

Possible Working Title: ‘Making the Most of Wales’ Coast

Section 1

A vision for the sustainable management of the Welsh Coast

Introduction

1.1 A key objective of integrated coastal zone management (ICZM) is to provide a management framework to facilitate the sustainable management of the resources in the coastal zone. The concept is not yet well known – and one of the aims of this strategy is to promote the ICZM process. Doing so effectively should help further the Assembly’s sustainable development objectives.

Wales’ coast – a key resource

1.2 The coast of Wales contains hugely important environmental and economic assets. 60% of the population of Wales lives and works in the coastal zone, with all our major cities and many important towns located on the coast. Ports such as those at Milford Haven, Port Talbot, Cardiff and Newport are vital for international trade, while our coastal waters support valuable inshore fisheries and aquaculture projects. In addition some 70% of the Welsh coastline (c. 1200 kilometres in length) is designated for its environmental importance (fig. 1 – to be added). The Gower Peninsular was the first Area of Outstanding Natural Beauty in the UK (and celebrates its 50th anniversary in 2006) and there are two other AONBs on the Welsh coast (Llyn and Anglesey). The Pembrokeshire Coast National Park is the only designated coastal national park in Britain and with Snowdonia National Park, a significant proportion of the Welsh coast has national park designation. Important features of archaeological and historic interest are also found along the Welsh coast, including a wealth of Bronze Age, Iron Age, Roman and more recent historic sites such as the Edwardian castles of Caernarfon, Harlech and Conwy.

1.3 The environmental assets of the coast and the proximity of significant population helps explain the Welsh coast’s attraction to a tourist industry which contributes over £2.5 billion each year to the Welsh economy. Millions of visitors head for the Welsh coast each year, attracted to Wales’ coastline. [Map to be added showing key designations on Welsh coast – SAC, etc – as fig 1.]

Wales coast – pressures

1.4 These key facts help to illustrate the importance of the Welsh coast – from the environmental, social and economic perspectives. The key assets of the coastal zone, however, face a range of challenges, not least as a result of development pressures. These include – pollution; the increase in the development of offshore renewable energy projects; dock/marina developments; and sustainable fishing and shellfish industries. And perhaps the greatest challenge facing Wales’ coastal areas is that posed by climate

change, with the threat of sea level rise and increased incidence of coastal flooding among the expected effects. These pressures, which are discussed more fully in Section 3, only serve to underline the need to find ways of effectively supporting development while also safeguarding precious environmental features and ecosystems and adapting to the anticipated impacts of climate change.

Integrated coastal zone management (ICZM) – what is it and why is it important?

1.5 ICZM is a process which brings together all those involved in the development, management and use of the coast to help ensure future management takes place in an integrated and informed way. In essence, ICZM is about the sustainable management of the coastal zone.

1.6 The coastal zone is essentially the area of land and adjacent sea which can be considered to be mutually interdependent. It comprises the coastal strip (which will be of varying width depending on local geography), the foreshore and coastal waters out to 12 nautical miles (the limit of devolved statutory powers in relation to certain maritime issues).

1.7 The principles of ICZM and the influence of the EU's Recommendation on this topic are considered in more detail in Section 2. The Welsh Assembly Government supports the concept of ICZM and is keen to see its main principles embedded in relevant policies, programmes and projects at the Wales and local levels, in support of the National Assembly's sustainable development agenda. If this can be done successfully – with all key stakeholders actively engaged in the process, especially the coastal communities themselves - then the ICZM process should add real value to existing management arrangements for the Welsh coast. In particular, specific benefits which may be secured from ICZM include :

- a more joined up approach to the management of development in coastal areas;
- increased public understanding of the importance of our coastal resources;
- more effective engagement of key stakeholders, including local communities, in decisions affecting the coastal zone;
- securing sustainable levels of economic and social development in the coastal zone while protecting the environment.

ICZM – not a standing start

1.8 As part of the development of this strategy, a 'stocktake' of the legislation and institutions involved in the management of the Welsh coastal zone was undertaken in 2003/4 (discussed further in Section 2). This helpfully identified a range of Welsh-based programmes and initiatives which were putting ICZM principles into practice 'on the ground'. A good example is the Green Seas Partnership Initiative which involves business interests, local authorities, the Wales Tourist Board, Keep Wales Tidy and others in action to enhance the environment and management of Welsh beaches. This strategy aims to build on these foundations and to provide a clear way forward.

1.9 Future marine and coastal development will bring economic benefits for Wales but it needs to be managed in a sensitive and sustainable way if we are to sustain the high quality environment on which much of this economic potential is based. We know that the coastal waters around Wales are heavily influenced by activities that take place on land and in our inland waterways – for example pollution from farms entering rivers and then the sea. Land, sea and coastal management therefore need to be carefully coordinated.

The Wales National Strategy

1.10 This strategy aims to provide a management framework to facilitate integrated working on the coast by the different interests involved in managing our coastal assets – with the aim of helping them ensure that these assets are maintained and enhanced for the benefit of present and future generations. It also sets out the links that must be made between diverse national and local policies and strategies so that the people involved in managing and using the coast can do so in a way that takes into account the needs of others. It is not, however, a ‘master plan’ for development on the coast

The wider context for ICZM in Wales

1.11 The Welsh ICZM strategy does not stand alone but nests within and complements a number of other strategies at the Wales national, regional and local levels - as illustrated by the diagram below (Fig. 2). This strategy, if successfully implemented, should in particular make a contribution to the delivery of key aspects of the Assembly Government’s new Environment Strategy and to Wales : A Vibrant Economy – the Assembly Government’s strategic framework for economic development in Wales. The Wales Spatial Plan – People, Places and Futures – is also intended to provide a clear framework for future collaborative action to achieve national and area level objectives. And the ICZM process itself should be facilitated by a stronger spatial planning approach on the land/sea interface.

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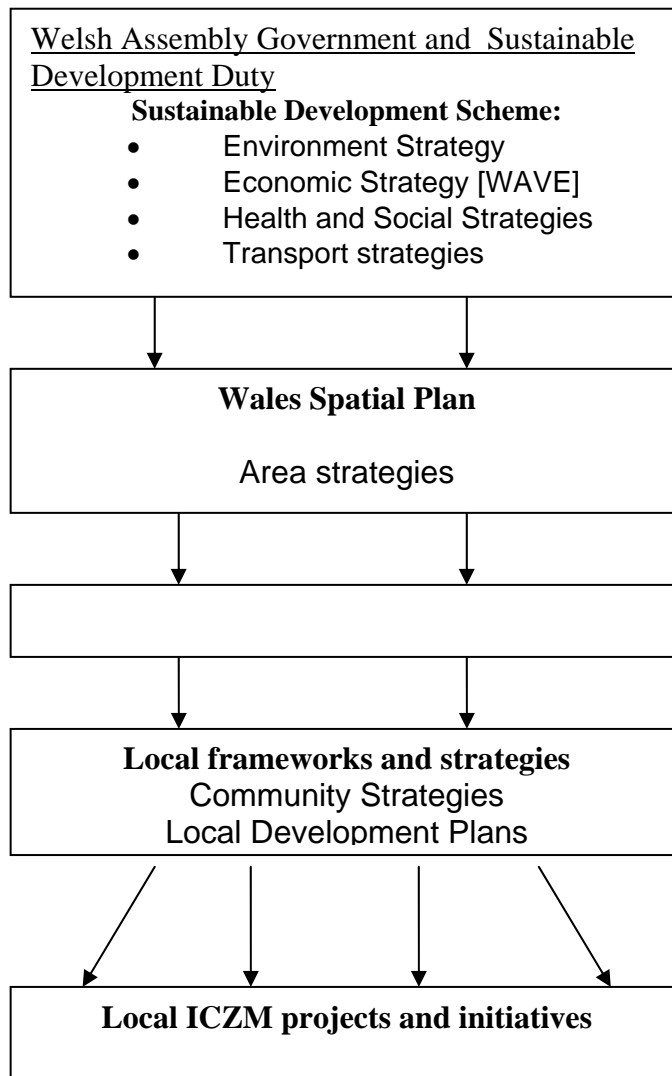


Fig 2. The national policy context for the Welsh ICZM strategy

Our Vision for a Sustainable Future for the Welsh coast

1.12 As noted above, our vision for the Welsh coast is one where the natural, cultural and economic assets of the coastal zone, and the services they

provide, are maintained and enhanced for the benefit and enjoyment of present and future generations. Specifically, we want a Welsh coast which will be :

Community 'owned' - with communities effectively involved in decision-taking affecting their local coastal environment

Optimised - with the quality of the coastal environment maintained and where possible enhanced

Appreciated – increased public appreciation of our coastal environment and of its cultural heritage

Safeguarded - coastal waters are of good quality supporting marine life and recreational use; and development takes place in a way sympathetic to the natural environment and cultural heritage of the area

Thriving - The economic benefits of natural coastal resources are maximised within sustainable limits

Sustainable - A robust coastal environment that has the capacity to adapt to change, support economic and social needs, whilst sustaining healthy coastal ecosystems

1.13 To take this vision forward and to promote ICZM at the Wales, regional and local levels, our key objectives for the next four years are as follows :

- a. to ensure that the ICZM process in Wales is accepted as an integral part of delivering sustainable development; with adequate resources for the task; and effective participation by all stakeholders;
- b. to help ensure that all sectors and organisations successfully integrate ICZM management principles into the development of relevant policies;
- c. work towards a better system of planning and management of the Welsh coast
- d. develop a sound knowledge base about the coastal zone which is readily accessible and underpins decision-making;
- e. help ensure that stakeholders are well informed of the natural processes and human impacts affecting the coast and of the value of the coast to everyone;
- f. secure effective linkages to the ICZM process in adjacent countries;
- g. regularly monitor progress on ICZM and report the results

Joining up with our neighbours

1.14 This ICZM Strategy for Wales is being developed within the UK strategy and alongside the ICZM strategies for England, Scotland, Northern Ireland and Eire, within the framework provided by the EU Recommendation on ICZM. We are working through the political forum of the Great Britain/Ireland Council to ensure a co-ordinated approach to the development of our

respective ICZM strategies. Elements of this approach are already being delivered through the Wales Spatial Plan which is addressing planning issues around the Severn and Dee estuaries under the heading “Working with our immediate neighbours”. Inter alia the Spatial Plan usefully highlights, in this context, the need for integrated management of the Severn and Dee Estuaries as well as across the Irish Sea.

The way forward

1.15 In the following sections this document explains how ICZM can help deliver the above vision. It also outlines the principles of ICZM and how they are being put into practice already in Wales; explains how the process of ICZM will help to address main pressures/challenges at the coast; highlights the roles and responsibilities of the key players and sets out actions planned to secure delivery of the objectives underpinning our vision for a sustainably managed coast for Wales.

1.16 ICZM is not a panacea, however and neither is it something the Welsh Assembly Government can deliver on its own. Making further, sustained progress down the ICZM ‘road’ will require co-operation by all parties and a co-ordinated approach to the challenges facing the Welsh coast. The Assembly Government will review and report progress [annually] in conjunction with the Wales Coastal and Maritime Partnership and other key interests.

Section 2

ICZM theory and practice in Wales

2.1 In May 2002, following the outcome of an extensive 'demonstration programme' – a series of practical coastal projects within EU Member States), the European Union adopted a Recommendation on ICZM. This requires Member States to :

- a. undertake a stocktake or review of the legislation, institutions and stakeholders involved in the management of the coastal zone. The UK stocktake was commissioned by DEFRA in 2003 with the full involvement of the devolved administrations. A copy of the stocktake report is on DEFRA's website – www.defra.gov.uk
- b. develop ICZM strategies by March 2006 for submission to the EU. Ministers in DEFRA and the devolved administrations have agreed to develop individual country strategies for England, Scotland, Northern Ireland and Wales and these will fit within a UK framework.

2.2 This Wales strategy has been developed in conjunction with the Wales Maritime and Coastal Partnership (WCMP), a partnership of all the key stakeholders with an interest in the Welsh coast and containing representatives from the public, private and voluntary sectors. Preparation of the strategy has taken account of relevant information on Wales within : the UK stocktake; the outcome of relevant research commissioned by the WCMP (including in particular the WCMP commissioned report 'Review of Coastal and Maritime Initiatives and Pressures'); and information mutually shared with those preparing related country strategies in the UK and Ireland.

2.3 This process has revealed that the key principles of ICZM are already being put into practice in some instances. Progress in adoption of ICZM principles within key policies and programmes varies, however as the WCMP review report indicated. The consenting arrangements for developments in our coastal waters also complex and securing effective co-ordinating between the key organisations is an ongoing issue. There is scope, therefore for more to be done if our vitally important coastal areas are to be effectively and sustainably managed in the future.

2.4 The 8 key principles of ICZM and examples of relevant action implementing these principles are as follows :

- a. take a long term view/perspective - this is important because of the long term evolution of coastal processes, the implications of climate change and the need to take account of future generations. Shoreline management plans, which are being developed by 5 local authority –led coastal groups around the coast of Wales are a good example of such long term planning.

The plans are intended to provide a strategic assessment of coastal erosion and flood risk and assist the planning of coastal and flood defences.

- b. involve a broad, holistic approach – in order to be effective coastal planning and management has to look at the big picture and view coastal issues – including potential development projects – in the wider context. This approach has been taken by the Severn Estuary Partnership in the development of its management strategy for the estuary. The Severn Estuary is one of the most heavily developed and navigational estuarine sites in the UK, but also contains important international environmental designations (a Ramsar site) and key features such as Gwent Levels Wetland Reserve. The Partnership contains representatives of all the key stakeholders and they are working together to deliver the agreed objectives within the strategy.
- c. Adaptive management – uncertainty surrounding future coastal conditions and demands on coastal resources means that management plans for the coast need to be both flexible and adaptive. This principle underpins the local community strategies which all the unitary authorities are required to produce, setting out their future plans for their areas. For the 17 authorities along the coast of Wales, this will include their plans for their coastal communities.
- d. Work with natural processes – coastal management needs to be based on working with nature rather than against it. This is already becoming accepted practice in relation to coastal defence work. It is a principle also underpinning other key policy work – for example implementation of the Water Framework Directive in Wales and the preparation by 2009 by Environment Agency Wales of new River Basin Management Plans which will include coastal waters out to one nautical mile.
- e. Support and involvement of relevant administrative bodies – effectively this means partnership working to agree and deliver common goals for our coastal areas. There are many examples of such partnerships at the national and local levels in Wales, including the WCMP itself and local forums such as the Pembrokeshire Coastal Forum (see fig. 3). This latter forum has, with EU funding, recently developed a management framework for ICZM in Pembrokeshire and is engaging key interests in the process, including statutory bodies, industry and communities.
- f. Participatory planning – or getting local communities engaged in the management of ‘their’ coastal area as well as the statutory agencies. Active participation by local communities has been the foundation of a number of local initiatives on the Welsh coast –

such as the Coast Care groups promoted by Keep Wales Tidy to secure cleaner beaches. A series of local projects involving different aspects of coastal management have also been supported under the EU's Interreg programme. The unitary authorities in Wales will also be introducing new Local Development Plans for their areas from 2006/7. This process will require full engagement with local communities and will provide a significant opportunity for participatory planning in the coastal zone.

- g. Use of a combination of instruments – recognising that successful implementation of ICZM will require the use of a range of measures – programmes, research, education and information provision – to achieve agreed objectives. The management of Ceredigion's Marine Heritage Coast, for example, includes use of voluntary agreements, local byelaws, monitoring and information dissemination and research. Such a combination of measures is also being put in place for the management of the new Marine Special Areas of Conservation around the Welsh coast.
- h. Reflecting local characteristics (or more simply, local solutions for local problems) – in Wales many local ICZM initiatives have been driven by the desire of communities to tackle locally important issues. The Pembrokeshire Marine Code is a good example of this, with the Code drawn up in order to help promote an environmentally sustainable and responsible approach to commercial boating activities along a coast exceptionally rich in marine life. This approach can also apply to development as in the case of the Carmarthen Bay Millennium Park at Llanelli. This £27 million Lottery-funded Park has seen a large area of industrial wasteland reclaimed for housing, recreational use and as the site of the National Wetlands Centre for Wales.

2.5 The above examples represent only a small part of the projects which have been undertaken or which are under way on the Welsh coast. They help to illustrate, however, how the sustainable management of Wales' coast is already being assisted through the adoption of ICZM principles within a range of projects/initiatives. However, the UK stocktake exercise found that the current legal and administrative framework reflects a sectoral rather than a fully integrated approach to managing coastal issues across the UK. This is clearly apparent in the current consenting arrangement for developments in coastal waters, a process which is complex for project proposers, those who administer the applications and potential objectors alike. Ways of addressing such issues and achieving greater integrated management of them is considered further in later sections of this strategy.

Fig 3

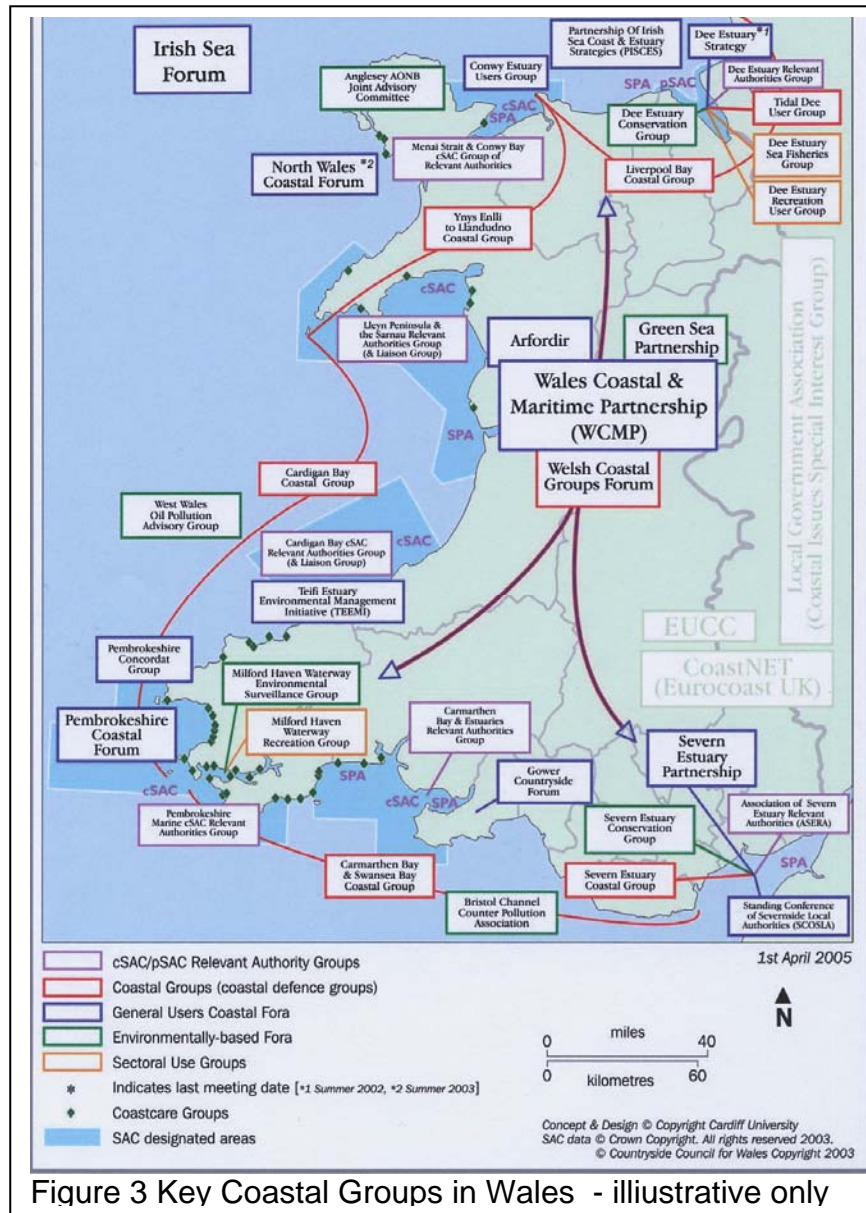


Figure 3 Key Coastal Groups in Wales - illustrative only

Section 3

Our coastal resources - Key trends and pressures

3.1 As noted in section 1, our Welsh coast is blessed with a wide range of natural resources that we value, both for their own sake and as assets that we must manage in a sustainable way. Our future well being and prosperity is dependent upon a recognition of the importance of biodiversity, the impact of our activities on the natural resources of the land and sea, and that self sustaining resources have exploitation limits which must not be broken.

3.2 The following sections review key trends and pressures which are apparent today on the Welsh coast :

a. Development pressures

As noted earlier, our major cities and towns are located on the coast, along with the International Airport at Cardiff and the major east/west transport routes are close to the coasts of north and south Wales. This brings inevitable pressure for land for commercial, residential and recreational use as well as for the associated infrastructure and waste facilities. Economic changes, such as the closure of part of Llanwern steel works affect coastal communities while raising issues about the future uses of coastal land. Coastal locations provide attractive and popular places to live as evidenced by the success of waterfront developments as in Cardiff Bay, Swansea and Conwy. These developments can only usually take place through joint initiatives between the port authorities, WDA and developers – for example the Barry Waterfront development. The coast will continue to be affected by changes in the economy and increasing demand for housing. In addition the marine environment itself is likely to come under pressure arising from the opportunities presented by energy development and increasing leisure use.

b. Tourism/recreation – The coast is an important tourism resource and accounts for £0.7bn of tourist expenditure. The coast provides a location for a range of recreational uses, both land and water based. Boating and water sports are particularly popular with about 900,000 people taking part in sailing, windsurfing and motor boating in Wales each year. Marina developments as at Conwy provide berthing facilities and housing and are increasingly being proposed for Welsh coastal resorts.

c. Social exclusion - Sixty percent of Wales' population of 3 million live near the coast and sixty percent of the 7 million visitors to Wales each year stay on the coast. At the same time some of our coastal communities are suffering from housing and social problems – the lack of affordable housing, drug abuse and other anti-social behaviour. The Communities First Programme has been established by the Assembly Government as part of the response to such issues and a number of the 100 communities within that programme, such as west Rhyl, are in coastal areas.

d. Pollution control and water quality

Progress is being made to reduce marine pollution, particularly in the reduction of the impacts of sewage and industrial discharges. Most forms of waste disposal at sea are now prohibited and advanced sewage treatment processes have enabled sewage sludge to be applied to agricultural land rather than dumping offshore. However, the volume of beach litter is higher than the UK average, something which our Coast Care groups are helping to tackle; but this effort needs to be sustained (and the recent EU Directive on Port Waste Reception Facilities should also help here). The challenges that are now brought into focus include the pollution from “diffuse” sources such as widespread fertiliser and sheep dip use on land and the petrochemicals and sediments that run off with rainwater from built up areas. Some pollutants also remain for many years such as elevated copper levels in Swansea Bay which are a legacy of the Industrial Revolution. Nonetheless water quality in our coastal waters is encouragingly good. All 80 EU identified bathing waters in Wales met the mandatory standards in 2005; and a record 91% (73 waters) met the more stringent Guideline Standards. A record 38 Blue Flag beaches in Wales were also announced in 2005. Looking ahead a revised EU Bathing Waters Directive is likely to help raise water quality standards further.

e. Fishing and aquaculture

Wales' offshore waters are an important resource for the fishing industry. The Welsh fishing industry is mainly inshore based with approximately 1,000 fishermen involved in direct fishing activity and another 400 on a part time basis. They take a wide range of high value species such as bass, crabs, scallops, lobsters and whelks and use mainly gill nets, pots and small trawls. Shellfish gathering by hand is important at the Burry Inlet and Menai Straits. In 2004 total landings throughout Wales was valued in excess of £25 million. Aquaculture, notably in the form of mussel beds is important in the Menai Straits and Swansea Bay. Cockle gathering is also locally important in the Burry Inlet and Carmarthen Bay. Wales also has the first major land-based marine fish farm in Europe on Anglesey.

But there are a range of threats to Wales' fisheries – as a result of over-fishing and pollution. The Assembly Government is committed to the development of a sustainable fishing industry and to this end is developing a new Welsh Fisheries Strategy which will help map out a way forward.

f. Ports/shipping

Twelve ports handle nearly all port trade in Wales with Milford Haven accounting for more than half of the total. Other smaller ports, such as Aberaeron, play an important role in recreation and fishing. Most shipping movement around Wales' coast occurs around Milford Haven, through St George's Channel to access the Mersey ports and in the Bristol Channel to access the Severn estuary ports. The volume of port traffic has remained relatively constant in recent years (57.2 million tonnes in 1995 to 52.6 million tonnes in 2003.) though there has been a steady increase in ships utilising the South Wales ports.

While no major port developments are planned on the Welsh coast at this time, the position could change; and to maintain the viability of existing ports

dredging and investment in the renewal of quayside infrastructure will continue to be needed. In view of its importance to the Welsh economy, it will be important to ensure that this necessary investment is facilitated and at the same time takes place in a sustainable manner.

g. Non Renewable Energy

Oil and gas production is a very important economic activity in UK marine waters. In Wales the main production area is in the Irish Sea to the north and east of Anglesey - and which accounts for 14% of UK gas production. The gas terminal at Point of Ayr provides onshore processing facilities for several gas pipelines in Liverpool Bay as well as fuel for the gas-fired power station at Connah's Quay. Important new energy developments are also planned in Milford Haven (LNG proposals).

The energy reserves in Liverpool Bay are expected to last at least 20 years. Elsewhere, along the Welsh coast, however, no significant reserves of oil and gas have been found and exploration activity is currently limited (ie, some exploration for gas reserves off the Pembrokeshire Coast). The UK Government has agreed to undertake a full Strategic Environmental Assessment before any further exploration licenses are granted around the Welsh coast – and given the rich environmental heritage of much of the Welsh coast, this is a very important safeguard.

h. Renewable Energy

Interest in renewable energy projects around the Welsh coast is, by contrast, growing due to Wales' climate and geography. The UK's first major offshore wind farm was constructed in 2003 at North Hoyle, approximately 4 miles off the North Wales coast at Rhyl. This has the capacity to generate 60 Mega Watts, enough to supply 50,000 homes. Other proposals are 'in the pipeline' including a further windfarm, Gwynt y Mor, some 7 miles off the North Wales coast. There are clear investment and job creation opportunities associated with marine renewable energy technology – but also a range of environmental, fishing and navigation and other considerations need to be taken into account before approvals can be given.

As is set out in its Energy Route Map, the Assembly Government has a target of 4 Terra Watt Hours to be produced by renewable energy in Wales by 2010. Given current technological development, much of this can be expected to be met by wind energy, based on and offshore. Marine energy systems that harness wave and tidal power also have the potential to play an increasingly important role in achieving future renewable energy targets, however, as improving technology provides the means to exploit these energy sources within the demanding marine environment.

i. Marine Sand and Gravel

Aggregates for use in building construction are obtained from 10 licensed sites in the Bristol Channel and provide around 1.5 million tonnes for use mainly in south Wales. In north Wales approximately 50 thousand tonnes is landed at Port Penrhyn from Liverpool Bay. The Assembly Government's Marine Aggregates Dredging Policy for South Wales adopts a spatial zoning approach to managing the authorisation of dredging in the Bristol Channel

and Severn Estuary that is based on knowledge gained from recent research investigations. This research has indicated, for example, that a gradual shift in dredging from inshore to offshore waters could be more environmentally sustainable longer term. The use of alternative land based sources has other implications in economic, social and environmental terms as those resources are often in environmentally important or developed areas.

While commercial interest in offshore mineral dredging is fairly stable and not expected to increase significantly in the medium term, this issue usefully highlights the need for an integrated approach to resource management.

j. Conservation

As noted in section 1, Wales has an abundant marine life and diverse range of marine habitats. As well as more established environmental designations on the Welsh coasts like National Parks and Areas of Outstanding Natural Beauty, some 70% of the Welsh coastline has recently been designated by the EU under the Marine Natura 2000 programme. Important coastal features include pen rocky coasts and offshore islands as well as low sandy beach and dune systems and salt marsh/intertidal mudflats important for overwintering wildfowl. Despite the extent of existing designations, however, the State of the Welsh Environment Report (2003) found that much of the associated biodiversity is being degraded by lack of appropriate management. Sea level rise due to climate change also poses challenges such as the possibility of a 'coastal squeeze' of habitats, particularly in relation to intertidal mudflats and marshes and the important habitats and species they support. Offshore, rising average sea temperatures could also affect species at the edge of their geographical range.

k. Coastal defence

The low lying, urbanised coasts and estuaries of south and northeast Wales are most at risk from coastal flooding. Estimates indicate some 39,000 properties may be at risk from coastal flooding and a recently published Foresight Report forecast that the general risk of coastal flooding could increase between 2 and 20 times by 2080. To address this we are moving away from the traditional approach of building more and higher defences to one of managing the risk. Greater emphasis is being placed on understanding the flood risk and raising awareness of those at risk of the consequences they face. Recent streamlining of the existing flood defence arrangements in Wales reflect this, with the establishment of Flood Risk Management Wales to provide the focus for risk management in the future. New guidance from the Assembly Government also encourages development away from the fluvial and coastal flood plain. Allied to this a first complete set of Shoreline Management Plans has been completed for strategic sections of Wales' coast, identifying policy options for their future management. The Assembly Government also provides funds to support relevant authorities to manage river and coastal flood and erosion risks. Since 2000 funding has increased significantly to over £30 million.

l. Historic environment

The coast of Wales has attracted settlers for thousands of years. From prehistoric hunters to Victorian industrialists, people have left an indelible mark on the coastline and much of what we see today has been shaped by their activities. A recent survey of the Welsh coast identified over 3000 sites and monuments of interest. But this historic environment is increasingly threatened by natural decay, development, natural processes and climate change. Its survival depends on careful management if our historic heritage is to be safeguarded for present and future generations. Sea trading and maritime routes have left many coastal features of archaeological importance and historic interest along the Welsh coast.

m. Climate change

A key pressure on the Welsh coast today – and one that impacts on many if not all of the issues identified above – is that presented by climate change. There is uncertainty about the impacts of climate change but the UK Climate Change Impact Programme (UKCIP) has modelled a number of scenarios based on different emission projections. In general terms the model suggests that Wales can expect : hotter average temperatures; an increase in the number of hot summers and dry summers and an increase in the number of extremely hot days; milder winters and a reduction in snowfall; an increase in winter rainfall; and a longer growing season.

The UKCIP scenarios are based on a gradual change in the climate but a more sudden shift is possible, for example if the Gulf Stream was to reduce significantly or if large volumes of polar ice were to melt. Recent evidence, including research presented at the International Symposium on the Stabilisation of Greenhouse Gases – Exeter 2005 – indicate that the risks of dangerous climate change are more serious than previously predicted.

We are already seeking to adapt to the likely effects of climate change as is illustrated in paragraph 3.3 k above. Further adaptation measures will be needed if we are to mitigate and respond to the effects of climate change. ICZM can potentially help to ensure that adaptation is arranged in a co-ordinated and holistic way – so that changes made in one location do not have unintended effects elsewhere and that key stakeholders are appropriately consulted about the actions planned.

3.4 The above review of pressures on the Welsh coast usefully highlights both the complex range of issues involved and the inter-relationships between them (shipping lanes and energy exploration/generation; pollution and fish stocks; nature conservation and tourism, etc). Managed in a fully integrated way these pressures can result in win-win-win situations - for the economy, for the environment and for local communities as in the case of the Carmarthen Bay Millennium Park development. ICZM aims to help deliver more of this by bridging the current sectoral approach to managing issues at the coast.

Section 4

Managing our coastal resources – key players and programmes

4.1 A range of organisations are involved in the management of Wales' coastal resources. The following brief review concentrates on those with legal and other responsibilities for the coastal zone and examines the four main levels of influence or control which exist – ie European and international; UK, Wales, and local levels. Fuller details of their legal and other responsibilities is contained in Annex 1

a. European level – the European Union

The EU is having an increasing degree of influence on the management of Europe's coasts through the development of relevant legislation which has to be implemented by Member States and through supporting programmes. The EU has adopted over 200 environmental protection directives with a number being of particular relevance to the management of the coastal zone – for example the Water Framework Directive. It backs up its policy objectives with financial support programmes – such as Interreg and LIFE which have and are supporting projects large and small in Wales.

b. UK central government departments and agencies

While a range of legislative powers have been devolved to the National Assembly for Wales since 1999, certain key UK strategic responsibilities are retained by central government departments. **DTI** has responsibility for consenting the development of energy generation (from renewable and non renewable sources - offshore and onshore) as well as licensing oil and gas exploration. **DEFRA** is leading on the ICZM process for the UK and is promoting the sustainable management of our seas and coastal waters through strategies such as the Marine Stewardship report. It is also leading on the preparation of the proposed Marine Bill. **Department of Transport** has responsibility for navigation issues in relation to ports and shipping, including pollution incidents resulting from oil spills. **Crown Estate** owns and manages the foreshore and sea bed (below low water mark) on behalf of the Crown. Any proposed development on the seabed therefore needs their permission. And the **Maritime and Coastguard Agency** is responsible for promoting marine safety and for enforcing safety regulations. They also co-ordinate search and rescue operations through **HM Coastguard**.

c. Wales

The **National Assembly for Wales** has a range of powers devolved to it in relation to the Welsh coast and coastal waters. These include the licensing of the Welsh fishing fleet and quota management; licensing of disposal of material at sea; water quality; flood and coast protection policy; nature conservation designations; licensing aggregates dredging; and for setting the national planning policy framework including Technical Advice Notes on issues like coastal planning (TAN 14).

A number of agencies in Wales also have legislative powers and/or programmes of work specific to the Welsh coast. The key agencies are :

- the **Environment Agency, Wales** which is responsible for enforcing environmental protection by regulating and monitoring discharges to water courses and to the sea;

- the **Countryside Council for Wales** whose responsibilities include advising the Government on the selection of European and international wildlife sites including Special Areas of Conservation. It is also currently investigating, on behalf of the Assembly Government, options for extending public access to the Welsh coast.

- the **Wales Tourist Board** which supports a number of initiatives aimed at making Wales more attractive to tourists, for example the Green Seas Initiative.

-the **Welsh Development Agency** which supports the economic prosperity of Wales and at the same time to support sustainable community development across Wales, including within coastal communities

- **Cadw** – is a division within the Welsh Assembly Government with responsibility for protecting, conserving and promoting an appreciation of the historic environment of Wales.

d. Local

Of the 22 unitary authorities in Wales, 17 include coastal areas and these authorities have a wide ranging role in managing, regulating and facilitating activities at the coast. Their responsibilities include - planning and development control; tourism and leisure; environmental health; waste management; and coast protection and flood management. Local authorities' planning responsibilities extend formally to the low water mark only. Beyond that activities are generally regulated by sector. Coastal planning guidance (TAN 14) however recommends that coastal local planning authorities should consider defining an 'area of influence' offshore as well as an onshore coastal zone – so that the likely impacts/influences of different developments in the dynamic environment of the coastal zone can be taken account of.

4.2 Other important local agencies include the **Sea Fisheries Committees** which regulate and protect inshore fisheries, including shell fisheries; the **Snowdonia and Pembrokeshire Coast National Park Authorities** which have significant stretches of coastline within their boundaries; and the **Port Authorities** which have statutory responsibility for the port facilities they manage including a requirement on them to have regard to conservation needs.

4.3 In addition a range of working partnerships exist around the Welsh coast as illustrated in fig 3, Section 2, operating at either the all-Wales or local levels. Key partnerships in terms of the implementation of ICZM in Wales include the **Wales Coastal and Maritime Partnership** which with a cross sectoral membership aims to provide co-ordinated advice on a range of Welsh

policy areas to the Welsh Assembly Government ; the **Green Seas Partnership** which promotes better quality beach environments;

the 5 **Coastal Defence Groups** which implement measures to manage coastal erosion and flooding from the sea ; the **Severn Estuary Partnership and the Pembrokeshire Coastal Forum** both of which aim to assist the co-operative management of their respective coastal areas; **Coast Care groups** which involve local people maintaining 'their local beaches to a high standard; and **Special Areas of Conservation Management Groups** which aim to ensure a sustainable future for the 90 such areas designated in Wales and which include 70 % of the Welsh coast.

4.2 As the foregoing review illustrates, there are a wide range of organisations involved in the management of the coasts of Wales. Given the range of issues affecting the coast, this is perhaps not surprising. It does, however, highlight the following aspects in terms of achieving the integrated management approach which is at the heart of ICZM :

- the wide range of statutory organisations involved also means that there is an equally wide range of funding sources for relevant programmes/initiatives. This encompasses funding at the EU, national and local levels. It will be important to ensure that future EU funding under the Regional Development Regulation and other strategic programmes continues to support relevant ICZM-based activity.

- the number of government departments and agencies who are involved in considering and/or consenting to proposed developments on the coast (for example, any offshore windfarm development could require up to 5 separate consents under different legislation);

- the wide range of local groups established around the Welsh coast, some with very specific remits, others with wider areas of focus. Only in relation to coastal defence is there a network of local groups covering the whole of the Welsh coastline;

- the range of projects and strategy development work under way at this time and which key partners need to be aware of and to take into account;

- the relative complexity of the management arrangements and the implications of this for effective community engagement and dialogue. The Assembly Government's Merger Programme will deliver some useful rationalisation in this area, however, from 1 April 2006 when the WDA, WTB and ELWA are due to merged with the Assembly Government.

4.3 These matters are considered further in Section 7 in terms of practical action which can be taken to ensure that the different interests are effectively involved in the future management of our coastal resources.

Section 5

Our coastal resources - Information Management

5.1 It is generally accepted that our knowledge of the coastal/marine environment is much more limited than that of the terrestrial environment. There are a number of gaps in our knowledge which could usefully be filled in order to support the delivery of ICZM. These include : the effects of contaminants on marine life, the predictions of sea level rise and other climate change consequences, the potential for marine ecosystems to adapt to climate change, and the links between development policy options and effects on marine resources.

Monitoring and Data Collection

5.2 A wide range of data about the Welsh coastal environment has been collected over the years - with the volume constantly growing – as a result of monitoring by statutory organisations and other bodies. Some of this has been collected in order to demonstrate compliance with EU Directives such as those on Bathing Waters and on Strategic Environmental Assessment. The Assembly Government, CCW, the Environment Agency and Forestry Commission also all support research programmes which are improving our knowledge of the Welsh coastal environment. In addition, a considerable wealth of relevant data has also been produced by research undertaken by the higher education institutions in Wales. So in relation to the coastal zone, we now have a range of information on - bathing water quality; levels of various pollutants; information on fish-stocks; distribution of marine aggregates; coastal erosion rates; flood risk analyses; distribution of coastal/marine habitats and species and so on. The quantity and breadth of the data reduces, however, with distance off-shore.

Publication of data

5.3 There are also good examples of collaborative efforts in pooling and publishing the available data. For example, the CCW, Environment Agency and Forestry Commission published a State of the Environment Report for Wales in 2003 covering a whole range of environmental issues from pollution to historic monuments. The Bristol Channel Marine Aggregates Database also provides extensive spatial information about environmental aspects of the Bristol Channel/Severn Estuary. And DEFRA has recently published, in conjunction with the Assembly Government and the other devolved administrations, 'Charting Progress', a report on the condition of the seas around the UK.

5.4 While the available data is growing and increasingly being made publicly available through internet publication, there remain problems in knowing exactly what is available from where and the standards adopted in collection. These issues are being addressed by the following initiatives:

a. the establishment by DEFRA in March 2005 of a new UK Marine Data and Information Partnership;

- b. the commissioning by CCW of an inventory of all environmental monitoring activity currently being undertaken in Wales;
- c. the recent completion by CCW of an inter-tidal survey of species and habitats around the Welsh coast;
- d. the review of coastal monitoring activity, the results of which are currently under consideration by the Assembly Government.

Indicators

5.5 Utilising the available data, work has been put into establishing meaningful indicators of the state of the Welsh environment.. As part of its Sustainable Development Action Plan, the Assembly Government has developed a set of sustainability indicators – to help monitor progress in securing more sustainable living and use of Wales’ resources. However, only one of the key indicators is directly related to the coastal and marine environment – ie fish stocks maintained at full reproductive capacity and harvested sustainably. The set of Sustainable Development indicators is currently under review by the Assembly Government and a revised set is expected to be published shortly. The new Environment Strategy for Wales will also include a full set of indicators related to its key delivery aims. Given the disproportionate importance of our coastal resources, it would seem sensible to ensure that a reasonable number of the new indicators should also be relevant to the land/sea interface. In addition the EU has been developing indicators to measure progress against ICZM principles – and these could provide a useful starting point for the development of a meaningful set for Wales.

ICZM related research

5.6 The Higher and Further Education Sector (HFE) in Wales is already playing an important role in promoting ICZM-related research, liaising with coastal policy-makers and practitioners and helping to educate the public about coastal management issues. Many of the university colleges in Wales have strong marine or marine-related teaching and research departments – and as the UK Stocktake Report identified, there is an increasing demand for suitably qualified graduates to fill a new generation of coastal management positions, including for coastal estuary partnerships and forums. Because this research is undertaken by a number of institutions, however, and commissioned by a variety of organisations, public bodies as well as companies and project proposers, it is not as well co-ordinated or disseminated as it might be. To help address this, a new Environmental Research Hub is being developed to co-ordinate environmental research in Wales and with the full involvement of the HFE sector.

5.7 In summary there is a need for more research and monitoring to fill existing data gaps, as well as the development of relevant indicators to monitor change in the coastal environment and general progress in securing ICZM in Wales.

Section 6

Capacity building

Capacity building and those working in the coastal zone

6.1 Recent research suggests that as many as 60% of coastal practitioners hold a degree. The HFE sector in Wales thus has the opportunity to help build the knowledge and awareness of ICZM principles and practice in terms of - scientific research; policy development; implementation and monitoring; educating the future environmental managers and involving the public in coastal issues. The voluntary sector will also have an important role to play here given their involvement in a wide range of coastal initiatives such as the Coast Care Groups and partnerships like Wales Coastal and Maritime Partnership. In particular there would seem to be scope to build on existing links between the HFE sector and coastal zone practitioners in the public, private and voluntary sectors in order to promote effective information exchange and to share good practice.

Capacity building and communities

6.2 As well as practical research on ICZM, the HFE sector is also involved in 'hosting' initiatives – for example, University of Wales, Cardiff provides the secretariat for the Severn Estuary Partnership – and it is participating in others such as the Corepoint project in the Severn Estuary. However, such activity is not evenly spread around the Welsh coast and there is scope for greater interaction and engagement between the HFE sector, the voluntary sector and local communities. The benefits of such engagement include helping community groups to have a better understanding and 'ownership' of their coastal environment and assisting the education sector to be more responsive to society's needs. Another benefit may be in assisting communities – in line with ICZM principles – to become more competent and confident in engaging with decision-making processes in the coastal zone.

6.3 The HFE sector in Wales is already playing a useful role in developing ICZM related courses, undertaking research and assisting in local initiatives. There is scope, however, to build on this base with partners in the voluntary, public and private sectors to support capacity-building within local communities. Suggested actions to take these and other issues forward are covered in Section 7.

Section 7

Taking the ICZM process forward in Wales

This section sets out objectives and actions for the further development of the ICZM process in Wales. They are set out under seven key headings which are often interrelated:

1. Promoting ICZM at national and local levels
2. Policy integration
3. Integrated planning and decision-taking
4. Better information
5. Promote awareness of the value of the coastal zone and of ICZM
6. Joining up with our neighbours
7. Monitoring the ICZM process

7.1. Promoting ICZM at national and local levels

As indicated in Section 2, coastal management initiatives in Wales to date have successfully demonstrated the important benefits to be gained from co-ordinated working. However, despite the range of local fora in existence in Wales, there is only one local network – the Coastal Defence Groups - covering the whole of the coast of Wales. Also these groups and the local initiatives and projects they undertake can tend to suffer from the lack of long term, secure funding – which often results in a stop/start approach to taking actions forward and can lead to the loss of commitment/expertise.

Our **objective** is to

Ensure that the ICZM process in Wales is accepted as an integral part of delivering sustainable development; with adequate resources for the task; and effective participation of all stakeholders in the process at the appropriate level

To achieve this we will

- Ensure that effective co-ordination arrangements are put in place across the Assembly Government, local government and other interests with a role in the coastal zone to oversee the ICZM process across Wales *; [WCMP]
- Encourage coastal local authorities to take a lead locally in the development of ICZM, bringing together those with a statutory function in the coastal zone as well as coastal communities [WLGA]
- Build on existing local and regional partnerships (including the Wales Spatial Plan Area Groups and Community Strategy Partnerships) to secure effective local fora for strategic stretches of the Welsh coast [WCMP]
- Review the funding sources, including European programmes, to support such partnerships and related ICZM projects/initiatives and consider how any important gaps may be filled. [WCMP]

7.2 Policy integration

The need for improved integration in the development of policies and programmes in Wales is already acknowledged by the Assembly Government, most recently as part of the Making the Connections agenda. The development of the Policy Integration Toolkit is a key part of the response to this need. The ICZM process seeks to encourage the integration of policies and programmes affecting the coastal zone and the Assembly Government is working with DEFRA to examine how framework measures within the proposed Marine Bill might help underpin ICZM. Meanwhile much can be done under the banners of sustainable development and effective partnership to secure the required degree of policy and programme integration.

Our **objective** is to

Ensure that all sectors and organisations successfully integrate ICZM management principles and issues into the development of relevant policies, thus helping to ensure the sustainable use of coastal and marine resources

To achieve this we will:

- Ensure that the principles of ICZM are adopted in all relevant strategies and plans initiated by the Assembly Government and its sponsored bodies, especially those related to sustainable development, the environment (including fisheries), economic development, energy and tourism* [WAG]
- Consider with local government the need for additional guidance on the need to address the integration of coastal and marine issues within their plans and strategies, in particular community strategies; [CCW]
- Consider with DEFRA the scope for framework measures for Wales within the proposed Marine Bill to underpin ICZM at the local and national levels*. [WAG]

7.3 Integrated planning and decision- making

As Section 3 indicates, Wales coastal resources – both on land and in coastal waters – are under pressure from a number of directions. The position is further complicated by the separate, sectorally based control regimes in place to manage different activities at the coast. While the Wales Spatial Plan is helping to bring more co-ordination in terms of terrestrial planning, this approach does not yet extend beyond the coast into important sea areas. The possible development of a Marine Spatial Plan is being investigated at the UK level via a pilot project in the Irish Sea. Marine Spatial Planning is also another issue which is under consideration for possible inclusion in the proposed Marine Bill. The planning and implementation of the Water Framework Directive crosses the sea - land boundary and therefore can help to show how ICZM principles can be applied in practice at the regional/local level. Also, of particular importance in Wales, is the need to link effectively the planning and management of the terrestrial protected landscapes (National parks and Areas of Outstanding Natural Beauty) with that of the European marine sites. Currently they have separate systems running in parallel. In addition the increasing interest in offshore renewable energy projects and

other developments underlines the need for an integrated approach to their planning, to their approval processes, and to the assessment of their likely impact.

Our **objective** is to

Work towards a better system of planning and management for the coasts of Wales with a co-ordinated and transparent system of decision-taking across the land/sea boundary

To achieve this we will

- Review the current consent arrangements for major projects on the coasts of Wales and consider how the processes can be streamlined/improved. Use information to inform content of proposed Marine Bill*:[WAG]
- Review the existing advice in TAN 14 on coastal planning and ensure that it takes full account of ICZM principles:[WAG]
- Ensure that the implementation of the Water Framework Directive takes full account of ICZM principles and supports the objectives of this strategy; [EA Wales]
- Explore the need for additional guidance on how the planning and management of coastal protected landscapes of Wales can be integrated with the planning and management of adjacent coastal waters [CCW]

7.4 Better information

The sustainable planning, management and use of the resources within the coastal zone depends on informed decision- making. An understanding of the nature and extent of these resources is crucial to this process. Equally important is the need to understand the natural processes affecting the coastline, particularly in the context of climate change. While a good deal of research and monitoring is being undertaken in Wales, it seems to be accepted that there is room for better co-ordination of this research effort. Improved access to the results of the research is also required – for the benefit of all stakeholders, including local communities.

Our **objective** is to:

Develop a sound knowledge base about key aspects of the coastal zone [economic, social, environmental and physical] which is readily accessible and underpins decision making

To achieve this we will

- Investigate ways of better disseminating information on the condition of the Welsh coastal environment and accessible to coastal decision-makers and the communities affected by those decisions [WCMP].
- work through partners within the WCMP – CCW and the Environment Agency in particular - to identify any gaps in information and initiate a programme of research to fill them [CCW and EA]
- The Assembly Government will work with partners to ensure that fuller information on the Welsh coastal environment is contained in future State of the Environment Reports [WAG]

- Ensure through the new Environment Strategy an effective set of indicators to assess change in the Welsh coastal environment *[WCMP]

7.5 Promote awareness of the value of the coastal zone and of ICZM

A wider appreciation of the value of Wales' coastal resources and how we impact on them – from the economic, environmental, social and cultural perspectives – is important for policy-makers, decision-takers and for those who live on the coast. Often the focus of specific stakeholders is on one aspect of the coastal environment – eg recreational use – rather than the coastal resource as a whole. But successful dialogue between the different groups/organisations involved depends on a mutual appreciation of the variety of issues affecting the coast. Equally there is limited understanding of ICZM as a concept and of its potential relevance to achieving sustainable development objectives.

Our **objective** is to

Ensure that all stakeholders are well informed of the natural processes and human impacts affecting the coast and the overall value of our coastal resources

To achieve this we will

- Ensure that the current study of the economic value of the Welsh marine environment is widely disseminated to decision-makers and communities in Wales as part of a concerted effort to raise public awareness of a. nature and value of the coast and b. of the natural process affecting the coast*; [WCMP]
- Initiate a programme to raise awareness, at all levels, of the benefits of ICZM as a process, through the dissemination of good practice etc;[CCW and EA]
- Work to ensure that public access to the coast is improved with consequential opportunities for public education/awareness raising also taken*.[WAG]

7.6. Joining up with our neighbours

This ICZM strategy for Wales is not being developed in isolation. It is being prepared within the framework of the EU recommendation on ICZM and will contribute to the UK strategy. Links with Ireland are already in place through the Great Britain/Ireland Council and through the Wales Spatial Plan. Further development of the Marine Stewardship process, in conjunction with DEFRA, should also assist the process of joining up and help ensure that wider marine issues are also considered, as appropriate, alongside influences on the coastal zone.

Our **objective** is to

Secure effective linkages to ICZM in adjacent countries and within Europe

To do this we will:

- Enhance existing links and build working partnerships with adjacent countries * [WCMP]
- Contribute to the development of ICZM in UK and Europe, through exchange of information and practice and an input to the development of UK and European policies in the coastal zone* [WAG]

7.7 Monitoring progress on the ICZM process in Wales

Monitoring of the development and effectiveness of the ICZM process will be important. Without clear evidence that it is adding value, the current low level of awareness about the process will continue to hinder its full development.

Our **objective** is to:

Monitor progress on the ICZM process in Wales on a regular basis and report the results

To achieve this we will:

- Building on the approaches being piloted by the EU, we will tailor ICZM monitoring indicators for use in Wales to assess progress down the ICZM road; and report progress [annually.]* [WCMP]
- Aim to review/refresh this strategy every [4 years] reporting on progress and preparing an updated plan of action. [WAG]

Note – it is intended, subject to consultation, that those actions marked with an asterisk will be given particular priority in 2006/7, as initial priorities for implementation. Suggested lead bodies for each of the actions are identified in brackets.

Section 8

Next steps

8.1 The Sustainable Development Scheme (Starting to Live Differently) and related Action Plan confirm the Assembly Government's commitment to developing a new ICZM strategy for Wales. In addition the Wales Spatial Plan provides a framework for collaborative action to develop sustainable communities across Wales. Though essentially land based, the Plan acknowledges the need for integrated coastal zone management. The Assembly Government is also preparing a new Environment Strategy for Wales which will provide an overarching framework for the sustainable management of Wales' environment, including coastal areas. This ICZM strategy aims to complement and support relevant objectives and targets within the Environment Strategy as well as the Wales Spatial Plan and the National Economic Development Plan. It should also make a contribution to the Assembly Government's Making the Connections agenda and specifically its two key principles of more co-ordinated public services and putting the citizen centre stage.

8.2 As was noted in Section 1 however, ICZM is not a panacea and neither is it something the Assembly Government can deliver on its own. Delivery of the key objectives and supporting actions identified in Section 7 will require the co-operation and commitment of key stakeholders. As the next step – and as part of the process of securing this commitment - the Assembly Government plans to consult on the contents of this strategy and in particular on the suggested actions to take this process forward. Following that consultation we will work with key partners, including those represented on the Wales Coastal and Maritime Partnership, to deliver the initial 14 priority actions identified for delivery in 2006/7 and report on progress at the end of that year. Subject to the outcome of the public consultation also, we plan to review this strategy after 4 years and to update it to take account of relevant developments in the meantime, including the impact of new legislation.

8.3 Resources – delivery of the objectives and actions identified in Section 6 will be taken forward as part of the ongoing programmes of the relevant lead organisations and partners, including those of the Assembly Government itself. No new resources are being made available at this stage therefore. The Assembly Government will work to ensure, however, that future EU funding programmes continue to support ICZM related projects on the Welsh coast.

January 2006

ECM Division
Welsh Assembly Government

Management of our – key players and programmes

A range of organisations are involved in the management of Wales' coastal resources – at the European and international; UK, Wales, and local levels. The following text aims to provide an overview of their main roles and responsibilities, supplementing the information in Section 4 :

a. European level – the European Union

The EU is having an increasing degree of influence on the management of Europe's coasts through the development of relevant legislation which has to be implemented by Member States and through supporting programmes. The EU has adopted over 200 environmental protection directives with a number being of particular relevance to the management of the coastal zone – for example the Strategic Environment Assessment and Environmental Impact Assessment Directives, Bathing Waters and Urban Waste Water Directives, the Habitats and Birds Directives and the Water Framework Directive. As well as legally-binding directives, the EU also seeks to influence actions by Member States via non regulatory means. The EU Recommendation on ICZM is a good (and this context very relevant!) example of this. In addition EU promotes sector specific policies such as the Common Fisheries Policy which aims to secure the sustainable exploitation of fish stocks in European waters.

Increasingly EU marine /coastal policy is being based on an eco-system approach which involves maintaining the wealth of natural eco-systems alongside appropriate human use of the environmental resources they contain. This approach is likely to be reflected in the new Marine Thematic Strategy the EU is finalising – with expected read-across to the delivery of ICZM objectives too.

EU financial aid supports the practical achievement of the EU's policy objectives for the coastal/marine environment and they have been used to good effect in Wales to date, supporting projects large and small as illustrated in Section 2. Key funding programmes include the EU's Structural Funds; Interreg and the LIFE programme.

b. UK central government departments and agencies

While a range of legislative powers have been devolved to the National Assembly for Wales since 1999, certain key UK strategic responsibilities are retained by central government departments. The main functions and departments involved are as follows :

DTI – has responsibility for consenting the development of energy generation (from renewable and non renewable sources; and offshore and onshore) as well as licensing oil and gas exploration. DTI is currently undertaking, in liaison with the Assembly Government and CCW, a programme of Strategic Environment Assessments around the coast of the UK to help guide future oil and gas licensing activity. [Note – the Assembly Government is considering

with DTI and the Wales Office the possibility of consents for larger energy projects being transferred to the Assembly.]

DEFRA – is leading on the ICZM process for the UK and is promoting the sustainable management of our seas and coastal waters through strategies such as the Marine Stewardship report. It is also leading on the preparation of the proposed Marine Bill.

Department of Transport – has responsibility for navigation issues in relation to ports and shipping, including pollution incidents resulting from oil spills.

Ministry of Defence – owns important sites around the Welsh coast, including airfields such as RAF Valley and military ranges like that at Castle Martin, Pembrokeshire.

Crown Estate – while not technically a government department, it is a public body which owns and manages the foreshore and sea bed (below low water mark) on behalf of the Crown. Any proposed development on the seabed therefore needs their permission.

Maritime and Coastguard Agency – is responsible for promoting marine safety and for enforcing safety regulations. They co-ordinate search and rescue operations through HM Coastguard and check that shipping meets UK and international safety requirements.

c. Wales

National Assembly for Wales – The Assembly has a range of powers devolved to it in relation to the Welsh coast and coastal waters. These include the licensing of the Welsh fishing fleet and quota management; licensing of disposal of material at sea; water quality including responsibility for transposing into secondary legislation key EU Directives such as the Urban Waste Water Treatment and water Framework Directives; flood and coast protection policy; nature conservation designations including Special Areas of Conservation; licensing aggregates dredging; and for setting the national planning policy framework including Technical Advice Notes on issues like coastal planning (TAN 14).

The Assembly is also under a statutory duty to promote sustainable development. The latest Sustainable Development Scheme (Starting to Live Differently) and related Action Plan confirms the Assembly Government's commitment to developing a new ICZM strategy for Wales. In addition the Assembly Government published in November 2004 a Wales Spatial Plan which provides a framework for future collaborative action to develop sustainable communities across Wales. Though essentially land-based, the Plan acknowledges the need for integrated coastal zone management. The Assembly Government is also consulting on a new Environment Strategy for Wales which will provide an overarching framework for the sustainable management of Wales. This ICZM strategy aims to complement and support

relevant objectives/ targets within the Environment Strategy as well as the Wales Spatial Plan and the National Economic Development Strategy

A number of agencies in Wales also have legislative powers and/or programmes of work specific to the Welsh coast. The key agencies are:

Environment Agency, Wales – is responsible for enforcing environmental protection by regulating and monitoring discharges to water courses. In its regulatory role it regulates effluent discharges to the sea; regulates salmon and trout fishing; regulates sea fisheries in estuaries (Severn and Dee); acts as competent authority [define simply] for a number of EU Directives and manages flood risk through the regulation of development on flood plains and the construction of sea and river defences. The Agency's work extends beyond regulation to direct action into wider influencing work such as action to tackle diffuse pollution. Recognising the relevance of ICZM to its work, the Agency has recently commissioned a study of the different management approaches to ICZM and is planning to publish its own Marine Strategy in November 2005.

Countryside Council for Wales – CCW is the Assembly's statutory adviser on nature conservation and enjoyment of the countryside. Its responsibilities include advising the Government on the selection of European and international wildlife sites including Special Areas of Conservation; assisting in implementing the Wales elements of the UK Biodiversity Action Plan; promoting the sustainable management of over 1000 SSSIs and 69 National Nature Reserves and Wales only Marine Nature Reserve at Menai Straits and providing grants to support these activities. It is also currently investigating, on behalf of the Assembly Government, options for extending public access to the Welsh coast.

Wales Tourist Board – as part of its role to promote tourism in Wales the WTB supports a number of initiatives aimed at making Wales more attractive to tourists. One example of this is the Green Seas Initiative mentioned in Section 2. In 2004, and following an assessment of the facilities on Wales coasts and inland waters for water-sports, the WTB published its 'Catching the Wave' strategy. This highlighted that Wales was not maximising its potential in this area and suggested ways in which Wales might aim to do so in a sustainable manner. This is now being taken forward by a Coastal Facilities Group led by WDA which is examining the opportunities for provision of appropriate facilities at suitable locations around the Welsh coast.

To help secure a joined –up approach to leisure/tourism related development on the Welsh coast, the WTB is also now developing a Coastal Tourism Strategy for Wales, in line with one of the commitments in the Wales Spatial Plan. The specification for this work usefully requires account to be taken of the contents of this strategy.

Welsh Development Agency – The WDA aims to stimulate and support the economic prosperity of Wales and at the same time to support sustainable community development across Wales. As well as developing infrastructure

and providing grants and advice to businesses, the Agency is involved in a range of town/community regeneration projects. It also manages a number of rural programmes aimed at regenerating towns and villages in the more remote parts of Wales, including coastal communities.

Cadw – is an agency within the Welsh Assembly Government with responsibility for protecting, conserving and promoting an appreciation of the historic environment of Wales. Its duties include securing the preservation of ancient monuments and historic buildings; grant aiding the repair of these buildings and managing the ancient monuments which are in the care of the National Assembly, including coastal sites like Conwy Castle.

d. Local

Local authorities (unitary authorities) – of the 22 unitary authorities in Wales, 17 include coastal areas and these authorities have a wide ranging role in managing, regulating and facilitating activities at the coast. Their responsibilities include - planning and development control; tourism and leisure; environmental health; waste management; and coast protection and flood management. Local authorities' planning responsibilities extend formally to the low water mark only. Beyond that activities are generally regulated by sector. Coastal planning guidance (TAN 14) however recommends that coastal local planning authorities should consider defining an 'area of influence' offshore as well as an onshore coastal zone – so that the likely impacts/influences of different developments in the dynamic environment of the coastal zone can be taken account of. In order to share information on coastal issues of common concern, the 17 coastal local authorities have established an officers group, Arfordir. The local authorities are currently engaged in drawing up community strategies for their areas covering their future planning for enhancing local economies, environments and social conditions. As noted in paragraph 2.4 f, they will also be preparing new local development plans for their areas over the next year or so.

Sea Fisheries Committees – two such committees cover the coast of Wales, the South and North Wales and West Sea Fisheries Committees. They are statutory bodies established to regulate and protect inshore fisheries, including shell fisheries. Their future is currently subject to review.

National Park Authorities – two of Wales National Parks have significant stretches of coastline within their boundaries – the Pembrokeshire Coast and Snowdonia National Parks. In addition to their statutory purposes of conserving and enhancing the natural beauty, wildlife and cultural heritage of their areas and of promoting public enjoyment and understanding of them, the Park Authorities are also under a duty to foster the economic and social well being of the communities within their areas. The Park Authorities are currently working to produce new/updated National Park Management Plans setting out their strategic policies for the future management of these special areas – and building ICZM-related principles and actions will form part of these plans.

Port authorities – have statutory responsibility for the port facilities they manage including a requirement on them to have regard to conservation needs.

Partnerships – a range of working partnerships exist around the Welsh coast as illustrated in fig 4, Section 2, operating at either the all-Wales or local levels. Key partnerships in terms of the implementation of ICZM in Wales include :

i. the Wales Coastal and Maritime Partnership – set up in 2002 by the Assembly Government to provide co-ordinated advice on a range of Welsh policy areas. Its members comprise representatives from farming, business, government and the environmental sectors (including the National Trust which manages some 133 miles of the Welsh coastline) ;

ii. the Green Seas Partnership – promoting a better quality beach environment;

iii. Coastal Defence Groups – 5 in Wales and led by the relevant local authority as the body with the statutory remit to implement measures to manage coastal erosion and flooding from the sea ;

iv. Severn Estuary Partnership – set up in 1995, this Partnership is assisting in the co-operative management of one of the UK's most economically and environmentally important estuaries ;

v. Pembrokeshire Coastal Forum – a local partnership of statutory, voluntary and business interests established to help address on a co-operative basis management issues relating to this vitally important stretch of coastline. With EU Objective 1 funding the forum has developed a local ICZM framework for the Pembrokeshire Coast, which could act as a model for other areas.

vi. Coast Care groups – operate around the coast of Wales and involve local people taking responsibility for helping, through 'litter picks' and other action that 'their' local beaches are maintained to a high standard. Keep Wales Tidy provides the management lead for these groups and has successfully obtained EU Interreg funding for their activities.

vii. SAC Management Groups – the Assembly Government has formally designated under EU legislation some 90 Special Areas of Conservation in Wales. 70% of the Welsh coast is covered by such designations including the Pembrokeshire and Carmarthen Bay area. Management schemes are being drawn up by the Relevant Authority Group managing these sites which aim to ensure a sustainable future for these special areas.