

**JURASSIC COAST PATHFINDER PROJECT**  
**Jurassic Coast Pathfinder Steering Group**

**Final Report to DEFRA**

**August 2011**

## CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>3</b>
<b>1. BACKGROUND TO THE JURASSIC COAST PATHFINDER PROJECT</b>	<b>7</b>
1.1 Project background	7
1.2 The Jurassic Coast	7
1.3 Project aims and objectives	7
1.4 Project governance	8
<b>2. SHARING THE LESSONS FROM PATHFINDER</b>	<b>13</b>
<b>3. DELIVERING THE JURASSIC COAST PATHFINDER PROJECT</b>	<b>13</b>
3.1 Scope of the Project	13
3.2 Understanding our starting point	13
3.3 Building adaptive capacity	16
3.4 Engaging communities via Pathfinder	17
3.5 Key outcomes from the Jurassic Coast Pathfinder process	18
3.6 Project evaluation	20
<b>4. LESSONS LEARNT FROM PATHFINDER</b>	<b>24</b>
4.1 Lessons for community engagement	24
4.2 Lessons for the Jurassic Coast Pathfinder project team – would we have done anything differently?	29
4.3 Unintended consequences?	31
4.4 Other lessons learnt	31
<b>5. RESPONSES TO DEFRA EVALUATION QUESTIONS</b>	<b>32</b>
<b>6. CONCLUSIONS &amp; RECOMMENDATIONS</b>	<b>41</b>
6.1 Conclusions	41
6.2 Recommendations	42
<b>APPENDICES</b>	<b>46</b>

## EXECUTIVE SUMMARY

### The Jurassic Coast Pathfinder project

Dorset County Council, on behalf of a range of partners on the Jurassic Coast of Dorset and East Devon, submitted a bid to DEFRA's Coastal Change Pathfinder fund in September 2009. £376,500 was awarded 'to explore planning for, and managing, adaptation to coastal change on the Jurassic Coast'.

### Outputs

The centre-piece of the project was an intensive focus on six case study sites, using scenario planning to work with communities to identify coastal change risks and options for adaptation. The sites – Swanage, Ringstead, Preston Beach Road, Charmouth, Seatown and Sidmouth – are all very different but will all face significant changes if Shoreline Management Plan policies are implemented. A network of facilitators was trained to ensure that an effective process of stakeholder engagement was designed and delivered. In addition the project delivered:

- **High quality visualisations** to illustrate the potential impacts of coastal change.
- **Training** for community leaders and **exchange visits** for communities facing change.
- A **research project into how spatial planning** can best support sustainable adaptation to coastal change.
- A **public exhibition** showcasing the conclusions from the scenario planning workshops and raising awareness.
- An **education project** to embed coastal change in the geography curriculum locally and equip future generations with the knowledge and skills to address coastal change issues.

### Outcomes

Each element of the project was carefully evaluated (see section 3.6 and appendix 1) and feedback gathered from participants suggested that most of the aims of the project were achieved. In particular:

- **Coastal change literacy:** there has been a demonstrable improvement in the awareness of coastal change issues among key stakeholders in the six communities identified as case studies. Awareness of the issues facing communities has improved among both coastal managers and communities themselves.
- **Effective stakeholder engagement:** there has been a significant improvement in the awareness across the public sector partners involved in the project of why and how effective stakeholder engagement can promote sustainable adaptation to coastal change.
- **Capacity to lead and manage the debate about coastal change:** a cohort of community leaders, present and future, has been developed who are better placed to lead and manage the debate about coastal change within their communities. A small but robust network of capable, trained facilitators has also been established in the public sector which can better support communities in debating and addressing coastal change and other issues.

- **Resilience:** the project has contributed to a growing realisation within communities that they need to take action for themselves to increase their resilience to coastal change, irrespective of action taken by central and local Government. Four of the six case study sites are now considering community emergency resilience plans for their areas.
- **Community empowerment:** as a result of capacity building and awareness raising activities, stakeholders involved in the Pathfinder process feel that they are better equipped to influence the decision making process. One community, Swanage, has established a Swanage Coast Forum to continue the discussion started by Pathfinder and raise awareness of the issues within the town.
- **Dialogue between coastal managers and communities:** there has been a step-change in the quality and quantity of dialogue between coastal management professionals and residents in the six communities identified as case studies. A number of specific proposals are under consideration as a result of bi-lateral or multi-lateral discussions initiated by the Pathfinder project. One community is now actively investigating the potential for 'roll back' of a key community building threatened by erosion.
- **Coastal change education:** the project has led directly to a significantly raised profile for geography and coastal change in the school curriculum locally. It has also given a cohort of the most gifted and talented students a unique opportunity to study coastal change, and in doing so potentially prepared a future generation of community leaders to deal with the issue.
- **Spatial planning for coastal change:** the project has contributed to a growing awareness of the need and potential for spatial planning to better address coastal change, and for local authorities across the Jurassic Coast to collaborate to ensure a consistent approach.

### Lessons learnt

Key lessons emerging from the Jurassic Coast Pathfinder project were that:

- **Good process design is the key to successful engagement:** the skills required are not the same as conventional communication skills and do not necessarily exist within the coastal management professions. While those leading the SMP2 process made efforts to consult coastal communities, many communities clearly did not feel sufficiently engaged in the process.
- **An open and honest approach is essential:** if Government and regulators want communities to make good long-term decisions, they need to present communities with clear and consistent information about long-term risks arising from coastal change.
- **There is opportunity in coastal change as well as threat:** but a well designed and facilitated process of discussion may be necessary to draw this out.
- **An inclusive approach** is a pre-requisite with engagement seeking to involve *all* key stakeholders (particularly statutory bodies), not just most.
- **Strenuous efforts should be made to engage those with most to lose** from coastal change (i.e. those with properties or businesses at risk) but also to engage those in coastal communities with less to lose – they have a stake too, as, even if defended, coastal towns will still face risks and need to adapt.

- **Visualising change** can be a powerful means of communicating coastal change impacts to communities – some of the information available currently tends to obscure rather than illuminate the impacts of coastal change.
- **Expectations are high, but can be managed** through meaningful dialogue which explores the limits of what can and can not be done in the face of coastal change.
- **The state has obligations to communities at risk**, and can not hide behind the absence of a legal obligation to compensate for loss to coastal change, particularly as such losses will accelerate in future.
- **Communities and individuals are pragmatic about change**, and open minded about potential relocation as long as the right support and incentives are available.
- It is not just communities who need to adapt to coastal change – **statutory agencies, local authorities and Government also need to adapt** their policy and regulatory frameworks to take account of the issues raised.

### Key conclusions

- The Jurassic Coast Pathfinder project has taken our understanding of coastal change and the conversation between coastal communities and coastal managers to a new level.
- The project has been a constructive, positive and worthwhile exercise for most of those involved. Progress has also been made in a short space of time with most of the key aims of the project.
- Particular progress has been made in awareness raising, engaging communities in a productive discussion about how to respond that change, and developing a wider range of options to adapt.
- Managing expectations was always going to be a challenge but the project has been reasonably successful in delivering what it said it would deliver, and managing expectations about what it could not deliver to a realistic level.
- The project has not fundamentally changed the widespread public expectation that Government (in some form) should and will continue to defend communities against erosion; but it would have been unrealistic to expect this to happen.
- It has demonstrated, however, that, with a targeted and well-designed process of dialogue, communities can be effectively engaged in the process of planning to adapt, as well as being empowered to take forward some adaptation actions for themselves.
- The potential for conflict between the public interest inherent in a natural coastline and private interests threatened by unmanaged coastal change is likely to increase – Pathfinder type dialogues are an important first step in reconciling these conflicts.
- As Natural Environment White Paper suggests, we must quantify the wider benefits of natural coastal change if they are to carry adequate weight in the decision-making process.
- It may never be possible to persuade communities threatened by coastal change to wholly embrace the idea – but Pathfinder suggests it is possible to help them understand why change is happening, and to come to terms with the need to adapt to it.

- Far from being a ‘soft’ alternative to engineering solutions to coastal change, Pathfinder has thus proven to be a very practical and pragmatic approach which, for modest cost in the short-term, could deliver significant benefits, opportunities and financial savings in the long-term.

### **Recommendations**

- Public bodies need to ‘get out more’ to understand the issues facing coastal communities. They also need to invest in the skills to engage with communities, and be prepared to resource this accordingly. The costs are modest but the dividends potentially huge and not restricted to coastal change.
- The strategies and action plans being developed to take forward high level policies set out in SMP2 need to apply the lessons from Pathfinder in terms of community engagement now - they can not wait for SMP3.
- The Government’s coastal policy framework needs to give a clear and consistent policy steer, with DEFRA policies, DCLG’s planning framework and EA’s coastal overview all being closely aligned to ensure a long-term approach to the sustainable management of coastal change.
- Critically, Government funding streams need to be reviewed to ensure that they support and deliver this policy steer. There are concerns that the proposed framework for funding coastal defence could lead to more unsustainable engineering schemes being funded, rather than ensuring that scarce public resources are deployed to support sustainable adaptation.
- 20, 50 and 100 year risk information arising from the National Coastal Erosion Mapping exercise should be made publicly available, readily digestible and easily understood, preferably in simple map form showing the extent of possible erosion risk with appropriate caveats and explanations forming an integral part of their presentation.
- In the short-term, Government should consider a modest, targeted extension of Pathfinder to put the best ideas developed in the research/engagement phases of existing Pathfinder projects into practice.
- In the medium-term, an increasing proportion of the national budget for coastal defence should be ring-fenced to support the implementation of adaptation actions.
- At some point adaptation should be able to compete for funding on a level playing field with conventional coastal defence schemes, though this is likely to require a fundamental review of how costs and benefits are assessed, informed by the logic of the Natural Environment White Paper.
- The emerging National Planning Policy Framework should emphasise the importance of (i) adaptation to coastal change (ii) effective stakeholder dialogue.
- Government should reflect on the experience of Pathfinder education projects with a view to ensuring that future generations are equipped with the knowledge and skills required to tackle issues arising from future environmental change.

### **Acknowledgement**

*The Project Team would like to record its sincere thanks to the communities of the Jurassic Coast who took part in the Pathfinder project and in particular the members of the project Steering Group for their help, advice and support.*

## **1. INTRODUCTION**

### **1.1 Project background**

Dorset County Council, on behalf of a range of partners on the Jurassic Coast of Dorset and East Devon, submitted a bid to DEFRA's Coastal Change Pathfinder fund in September 2009. £376,500 was awarded 'to explore planning for, and managing, adaptation to coastal change on the Jurassic Coast'.

This report on the Jurassic Coast Pathfinder project has been prepared by the Project Team and endorsed by the Project Steering Group (see 1.4 below). It summarises lessons learnt from the project and makes recommendations for action at national and local level. These lessons and recommendations are:

- Summarised in an Executive Summary (p3-6)
- Discussed comprehensively in the section on 'lessons learnt'
- Presented in response to evaluation questions set by DEFRA
- Explained in detail in appendices produced for each of the main workstreams within the project.

### **1.2 The Jurassic Coast**

The Dorset and East Devon World Heritage Site, popularly known as the Jurassic Coast, was inscribed on the World Heritage list in 2001 for its geological, paleontological and geomorphological importance. It covers a 95 mile stretch of coast from Exmouth in the west to Swanage in the east, and the journey across this coast represents a 'walk through time', covering 185 million years of earth's history. The partners in the Jurassic Coast Pathfinder project felt that the presence of England's only natural World Heritage Site (WHS) presented a unique opportunity in UK terms to help coastal communities understand and adapt to the process of coastal change. As one of the world's focal points for the earth sciences, the project aimed to ensure that the understanding of coastal change was driven by good science in the cultural context of a World Heritage Site which offers huge opportunities to engage as well as to educate.

Established mechanisms for engaging coastal communities already existed within the area in the form of the Jurassic Coast Communities Forum, the Dorset Coast Forum, the Devon Maritime Forum and the relationships with communities built up by individual local authorities and statutory agencies. The Pathfinder project built on these mechanisms, taking the conversation with communities about the risks and opportunities presented by coastal change to new levels, both in terms of the depth of understanding, and the breadth of the search for practical ways forward.

### **1.3 Project aims and objectives**

The overall objective of the Jurassic Coast Pathfinder project was:

'to ensure through meaningful engagement and participation that coastal communities are well-equipped to understand, debate and take part in decisions about coastal change, adapting and becoming more resilient to those changes as a result, based on sound science and local knowledge'.

Within this overall objective, 7 further aims were identified:

- Aim 1: Coastal communities who are well informed about coastal change.
- Aim 2: Coastal communities who are well equipped to debate coastal change.
- Aim 3: Coastal communities who can play a meaningful role in decisions about coastal change.
- Aim 4: Coastal communities who are more resilient and well-prepared to deal with coastal emergencies as well as long-term change.
- Aim 5: Coastal communities who are supported in the testing and acceptance of practical action to adapt to coastal change.
- Aim 6: Future generations of coastal communities who are aware of the changes they face in the long-term and better prepared to deal with them.
- Aim 7: A spatial planning system which is well-equipped to reconcile the potential conflicts between a sustainable approach to coastal change on the one hand, and onshore/offshore development pressures on the other.

The extent to which these aims were met is summarised in section 3.5. The extent to which individual workstreams contributed to the delivery of each aim is addressed in the appendices which relate to each workstream (Appendix 1).

#### 1.4 Project governance

##### *The Project Steering Group*

A Steering Group was established at the outset of the project with representatives from local authorities, statutory agencies, parish/town councils, community groups, non-government organisations and residents invited. A full list of the Steering Group membership is included at Table 1. The Steering Group was asked to endorse a proposed governance structure for the project, and the following Terms of Reference, at its first meeting:

##### **TERMS OF REFERENCE FOR JURASSIC COAST PATHFINDER STEERING GROUP – discussed and agreed by Steering Group January 2010**

- To advise the project executive on the **direction** of the project and individual work streams within it.
- To bring together the full range of stakeholders in the project at strategic level and **co-ordinate** the activities of all partners in the project.
- To provide a forum for the **exchange of information and learning** about coastal change.
- To discuss and develop **sustainable solutions** to the issues raised by coastal change.

The role of members of the Steering Group is to:

- Accurately and effectively **represent** the views of their organisation or community.
- Raise awareness of the project and provide **feedback** to the organisation or community which they represent.

- **Bring their wider expertise and experience** to the Steering Group and not just the perspective of the organisation or community they represent.
- Contribute to the **development, delivery and evaluation** of individual activities within the project as appropriate.

In accepting the invitation to join the Steering Group, partners are asked to make a commitment to:

- Approach the issues with **an open mind and a willingness to consider a range of alternative approaches** to the issues raised by coastal change.
- **Listen respectfully** to the views of others even where they may disagree.
- **Seek consensus** with other partners on the way forward wherever possible.
- **Champion** the project's aims wherever they feel able to do so.

**Table 1: Membership of the Jurassic Coast Pathfinder Steering Group Jan 2010**

<b>Partner organisation</b>	<b>Lead contact</b>
Charmouth Parish Council	Cllr Mallory Hayter (Chairman)
Chideock Parish Council	Cllr Kate Geraghty (Chairman)
Devon County Council	Aidan Winder (Coastal Policy Manager)
Devon County Council	Cllr Stuart Hughes (Cabinet Member for Highways & Transportation)
Devon Maritime Forum	Jim Masters (Co-ordinator)
Dorset AONB Partnership	Tom Munro (Dorset AONB Team Manager)
Dorset Coast Forum	Ken Buchan (Secretary)
Dorset County Council	Peter Moore (Env Policy Group Manager)
East Devon District Council	Mark Reilly (Head of Streetscene Services)
English Heritage	Veryan Heal (Team Leader)
Chair of Steering Group	Cllr Hilary Cox (Environment portfolio, DCC) – later replaced by Cllr Robert Gould
Environment Agency	Neil Watson (Coastal Engineer)
Jurassic Coast Trust	Malcolm Turnbull (Trustee)
Jurassic Coast World Heritage Team	Richard Edmonds (Earth Sciences Manager)
National Trust	Tony Flux (Dorset Coastal Zone Projects)
Natural England	Rachel Waldock (Maritime Advisor)
Osmington Parish Council	Cllr Mike Hart (Chairman)
Owermoigne Parish Council	Chairman
Purbeck District Council	Mike Goater (District Engineer)
Ringstead Society	John Young (Chairman)
RSPB	Renny Henderson (Conservation Officer)
Sidmouth Town Council	Cllr Simon Pollentine (Chairman of Tourism)
Sidmouth Vision	Jo Frith
Swanage Chamber of Trade	Secretary
Swanage Town Council	Alan Leeson (Town Clerk)
West Dorset District Council	Phil Perkins (Coastal Engineer) – later replaced by Ben Murray
West Dorset District Council	Cllr Teresa Seall (Owermoigne ward)
Weymouth & Portland Borough	Robert George (Coastal Engineer)
Weymouth & Portland Borough	Kate Evans (Senior Planning Policy Officer)

The proposed governance arrangements discussed and agreed by the Steering Group are summarised in figure 1. As the project took shape, it became clear that the 'Pathfinder Forums' proposed for the six case study sites, and the attendees being

assembled to attend workshops in each site were, in fact, one and the same thing. Similarly, it proved unnecessary to formally establish the proposed 'Pathfinder Communicators Group' as the individuals involved were able to co-ordinate via bi-lateral and multi-lateral discussion.

Minutes of the Project Steering Group meetings were made publicly available on the Pathfinder section of the Jurassic Coast website ([www.jurassiccoast.com/pathfinder](http://www.jurassiccoast.com/pathfinder)).

### *The Project Executive*

The Project Executive was formed largely from officer representatives of partner organisations who came together to assemble the bid to the Coastal Change Pathfinder Fund. A full list of the original membership is at table 2.

**Table 2: membership of Jurassic Coast Pathfinder Project Executive**

<b>Partner organisation</b>	<b>Lead contact</b>
Devon County Council	Aidan Winder (Coastal Policy Manager)
Dorset Coast Forum	Ken Buchan (Coastal Policy Manager)
Dorset County Council (Chair)	Peter Moore (Environment Policy Group Manager)
Environment Agency	Neil Watson (Coastal Engineer)
Jurassic Coast World Heritage Team	Sam Rose (World Heritage Team Leader)/Richard Edmonds (Earth Sciences Manager)
National Trust	Tony Flux (Coastal Projects Manager)
Elected member champion (from Dorset CC as accountable body)	Cllr Hilary Cox (Deputy Leader and Environment Portfolio Holder)
1 representative of District/Borough Councils covered by the project	Mike Goater (Coastal Engineer, Purbeck District Council)

### *The Project Team*

A large number of professionals and volunteers were involved in the delivery of the Jurassic Coast Pathfinder project. The 'core' project team employed directly to deliver the project consisted of:

- Rupert Lloyd (Coastal Change Pathfinder Co-ordinator) – recruited on 18 month fixed term contract to co-ordinate project delivery.
- Henry Aron (Coastal Change Pathfinder Officer) – recruited on 18 month fixed term contract to deliver project outputs.
- Alexandria Potter (Coastal Change Pathfinder Support Officer) – recruited on 18 month fixed term contract (part-time) to support project delivery.

This core project team was overseen by:

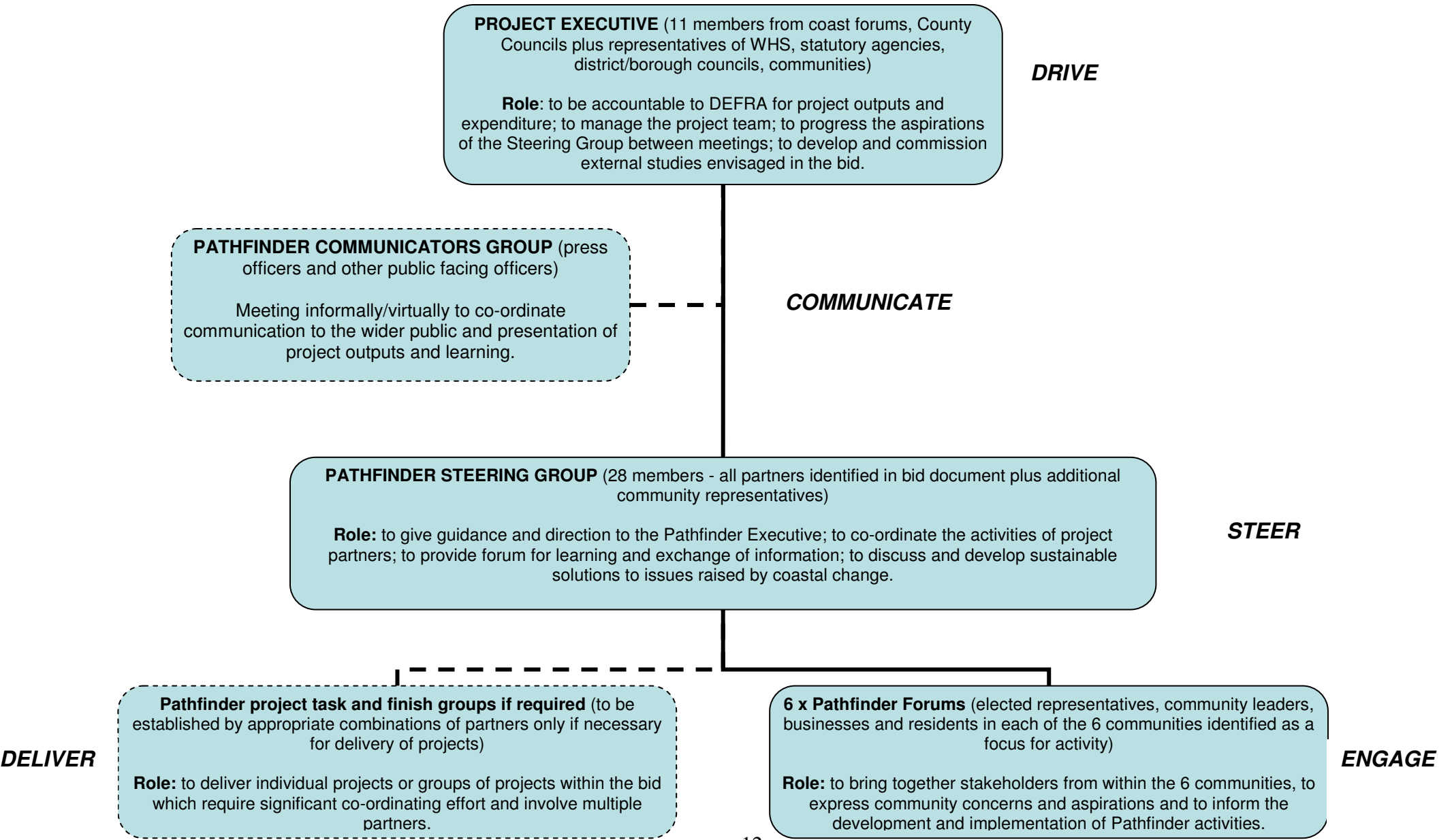
- Peter Moore (Environment Policy Group Manager, Dorset County Council) – project lead for the host authority.
- Ken Buchan (Coastal Policy Manager, Dorset County Council) – line manager of the Pathfinder staff team.

Other existing employees of partner organisations were charged with delivery of specific project outputs as part of their role for the duration of the project as follows:

- Anjana Ford (Education Co-ordinator, Jurassic Coast Team, hosted by Dorset County Council) – delivery of education project (project 6i).
- Daisy Sutcliffe (Arts Officer, Jurassic Coast Team, hosted by Dorset County Council) – delivery of creative arts project (project 1iii)
- Julia Pulman (Marketing Officer, Jurassic Coast Team, hosted by Dorset County Council) – management of Pathfinder content on Jurassic Coast website.
- Ben Wyer (Jurassic Coast Programme Officer) – delivery of coastal change champions project and Jurassic Coast Conversation (projects 2ii and 2iii)
- Bridget Betts (Dorset Coast Forum Co-ordinator) – support for scenario planning process in Dorset case study sites (project 1i) and other deliverables in Dorset.
- Jim Masters (Devon Maritime Forum Co-ordinator) – support for scenario planning process in Sidmouth (project 1i) and other deliverables in Devon.

Significant in-kind support was also provided by a range of other individuals and partner organisations, particularly the members of the Project Executive and Steering Group.

**Figure 1: governance arrangements for Jurassic Coast Pathfinder – approved by Steering Group Jan 2010**



## 2. SHARING THE LESSONS FROM PATHFINDER

DEFRA's award of the Pathfinder grant sought 'a clear commitment to share lessons and participate in wider evaluation of the Pathfinder programme' from recipients. Dorset County Council and partners sought to meet this commitment via:

- Attendance at and participation in national, regional and local events to identify and disseminate lessons learnt during the course of the project.
- Collaboration with other Pathfinder authorities throughout to ensure we could learn from each other.
- A prominent web presence for the project and outputs from it to promote understanding of the issues to a wider audience.
- Targeted promotion via local media.

### *Participation in national, regional and local events*

During the course of the project, in addition to the 14 local events held under the auspices of the Jurassic Coast Pathfinder project, the project team and/or Project Executive members gave presentations on project progress and lessons learnt to the following conferences and events:

#### National/regional events:

- Planning for Coastal Change Conference, hosted by Royal Haskoning, Exeter, Devon, 8<sup>th</sup> September 2010 (100 delegates)
- Coastal Futures Conference, London, 17<sup>th</sup> January 2011 (200 delegates)
- Lecture on Spatial Planning and Coastal Erosion in Swanage, Manchester University, 7<sup>th</sup> April 2011 (90 delegates)
- Southern Marine Planning Conference, Solent Coast Forum, Southampton, 30<sup>th</sup> September 2010 (80 delegates)

#### Local events:

- Devon Maritime Forum, Exeter, 15<sup>th</sup> March 2011 (50 delegates)
- Dorset Chamber of Commerce Business Breakfast, Poole, April 2011
- Dorset Coast Forum bi-annual conference, Poole, 19<sup>th</sup> November 2010 (80 delegates)
- East Devon AONB Partnership Board Meeting, Sidmouth, 21<sup>st</sup> July 2010 (20 delegates)
- Purbeck Heritage Committee meeting, Wareham, 10<sup>th</sup> February 2011 (15 delegates)
- South West Coastal Group, Exeter, 2<sup>nd</sup> February 2011 (30 delegates)
- Swanage Town Council meeting, 1<sup>st</sup> November 2010 (40 delegates)

An exhibition on coastal change was also created to raise awareness in the wider community and reach visitors to coastal areas. It toured Swanage, Weymouth, Charmouth and Sidmouth during June-July 2011. This consisted of display boards and a timeline telling the story of coastal change on the Jurassic Coast, computer-based visualisations of coastal change, and details of some of the adaptation options developed by communities during the workshop phase of the project. Exhibition materials have been designed with a long 'shelf-life' so that they can be deployed at other locations in future. Plans are already in place for exhibition materials to be available at public libraries and other locations, and for use by project partners.

### *Collaboration with other Pathfinder authorities*

Representatives of the Jurassic Coast Pathfinder project sought to engage with other Pathfinder authorities wherever possible and participated in or spoke at national and regional Pathfinder events including:

- DEFRA national event for Pathfinders, Reading, March 2010
- DEFRA national event for Pathfinders, Weymouth, October 2010
- GOSW event for South West Pathfinders, Exeter, March 2010
- North Norfolk Pathfinder conference, Cromer, March 2011
- Slapton Ley Pathfinder conference, Slapton, Devon, March 2010

The project team maintained regular contact and exchanged information and experiences beyond these events with a number of Pathfinder authorities, particularly Devon, Somerset and North Norfolk.

### *Pathfinder web presence*

The Pathfinder project was given a web presence in the form of a new section of the existing website for the Jurassic Coast, [www.jurassiccoast.com](http://www.jurassiccoast.com), accessed via a prominent link on the homepage.<sup>1</sup> This website is the main information resource about the Jurassic Coast for residents, visitors and professionals, receiving 50-60,000 unique visitors per month and 12 million 'hits' per annum. This section of the website contained:

- Background details of the project.
- Details of the six communities identified as case studies.
- Contextual and educational material on coastal change.
- Minutes of the meetings of the Project Steering Group.
- Links to project partner and other relevant external websites.
- Details of news and events arising from the project.

### *Targeted promotion via local media*

Press releases were issued sparingly in the early stages of the project to announce its launch, raise awareness and encourage residents and visitors to share their experience of coastal change. The project team started to work with the local media more intensively to promote public exhibitions and spread the message about how coastal change will affect communities. Had media been included in the earlier stages of the engagement process, the project team identified a risk that information about loss of property could have become sensationalised and dominated the discussion to the exclusion of other issues. The focus initially, therefore, was on direct contact with communities rather than indirect via the media.

---

<sup>1</sup> Homepage for Jurassic coast.com: <http://www.jurassiccoast.com/>; link to Pathfinder project: <http://www.jurassiccoast.com/397/managing-change-on-the-jurassic-coast-43.html>

### **3. DELIVERING THE JURASSIC COAST PATHFINDER PROJECT**

#### **3.1 Scope of the project**

The project proposed a combination of coast-wide awareness raising activities plus an intensive focus on six communities facing particular challenges from coastal change. These were:

- New Swanage: the northern part of the seaside town where residential and commercial property and public access to popular beaches are at risk.
- Ringstead: where residential property and the South West Coast Path could be affected by change.
- Preston Beach Road, Weymouth: where a major access route into the town faces long-term challenges.
- Charmouth: where a World Heritage visitor centre faces risk of damage and ultimately loss to the sea.
- Seatown: where residential properties, a popular public house and beach car park could be lost.
- Sidmouth: where residential property and gardens face erosion which could also increase the risk of flooding to the town centre.

These sites were selected for the diversity of issues they face but in each case, the Shoreline Management Plan, which sets the long-term policy framework for how the coast will be managed, proposes a change of policy, typically from ‘hold the line’ to ‘managed realignment’ or ‘no active intervention’, or a combination of both.

#### **3.2 Understanding our starting point**

An early priority for the project team was to gauge how well the wider community already understood coastal change, and how involved people felt in the process of managing change. This was done via a baseline opinion survey<sup>2</sup>. Appendix 3 presents the conclusions of this survey, and contrasts them with a follow-up survey conducted in the later stages of the project. The Jurassic Coast is in the unique position of being England’s only World Heritage Site inscribed for its natural interest – namely, the geology and the process of erosion which created its stunning landforms, textbook examples of coastal change and rich fossil record. As a result, the profile of geology and geomorphology – in education, science and culture – is high. Even in this relatively well-informed environment, however, there appeared to be significant gaps in public knowledge of, and engagement in, the process of adapting to change. This was underlined by the baseline survey which revealed that:

- 24% of people had heard of the Shoreline Management Plan (SMP).

---

<sup>2</sup> Telephone survey of adults living in the Pathfinder project area (Charmouth, Preston, Ringstead, Seatown, Sidmouth, Swanage) conducted by Marketing Means Ltd – numbers generated using stratified random digit dialling. Wave 1: telephone interviews conducted between 25 October 2010 and 10 November 2010 with booster face to face interviews in Ringstead and Seatown. Total of 618 responses achieved. Wave 2: telephone interviews conducted between 27<sup>th</sup> July 2011 and 9<sup>th</sup> August 2011. Total of 617 responses received.

- Of this 24%, only 31% knew what the SMP policy was for their area.

Together, the results suggested that less than 10% of people in coastal areas were aware of one of the key policy mechanisms for deciding how their coast will be managed in future.

The survey also showed that:

- 47% felt 'not very well-informed' and a further 22% 'not at all' informed about the decision-making process surrounding coastal change.
- 57% felt 'not at all' involved in the decision-making process regarding coastal change, and a further 33% answered 'not a great deal'.
- 37% said that they would like more involvement in the decision making process around coastal change, with a further 16% answering 'maybe'.

These results suggest that while a small minority do already feel engaged in the coastal change decision-making process, despite recent public engagement opportunities offered through consultation on the Shoreline Management Plans, there is a clear appetite for more information, and, to a lesser extent, more involvement.

### **3.3 Building adaptive capacity within communities**

Given the time-limited nature of the project, partners in the Jurassic Coast Pathfinder were keen to ensure that the project left a lasting legacy. Consequently, there was a focus on building capacity at a number of levels:

- Capacity to understand coastal change: the project produced high quality visual material to help communities understand change. These included video clips and fly-throughs using aerial photography draped over computer generated images of the coast to visualise what the coast may look like in 20, 50 and 100 years time (Figure 2). Training in coastal management was also delivered to community leaders, improving their ability to raise awareness of the need to adapt within their communities. Site visits between and beyond the six case study sites were organised to put communities facing similar challenges in touch with each other with a view to providing practical and moral support. The conclusions of intensive engagement with key stakeholders in each community were fed into a public exhibition highlighting the implications of coastal change and the options for adaptation to spread the message to the wider community and visitors.
- Capacity to initiate, manage and lead debates about coastal change: it was recognised, at an early stage, that good engagement required good facilitation, so training was commissioned for a network of facilitators to improve the capacity of the public sector to support communities in debating adaptation. Spatial planners, community planners, policy-makers and coastal engineers all attended the training and the early signs are that a robust network of skilled facilitators has been established. The involvement of local authority elected members was sought at an early stage in view of their community leadership role. The project Steering Group was chaired by a Cabinet Member from the lead authority, Dorset County Council, and there was good elected member input to the workshops in the six case study sites.

- Building the capacity of future generations to understand and adapt to coastal change: the project worked with schools along the Jurassic Coast to embed coastal change in the curriculum. This gave students the opportunity to develop and express their views on the issue, through learning outside the classroom and involvement in the mainstream engagement activities with the wider community.

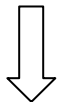
### 3.4 Engaging communities via Pathfinder

Many public policy processes highlight the need for ‘community engagement’, but like adaptation, this can mean many things. Traditional approaches to stakeholder engagement often involve information giving (e.g. setting out the issues), information gathering (e.g. opinion surveys) and consultation (e.g. issuing a draft proposal for comment), but stop short of real engagement, meaningful dialogue and shared decision-making with stakeholders (Table 3). All are valid techniques, but the technique chosen should be appropriate to the issue at hand.

With an issue like coastal change, where understanding is variable, uncertainty is high, conflict is possible and emotion often present, more intensive stakeholder dialogue is required to help communities understand the constraints and opportunities, and to identify the best adaptation options.

More collaborative effort invested up front, which involves interested parties in the decision making process at an early stage, often results in a smoother process because of wide agreement and buy-in (Pound 2008). This was the chosen approach for Jurassic Coast Pathfinder project.

**Table 3: models of participation<sup>3</sup>**

Activity	Purpose	Stakeholder’s influence over outcome
1. Information giving	To raise awareness	None  Most
2. Information gathering	To develop own understanding	
3. Consultation	To be open to influence	
4. Shared decision-making	To share influence	

The cornerstone of the project was therefore a series of workshops held in the six case study communities. These used scenario planning to envisage a catastrophic future storm, and worked backwards from the scenario to identify possible adaptations which the community could consider to mitigate or avoid the impacts of such an event.

Between October 2010 and April 2011, two workshops were held in each of the six communities. The first was designed to help participants better understand coastal change and identify the widest range of possible options to adapt.

The second workshop narrowed down these options so that the community and/or other stakeholders had a prioritised list of specific actions to progress. The intention was to present communities with evidence about coastal change and support them in coming to their own conclusions about how best to respond, rather than impose a pre-conceived notion of what would be best for each community. The evidence presented was also shaped and improved by local knowledge and experience so that professionals also

<sup>3</sup> D Pound, *Stakeholder dialogue: a good practice approach to participation*, Dialogue Matters Training Manual, 2008, adapted from article by R Harris, *Why dialogue is different*, Elements Issue 2 December 2000.

learnt from the process in terms of the implications of coastal change for different areas. Detailed reports of each workshop were produced and circulated to participants. A copy of the scenario, the workshop reports and other papers produced for the Swanage scenario planning process is included at Appendix 4 by way of example.

A project plan was drawn up for each of the workstreams within the project. Appendix 1 summarises the extent to which these workstreams delivered the aims and outputs from the project, give details of costs, plus further quantitative and/or qualitative evaluation of each.

**3.5 Key outcomes from the Jurassic Coast Pathfinder process**

Detailed outputs and outcomes from the project are described in the appendices, but a number of the most significant are summarised below in relation to the stated aims of the project:

**Table 4: key outcomes compared to aims of Jurassic Coast Pathfinder Project**

AIMS	KEY OUTPUTS/OUTCOMES
Aim 1: Coastal communities who are well informed about coastal change.	There has been a demonstrable improvement in the awareness of coastal change issues among key stakeholders in the six communities identified as case studies (see section 3.6 - feedback from workshop participants and exhibition attendees). While this has not been matched by a measurable increase in awareness in the wider communities of the Jurassic Coast (see section 3.6 – residents’ survey),
Aim 2: Coastal communities who are well equipped to debate coastal change	There has been a significant improvement in the awareness across the public sector partners involved in the project of why and how effective stakeholder engagement can promote sustainable adaptation to coastal change. A cohort of community leaders, present and future, has been developed who are better placed to lead and manage the debate about coastal change within their communities. A small but robust network of capable, trained facilitators has also been established in the public sector which can better support communities in debating and addressing coastal change and other issues. One case study community, Swanage, has established a Swanage Coast Forum to continue the discussion started by Pathfinder and raise awareness of the issues within the town.
Aim 3: Coastal communities who can play a meaningful role in decisions about change	As a result of capacity building and awareness raising activities, stakeholders involved in the Pathfinder process feel that they are better equipped to influence the decision making process (see section 3.6 – feedback from workshop participants)
Aim 4: Coastal communities who are more resilient and well-prepared to deal with coastal emergencies as well as long-term change.	The project has contributed to a growing realisation within communities that they need to take action for themselves to increase their resilience to coastal change, irrespective of action taken by central and local Government (see section 3.6 – feedback from workshop participants). Four of the six case study sites are now considering community emergency resilience plans for their areas.
Aim 5: Coastal communities who are supported in the testing and acceptance of practical action to adapt to coastal change.	There has been a step-change in the quality and quantity of dialogue between coastal management professionals and residents in the 6 communities identified as case studies (see section 3.6 – feedback from workshop participants). A number of specific proposals are under consideration as a result of bi-lateral or multi-lateral discussions initiated by the Pathfinder project. One case study community is now actively investigating the potential for ‘roll back’ of a key community building threatened by erosion.

Aim 6: Future generations of coastal communities who are aware of the changes they face in the long-term and better prepared to deal with them.	The project has led directly to a significantly raised profile for geography and coastal change in the school curriculum locally. It has also given a cohort of the most gifted and talented students a unique opportunity to study coastal change, and in doing so potentially prepared a future generation of community leaders to deal with the issue.
Aim 7: A spatial planning system which is well-equipped to reconcile the potential conflicts between a sustainable approach to coastal change, and onshore/offshore development pressures.	The project has contributed to a growing awareness of the need and potential for spatial planning to better address coastal change and for local authorities across the Jurassic Coast to collaborate to ensure a consistent approach.

### 3.6 Project Evaluation

Evaluation was an integral part of many workstreams which are summarised in Appendix 1 – this section highlights some of the key formal evaluation exercises conducted during the course of the project, namely:

- Feedback from participants in the scenario planning workshops
- Feedback from attendees at the public exhibitions
- Feedback from participants in the education project
- Feedback from residents in the wider community tracked via telephone opinion survey 'before' and 'after' the project.

#### *Feedback from participants in the scenario planning workshops*

These formed the centre-piece of the project. 205 people attended, of whom 102 completed evaluation forms (50%). The feedback suggested that:

1. **The process significantly improved the understanding of local residents and businesses about the impacts of coastal change on their location.** While the feedback from other stakeholders (which included local authorities, statutory bodies, NGOs and community groups) was less emphatic, it was also noteworthy that they too increased their understanding of the impacts of coastal change on specific locations, suggesting that professionals benefited from such engagement as well as communities themselves.
2. **Better understanding of the impacts of coastal change perhaps inevitably led to an increase in concern among residents and businesses.** In isolation this would have been an undesirable outcome so the response to this question should be considered alongside the response to point 3 below.
3. **The process did, however, leave residents and businesses feeling better prepared to deal with the impacts of coastal change.** As with point 1, there was also a positive response to this question from professionals.
4. **The process gave all stakeholders a better idea of who is involved in managing coastal change and about how decisions are made.** This was an explicit objective of the project.
5. **The process left residents and businesses feeling much better able to take part in decisions about coastal change.** Again, this met another stated objective of the project.

6. **All stakeholders felt that the process had identified a wider range of options to adapt** - again, a key objective of the project.
7. **Stakeholders felt very clearly that the process gave them a better understanding of others' points of view.** While not an explicit aim of the project, this was one of the more powerful and positive pieces of feedback.

The most strongly positive response was for the proposition that the Pathfinder workshops were well organised and well-run – as well as being welcome news to the project team, this did suggest that even where the hoped for outcomes may not have emerged, this was not a failing of process, and might be better explained by political, economic or other constraints on the options available for adaptation. A detailed summary of the feedback is in table 4 below.

**Table 5: summary of feedback from participants in scenario planning workshops**

Question	All participants (1 = disagree, 5 = agree)	Residents/ businesses only (1 = disagree, 5 =agree)
1. Overall, the workshops have improved my understanding of how coastal change may impact on [location]	3.4	3.9
2. As a result of the workshops I am less concerned about how coastal change might impact on [location]	2.5	2.2
3. The workshops have left me feeling better prepared to deal with how coastal change might impact on me	2.9	3.3
4. After the workshops I have a better idea of who is involved in managing coastal change in [location] and about how decisions are made	3.4	3.5
5. After the workshops I feel better able to take part in future decisions about how coastal change is managed in [location]	3.7	3.9
6. The workshops have helped develop a wider range of options for [location] to adapt to coastal change in future	3.8	3.9
7. As a result of the workshops I have a better understanding of other stakeholder's point of view	3.8	4.0
8. I think the Pathfinder workshops were well organised and well run	4.4	4.5

*Feedback from attendees at the public exhibitions*

During the course of the scenario planning process, the need to engage a wider audience beyond those involved in the workshops became apparent. As a result, the Pathfinder team organised a series of public exhibitions in key locations along the Jurassic coast: Swanage, Weymouth, Charmouth and Sidmouth during June and July 2011.

A selection of techniques were used to advertise the exhibitions, including: a press release which led to coverage within the local press and popular websites (e.g. the BBC News website), information within the newsletters of partnerships and organisations (e.g.

the Dorset Coast Forum newsletter and Parish Council newsletters), handing out leaflets and flyers and placing posters in popular community locations (e.g. post offices, restaurants and shops)

The exhibition content was comprised of display boards detailing the following:

- A timeline illustrating how the Jurassic Coast has changed over the last 100,000 years
- What coastal change is, and how it impacts upon communities
- How coastal change is managed and who makes decisions on the coast
- Why some coastal communities need to plan for alternatives to coastal defence
- The outcomes of the scenario planning workshops
- The visualisations of coastal change produced for the scenario planning workshops

The exhibitions were viewed by a total of 602 individuals of which 84 completed evaluation feedback forms, a reasonable response rate of 14% for this kind of exhibition. When asked whether they felt better informed about the impacts of coastal change and how it is managed on a scale of 1 to 5 (1 = disagree, 5 = agree) the average score from exhibition attendees was 4.35. When asked whether the exhibition had improved understanding of how the coast has changed in the past and may change in the future, the average score was 4.34. A detailed summary of feedback is below in table 5.

**Table 6: feedback from public exhibitions June-July 2011**

	Swanage	Charmouth	Sidmouth	Average
Q1 Overall , the exhibition has improved my understanding of what coastal change is and how it is managed (I disagree 12345 I agree)	4.30	4.52	4.23	<b>4.35</b>
Q2 The exhibition has improved my understanding of how the coast has changed in the past and may change in the future (I disagree 12345 I agree)	4.39	4.39	4.23	<b>4.34</b>
Q3 As a result of the exhibiton, I am more aware of how I may be personally affected by coastal change (I disagree 12345 I agree)	4.20	4.10	3.90	<b>4.07</b>
Q4I am now more / less concerned about how coastal change might impact upon communities on the Jurassic Coast (More 12345 Less)	2.77	2.47	2.58	<b>2.61</b>
Q5 I think the Pathfinder exhibition content was interesting and the event well organised (I disagree 12345 I agree)	4.45	4.67	4.26	<b>4.46</b>

*Feedback from Jurassic Coast Pathfinder Education Programme*

Significant benefits were also generated via the educational aspects of the project. These benefits could be measured in terms of the impact within schools and pupil development as much as in terms of coastal change adaptation – see below for summary of feedback.

*Comments on the benefits of the project to schools and students*

- ‘The benefits to the school have been significant in terms of...prestige, particularly with the Sustainable Schools Award’
- ‘The main benefit was giving students something different, local, important, difficult to delve their teeth into and develop their own ideas’

- 'We found that the project...helped students to understand professional expectations and working practises better'
- 'Students enjoyed the fieldwork very much and could see this as geography in action'
- 'In an ideal world it would be excellent if more learning could take place this way involving greater student numbers'

*Comments on educational attainment and personal development*

- 'Students who were in Year 10 at the start all got an A\* in the Coasts GCSE exam'
- 'The young people have developed as a group and individuals in ability and confidence levels'
- 'Students have emerged with strong leadership skills not previously apparent'
- 'Some students...have obviously grown in confidence within the classroom and are now much more 'switched on' and involved in classroom discussion'
- 'Learners enjoyed being part of the project and their confidence has continued to flourish along with their growing interest in geography'
- 'We used GIS in some parts of the project and also developed media skills which the students enjoyed very much'
- 'All the students are now very confident in their areas of study and have used a multitude of skills to put their presentation together'

*Comments on the teaching of geography and other legacies*

- 'We want to share our experiences with other schools and are seriously looking to replicate a similar project with the next cohort of geographers'
- 'Students...have helped to produce a resource that will be used in the teaching of geography in future years'
- 'The whole experience has really focused their skills and enthusiasm for teamwork'
- 'They have been extended and challenged and are in a great position to go further in the subject as a result'
- 'We want to develop our GIS expertise and utilise this with regular investigations...as a key part of a developing geography curriculum'
- 'The theme of coasts in being reintegrated into the Year 7 curriculum using resources from this project to support it'
- 'The project has enhanced the students knowledge and appreciation of coastal processes and I will use this to kick start their learning for GCSE Geography'

*Comments on the Pathfinder process*

- 'I found the Pathfinder community consultation event very enlightening...having young people involved as stakeholders should be encouraged and expanded'
- 'The students had the chance to take part in stakeholder discussions at a high level and their opinions were valued by the participants'
- 'The support given by the Jurassic Coast team was excellent – thank you'
- 'The project has an excellent vision and the support provided by the Jurassic Coast team has been fantastic'

*Feedback from public opinion surveys*

Two surveys were conducted by Marketing Means to gather:

- Pre-project baseline data on opinions and awareness to feed into the project
- Post project data to see if there was any different in opinion-awareness

The method used was a telephone survey of adults living in the six case study areas – Charmouth, Preston, Ringstead, Seatown, Sidmouth and Swanage. The summary reports of both waves are included at Appendix 3.

While the first wave survey produced some very useful and revealing baseline information which helped establish our starting point (see section 3.2), the second survey revealed a disappointing lack of statistically significant change in awareness of and opinions about coastal change in the wider communities surveyed. This may be explained by:

- The conscious decision by the project team to focus on those with most at stake, and to do so via direct contact rather than indirectly via the local media. This allowed us to manage the process of engagement without the risk of the agenda being set by others, but in doing so perhaps restricted the ‘reach’ of the project message beyond those most affected by coastal change.
- The fact that the large size of some of the sample areas (e.g. Swanage and Sidmouth) inevitably included many people who are not directly affected by coastal change, or would not perceive themselves to be. For further discussion of this, see section 4.1 on ‘Engaging stakeholders in coastal change who don’t think they have a stake’.

The number of people who attended the public exhibitions (who gave very positive feedback) was similar to the number surveyed so we can perhaps conclude that the project had a positive impact on those with whom it was able to directly engage, but not on those who were only exposed to it indirectly. While it might have been possible to reach a wider audience via a more high profile project, this may have required an unacceptable trade-off with both the quality of the contact we enjoyed with those who did participate in the project, and our ability to manage the engagement process without the risk of the issues being misinterpreted, misrepresented or sensationalised.

## **4. LESSONS LEARNT FROM PATHFINDER**

### **4.1 Lessons for community engagement**

#### ***Good process design is the key to successful engagement***

The significance and value gained from training a network of facilitators at an early stage of the project can not be under-estimated. The training equipped a network of individuals working in the public sector not just with the functional skills to manage a group discussion, but with the planning skills to design an effective process. We are grateful to Diana Pound and Katherine Hardcastle of Dialogue Matters who delivered this training, and would strongly recommend the approach they promote which has been developed over a period of years and refined through practical experience.

#### ***An open, honest approach is needed***

The experience of the Pathfinder project suggests that, to have a sensible and constructive discussion about adaptation options, the statutory sector and coastal management professionals need to be as open and honest as possible about what they know about the risks, and about what can and can not be done within the prevailing economic and regulatory climate. The cultural change implied for some agencies should not be under-estimated, and it fair to say that some organisations have embraced the opportunity for more openness more easily than others.

Government (central and local) and its agencies need to ensure that the investment in the National Coastal Erosion Mapping exercise is put to good use by ensuring that clear, consistent information about the short, medium and long-term impacts of coastal change is made publicly available in a form which is easy for the public to understand, and in a way which manages the risks of this information being misinterpreted or sensationalised.

The experience of the Pathfinder project suggests not just that this is a helpful aide to stimulating a debate about adaptation within communities, it is an essential ingredient in doing so. Any concern that communities might react badly to such information, or would be immediately blighted, has been allayed by the Pathfinder process. The information is already publicly available via the SMP process, and its wider promotion needs to be managed so that long-term decision-making can be informed effectively by understanding of coastal change risk.

There were several moments during the scenario planning workshops when solutions were proposed which were probably impractical for a number of reasons. During the first phase of workshops these went unchallenged as the idea was to generate as many ideas and options as possible, and to ensure that the creative process was not stifled by considerations about what was 'realistic'. During the second round of workshops, however, when the objective was to narrow down the options to the most sustainable, acceptable and deliverable, a number of ideas were still on the table which various stakeholders knew to be impractical for a variety of reasons.

Facilitators therefore encouraged stakeholders who were aware of any such 'show-stoppers' to declare them as ideas came up in the second workshop. The purpose of doing so was to ensure that all stakeholders left the room with the same clear information about what might or might not be possible – a crucial stage in both managing expectations and ensuring that action which had been agreed to could be taken forward rather than lead to further frustration.

### ***There is opportunity in coastal change as well as threat***

Communities facing coastal change do not instinctively associate it with opportunity, but Pathfinder demonstrated that, when space was provided through the engagement process to consider opportunities, most communities had little difficulty in identifying a range of potentially positive outcomes from coastal change. There would be little point trying to convince a community threatened by significant loss that this can be flipped on its head simply by sunny optimism. But through structured and facilitated discussion, it did prove possible to draw out specific opportunities.

In some cases these opportunities outweigh the threats to the extent that communities may embrace change and see it as a good thing. They may even do so regardless of whether coastal change actually happens – the ‘no regrets’ approach – to try to get ahead of inevitable change and adapt in their own time rather than in a hasty and ill-considered response to a catastrophic event. In drawing out the potential opportunities from change, the notion that communities have a single, common interest in maintaining their reliance on coastal defence is also challenged.

### ***An ongoing commitment to stakeholder engagement is required***

The process of engagement produced many positive results. An important lesson is that this engagement must be maintained over time as a start-stop process could lose the momentum and undermine the goodwill generated to date. This is a concern for project partners as they are determined to maintain this momentum while at the same time facing severe constraints on expenditure as a result of funding cuts. Some targeted continuation of the work begun by Pathfinders would be advisable, and if Government is considering any extension of Pathfinder, we would suggest that maintaining capacity to engage should be a priority, along with funding practical adaptations following on from the process of engagement.

### ***An inclusive approach is a pre-requisite***

Where there are existing conflicts or differences of opinion about future management options between communities and regulators, these are more likely to be addressed and resolved if all the relevant stakeholders are brought together in the same room under a ‘neutral’ banner. The emphasis here is on ‘all’ rather than ‘most’ – one of DEFRA’s agencies was unable to attend one of our workshops in which they played a key role, and the event was not as successful as it could have been as a result. It was in one sense surprising that the groups of people who came together in the context of Pathfinder had often not been in the same room at the same time before. Meeting people with different interests who might have previously been assumed to be ‘the enemy’ de-fused tensions and initiated dialogues which, arguably, should not have had to wait for Pathfinder.

### ***A picture speaks 1,000 words – and 10,000 ‘high-level statistics’***

Adopting the truism that ‘a picture speaks a thousand words’, the Jurassic Coast Pathfinder project invested significantly in high quality visualisations of coastal change to make the reality of change more accessible to communities and to illustrate the likely impacts of SMP policy for their areas. These are included as a separate annex to this report. Different people absorb information in different ways, so we have aimed for a diversity of media to accommodate different learning styles within the communities we serve. The feedback from participants was that these demonstrated powerfully both the implications and inevitability of change, and in doing so helped them appreciate the need to adapt, and the importance of thinking

about adaptation now, even if the predicted impacts of change might be some way off. There are important lessons from this in the way that the evidence collated by the National Coastal Erosion Mapping exercise is presented to the public.

### ***Engaging those with most to lose***

There can be a tendency in the debate about coastal change on the part of public bodies to avoid contact with those with most at stake as interactions with them can be highly sensitive and emotive. We were therefore careful not to exclude those at the 'sharp end' of coastal change from the project. In addition to making strenuous efforts to ensure residents in properties at risk contributed to the process, we also invited a number of individuals with properties at risk onto the 20-strong project Steering Group. These individuals provided an invaluable reality check on the project and made some candid, insightful and passionate inputs to our deliberations. The fact that they were clearly not 'captives' of the project also helped us address the initial scepticism about the purpose of the project. We were very fortunate that they entered into the spirit of the project with open minds and that they were willing to play an important role in bringing to the table neighbours who might otherwise have remained outside the process.

As such, the experience of the Jurassic Coast Pathfinder was that engaging individuals with much to lose was not just beneficial, it was an essential part of the process. Doing so in the context of a well-facilitated workshop, where tensions could be managed, and where an alternative point of view was usually available to challenge preconceived ideas – whether held by an individual or an institution – provided an effective means to ensure that legitimate concerns were aired, and that the collective efforts of many stakeholders were focused on addressing them.

Anecdotal evidence suggests that individuals with property at risk welcomed this supportive environment and were glad to be involved in the process, even though for some it was the first time they had been made aware of the risks. Introducing the issue of risk sensitively but honestly in the company of their neighbours, peers and relevant professionals seemed to work well.

### ***Engaging 'future generations' of coastal residents and decision-makers***

'Future generations' is a key concept in sustainable development but it is not often that future generations of decision-makers are engaged in the consultation and decision-making process. The Jurassic Coast Pathfinder project sought to do so this with a specific focus on secondary schools, the geography curriculum and how young people might be better engaged in the issue of coastal change.

Nine schools along the Jurassic Coast were given financial and practical support to mount investigations into how coastal change would affect an 'adopted' stretch of coast, although 2 dropped out due to competing time pressures. Students in the remaining 7 schools conducted field trips, action research and interviews with coastal stakeholders. They reported their findings via a variety of media to a Pathfinder Schools Conference on 11<sup>th</sup> March 2011. This was attended by over 100 students, parents, teachers, professionals, policy-makers and decision-takers. Students were also involved in the wider process of stakeholder engagement within the Pathfinder project, participating in workshops with other stakeholders. Appendix 6 provides a detailed summary of the projects carried out by each school along with evaluation from the teachers who participated.

Issues like coastal change, natural disasters and climate change illustrate the importance of geography in the curriculum in ensuring that future generations have the know-how to be resilient in the face of change, so the project had an additional aspiration to promote the subject.

It was clear from the feedback, summarised in section 3.6, that, as well as better equipping students to understand issues like coastal change and promoting geography within schools, the project delivered a wide range of additional benefits. We believe that this project could be replicated in a wide range of coastal areas for relatively limited cost. This would ultimately lead to a significantly higher level of coastal literacy among the coastal residents and decision-makers of tomorrow.

### ***Expectations are high – but can be managed***

Expectations on the role of the state in dealing with coastal change are very high, nowhere more so than in people's perception of the 'right' to compensation for the value of property threatened by coastal change. The idea of 'market value' of such property has arisen often in the Pathfinder discussion and merits some scrutiny. Most homeowners at risk feel that the only acceptable alternative to coastal defence for their properties would be purchase by the state in some form at full market value, and this is often asserted on the assumption that the state has a legal obligation to defend property which, of course, it does not. Clearly, if the state waits long enough, the 'market value' of at risk property will approach zero. Those homeowners who understand that there is no compensation mechanism are more inclined to accept that they are sitting on declining assets, and in terms of financial support to relocate, take the view that 'something' would be better than 'nothing'. Others would regard anything less than 'market value' as unacceptable.

Most residents we encountered were also unaware of the legal obligation on property owners to demolish property at risk. Many regard the up to £6,000 demolition grant introduced in 2009 as something of an insult, even though it technically puts them in a better position than they were before the grant was introduced. Many suggested that if they were losing a property they would simply walk away and take their chances with the possibility of enforcement action. This suggests that calculating the likely annual total of the demolition grants which might be paid out in future, and allocating this to a central fund (either nationally or locally) to ensure adequate clean up might produce more consistent results as well as more efficient delivery. The offer of a £6k grant is likely to result in £6k worth of expenditure, whereas co-ordinated public procurement of demolition services should lead to economies of scale and better specification of standards to which demolition should take place (e.g. in relation to environmental impacts). As more property is lost to erosion, the risk of coastal areas being strewn with the dangerous and unsightly remains of collapsed property will increase unless co-ordinated action is taken to address the problem.

A key learning point for the project was that most people in property at risk were pragmatic and while there may be understandable emotional attachment to such property, we encountered very few people who would not be prepared to consider relocation if an appropriate package of support was available. This suggests that options for roll-back being looked at by other Pathfinder authorities should be given very serious consideration by Government, ideally being rolled out as part of a single, fair and transparent national system.

### ***The state has obligations to property owners at risk, whether it likes it or not***

The Pathfinder process proved useful in explaining to people that there was no legal obligation on the part of the State to compensate householders for loss of property to coastal erosion. In the eyes of communities, however, this knowledge does not absolve the state of all political and moral obligations towards such people. Several decades of political orthodoxy have held that owning a home is a desirable goal. Most communities have high proportions of their net worth invested in property as a result. At the same time, the state has not required the best information to be provided to would-be property owners to enable them to make informed decisions about risk. While the conveyancing process now requires information to be provided about energy performance etc there is no requirement to provide information on coastal change risks.

We also encountered some individuals who had diligently studied their Local Plan and SMP1 and, reassured by the prevailing policy at the time, paid premium prices for coastal properties as a result, only to find that the SMP2 Policy has changed and that a policy of 'no active intervention' will now prevail. In such cases, the homeowner can not be blamed for ignorance or short-sightedness, and the case for state intervention to support their relocation is even stronger.

As coastal change accelerates, and more property is put at risk, the small but vocal grassroots campaigns emerging in communities at risk look set to increase in size, number and influence. Hiding behind the absence of a legal obligation to compensate homeowners for loss will become an increasingly weak defence against them. The experience in North Norfolk and other Pathfinder areas has shown the potential to harness the energy of this movement into a positive, creative force for adaptation. Government is at a juncture where it can either continue down the route started by Pathfinder, or risk reverting to the pretence that we can carry on defending everywhere that is currently defended indefinitely, even if more private money can be brought in to pay for defences.

### ***Engaging stakeholders in coastal change who don't think they have a stake***

In addition to the usual 'hard-to-reach' groups, there are many stakeholders who probably have an interest in coastal change but do not realise it, and they have proven difficult to engage in the project. The main groups in these categories are (i) residents of coastal communities beyond the areas facing imminent or significant risk (ii) visitors to coastal towns and their rural hinterland.

The first category is significant as their involvement in the engagement process can change the character of the debate. The scenario planning stage of the Jurassic Coast project was reasonably successful in engaging residents with most to lose, but less so with others who only have 'a bit' to lose. These may have been residents of coastal towns who realised the challenges presented by coastal change but for whom it was simply one of a number of more pressing concerns, or residents who were simply unaware of the challenges or opportunities presented by coastal change. When they were present, however, they brought out differences of view which were not immediately apparent, and changed the dynamic of the debate from being focused on the interests of a small number of individuals to the wider interests of the whole community.

On several occasions early in the process, the project team was struck by the lack of sympathy which was sometimes shown for those who had bought property at risk as some took the view that it was 'their own fault' for getting into such a position. By the

end of the process, however, when there was greater realisation that coastal change could have implications for the wider community, this had generally shifted into a desire for adaptation which met the needs of the whole community, as well as greater empathy for those individuals with most to lose.

Engaging visitors to coastal areas presented a different set of challenges. They clearly have a stake in the future of the coast, but as visitors are unlikely to want to spend too much time thinking about coastal change relative to enjoying their visit. Understanding why visitors are attracted to the coast is clearly important, however, and the answers are not always obvious. For example, Swanage is a traditional seaside resort with sandy beach which many visitors are unaware is the product of fairly recent engineering interventions. At the start of the engagement process, the prevailing view in Swanage was that the town would have nothing to offer should the beach be lost. As the process continued, it emerged that a study had shown that the beach was just one of a large number of reasons why people visited the area.

This example illustrates the importance of coastal areas understanding the visitors who often make up such an important part of their economy, both to inform how they market themselves to visitors, and to inform adaptation planning for the future. An undue focus on beach tourism when a beach may in any case be thinned or lost would clearly be inappropriate, and hope that there is a wider realisation of this in places like Swanage as a result of the Pathfinder process.

### ***Persuading the silent minority to make itself heard***

The Pathfinder Education project produced a revealing piece of anecdotal evidence in terms of the risks and costs faced by the owners of threatened properties. Schools interviewed a number of property owners by effectively door-stepping them. Some of these people said that although eventually losing their property was obviously a concern, they accepted that they could not resist natural processes and they did not really expect anything to be done about it. One even said that it would be 'a bit selfish' to expect defences to be built around her home.

This attitude was also reflected by one of the coastal businesses represented in one of our workshops. A holiday park owner said that some time ago he recognised that he would ultimately face the loss of his land to erosion and at that point made a conscious decision to treat the business as if he was a leaseholder rather than a freeholder. Although this involved changing nothing more than his state of mind, it had proved beneficial, allowing him to make appropriate investment decisions, and to plan for eventual loss rather than resisting the inevitable. He did, however, suspect that he was fairly unique in taking this attitude.

Hearing such views in a workshop context challenged some of the accepted wisdoms about where responsibility for managing coastal change really sits, and illustrated how individuals and businesses can also take responsibility for themselves.

## **4.2 Lessons for the Jurassic Coast Pathfinder project team – would we have done anything differently?**

With the benefit of hindsight, there are a number of changes which we might have made to the project to improve its effectiveness. These are summarised below.

### ***The balance between building adaptive capacity and delivering adaptation action***

The Jurassic Coast Pathfinder bid was (correctly) characterised by DEFRA as focusing on research and engagement rather than implementing adaptation actions. With hindsight, the project team may have bid for funding to deliver specific adaptation actions, as the perception that the project might not lead to practical outcomes was one of the obstacles to engagement at the early stages. While this obstacle was largely overcome, it would still have helped increase buy-in to the project, and provided an incentive for some stakeholders to come to the table, had there been a clearer funding mechanism in place to deliver action as a result. This said, the project team faced a Catch 22 situation – as we approached the engagement process with an open mind, we could not know what action might be proposed via that process, nor second guess this without subverting the point of the process: namely, to support communities in coming to *their own* conclusions about how to adapt to change rather than impose our views on them. As a result of some elements of the project coming in under budget we have been able to create a small ‘Community Adaptation Fund’ to take forward some of the lower cost options emerging from the process.

### ***Choice of case study sites***

Although reasonably content with our choice of six case study sites, which presented a diversity of issues from which we could learn, the project team has reflected on whether more could have been learnt from a different selection of case study sites. In one site in particular the prevailing narrative about the ‘need’ for coastal defences was so ingrained (or at least appeared to be) that the wisdom of selecting this as a case study was questioned at times. This said, much was still learnt from this case study. The key lesson was perhaps that the engagement process is likely to be much more productive the earlier it is begun: once a community has made up its mind that defence is the only answer, it can be difficult to change that perception.

### ***Depth versus breadth***

The Jurassic Coast Pathfinder bid proposed a wide range of activities – with hindsight, perhaps too wide. The central role of the scenario planning exercises in the six case study sites soon became apparent, and if doing the project over again, we would probably focus more attention and resources on this element of the project and less on some of the more peripheral, coast-wide activities. This said, we also realised that we could have been more ambitious in some areas: our proposals for helping coastal SMEs address coastal change risks were along the right lines, but were dwarfed in scale and sophistication by the programme developed in North Norfolk to achieve a similar objective. With hindsight we could have bid for more to achieve more in this area.

### ***Earlier recruitment of dedicated project team***

The Jurassic Coast Pathfinder bid set out an ambitious programme and we underestimated the time it would take to recruit and establish a dedicated team to take the project forward. Although recruitment policies on the part of the host authority provide part of the explanation for this, the post of Project Co-ordinator also had to be re-advertised, possibly reflecting the difficulty of recruiting to short-term contracts on modest pay scales. There is an important lesson for local authorities and other public bodies, many of whom are facing recruitment freezes or other restrictions: namely, that there is a risk of missing opportunities that come along if

they are unable to move quickly to take advantage of such opportunities. A further lesson for Government is that such programmes need to be more medium-term (minimum three years) to provide the best chance of recruiting stable, qualified teams to deliver the programme. This said, we were ultimately very fortunate to recruit a strong project team which climbed a steep learning curve swiftly and which has won plaudits for its work from many stakeholders.

### ***Perseverance with engaging elected representatives***

At the outset of the project we invited all County Councillors representing the six case study sites to a briefing and strongly encouraged District Councils involved in the project to do likewise. Not all councillors accepted the invitation and after several attempts in some instances we did not pursue these contacts further. On reflection, we could have been more persistent in pursuing these elected representatives and building their understanding of, and support for, the aims of the project.

### **4.3 Unintended consequences?**

As the Pathfinder process was approaching a conclusion, a group of residents in Sidmouth submitted a planning application to East Devon District Council for 200m of rock armour to defend Pennington Point from coastal erosion. This was interpreted by some as a failing of the Pathfinder process. While it is difficult for the project team to be objective about this, our conclusion is that such an application would probably have been forthcoming regardless of whether the Pathfinder process had taken place. The application is so clearly at odds with both the Shoreline Management Plan and the World Heritage Site Management Plan that it would certainly have been preferable for the current proposal not to come forward. If there was a failure, it was perhaps the failure to engage the residents who have submitted the application fully in the Pathfinder process. This was not for want of trying, and from the outset there were significant elements of the community in Sidmouth who resisted engagement in Pathfinder precisely because they were concerned that it would delay progress towards engineering solutions which they were convinced were necessary.

The lesson from this is perhaps not that community engagement can open a Pandora's box of unintended consequences, but that statutory bodies and local authorities need to engage early with communities facing change before they have convinced themselves that defence is the only option. This further emphasises the importance of publishing information about long-term risk as this information provides the only incentive to encourage communities to think about adaptation before it is too late.

### **4.4 Other lessons learnt**

Our baseline survey highlighted the fact that significant proportions of the population do not feel engaged in the decision-making process around coastal change. The workshops confirmed this and drew attention to frustration in some communities at the costs and time involved in negotiating the consenting process for defence works, particularly in relation to environmental designations. One community in particular was concerned that the cost of works which it considered necessary was exceeded by the costs of negotiating the approval process. The Pathfinder team was not in a position to confirm or refute this, but we did agree to feedback to DEFRA a plea for greater clarity, simplicity and speed in the consenting process. It is important to emphasise, however that this did not amount to a demand for the stringent tests which apply in special environments like the Jurassic Coast to be weakened as most stakeholders recognise the need for high levels of protection to be maintained. But

there was a degree of consensus around the need to streamline process without weakening protection in this area. Better explanation of why sites are designated would also be welcome as some stakeholders complained of being told that work could not be carried out on an SSSI or an SAC without being informed about the purpose of such designations.

## **5. RESPONSES TO DEFRA EVALUATION QUESTIONS**

This section seeks to answer the evaluation questions posed by DEFRA, but should be read in conjunction with sections 3.5, 3.6 and 4 above which draw out lessons which are not necessarily addressed by these questions. The text cross-references to other parts of this report where answers have already been provided.

***Were you able to deliver everything set out in your original bid? What differed from your original plan and why? Were any elements less successful than you had hoped and why?***

The project remained reasonably faithful to its original project plan. Resources were diverted from some of the original project ideas into other areas when it became clear through contact with other Pathfinders that we were unlikely to add any value to what they were learning from similar, more advanced (in terms of timescale), larger or more ambitious projects. For example, we could see little merit in pursuing our proposed ‘trial negotiations’ with property owners when it became clear that other Pathfinders were doing this ‘for real’. Resources from this were diverted into other areas of the project, particularly the scenario planning workshops, which proved to be more resource intensive than originally envisaged. Appendix 1 gives a detailed commentary on what, if any, changes were made during the course of the project for each project envisaged within our original bid,

***Did risks and issues arise during the course of the Pathfinder that you had not anticipated?***

A detailed risk register (appendix 2) was created at the outset which identified and helped mitigate most of the key risks encountered. There were, however, some unintended consequences – while these were anticipated in general terms, they could not by definition be entirely foreseen. See section 4.3 above for further details.

***What were the benefits (obvious/expected and otherwise)? Please refer to any formal evaluation of benefits you have made, and comment on how far the benefits fell to individuals and how far to the wider community.***

The benefits of the project were perhaps best illustrated by the feedback provided by participants in various elements of the project – see sections 3.5 and 3.6 for summaries of evaluation and appendix 1 for project by project summaries.

***Would you have been able to achieve these benefits without the Pathfinder funding? If no, why not?***

Pathfinder coincided with the start of a period of severe restraint on local authority budgets so it is difficult to see how the process might have been kick-started in the absence of Pathfinder funding. Part of the power of Pathfinder was that it was interpreted positively by communities as a recognition from Government that where they are facing loss, Government wants to support them in adapting rather than ignoring the problem. As such, even if alternative sources of funding had come forward, the process may not have been as effective, as it would not have had the

explicit backing of central Government. It is therefore important that Government continues to send a clear signal that it is serious about supporting adaptation.

***Has the Pathfinder project increased the ability of the community to adapt to the impacts of coastal change in future? Please explain how.***

Yes. The feedback from the scenario planning exercise (see section 3.6) confirms this. We believe that communities are now better able to adapt in the following key respects:

- Greater awareness of risk – as well as leading to practical steps to improve resilience, heightened awareness of risk also leads to better psychological preparedness to deal with risk.
- Planning for resilience – four of the six case study communities are now taking forward an emergency planning exercise with the support of their local authorities giving specific consideration to coastal change risk.
- Planning for long-term adaptation – some of our case study communities are beginning to look at relocating vulnerable assets. They will need further support, however, in assessing the feasibility of different options and finding the resources to adapt.

See section 3.5 for a summary of outcomes in relation to the original aims set out in our bid.

***What were the costs, including any not covered by your original bid (including for example local authority staff time)? Were you able to bring in additional funding? Please provide a breakdown using the following tables.***

Our bid did not seek to secure additional local authority funding so the only way we can complete this table is to estimate in-kind support. It is, however, difficult for many partners to separate out the in-kind contributions which they made to support Pathfinder from their day-to-day work. In as much as part of the purpose of Pathfinder was to mainstream adaptation planning within the coastal management professions as well as within communities, we are not convinced that this is a helpful way of assessing the cost or, indeed, value of the in-kind support provided by partners. This said, staff time committed by some partners was significant, and probably under-estimated at the outset, but partners regarded this as a necessary and important part of their commitment to maximising the impact and learning to be gained from the Pathfinder project. Feedback from partners has generally been that it was time well spent. The figures in table 7 do not include the value of voluntary input from individuals and communities which was significant.

***Table 7: Total funding for scheme:***

Pathfinder funding received	Additional local authority funding	Additional local authority support in kind (e.g. staff resource)	Other funding	TOTAL
£376,500	£0	c£50-100,000?	£0	£425-476,000?

***Table 8: Breakdown of expenditure by objective***

**Please provide a breakdown to show how the funding you received under the Pathfinder scheme was used. Please do not include other sources of funding in this table (but feel free to provide any separate information about how other funds were spent).**

<b>Category</b>	<b>Description</b>	<b>Amount</b>
Engaging the community on coastal change adaptation	Work aimed at explaining coastal change and possible adaptive responses to the community, including workshops, consultations, education materials and publications.	£317,000
Adaptation planning	Drawing up policies and strategies to adapt to coastal change. Also research and studies aimed at future adaptation	£32,500
Delivering adaptive solutions	Delivering solutions on the ground, including maintaining and improving assets damaged by erosion, rollback schemes and buy and lease back schemes	£27,000
Wider economic development not directly linked to coastal change adaptation	Broader economic development in areas affected by coastal change, but not directly linked to coastal change adaptation.	0
Coastal protection	Maintaining or construct coastal protection measures, including setting up mechanisms to fund coastal protection in future and engaging the public on coastal protection.	0
Managing flood risk	Work aimed at managing flood risk, including raising awareness of current and future flood risk.	0
Other (please specify)	Any work not directly related to flooding and coastal erosion.	0
	<b>TOTAL (should equal total funding received under Pathfinder)</b>	<b>£376,500</b>

**Table 9: Breakdown of expenditure by type of spend**

Please provide a second breakdown showing the type of expenditure, again, only including Pathfinder funding.

<b>Category</b>	<b>Description</b>	<b>Amount</b>
Staff costs	Salary and associated costs (e.g. any accommodation costs)	£161,470
Consultancy and professional advice	Including external legal or engineering advice	£62,262
Capital spend on delivering adaptive solutions		£0
Revenue spend on delivering adaptive solutions	Not including small grants	£27,000
Workshops, publications and		£125,768

other comms materials not included above		
Small grants		£0
Other (please specify)		£0
	TOTAL (should equal total amount of funding received under Pathfinder)	£376,500

We have added the following table to compare anticipated costs of individual workstreams within our original bid with actual spend (or anticipated spend where work is still ongoing).

**Table 10: summary of budgeted versus actual/anticipated costs**

<b>Activity</b>	<b>Budget from bid document</b>	<b>Actual spend (or anticipated spend if incomplete)</b>
1.i Development of site specific scenarios	42,000	67,117 (variance diverted from 2.ii and 5.i)
1.ii Development of coastal change visualisations	30,000	25,536 (remainder diverted to 9)
1.iii Arts-science project	10,000	10,000
2.i Coastal change champions network	10,000	5,518 (remainder diverted to 1.i)
2.ii Network of coastal change facilitators	45,000	25,528 (remainder diverted to 1.i)
2.iii Jurassic Coast Conversation	15,000	11,537 (remainder diverted to 11)
3.i Coastal change decision-making road-map	10,000	10,000 earmarked – not yet delivered
3.ii Coastal change action plans	12,500	0 - budget diverted to 12
4.i Personal emergency planning initiative	10,000	0 - budget diverted to 12
4.ii Research into tolerance of coastal change risks	20,000	0 – budget diverted to 11
5.i Landowner liaison	5,000	0 – budget diverted to 1.i
5.ii Trial negotiation with coastal householders	15,000	0 – budget diverted to 9
5.iii Business planning tool for SMEs	10,000	10,000 – committed, not yet delivered
6.i Coastal conflicts education initiative	24,000	24,000
7.i Spatial planning and coastal change research	20,000	14,766 – remainder diverted to 11
7.ii 'Change we can plan for?' seminar	5,000	0 – output delivered within 7.i, budget diverted to 11
8. Production and distribution of findings	10,000	10,623
9. Project co-ordination and administration	70,000	88,981 (variance diverted from 1.ii and 5.i)
10. Project evaluation	13,000	9,914 (remainder diverted

Activity	Budget from bid document	Actual spend (or anticipated spend if incomplete)
		to 11)
11. Continuation/exit strategy (not included in original bid)	0	33,580 (variance diverted from 2.iii, 4.ii, 7.i, 7.ii and 10.
12. Community adaptation fund (not included in original bid)	0	27,000 – diverted from 2.i, 3.ii and 4.i
<b>TOTAL</b>	<b>376,500</b>	<b>376,500</b>

Towards the end of 2010 we were forecasting an under-spend as a result of three developments:

- Efficiencies in project delivery – the project budgeted for some activities which were ultimately delivered at lower or no cost. For example, £10,000 was identified for emergency planning work which was ultimately delivered as a beneficial by-product of the scenario planning workshops. This negated the need to commit the sums originally envisaged. Similarly, we were reasonably successful in engaging landowners in the scenario planning workshops, so the need to spend the allocated sum specifically on landowner liaison as originally envisaged was reduced.
- Project timescale – Dorset County Council’s procurement policies required the project team to scale back some projects to below a £20,000 threshold as above this a full compulsory competitive tender would have been required, and there would not have been time to complete the projects by spring 2011 had this route been followed. For example, this required us to limit the proposed £45,000 spend on facilitation training to £20,000 for a consultancy contract. This still provided a very good product, and it should be possible to provide top-up training for the network of facilitators which has been established, and/or to replicate this training for other potential facilitators, with a proportion of the remaining budget.
- Conscious decisions not to pursue some workstreams – we could see little merit in pursuing our proposed ‘trial negotiations’ with property owners when it became clear that other Pathfinders were doing this ‘for real’. This item was budgeted for £15,000.

Some of the forecast under-spend in the above areas was offset by the need to put additional resources into other areas of the project. In particular, we underestimated:

- The time and cost required to deliver the scenario planning workshops in the six case study sites.
- The time and cost required simply to co-ordinate and deliver the project.

During 2011 we decided to create two new allocations within our remaining grant:

- Project continuation/exit strategy fund: we recognised a need to continue the discussions started by Pathfinder, so this fund has been allocated to the Dorset Coast Forum to (i) provide a point of liaison for communities involved in Pathfinder beyond the end of the project (ii) provide ongoing support and

advice to those communities and (ii) maintain and refresh the facilitators network established by the project. The fund has therefore been earmarked to pay for (i) a 6 month contract extension for one member of project team (ii) grant to Dorset Coast Forum to maintain capacity to engage with coastal communities, manage facilitators network etc (iii) contingencies e.g. meeting costs.

- Community Adaptation Fund: Pathfinder produced some promising ideas but our bid did not include resources to take these forward as we could not second guess what they might be at the start of the project. We intend, however, to work with communities involved in Pathfinder to allocate this fund to practical adaptation options which emerged from the scenario planning process (e.g. start-up funding for local coastal change fora which have been established as a result of Pathfinder, feasibility studies into options for rolling back infrastructure, facilitating dialogue between key stakeholders to address issues identified during the workshops). Allocations will be made according to the criteria set out in Appendix 5.

***What if anything did the Pathfinder reveal about expectations around Government support and funding for adaptation, and has the Pathfinder changed these expectations at all?***

Public expectations that Government should and will ‘do something’ are extremely high, perhaps unrealistically so in places. In the places where Pathfinder has enabled concerted engagement with communities, it has been possible to manage these expectations to a more realistic level. However, care has to be taken not just to give the message to communities that ‘there is not enough money to pay for defences’, and to ensure that the opportunities arising from change and the alternatives on offer are explored. Furthermore, Government and its agencies can not completely sub-contract the process of engagement and delivery of the message about the need to adapt to local authorities. This needs to be done in partnership, with both the message and the means being co-ordinated between local authorities, central government and its agencies. A culture of engagement within Government and its agencies needs to be fostered and adequately resourced.

***Were there lessons about the planning framework, and how planning policy can support adaptation?***

The engagement process with communities highlighted the critical importance of the national and local planning policy framework in promoting (not just enabling) sustainable adaptation to coastal change. We commissioned LUC to look into the role of the planning system in supporting adaptation and we endorse their report, which is being submitted alongside this evaluation report.

***Has the scheme come up with outcomes or promising looking ideas that warrant continuation? Which case studies do you think have the greatest replicability?***

The project has undoubtedly produced many positive outcomes which warrant continuation and extension, both in terms of breadth and depth:

*Breadth* - Dorset’s Pathfinder bid identified a range of coastal communities facing change and the six chosen as case studies were identified for the range of issues they presented rather than because they were unique or more urgent than other locations. As such, the approach taken – using scenarios of future change to inform

discussions within communities via facilitated workshops – could be replicated in the long list of potential case study sites which were considered (see list from original bid document).

*Depth* - as Dorset's bid focused on building adaptive capacity, there is also now a need and desire to move forward to implementing adaptation actions. The process identified a number of potential adaptations which would benefit from continuation funding, though in the absence of further Pathfinder funding it will clearly be a major challenge to secure such funding. A modest, targeted extension of Pathfinder by DEFRA to put ideas developed in the research/engagement phases of projects into practice would be extremely welcome and allow lessons to continue to be learnt from this important work.

Most elements of the Jurassic Coast Pathfinder project could be replicated elsewhere, but particularly the scenario planning exercises, the visualisations of coastal change and the educational initiatives. In particular, significant economies of scale could be generated by commissioning visualisations on a national scale. We would strongly recommend wider use of the approach to education taken by the Jurassic Coast Pathfinder project, and would be keen to discuss with DEFRA and/or Department for Education how this might be rolled out more widely.

***For each of these parts - Could they be self funding? Could/should they be funded by beneficiaries, the local community, or central government?***

While physical adaptations such as roll-back of property may be partially self-funding, it is difficult to see how community engagement activities could be, other than in the sense that effective engagement upstream will save public money downstream as there will be more realistic expectations and a wider range of more affordable adaptation options available to reduce pressure on the public purse.

Compared to coastal defence, adaptation will involve a more complex and subtle range of 'benefits' being experienced by a much wider and more diverse group of beneficiaries. Typically these benefits will be experienced more in the form of public than private goods. Logically, therefore, the taxpayer, either locally or nationally, should be expected to contribute to the cost of delivering these benefits. This points to the conclusion that a national, fiscal mechanism is likely to be the most effective means of resourcing adaptation.

This said, the benefits of stakeholder engagement which have arisen from Pathfinder suggest that local authorities should invest in the capacity to manage this kind of dialogue as a core function. The benefits of doing so would not be restricted to coastal change, but would be of value in the growing range of areas where a more informed, less adversarial conversation is needed with communities about what central and local government can and can not do. The costs of doing so are relatively modest.

Costs have to be considered in proportion to the benefits, and in terms of whether the authority is simply starting the process of engagement, supporting adaptation in hotspots only, or delivering wholesale adaptation across strategic areas. Many local authorities are currently reducing their commitment to Local Strategic Partnerships and community planning, which could be unfortunate as officers working in these areas often have the skills required to support good stakeholder engagement, and operate in a culture of partnership working. This is perhaps an inevitable consequence of Government removing the requirement for local authorities to

maintain LSPs, but it would be unfortunate if skills and capacity in these areas were lost only for them to have to be reinvented to perform the functions identified above.

While effective community engagement should be considered a core activity for local authorities, the costs of delivering adaptation action mean that adaptation will be limited if left to local authorities to fund alone. Coastal change is a strategic, national issue requiring a collective response, and some kind of fiscal mechanism to ensure that sustainable adaptation can be delivered in practice. We believe that in the short-medium term an increasing proportion of the budget for coastal defence should be diverted to support sustainable forms of adaptation. If a long-term perspective is taken, these will offer better value for public money, and will often deliver additional benefits which coastal defence can not. So much so, that at some point adaptation should be able to compete for funding on a level playing field with conventional coastal defence schemes.

### ***How would you have run the pathfinder scheme? What would you have done differently?***

Partners in the Jurassic Coast Pathfinder greatly appreciated the freedom to develop the projects without onerous guidelines or restrictions being imposed by DEFRA. The simple reporting requirements were also welcome. This said, the change of Government appeared to signal a shift in priorities and from that point there was growing concern that DEFRA might be less receptive to the lessons learnt from Pathfinder. This would be unfortunate as it was a well-conceived and overdue idea. Many Pathfinder authorities have approached the project with great enthusiasm and commitment, and we hope that DEFRA's enthusiasm and commitment remains to ensure that the public money invested in the project to date is not wasted.

## **LESSONS FOR POLICY-MAKING**

### ***Looking back to original aims of the Pathfinder, can adaptation work in this way or are there barriers?***

The original aims of the Pathfinder remain valid – indeed, in the experience of the Jurassic Coast Pathfinder project they have been validated by the process. The only possible question mark is over the aim of ensuring 'continuity of community' in all instances. Some existing coastal communities can not be regarded as 'sustainable communities' in the terms defined in previous Government policy – i.e. they have limited public services, infrastructure, no public transport, etc. If they did not exist, it is very unlikely that we would create them in these locations again, not least because of what is now known about coastal change. This raises question about whether ensuring 'continuity of community' is an appropriate aim in all locations facing change, or whether the 'maintenance and/or creation of sustainable communities' should be the-over-riding aim of policy in this, as in other, areas.

Significant barriers to delivering adaptation do remain, principally:

- Public understanding and awareness
- Funding for delivering adaptation action

### ***How can the barriers be overcome and who needs to do this?***

Public understanding and awareness: see 'lessons from Pathfinder' in section 4 above.

Funding for adaptation: in the short-term, Pathfinder has established momentum which it would be unfortunate to lose. Making modest and targeted Government funding available to implement adaptation actions which have emerged from the initial Pathfinder projects would therefore be very welcome. In the longer term, however, a small, competitive fund is unlikely to be adequate to support adaptation on the scale required. In the long-term, if the right values are ascribed to the wider costs and benefits of coastal change, proposals for sustainable adaptation would perform well against the principle of 'payment by results' proposed in the Government's revised funding formula for coastal defence schemes.

However, it is not clear whether such adaptations would be eligible for funding under the current proposals, which seem exclusively focused on funding engineering solutions. Our conclusion is that, in the context of fiscal restraint, the most realistic way to fund adaptation would be divert an increasing proportion of the budget for coastal defence to sustainable adaptation. At the very least, proposals for adaptation should be able to compete on a level playing field with coastal defence schemes, using a revised assessment of costs and benefits which addresses the long-term.

### ***Who should pay for adaptation? What are the external funding options?***

There is an implication in the notion of 'external funding' that Government money is seen as belonging to it, while private money is different. This is reinforced by the proposed changes to funding for flood and coastal defence which could be caricatured as suggesting that 'we (Government) won't waste our money on paying for unsustainable sea defences but you (residents/communities) can waste yours if you like'. Whoever's money is used, it will still be wasted money if spent on engineering schemes which do not take account of long term pressures facing the coast.

To communities and individuals threatened by change coastal defence may seem like the only option. Telling them what they want to hear is an easy but short-sighted option, and Government needs to work with local authorities to pursue the difficult but ultimately more cost-effective route of helping communities understand the risks and costs associated with different options. Ultimately Government money comes from taxpayers, and they give some of it to Government to solve problems which can not be solved by private action alone. Adaptation is surely one such issue: while there is undoubtedly scope for communities and individuals to take more responsibility for reducing their exposure to coastal change risks, there is a huge and ongoing role for government to ensure that:

- good information about risk which supports long-term decision making is made available to all
- actions taken by one community or area take account of the impacts on neighbouring communities
- sustainable adaptation is supported by a regulatory climate and fiscal mechanisms which reflect the fact that the coast is a national, not merely a local, asset
- a national planning policy framework supports sustainable adaptation to coastal change.

## **6. CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

Partners in the Jurassic Coast Pathfinder project saw Pathfinder as a unique opportunity to take our understanding of coastal change and the conversation with coastal communities to a new level. This ambition has certainly been achieved in those places which were a focus for Pathfinder. The feedback gathered to date suggests that the project has been a constructive, positive and worthwhile exercise for most of those involved. Progress has also been made in a short space of time with most of the key aims of the project. In particular:

- Awareness has been raised about the implications of coastal change.
- Communities have been engaged in a productive discussion about how to respond to that change.
- A wider range of options to adapt to change has been developed, and most of the communities and agencies engaged in the process are now better placed to take these options forward.

Managing expectations was always going to be a challenge but the project has been reasonably successful in delivering what it said it would deliver, and managing expectations about what it could not deliver to a realistic level. It remains to be seen whether it will be possible to meet the continuing expectations of communities given the limited resources available to partners, but significant goodwill has been generated to give grounds for optimism.

The project has not fundamentally changed the widespread public expectation that Government (in some form) should and will continue to defend communities against erosion; but this was never likely to happen given the timescale and scope of the project. It has demonstrated, however, that, with a targeted and well-designed process of dialogue, communities can be effectively engaged in the process of planning to adapt, as well as being empowered to take forward some adaptation actions for themselves.

The benefits of erosion are perhaps more obvious on the Jurassic Coast than elsewhere – it has created the huge economic asset of an attractive coastline, attracted World Heritage Status to the area, and provided a wide range of recreational and educational activities. However, it still remains difficult to persuade those with private property interests that their interests should be sacrificed to maintain these wider public goods.

Nowhere on the Jurassic Coast to date have environmental designations been the sole reason for rejection of a coastal defence scheme but they have often provided an additional reason not to proceed. Technical feasibility or cost relative to benefit have usually provided justification enough for the rejection of schemes. But if, in future, private funding is forthcoming for schemes as the Government hopes (removing the objection on the grounds of cost) or technical advances make what is currently impossible, possible (removing the objection on the grounds of feasibility) the conflict between protecting the environment and protecting property could appear more stark. This increases the urgency of projects like Pathfinder to reconcile these conflicts in advance of the point where erosion puts further property at risk.

In this instance, to avoid the risk of ‘homes versus stones’ becoming the defining narrative for the management of coastal change on the Jurassic Coast, Pathfinder has taught us of the need for the public debate about coastal change to address the real issue – namely, the potential conflict between private and public interest which is increasingly arising as a result of coastal change. Private interest is clearly represented by the property or commercial interests threatened by coastal change. The public interest is more diverse but represented by goods such as coastal access, ‘eco-system services’ such as flood risk management which are provided when natural processes are allowed to continue unimpeded, and the huge economic and cultural asset represented by a naturally eroding coastline. Inevitably, the value of these public goods is harder to quantify, but as the Natural Environment White Paper suggests, then we must quantify them if they are to carry adequate weight in the decision-making process.

While the Pathfinder project is in its evaluation phase, the debate about adapting to coastal change which it has initiated is in its infancy. It has been a constant challenge to persuade frustrated communities suffering from consultation-fatigue that more discussion is needed before action can be taken. Our response has been that it will be a different kind of discussion, involving a different group of people, which we hope will lead to a different kind of action. Moreover, when that action happens, we hope there is much wider public understanding of why it is necessary, and consent/support for it to be taken.

It may never be possible to persuade communities threatened by coastal change to wholly embrace the idea – but Pathfinder suggests it is possible to help them understand why change is happening, and to come to terms with the need to adapt to it. Far from being a ‘soft’ alternative to engineering solutions to coastal change, Pathfinder has thus proven to be a very practical and pragmatic approach which, for modest cost in the short-term, could deliver significant benefits, opportunities and financial savings in the long-term.

## **6.2 Recommendations**

### ***Recommendations for public bodies locally and nationally***

- Public bodies need to make a more co-ordinated effort to meet the public on whose behalf they all work. It is too easy to avoid difficult issues and situations but if such bodies go in with an open and honest approach, they will find it an enlightening and rewarding experience, as well as better serving the community. Put bluntly, we all need to ‘get out more’.
- Greater co-ordination between the responsible agencies – particularly Government, the Environment Agency, Natural England and local authorities – is required, both in terms of the message about coastal change, and the means to manage it.
- Public bodies need to invest in the skills required to design and deliver effective community engagement. These skills are different to conventional communication skills, and will inevitably require a commitment of scarce resources. However, these skills can be deployed in a much wider range of settings than simply coastal change and it should be noted that effective upstream engagement can save significant cost downstream in terms of implementation. At the present time, public bodies need to resist the

temptation to disengage as a response to pressure on public finances – it is ever more important if public expectations about what government (central and local) can and can not do are to be managed effectively.

### ***Recommendations for Shoreline Management Plans***

- The strategies and action plans now being developed to take forward high level policies set out in SMP2 need to apply the lessons from Pathfinder in terms of community engagement. There must be greater emphasis on public engagement with particular focus on ‘hot spots’ facing change during each of the three epochs covered by the SMP, not just the short-term. The lessons from Pathfinder also need to inform SMP3, but mechanisms for engaging communities need to be put in place long before the drafting of SMP3 begins.
- The strategies and action plans being developed to take forward SMPs also need to better define what managed realignment means for a given stretch of coastline, and to do so quickly – otherwise there is the danger of a necessary and desirable concept being discredited as a ‘fudge’.

### ***Recommendations for Government***

- The Government’s coastal policy framework needs to give a clear and consistent steer, with DEFRA policies, DCLG’s planning framework and EA’s coastal overview all being closely aligned to ensure a long-term approach to the sustainable management of coastal change.
- Critically, Government funding streams need to be reviewed to ensure that they support and deliver this policy steer. There are significant doubts about whether the existing or proposed framework for funding coastal defence will achieve this, and whether it supports the logic of the Natural Environment White Paper.

### ***Recommendations for DEFRA***

- There is a case for reviewing whether SMPs should be put on statutory basis, though if they are, evidence of effective community engagement in their preparation should be a condition of their approval.
- 20, 50 and 100 year risk information arising from the National Coastal Erosion Mapping exercise should be made publicly available, readily digestible and easily understood, preferably in simple map form showing the extent of possible erosion risk with appropriate caveats and explanations forming an integral part of their presentation. Government and EA should work with local authorities to manage a phased, co-ordinated roll out of such information to mitigate the risks and maximise the benefits of a nationally consistent approach.
- Government should consider reviewing and revising the CAPE guidance in the light of Pathfinder ‘ground-truthing’, producing a more user friendly, practical and interactive package of advice for local authorities, preferably in the form of a national training and awareness programme to share the lessons from Pathfinder with other coastal authorities.

- In the short-term, Government should consider a modest, targeted extension of Pathfinder by DEFRA to put the best ideas developed in the research/engagement phases of existing Pathfinder projects into practice. Momentum has been created and there is a danger that this will be lost as, while it is reasonable to expect local authorities to resource engagement as a core activity, they are unlikely to be able to find the resources required to put significant adaptations into practice.
- In the medium-term, a more strategic approach is required to fund the implementation of adaptation measures on a national scale. We suggest that an increasing proportion of the national budget for coastal defence should be ring-fenced to support the implementation of adaptation actions. At some point adaptation should be able to compete for funding on a level playing field with conventional coastal defence schemes, though this is likely to require a fundamental review of how costs and benefits are assessed, informed by the logic of the Natural Environment White Paper to ensure that adequate weight is attached to environmental considerations.

### ***Recommendations for other Government departments***

We are making a number of additional recommendations via DEFRA which we hope will support it in ensuring the need for a sustainable approach to the management of coastal change is addressed across Government:

- DCLG: the emerging National Planning Policy Framework should emphasise the importance of adaptation to coastal change and ensure that the key tenets of the supplement to PPS25 remain guiding principles of national and local planning policy.
- DCLG: the emerging National Planning Policy Framework should emphasise the importance effective stakeholder dialogue. More emphasis should be placed on early engagement, and an open and inclusive process with shared decision-making. Statements of Community Involvement have not necessarily delivered in this respect.
- DCLG: guidance for local authorities on the proposed ‘duty to co-operate’ under the Localism Bill should specifically identify coastal change as one of the areas where such co-operation is required. This should set clear expectations not just about how neighbouring authorities will co-operate with each other, but how they will liaise with the relevant statutory agencies and the authors of Shoreline Management Plans at strategic level, and Neighbourhood Plans at local level. This will be necessary to ensure a consistent approach which takes account of the natural processes at work within each coastal cell, as these will not necessarily coincide with political or administrative boundaries.
- DCLG: Government should consider requiring information about coastal change risk to be made available via the conveyancing process in the buying and selling of property. This is an essential quid pro quo for the Government’s expectation that individuals and communities which take greater responsibility for dealing with coastal change risks.
- BIS: current or future Government support for business advisory services should pay particular attention to coastal change risk in coastal areas. The

emphasis when working with business, particularly small business, should be on integrating coastal change risk and adaptation into mainstream business planning rather than seeking to address it as a discrete issue. As a prerequisite, therefore, business advisory services need to have a good understanding of coastal change risk and adaptation options to advise businesses accordingly.

DfEE: the experience of the Pathfinder education projects provides useful evidence of the value of geography in the curriculum in terms of preparing students for dealing with issues which arise from environmental change. The approach taken by the Jurassic Coast Pathfinder project also produced good evidence in terms of the personal development and attainment of students which merits further examination. We would be happy to speak to DfEE further about the approach taken should there be interest in replicating this elsewhere.