling and Rowntree 2002). Halcrow, the consultant, with Edmund Nuttall, the contractor, have been engaged by the Environment Agency, who have area staff co-located in the same offices, to operate over the next 20 years. The project is operational over the whole Broads system (30,000 ha, including 240 km of floodbanks) — and in this particular case the relevant local planning authority operates over exactly the same area. The Broads Authority is also a key stakeholder with specific interests in navigation and conservation (http://www.broads-authority.gov.uk/broads).

Because the Broads are a national park and also home to very close-knit and conservative communities, one of the main challenges for BESL was the interface with the planning process (Halcrow/CSERGE/CCRU 2002). BESL tackled the task early on with a very wide-ranging and ongoing process of stakeholder engagement (about 600 stakeholders plus 500 local landowners and residents were contacted), and it developed sophisticated modelling and visualisation tools for education and awareness (http://www.uea.ac.uk/~e313/virtual.html). This open and democratic process was intended to facilitate the implementation of the various schemes. BESL reported that in the early stages of BFAP a typical scheme took 18 months or longer to get through the planning process (and it is worth noting that the first schemes were those where communities had *already* been assessed as having serious flood risk), but this more engaged process, with greater community buy-in, is expected to reduce that timeframe.

Nevertheless, the relationship between the Environment Agency/BESL and the Broads Authority has not been consistently smooth. The Broads Authority had achieved an internal accommodation in the balance between its conservation and navigation interests, but this relied on stability and certainty – and unsustainable interventions in its river channels. The need for better flood management means that sheet-piling is being removed, reed-ronds and some experimental erosion control measures are being

introduced, and new floodwalls are being provided for undefended communities. All of these alter the dynamics of the system (towards a more sustainable new equilibrium), and the resulting uncertainty has been a source of conflict. It has helped, however, that the Environment Agency and the operational flood management team have been 'singing from the same song sheet'. The exchange of timely and relevant information between the Environment Agency and the Broads Authority is much more likely to be consistent and to be directed rapidly to the operators, so, in this well-scrutinised open process, it is more likely to have an impact.

At present, developing the necessary partnerships can be very expensive and time consuming. The Broads Private Finance Initiative (PFI) experiment in partnership was very costly to negotiate, and the necessarily intricate contract took two years to draw up: these would be prohibitive burdens on any schemes with a shorter lifetime. There are also few opportunities like the Broads where the spatial scale of the strategic FRM interventions match the scale of public planning powers (see section 3.3.1).

There are standard guidelines for the running and assessment of these partnerships: the ODPM's Local Strategic Partnership evaluations (*Baseline Practice* reports, 2004), and the Audit Commission's *Effective Partnership Working* (1998).

4.2 Emerging 'sub-statutory' partnerships

There is an undeniable drive towards partnership working in both the public and private sectors. Hoare (2002) identifies two reasons: physical/human system harmonisation and organisational/administrative coherence. The Environment Agency/Local Government Association partnerships and statutory consultee processes to date are moves in the direction of the latter, but government has avoided the option of establishing new authorities based on physical systems boundaries. This may be a major barrier, and it means that the 'catchment consciousness' of decision making must come through other means of co-ordination.

In the broader FRM context – at the interface of community, land and water resource planning – some entities have been created that qualify as partnerships under the above definition. Coastal and Estuary Management Partnerships, in particular, are legal entities set up to tackle sectoral integration and provide a longer-visioned mode of stakeholder engagement than most statutory processes. They can begin to address some challenges of stakeholder engagement in large-scale spatial planning, bringing planning and decision making in line with the scale of the fundamental natural processes that drive coastal erosion and flood risk.

Are these partnership initiatives effective and cost-effective, and can they help with the spatial integration that will be required for improved FRM? The CoastNet review of the Coastal Partnerships Vision (2003) draws together many examples of added value in the context of integrated coastal zone management (ICZM), and Fry and Jones (2000) provide a framework for evaluation of Estuary Management Plans (EMPs), but there have not yet been any systematic evaluations of such partnerships. The assessment here therefore can only outline some generic features of the benefits (illustrated with the experience of EMPs, which are the most widespread and established such initiatives) and difficulties in these partnerships.

4.2.1 Potential benefits

- Scale integration and working better with natural processes
- Harmonisation of plans and development controls
- **Informing partner operations** (lower-impact dredging, database development, joint working, 'portfolio-building' for environmental resource management)
- A longer-term perspective, leading to
- Adaptive management, involving gradual agreed change
- Community interface
- Capacity to mobilise local management instruments, including voluntary groups

On the coasts, which have seen a proliferation of forums and groups, partnership approaches are perceived as more advanced than inland (CoastNet 2004, McGlashan and Barker 2005). A major driver for integrated planning was English Nature's 1992 Estuaries Initiative, which resulted in today's situation where most major estuaries (e.g. the Humber, Tamar, Thames, Severn, Exe) and the most vulnerable stretches of coastline (e.g. SCOPAC) have management plans that have been co-developed (and importantly, co-funded) by formally recognised partnerships. These bridge sectors and bring together public and private interests that would otherwise operate independently. The attraction is that they provide one forum where any concerns – environmental, social, political or economic – can be discussed. Their existence as a recognised entity means that they can operate as springboards for other co-ordinated management needs (Hoare 2002). They hinge on trust, so their first task must be the process of agreement of their mode of working, regardless of what organisation or motivation was responsible for setting the partnership up in the first instance. The extent to which partners align their internal policies with the agreed partnership strategy determines the success of the partnership – but again, there is an agreed process and a negotiated timeline for this. The extent of alignment is shaped by individual partners' resource and remit constraints, but in the EMP context it is facilitated by the mutual trust and the material investment in the process by all partners.

Several of the EMP experiences have been documented (Hoare 2002, for the Severn; McGlashan and Barker 2005 for the Exe). The Environment Agency has strongly supported the development of the integrated strategies (with publications, funding, information resources), and it has expressed the intention to integrate the agreed strategies into its own catchment planning. The Humber is a very interesting case because of the high priority of FRM in the management planning discussions, and the diversity of administrative bodies involved – three Environment Agency regions are involved in environmental planning and protection in the Humber (North East, Anglian and Midlands). There are multiple local authorities and parish councils all striving to meet their own administrative targets and accommodate local political pressures. And the Humber, as a large and highly developed estuary, is subject to a great range and intensity of interlinkages and conflicts among the multiple use interests of the estuary. river and shore. Can the partnership provide any evidence of added value? One tangible success is the issue of data integration. Many of the individual authorities and businesses were collecting data on various aspects of the Humber, including natural processes. The partnership provides a mechanism for discussion and sharing of the research responsibilities for more effective management – and, in particular, a mechanism for identifying information needs. This type of discussion is critical in smoothing the implementation of major changes in the estuary system (e.g. the 440 ha

Alkborough realignment), where uncertainty about natural processes and impacts is a major constraint.

Other formal partnerships that have a bearing on FRM are:

- The Coastal Groups, operated principally by technical officers involved in environmental planning activities, in particular the process of setting up the SMPs. These are being extended in the context of integrated coastal zone management (see the table from *Making Space for Water*, Table 3.2 in section 3 above; CoastNet 2003, *Vision and Action Plan*). However, it should be noted that at present coastal defence groups do not extend for the whole coastline, just as not all estuaries have estuary partnerships.
- Site-specific partnerships for CHaMPs and the management of Areas of Outstanding Natural Beauty, nature reserves, Natura 2000 sites, etc.

Many of these partnerships are associated with other processes of less formalised stakeholder and community engagement groups and forums. The estuary partnerships in particular tend to operate with parallel estuary forums – more open community liaison bodies.

The Exe Estuary (McGlashan and Barker 2005) operates in a typical way: the partnership develops a rolling management plan for implementation by the partners, led by an advisory committee including community representatives. The public Exe Estuary Forum runs meetings and focus groups making it easier to see a consensus that can inform the partnership process. The representatives from the forum develop the capacity to engage effectively. This can be subject to the criticism of 'cosy relationships', but the degree of formality at all stages and the transparency of decision making contribute to the legitimacy of the process. There are also many other loose-structured but potentially highly effective community-level groupings, including Local Agenda 21 forums (see the Regional Environmental Observatory websites), Flood Fairs, and forums set up under corporate voluntarism initiatives.

Again, the tricky balance arises between widened participation and manageable strategic processes (tiers of engagement are unavoidable!). In these contexts, however, where the system and the community of interest are reasonably clearly defined and of the same scale, and partnerships have articulated Codes of Conduct, the nesting of the community forums within the strategic partnership is an explicitly defined and accountable process.

4.2.2 Potential difficulties

• There is no systematic (nationally agreed) role or composition of partnerships. The Estuary Initiative provided the original remit for the EMPs, but since then these partnerships have evolved. Without consistency of approach, the Environment Agency engagement with these partnerships will continue to be piecemeal. There is a bottom-up impetus for rationalisation (CoastNet 2003 Vision and Action Plan). If Coastal Groups and estuary partnerships all operate in a harmonised way, then tackling the geographical boundaries and areas of political overlap would be easier and could result in more effective Environment Agency engagement across the spatial scales. If all groups are very different in

composition and scope, then the benefits outlined in the previous sub-section will be very hard to obtain.

- The partnerships generally have little or no statutory weight. There are good arguments for keeping partnerships voluntary (*ultra vires* constraints have already been mentioned; see Jemmett *et al.* 1999, and the First Government Response to *Making Space for Water* (Defra 2005, chapter 8), but a major disadvantage is that vested interests mean non-statutory proposals can be blocked. In the increasingly complex context of flood risk, there will be many vested-interest tensions. The difficulty of achieving strategic objectives through instruments without statutory 'teeth' is illustrated in a recent review of the effectiveness of SMPs (Halcrow/CSERGE/CCRU 2002) about half of current managed realignments are on sites that were not identified as good locations in the first round SMP process, and, at the time of the study, fewer than half of the sites where managed realignments *had* been identified as the optimal option had schemes being planned or implemented. While flooding fields may have important ecosystem benefits, a random and uncontrolled approach to 'making space for water' will not have the desired effects on flood risk.
- Resourcing of partnerships if legal standing gives weight, funds give momentum. A considerable body of evidence in coastal and estuary partnerships indicates that they do help deliver sustainable solutions that balance development, community and environmental needs. The Environment Agency currently channels funds into many partnerships. It may want to consider being involved in a process of performance evaluation and good practice guidance development.
- Managing partnership strengths for effective joint working for FRM. Generally speaking, flood risk arises from a range of behaviours and activities, so in that sense, FRM is not a primary end in itself. It features in coastal and estuary management partnerships, as it does in other development planning contexts, but it is not necessarily an agenda-topper. This will also be true when the inland catchment-scale planning comes online with the Regional Spatial Strategies and River Basin Management Plans. A major challenge is to improve the integration of flood awareness within the primary activities that contribute to flood risk. Again. the government response to Making Space for Water (Defra 2005) recognises this, and explicitly highlights the need for resilience enhancement of individuals and greater flexibility in adaptive responses. In today's context of very dispersed statutory and independent private control over FRM responsibilities and flood riskcausing activities, robust and accepted partnerships and forums can help to meet the challenge of pulling in the same direction. The Environment Agency may want to explore ways of harnessing the potential benefits listed above (particularly the longer engagement timescale, effective community interfaces allowing for community mobilisation, and scale-matching between stakeholders and the physical system) as the government revises the mechanisms for improved (regional) democratic engagement with the Environment Agency over the next couple of years. A side comment is that people – communities – tend not to feel engaged with regional government at present, so the government's sensible strategic shift to single-tier Regional Flood Defence Committees could resolve one

disconnect (in spatial integration) by introducing another (democratic disengagement).

5 Changing stakeholder engagement to encourage partnership

5.1 Widening participation

Has the growing pyramid of stakeholder engagement really led to more effective flood risk management? Are the right stakeholders engaged?

Moving towards more cost-effective FRM that operates more harmoniously with natural processes at their physical scale increases the scope of participation. Because the earlystage widening of FRM stakeholder engagement started with a strong environmental emphasis supported by powerful regulatory instruments like the Habitats Directive (particularly on coasts and estuaries), conservation-related stakeholders still tend to dominate the participatory engagement process, and are among the likely candidates for partnership in implementation of FRM options. Despite the formalisation of partnership working between local authorities and the Environment Agency discussed in the previous section, the real power-sharing in rural and coastal/estuarine FRM is often seen to lie with the conservation bodies. English Nature clearly has a fundamental role as a statutory consultee, but, across the UK, the major conservation charities also come to the FRM planning process equipped with a considerable body of well-targeted research, a deep understanding of the regulatory and institutional context, multiple access points to the statutory bodies – and they have time and money resources to dedicate both to the process and the provision of flood management solutions, making them very powerful stakeholders. This is not a problem in itself – after all, there is an urgent need to redress serious environmental degradation – but other stakeholders can feel disempowered by the perception of asymmetry in the process: 'There's no Community Directive, is there?'.

Land management interests are integrated into the participatory process reasonably well - the National Farmers' Union and the Country Land and Business Association provide an important bridging mechanism for information flows between individual or community concerns and the larger-scale planning and policy process. The critical importance of their role in reducing flood risk 'at source' is increasingly recognised, and land management options have a growing prominence in the FRM portfolio (Evans et al. 2004). Similarly, the port authorities and water companies invest some resources into research and co-ordinated participation in consultations and decision making from local (scheme) to national (policy) levels. Although clearly these are important stakeholders in FRM, they certainly do not view themselves at present as moving towards 'partnership working' with the Environment Agency (Broadlands Environmental Services Limited 2002). Other business and community interests are included in many forums, in particular the Environment Agency-led consultative groups referred to in Table 3.2 and the Corporate Social Responsibility groups set up by consultants and contractors (e.g. BESL, Moray Flood Alleviation M⁴I). Their participation is often more ad hoc and limited by their resource commitment (Doyle 2003; Part 4 also outlines these challenges of

⁶ The changing role of farming in the FRM context was debated in a recent House of Commons Standing Committee: 8 December 2004, European Standing Committee, *A Debate on Flood Risk Management – Flood Prevention, Protection and Mitigation*. Transcript available at http://www.publications.parliament.uk/pa/cm200405/cmstand/euroa/st041208/41208s01.htm

inclusion), making it difficult to establish productive partnership opportunities that include them.

The UK's experience in managed realignment illustrates some of the challenges of participatory multi-objective decision making and the flexibility of partnership working (comments in this section are from the review by Halcrow/CSERGE/CCRU, 2002, unless otherwise specified). The Habitats Directive has been identified as both a major driver for managed realignment to (re)create wetland habitat and at the same time a major constraint or obstacle to realignment as a more cost-effective flood risk management option than conventional defences). This tension demands greater dialogue between environmental management and flood defence practitioners. The dialogue is intended to lead to a consensus on the optimal mix of objectives, but with multiple stakeholder and community interests and the potentially conflicting interpretations of the Habitats Directive and the WFD and other regulations to be navigated, 'every stone has to be turned every time' a new input is made or a new stage in planning is reached (Paull Holme Strays comments; N. Pontee, ABP-MER, personal communication).

The UK's successful realignment schemes have happened where the drive for environmental protection or wetland restoration was at least equivalent to the desire for improved flood management (i.e. reducing the costs to the State of flood defence infrastructure). Over time, realignments have taken longer to implement and become more costly (eastern regional workshop, Halcrow/CSERGE/CCRU 2002) as more stakeholders are involved in the multiple iterations of the planning and implementation process. Nevertheless, the realignments to date may be regarded as uncontentious compared with what is required for sustainable FRM in future: they are mostly very small scale schemes; the land used tends to be low-value, low-grade agricultural land; the communities involved – if any – have low-to-modest flood risk (otherwise the sites would not be considered in the first place); and there has therefore been little urgency. Of course, realignments also offer communities some degree of increased flood protection over the alternative 'do-nothing' option, the 'unspoken possibility' as long as flood defence provision is a permissive power. Under these conditions, stakeholders have a fair degree of scope in optimising the benefits as flood management solutions are designed and implemented. However, operating on a larger scale, as catchmentconsciousness requires, cannot be accompanied by rising costs and longer lead-in times.

The challenges for the future transition towards more sustainable FRM infrastructure are clearly serious (HR Wallingford 2005). Recent experience demonstrates that despite broader stakeholder engagement and a theoretical consensus of the need to reverse past (unsustainable) policies, practical action can be stalled through controversy and political tension – as Cley-Kelling has demonstrated.

Interfacing between stakeholder and the wider community has been a recurring theme in this report already, but the importance of getting the interfaces right cannot be overemphasised. At present, key stakeholders negotiate the optimal solutions, and rely on community engagement to facilitate implementation. This may be adequate for smallscale actions, but as the sources of flood risk are increasingly diverse and communitylinked ('It's not just IKEA car parks – every paving slab counts'), so more diverse and community-linked solutions are needed.

Conflicts in flood risk management are often framed in terms of community interests versus environmental conservation, although there are usually much more complex interests underlying the tensions (e.g. the long-standing debate about the coastal defences at Cley-Kelling⁷ largely hinged on which specific conservation objective to prioritise; Murby 2002, O'Riordan 2002). Increasing the range of stakeholder inputs (and changing the nature and process of engagement, as discussed in the following sections) is intended to help manage such complex problems. Catchment Flood Management Plans (CFMPs) are high-level Environment Agency tools for linking with stakeholders within river catchments with a specific FRM remit. Although they are still under development (progress has been appraised in the Aire and Calder Scoping Study, Wilkinson and Wade 2005), early-stage indications are that they should explore and expand conventional stakeholder encounters towards a process of partnership building for shared decision making (in line with the Environment Agency's *Building Trust with Communities* approach).

The dialogue process in the ongoing Broadlands Flood Alleviation Project, ⁸ an innovative Public–Private Partnership, was framed explicitly as a full stakeholder engagement process integrated with community engagement. (Some lessons for the integration of stakeholder and community involvement are given in the following section.) This engagement process will continue through the project lifetime. It is what Harris (2004) would term a 'bounded dialogue': fundamental FRM decisions have already been made (i.e. the total budget, the standard of protection and the main partners in the PFI delivery), but, beyond that, stakeholders will strongly and explicitly influence the actions over the course of the programme. It has generally been very open and inclusive, with hundreds of stakeholders and local residents involved in meetings and correspondence.

A wide and ongoing stakeholder engagement process like this provides the breadth of information necessary for the fine-tuned 'brokerage' of deals that increase the acceptability and even feasibility of schemes. Stakeholders can identify opportunities and funding streams – to take advantage of the flood management works for improvements to access, habitats, and so on. In Broadlands and elsewhere, creative and cost-effective agreements have been negotiated, with stakeholders taking up some positive multi-objective opportunities for environmental and community benefit. Often these involve very small adjustments to the outline plan (Halcrow/CSERGE/CCRU 2002; see also the BESL publicity literature about the BFAP on http://www.edp24.co.uk/). For instance, agreements between BESL and the Broads Authority have led to changes in the dredging programme for navigation, and footpath improvements along banks. There are similar examples elsewhere: the major landowning stakeholders conceded more floodplain land subject to the promise of the retention of commoners' rights and assistance in kind for a private counterwall (at Brancaster); English Nature guided new habitat creation as reed beds were planted in material borrow pits, and the parish council was able to develop local tourism initiatives alongside its involvement in the FRM engagement (Paull Holme Strays). At this local scale, of course, the boundary between 'stakeholders' and 'community' is blurred.

Nevertheless, even at the small scale, widened stakeholder engagement in a dialogue about FRM planning can face problems. BESL's programme has had a high degree of

Science Report Improving Stakeholder Engagement in FRM Decision Making and Delivery

⁷ http://www.english-nature.org.uk/livingwiththesea/project_details/good_practice_guide/habitatcrr/ENRestore/CHaMPs/NorthNorfolk/NorthNorfolk/Cley/Appraisal.htm#tcsrs
⁸ http://www.bfap.org/

public acceptance, and is an excellent example of good stakeholder practice, but it has still been subject to the criticism that certain groups or individuals had particularly favourable access and influence over the process (Halcrow/CSERGE/CCRU 2002, Taylor and O'Riordan 2002) because some powerful interest groups – particularly the national conservation NGOs – have access to the Environment Agency's decision makers through the 'weightier' primary stakeholder route. There is little incentive for these key stakeholders to participate fully in the open BESL-led discourse if they know they can influence the outcome without doing so.

The Environment Agency has tackled the structures of partnership for flood defence planning and construction. In that context, it has clear relationships and a common language with its statutory consultees, environmental engineers and development planners. It now needs to explore more formalised and accountable partnership in the delivery of the full portfolio of flood risk management measures, which, in addition to conventional flood protection, includes land use planning and spatial regeneration, insurance, post-flood recovery programmes, and flood-proofed and flood-resilient homes and communities driven by raised flood risk awareness in individuals. Most of these activities lie beyond the conventional roles of local authorities and the Environment Agency in flood response. A partial stakeholder network is already in place (with developers, insurers, educators, health care professionals, and so on) allowing for information flow, but consolidating that network into one that can allow for full dialogue leading to shared decisions and delivery is still some way off.

5.2 Cross-linking the tiers of stakeholder engagement

How should the portfolio of stakeholder engagement approaches and methods develop in order to tackle today's FRM challenges?

5.2.1 The engagement portfolio

The buzzword of the 1990s was 'consultation'. All public bodies, including the Environment Agency, greatly extended their consultation of each other and of the wider public. What seems to have been the case is that consultation was modelled first on local government processes (the 'decide—announce—defend' approach⁹), in which notification of changes would be published and objections to those changes sought. The extension of consultation into the stakeholder engagement we see today is progress towards a two-way dialogue and it has started to allow for more strategic organisational interconnection. However, asking for reasons why something should *not* be done is a very reactive and constraining way to operate, with little opportunity for positive planning, innovation and accommodative solutions.

When this consultation-by-objection is extended to a wider range of stakeholders, there is also the 'problem of raised expectations'. Stakeholders will express their strongly-felt objections, and – because there are so many possible negative objections to any programme or scheme, not all of which can be accommodated at once – their perception may well be that they have been disregarded or 'steam-rollered'. Informed citizens and stakeholder groups are now more involved in governance in FRM and in many other

⁹ The Environment Council use this phrase in their dialogue-promoting efforts. See www.the-environment-council.org.uk

³² Science Report Improving Stakeholder Engagement in FRM Decision Making and Delivery

contexts; they are more demanding of their right to have their say (Bulkeley and Mol 2003). If the process of incorporating stakeholder contributions is not fully transparent, consultees can become disillusioned with the process – and a further problem is that some stakeholders simply do not become consultees in the first place.

An alternative would be a more positive approach to consultation, moving towards codevelopment – perhaps this would be consultation-by-objective. At the very local scale (e.g. the Quality of Life Counts methodology) and at national and supra-national levels (most recently, the dialogue about *Making Space for Water*) this has begun to be explored. Part 4 in this set of reports (Speller and Twigger-Ross 2005) discusses the progress that has been made by the Environment Agency in this area of improved citizen engagement for FRM.

The essentials for good stakeholder engagement are known from experience (see also DETR 2000). They are:

- trust;
- clarity and agreement of roles within the decision-making group;
- exchange of knowledge (mutuality);
- good practice rules, including an agreed method of problem resolution.

Clearly, there are very many ways that these essentials can be achieved, and many tools and approaches are in current use (for a review and critique, see section 4.2 of the review of the social context of the Environment Agency's work; Science Report E1-057/SR1, 2005). In the transition from one-way, *ex post* information flow to deliberative planning and decision making with multiple stakeholders, the challenge is to ensure that the 'mix' of approaches satisfies all these requirements equitably, effectively and efficiently.

'Arnstein's Ladder' (Arnstein 1969; discussed in Environment Agency 2005b, and summarised in Figure 5.1) presents various modes of engagement in a ranked order from simple one-way information from the decision maker about *faits accomplis* up to fully accountable deliberative decision making with a high degree of mutuality in the commitment to the decision outcome. This representation has been widely used in academic arguments for a transition from 'bad' top-down government in the past to a 'good' fully participatory mode in future.

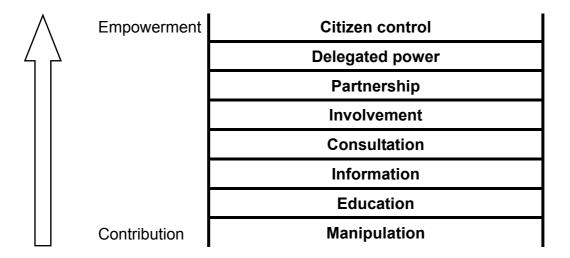


Figure 5.1 The eight rungs of Arnstein's ladder of participation, with Oakley's (1991) analysis of shifts of power in decision making added.

In practice, of course, these modes have co-existed in the past and should continue to co-exist. They represent a portfolio of modes of engagement that can be used at different stages in FRM planning and delivery. The challenge is to ensure the right balance among information exchange, co-development of solutions, persuasion and manipulation (after all, it is likely that in future FRM there will continue to be the need for compulsory purchase and other tools of strong centralised direction in the wider/national interest). Today's disjuncture between top-tier stakeholders involved in planning FRM solutions and the citizens who have to be engaged in order for the solutions to be implemented needs to be resolved.

There are two particular aspects of FRM that present engagement challenges. First of all, today's flood protection solutions clearly cannot be sustained long into the future, so there is a need to manage the transition towards longer-term effective options. Policy makers driving this transition need to carry along with them the stakeholders they rely on for successful implementation. The areas most at risk in future are the areas that are currently defended already (Halcrow Group *et al.* 'Assets at Risk' report 2001; *Future Flooding*, Evans *et al.* 2004), and while flood defence provision may be a permissive power, it is not an easily reversible one. Any dismantling of flood defences is often seen as being completely inconsistent with the stated objective of improving flood risk management – yet sustainable FRM requires just that in some instances.

The BESL experience in the Broads has had to tackle the challenge of squaring this particular circle to the stakeholders' satisfaction. Unambiguous information is crucial, as is absolute clarity about the degree of influence different stakeholders can expect at different stages in the process. Where an open dialogue for shared decision making is possible, stakeholders need to know they have that degree of power. Where decisions have already been made and there is no further scope for negotiation, this also needs to be made clear. BESL and the Environment Agency allocated time for this baseline setting stage: the first two years of the programme allowed for key relationships to be consolidated and strategic priorities determined. They have used the full portfolio of engagement methods, including conventional consultation processes inviting individual responses; specialised technical dialogues with key interests and the Broads Authority and Norfolk County Council, leading to shared strategic decisions and prioritisations;

open public meetings with the main aim of information gathering; involvement with independent academic scrutineers; 'action-learning' workshops; and unusually detailed information-giving about of their actions with reporting in community newsletters, on the web and in the local press. Finally, in all their discourse, BESL have emphasised that they are addressing flood risk management in a more sustainable way. Because they are running a long-term programme, fully supported by the Environment Agency, this message can be believed and reinforced. On a related point, BESL have recognised the value of demonstration trials and visualisation tools (e.g. of their experimental erosion controls). These show the stakeholders that BFAP is far from being predetermined. As stakeholders experience the ongoing processes of engagement, they can see that their input really can shape the decisions and delivery.

The second aspect that should shape FRM stakeholder engagement relates to the need to align the very many disparate interests in the management of flood risk. Again, the BESL experience is instructive. The BFAP area lies within a National Park, including areas with various degrees of environmental protection, and many of the proposed works rely on access to private land. Good working relationships with the Broads Authority and with multiple landowners is critical to the success of BFAP. Any individual stakeholder could affect the success of the process. Recognising this, the Environment Agency and BESL have made it clear that at the detailed level of implementation individual stakeholders can have a very high degree of influence in the negotiations. Not all of BESL's experience is directly translatable, however – as a PFI, it had some degree of freedom in negotiating optimal strategies, in particular with regard to the scope for compensatory payments for landowners affected by the schemes.

5.2.2 Bridging the stakeholder/community gap

There have been efforts to bridge conventional stakeholder engagement and community engagement, but generally at the local and small scale of the communities. In other words, at the local scale and on a scheme-by-scheme basis solutions are being explored for the problem of the tiers of engagement. In two small communities where flood management schemes have been implemented, Paull Holme Strays (Thorngumbald) in the Humber and the Brancaster realignment on the north Norfolk coast, an effective mechanism was the development of committed community forums — very local stakeholder groups. These forums were effective, simultaneously, for two key processes: first, informing and educating the community about the motivations for the change in flood management policy and the expected outcomes of the project and, secondly, informing the statutory decision makers about the local specifics, and helping to optimise the implementation. In part, they were effective because they were ongoing processes, with the communities and the stakeholders taking the necessary time to understand and incorporate the information they were giving each other.

How do local community interests get represented at the regional and national level? And equally, how are national-level decisions driven downwards? The need to address the consistency and interfacing across these multiple levels is more acute now that community engagement has become more widespread and members of the public demand greater accountability for decisions they have taken part in. Figure 5.2 shows the present-day context for FRM planning. Community engagement is a part of some of the plans shown: SMPs, RBMPs, and the development plans in local and county-level government. The degree of community engagement in the other plans shown is not

consistent. The arrows on the diagrams show how the plans are intended to feed information into each other, but, as yet, the mechanisms and their effectiveness are unclear.

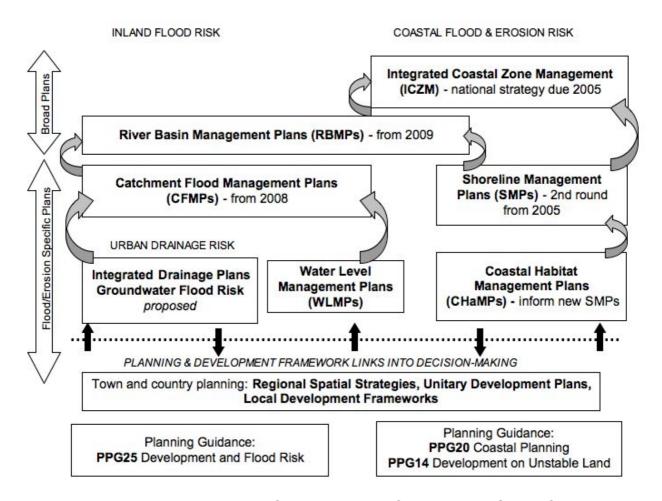


Figure 5.2 The planning context of FRM. Adapted from *Making Space for Water* (Defra 2004b)

Suggestions for bridging the scale gap include:

- Common engagement of some key stakeholders at multiple levels from policy through to scheme – the Environment Agency is uniquely important in this role, both as a key stakeholder itself at the many levels of multi-objective decision making, and in terms of its responsibility for engaging with other stakeholders (see Table 3.1).
- An iterative process of agreement of a set of guiding principles for participation that lays out each individual's or institution's roles and responsibilities from decision making through to delivery, which can adapt and exploit partnership opportunities as deliberative decision making becomes more established.
- Clarity at all levels with regard to the integration of stakeholder inputs in the decision-making processes.
- Improved information management to allow important discussions not just the final post-consultation decision outcomes – to be taken up at different levels or forums. This is the basis for integrating dialogue processes, in the terms of Harris

(2004). Another way to conceptualise this is to think in terms of generic community concerns. Every local case will be distinctive, but the problems will often have strong common themes that can only be identified when someone looks systematically across many communities. At present, the same local concerns can be handled in different ways at national level, because only the summary outcome (priority points, legal objections, etc.) feeds upwards, not the process information.

 Testing novel approaches to balancing conflicting stakeholder issues (in particular those that arise where national aims cause local tensions) and to managing stakeholder expectations.

Again, the Environment Agency is in the front line for these issues, and should draw on its successes in communication, engagement and education to strengthen longer-term relationships with stakeholders and the public. (See also CoastNet's 2004a Partnership workshop and Milligan's (2005) report on Defra's Living with a Changing Coastline workshop.)

5.3 The timescale of stakeholder engagement

Does the stakeholder engagement process need to change to allow for the more effective involvement of key stakeholders?

In the conventional approach to flood defence planning and implementation, flood risk is assessed, areas most at risk are prioritised, solutions are proposed, and an assessment of the costs and benefits is made. It is at this final stage that second-tier stakeholders have been consulted, in the attempt to provide a fuller and more credible assessment of environmental and social costs and benefits. This belies the often-stated reasons for engagement: obtaining specialised local knowledge to help define solutions; codeveloping efficient and effective options that will be less contested than top-down imposed solutions; even helping in assessing the risks and risk acceptance. All these reasons imply involvement at a much earlier stage, or, more realistically, involvement in an ongoing dynamic process of mutual adaptive learning, given that society, risk drivers and institutional/regulatory structures also undergo change.

Table 3.1 (summarised in Figure 5.3) shows that different stakeholders are currently engaged at different stages in the process of planning and implementation of FRM measures.

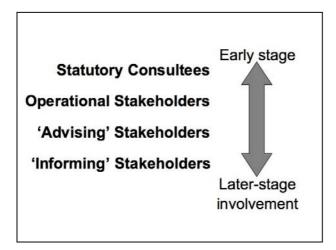


Figure 5.3 Stakeholder involvement in planning and implementation of FRM

This approach works best for the scheme-by-scheme planning process under which it evolved. There has been no robust mechanism allowing the duration of stakeholder engagement to extend much beyond the implementation of a scheme. The natural duration of contracts (and democratic terms of office, at a couple of years or so) mean that long-term strategic planning has not been a participatory process. There are very few other sectors in the current political process that have this kind of longer-term vision, but the planning context shown in Figure 5.2 above includes several efforts to redress this and extend the time horizon of strategic planning. The SMP process, in particular, takes a long-term view for estuaries and the coasts, but it is broadly perceived as having 'no teeth' because it is not yet embedded into the statutory planning process (Potts 1999). A key strength of the SMPs is that they provide a unique forum for more robust relationships among a wide range of stakeholders, leading to more consistent consensus. This is beginning to be consolidated in this current round, according to Milligan (2005).

Attention must now be paid to the timing of engagement for FRM. Foresight's *Future Flooding* (Evans *et al.* 2004) emphasised the fact that some effective and sustainable flood risk management actions have long lead-in times. These include the shift from constructed flood defences to the safe exploitation of the benefits of natural flooding. It takes time for saltmarshes and other natural systems to re-establish to the point where they can contribute to flood management. The other time-linked process relates to the wider community. Flood risk is as much related to risky behaviours as to risky locations, and practitioners and policy makers alike agree that social change is needed to manage risks in the longer term.

It takes time to educate and persuade stakeholders and individuals in the community about flood risk and its management (and of course flood risk is projected to increase as property values rise, the population expects more development, and the effects of climate change become stronger; Dlugolecki 2004 and *Making Space for Water*, Defra 2004b). This time represents one constraint on the rate at which society as a whole can change its collective behaviour. The emerging 'sub-statutory' partnerships, discussed in section 4 above, provide some long-term mechanisms for ongoing stakeholder relationships that can help with this aspect. The ongoing Public–Private Partnership (PPP) programmes (BFAP discussed above, Section 4.1, and the Pevensey Levels in Sussex) are another means of providing this continuity over 25+ years, but, as they are

run by private sector businesses, a large part of their stakeholder engagement depends on their Corporate Social Responsibility aims and targets (a particular example of a CSR scheme of relevance to FRM is the Movement for Innovation, M⁴I, under which the Moray Flood Alleviation scheme is operating as a demonstration project;¹⁰ see HR Wallingford 2005). There have not been enough PPP programmes to date to show what degree of Environment Agency steer there is on the process of engagement.

The other major constraint on social change relates to the rate and cycles of institutional and regulatory change. A very large range of spatial and sectoral plans have implications for the delivery of flood risk management (Figure 5.2 above), and most of these planning cycles operate over different timescales. Successful flood risk management depends on accommodating the implementation and review cycles of the various plans. For continuity in operating within this complex framework, particularly as flood risk management extends from a scheme-by-scheme responsive mode to a more system-focused integrated approach, there must be a shift from one-off engagement events to an ongoing process that engages the relevant stakeholders frequently enough and for a long enough period to allow the different planning cycles to be addressed together.

_

 $^{^{10}}$ www.m4i.org.uk and www.morayflooding.org

6 Conclusions and recommendations

The Environment Agency and FRM stakeholders have high demands of stakeholder engagement processes, and in particular of participatory decision making for FRM. Stakeholder engagement and open dialogue for the co-development of FRM decisions can offer the forums for potential partner identification and the development of relationships that can smooth and facilitate the delivery of the increasingly complex portfolio of FRM measures.

Some formal partnerships in existence now have not been productive in these terms. The link between the Environment Agency and local government, at least in the FRM context, is more about defining the boundaries of each 'partner's' role, with reactive mode information giving, rather than collaborative working. This could be set to change, with planning guidance revision, the implementation of the WFD and SEA directives, catchment and shoreline planning, and more integrated FRM planning outlined in the Government Response to the *Making Space for Water* consultation (Defra 2005). Many of these activities have stakeholder and citizen engagement obligations. Engaging in a fragmented way will not be effective. Discussions should begin now about how to streamline engagement.

Smaller-scale participatory processes and scheme-specific partnerships tend to work better, as might be expected, because information flows are more direct. The problem here is how these local-scale engagements can be aggregated and integrated into national and regional planning and FRM delivery. Some Coastal Groups and Estuary Management Partnerships have legal standing and dialogue-based processes for shared decision making, with ongoing forums nested within them for community engagement. These could form the basis of a local-to-regional network that would inform national policy. These groups are more developed on the coasts. Inland stakeholder groups for CFMPs and RBMPs are not the same constituency – they tend to be more like consultative bodies than decision-sharers.

The 'decide-announce-defend' approach to stakeholder engagement has many shortcomings, but a major process change is needed for any alternative approach to work. The key is the process. For most stakeholders, FRM is not their primary goal; it is a consequence of their actions or a problem they need to solve in order to act. For all flood risk management measures other than structural flood protection, stakeholders need to be engaged, persuaded or motivated on an ongoing basis. Engagement for FRM portfolio delivery needs to develop now.

References and bibliography

CEC, 2001 Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on *The Assessment of the Effects of Certain Plans and Programmes on the Environment*. Luxembourg: Office for Official Publications of the European Communities.

CoastNet, 2004 Report on the Partnership Workshop 2004, Oxley Hall, Leeds, 23–24 March 2004. Available from: http://www.coastnet.org.uk/

Downloadable from The Stationery Office (http://www.tso.co.uk).

http://www.planotes.org

http://www.planning.haynet.com

http://www.tyndall.ac.uk/publications

Planning Policy Statements PPS1: Creating Sustainable Communities, and PPS12: Local Development Frameworks. London: Office of the Deputy Prime Minister. Available from:

http://www.odpm.gov.uk/stellent/groups/odpm_control/documents/contentservertempl ate/odpm_index.hcst?n=5038&l=2

- Arnstein S R, 1969 A ladder of citizen participation. *Journal of the American Planning Association*, **35** (4), 216–224.
- Association of British Insurers, 2001 *Flooding: A Partnership Approach to Protecting People*. Available from:

http://www.abi.org.uk/Bookshop/default.asp#Flooding_&_Climate_Change. [Accessed 15 February 2006]

- Audit Commission, 2002 1998 A Fruitful Partnership: Effective Partnership Working, ISBN 1862401837186240075X. Available from: http://www.audit-commission.gov.uk/. [Accessed 15 February 2006]
- Ayling B and Rowntree J, 2002 The Broads Flood Alleviation Strategy: a review of the Public Private Partnership ProgrammeThe BESL experience. In *Redesigning the Coast* (ed. T O'Riordan). Available from:

www.uea.ac.uk/env/cserge/pub/wp/pa/pa 2002 01.pdf [Available from: http://www.tyndall.ac.uk/publications Accessed 15 February 2005]

- Bloomfield D, Collins K, Fry C and Munton R, 2001 Deliberation and inclusion: vehicles for increasing trust in UK public governance? *Environment and Planning C: Government and Policy*, **19**, 501–513.
- Broadlands Environmental Services Limited BESL, 2003 *Broadlands Flood Alleviation Strategy and Implementation Plan*. Halcrow/Edmund Nuttall and Environment Agency.
- Bulkeley H and Mol APJ, 2003 Participation and environmental governance: Consensus, ambivalence and debate. *Environmental Values* **12** (2) 143-154.
- CoastNet, 2004 2003 Partnership Approaches to ICZM: A Vision and Action Plan (March 2003 Partnership ReportWorkshop Report 2003). CoastNet/Sustainability Matters.

- Available from: http://www.coastnet.org.uk/ [Accessed 8 December 2005]
- CoastNet, 2004 Report on the Partnership Workshop 2004, Oxley Hall, Leeds, 23–24 March 2004. Available from: http://www.coastnet.org.uk/
- Davies A R, 2002 Power, politics and networks: shaping partnerships for sustainable communities. *Area*, **34** (2), 190–203.
- Davis M and Rees Y 2004 Participation and Social Learning in the River Ribble UK. Ribble River Basin Planning Workshop, Bamber Bridge, November 2004. Available from: www.harmonicop.info/_files/_down/ English%20National%20SH%20Workshop%20Report.pdf [Accessed 15 February 2006].
- Defra, 2003 SMP2 Workshop 'Experiences to Date'. Report on a meeting on 25 November at Nobel House, London. Available from: http://www.defra.gov.uk/environ/fcd/policy/smpworkshopnov2003.htm [Accessed 15 February 2006]
- Defra, 2004a The Government's Response to the Royal Commission on Environmental Pollution's 21st Report. Available from: http://www.defra.gov.uk/environment/rcep/21/09.htm [Accessed 15 February 2006]
- Defra, 2004b Making Space for Water: Developing a New Government Strategy for Flood and Coastal Erosion Risk Management in England. Consultation Document and First Government Response. Available from: http://www.defra.gov.uk/corporate/consult/waterspace/ [Accessed 15 February 2006]
- Defra, 2005 Making Space for Water: Developing a New Government Strategy for Flood and Coastal Erosion Risk Management in England. First Government Response. Available from: http://www.defra.gov.uk/corporate/consult/waterspace/ [Accessed 15 February 2006]
- DETR, 2000 UNECE Handbook of Good Practices in Public Participation in Making Local Environmental Decisions.. Available from the UN Economic Commission for Europe, . Available from: http://www.unece.org/env/pp/newcastle.handbook.htm [Accessed 15 February 2006]
- Dlugolecki A, 2004 *A Changing Climate for Insurance*. ABI Summary Report and Technical Annex. London: Association of British Insurers. Available from: http://www.abi.org.uk/climatechange [Accessed 15 February 2006]
- Doyle A, 2003 *Developing Effective Partnerships: A Case Study Approach*. University of Newcastle upon Tyne report for the Environment Agency.
- Ellis J B, D'Arcy B J, Chatfield P R, 2002 Sustainable urban-drainage systems and catchment planning. *Journal of the Chartered Institution of Water and Environmental Management*, **16** (4), 286–291.
- English Nature, 2003 *The Cley-Salthouse scheme: a summary appraisal.* Downloadable from http://www.english-nature.org.uk/livingwiththesea/project_details/good_practice_guide/habitatcrr/ENRestore/CHaMPs/NorthNorfolk/NorthNorfolk/Cley/Appraisal.htm [Accessed 15 February 2006]
- Environment Agency, 2003 Building trust with communities. Bristol: Environment Agency.
- Environment Agency, 2005a Water for life and livelihoods: A strategy for River Basin Planning. A Framework for stakeholder engagement. Bristol: Environment Agency.
- 42 Science Report Improving Stakeholder Engagement in FRM Decision Making and Delivery

- http://www.environment-agency.gov.uk/yourenv/consultations/946103/?lang= e [Accessed 15 February 2006]
- Environment Agency, 2005b *Understanding the Social Context of the Agency's Work: Policy and Literature Review.* Science Report E1-057/SR1. Bristol: Environment Agency.
- Evans E *et al.*, 2004 *Foresight: Future Flooding.* Scientific Summary: Volume II Managing Future Risks. London: Office of Science and Technology, London.
- Fry V E and Jones P J S, 2000 *The Development of Meaningful Indicators of Estuarine Management Partnership Success*. Report from UCL to English Nature under the Estuaries Review.
- Guimaraes R P, 2001 The politics and ethics of 'sustainability' as a new paradigm for public policy formation and development planning. *International Journal of Economic Development*, **3** (3), 1–54.
- Halcrow Group, HR Wallingford and John Chatterton Associates, 2001 *National Appraisal* of Assets at Risk from Flooding and Coastal Erosion, Including the Potential Impact of Climate Change. Report produced for Defra.
- Halcrow/CSERGE/CCRU, 2002 Managed Realignment Review. Defra/Environment Agency research report FD 2008. Available from:

 http://www.defra.gov.uk/science/project_data/DocumentLibrary/FD2008/FD2008_537

 http://www.defra.gov.uk/science/project_data/DocumentLibrary/FD2008/F
- Harris R, 2004 *Why Dialogue is Different*. >Elements, The Environment Council, 24–26. Available from: http://www.the-environment-council.org.uk/docs/pdf_whydialogueisdifferent.pdf [Accessed 15 February 2006]
- HM Government, 2005 Securing the Future: Delivering UK Sustainable Development Strategy. Available from: http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm [Accessed 15 February 2006]
- Hoare AG, 2002 Natural harmony but divided loyalties: the evolution of estuary management as exemplified by the Severn Estuary. *Applied Geography*, **22** 1-25.
- Hodge I, 2001 Beyond agri-environmental policy: towards an alternative model of rural environmental governance. *Land Use Policy*, **18** (2), 99–111.
- HR Wallingford, 2005 Sustainable Flood and Coastal Management. Progress Report, 2004 Defra/Environment Agency project FD 2114. (final report to be submitted June 2005). See: http://www.sfcm.org.uk/
- Huber M, 2004 Reforming the UK Flood Insurance Regime: The Breakdown of a Gentlemen's Agreement. ESRC/Centre for the Analysis of Risk and Regulation, London School of Economics.
- Inglis A and Hesse C, 2003 *PLA Notes 44: Local Government and Participation*. IEED Participatory Learning in Action. Available from: http://www.iied.org/NR/agbioliv/pla notes/index.html [Accessed 15 February 2006]
- Jemmett A, Kennedy K, Masters D and Witt R, 1999 *Towards sustainable estuary management*. English Nature Research Reports, No. 329
- Jordan A, Wurzel R K W, Zito A R, Bruckner L, 2003 Policy innovation or 'muddling 'muddling through''? 'New' 'New' environmental policy instruments in the United Kingdom. *Environmental Politics*, **12** (1), 179-198+ SPR

- Ledoux L, Cornell S, O'Riordan T, Harvey R, Banyard L 2005 Towards sustainable flood and coastal management: identifying drivers of, and obstacles to, managed realignment. *Land Use Policy* **22** (2) 129-144.
- Local Government Management BoardAssociation and Planning Officers Society, 19989 *Public Involvement in the Development Control Process*. LGA Publications, London. ISBN: 1 84049 074 8 LGMB Publication Sales.
- Local Government Association, 2000 *Briefing Note on Preparing Community Strategies*, June 2000. Available from: http://www.lga.gov.uk/lga/blg/index.htm [Accessed 15 February 2006]
- Local Government Association, Environment Agency, and Welsh Local Government Association (2003) *Working better together 2003: memorandum of understanding.* LGA, London. Reference Code F/EN022, ISBN: 1 84049 330 5
- McGlashan D J and Barker N, 2005 The partnership approach to integrated coastal zone management in Britain. In: *Managing Britain's Marine and Coastal Environment.* (eds. Smith HN and Potts JS) Abingdon, Oxfordshire: Routledge and National Maritime Museum., pp308
- Milligan J, 2005 Living with a changing coastline: exploring new forms of governance for sustainable coastal futures. Minutes from a Tyndall Centre/Defra project workshop, Westminster, 10 January 2005.
- Murby 2002 Why do we pay so much to protect wildlife from nature? *Coastal Futures Conference*, London, . Kempley, Gloucestershire: Coastal Management for Sustainability,. Kemply, Gloucestershire.
- Local Government Association, National Audit Office, 2002 *Better Public Services Through E-Government*, April 2002. Available from: www.nao.gov.uk/publications/
 nao reports/01-02/0102704-l.pdf [Accessed 15 February 2006]
- O'Riordan T, 2002 *Redesigning the Coast.* Report from a series of Tyndall Centre stakeholder and community workshops. Downloadable Available from: www.uea.ac.uk/env/cserge/pub/wp/pa/pa 2002 01.pdf [Accessed 15 February 2006]
- ODPM, 2004b LSP Evaluation and Action Research Programme Case-Studies interim report: A baseline of practice. Available from:

 http://www.odpm.gov.uk/index.asp?id=1136876 [Accessed 15 February 2006]
- ODPM, 20054a A Draft Practical Guide to the Strategic Environmental Assessment Directive. London: Office of the Deputy Prime Minister, London. Available from: www.odpm.gov.uk/embedded_object.asp?id=1143290 [Accessed 15 February 2006]http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm plan 029817.pdf
- Potts J S, 1999 The non-statutory approach to coastal defence in England and Wales: coastal defence groups and Shoreline Management Plans. *Marine Policy,* **23** (4/5), 479–501.
- Potts J S, 2000 Coastal defence groups in England and Wales: benefits, shortcomings and future requirements. *Periodicum Biologorum*, **102**, 13–21 Supp.
- Pound D, 2004 Stakeholder Dialogue A Good Practice Guide for Users. Dialogue Matters/Countryside Agency Report. Available from: http://www.dialoguematters.co.uk/ [Accessed 13 December 2005]

- RESOLVE Inc, et al., 2000 Participation, Negotiation and Conflict Management in Large Dams Projects, Thematic Review V.5 prepared as an input to the World Commission on Dams, Cape Town. Available from: http://www.resolv.org/press/index.html [Accessed 8 December 2005]
- Richards D and Smith M, 2002 *Governance and Public Policy*. Oxford: Oxford University Press.
- Speller G and Twigger-Ross C, 2005 *Improving Community and Citizen Engagement in Flood Risk Management Decision Making, Delivery and Flood Response.* Science report no. SC040033/SR3. Bristol: Environment Agency.
- Taylor E and O'Riordan T, 2002 *Public/Private Partnership in Flood Management*. CSERGE Working Paper. Available from: http://www.uea.ac.uk/env/cserge/publications
- UNECE, 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. United Nations Economic Commission for Europe, Aarhus, Denmark, 25 June1998.
- Wilkinson D and Wade D, 2005 Managing Flood Risk Through Effective Stakeholder Engagement – A Scoping Study on the Aire and Calder. Science report no. SC040033/SR4. Bristol: Environment Agency.

Abbreviations and acronyms

BESL	Broadlands Environmental Services Limited
BFAP	Broadlands Flood Alleviation Project
CFMP	Catchment Flood Management Plan
CHaMP	Coastal Habitat Management Plan
EIA	Environmental Impact Assessment
EMP	Estuary Management Plan
FRM	flood risk management
ICZM	Integrated Coastal Zone Management
LEAP	Local Environment Agency Plan
M^4I	Movement for Innovation
NGO	non-governmental organisation
ODPM	Office of the Deputy Prime Minister
PFI	Private Finance Initiative
PPP	Public–Private Partnership
RBMP	River Basin Management Plan
RFDC	Regional Flood Defence Committee
SCOPAC	Standing Conference on Problems
	Associated with the Coastline
SEA	Strategic Environmental Appraisal
SMP	Shoreline Management Plan
WFD	Water Framework Directive

We welcome views from our users, stakeholders and the public, including comments about the content and presentation of this report. If you are happy with our service, please tell us about it. It helps us to identify good practice and rewards our staff. If you are unhappy with our service, please let us know how we can improve it.