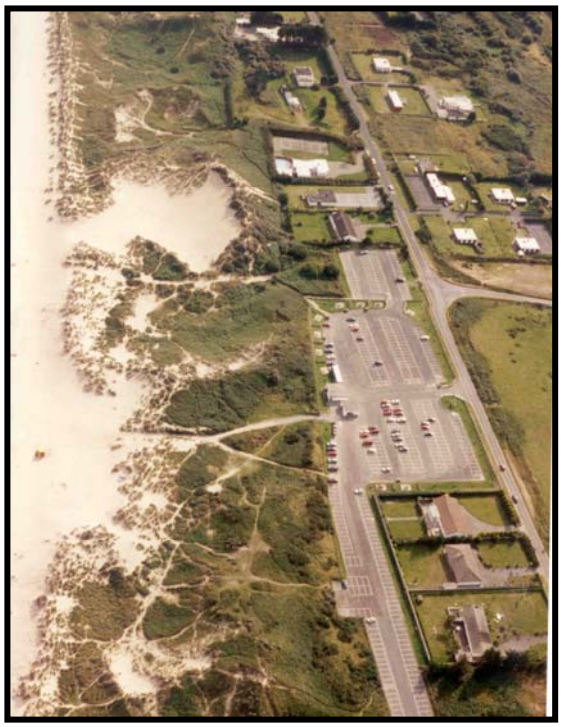
Coastal Zone Management Network

CZMNet

Interreg IIIa Final Report



Jan 2005

ENTERPRISE IRELAND

Cyngor Sir Gâr Carmarthenshire County Council

Contents:

1. Introduction

This is the final report to be published with the support of the 2003-04 Interreg-funded CZMNet Project. It includes the presentations made at the three CZMNet conferences held in Wales and Ireland, including those which have been previously made available via the Coastal Communities Project website at http://coconet.ucc.ie

2. Concept

The CZMNet Project has brought together Irish and Welsh practioners involved in a wide range of public sector coastal management activities. Emphasis has been give to the way different aspects of coastal management interact, with a view to deepening understanding of the concept of integrated coastal zone management following publication in June 2002 of the European Union's Recommendation concerning the Implementation of Integrated Coastal Zone Management in Europe (ref. 2002/413/EC). The CZMNet Project has been carried out in tandem with stocktakes carried out under Chapter Three of the Recommendation. The United Kingdom Stocktake was published by the Government's Department of the Environment, Food and Rural Affairs in April 2004. The Irish Stocktake is at a somewhat earlier stage. It is hoped that the CZMNet Project will continue to feed into this stocktaking process.

3. Origins

The CZMNet Project was initiated by Enterprise Ireland as a sister project to the EcoNET Project which had been carried out in 1998-2000. The EcoNET Project was an EU-supported project for coastal engineers working for local authorities around the Southern Irish Sea to share coastal protection experiences. CZMNet was set up to assist sharing of experience of wider coastal issues affecting the Southern Irish Sea, involving local authorities, government agencies and coastal fora. At about the same time a similar project, called CoCoNet was set up to support interest in Southern Irish Sea coastal issues amongst local communities and voluntary groups. The two projects worked closely together at all stages, culminating in the joint conference held in Wexford in June 2004. CZMNet is grateful to CoCoNet for allowing it a share of its website. Both projects were financially supported by the European Union via the Interreg IIIA Programme.

4. Outcome

CZMNet conferences were held in Dublin in October 2003 and in Llandudno in February 2004. A third conference was held jointly with CoCoNet, as indicated above. Many people have met and discussed a wide range of coastal issues, experienced presentations, including opportunities to dicuss issues with presenters. Meetings have included field excursions at Wexford and along the North Wales coast. The Project has stimulated enthusiasm for, and understanding of, integrated coastal zone management, and provided food for thought as to how our coastal zones may be better managed in the future.

5. Meeting 1 - Minutes

The CZMNet group held its first meeting on 21st of October and with an attendance of 27 key people involved in coastal zone management it proved to be a very informative and sociable occasion. The agenda (attached) was prepared in consultation with the attendees and included such topical issues as one-off rural housing on the coast, sea level rise and bye-laws in the coastal zone.

The meeting kicked off with a welcome by Dave O'Donoghue of the Department of Communications, Marine and Natural Resources in whose offices the meeting was held. The aims of CZMNet were then presented by Brendan Dollard where the importance of creating a long lasting Welsh/Irish network, in which coastal zone management experiences could be shared, was stressed. Here also each network member introduced themselves and stated which CZM issues they found most pressing.

The next presentation by Kevin Lynch on the award winning Bantry Bay Charter created a lot of interest and raised one of the key issues to emerge from the meeting that of sourcing long term funding for CZM.

David Poulter followed with a comprehensive presentation on the current state of CZM in Carmarthenshire. This Wales dimension immediately highlighted differences in such fundamentals as the practical definition of the coastal zone when compared with that used by the Irish local authorities. He suggested that ICZM might best work by influencing existing strategies rather than as a stand alone policy.

The next presentation from Dr. Mark Scott of UCD on rural housing address an issue which is currently dominating not just CZM but rural development and management in Ireland. He highlighted the political difficulties in strengthening development controls.

After lunch the theme changed to a more long term problem that of sea level rise. The presentation given by Louise Weir from the Dublin Dockland Authority presented some of the approaches currently being taken to accommodate this predicament.

The final presentation by Eamonn Hoare covered the topical issue of using bylaws in order to avoid conflicting or damaging uses of the coastal zone. Particular interest was shown in the use of volunteers to monitor the adherence to the bylaws.

The discussion continued for a further hour and various experiences with CZM were recounted. A number of issues were raised by the participants along with suggestions for topics to be considered in future CZMNet meetings. These included;

- define the CZM process and assess the need for it
- obtain update on what is likely to be covered by the Coastal Zone Management Bill expected to be introduced to the Dáil next year
- link between land and marine planning
- how to get the public involved in CZM
- how to accommodate offshore wind farms and tidal energy schemes within CZM
- how to plan for the mitigation of the l andscape impact of coastal defence structures
- how to accommodate offshore aggregate extraction within CZM
- how to accommodate aquaculture within CZM, Dungarvan Bay as a possible case study area
- what process required to deal with the Water Framework Directive
- interaction between local authorities and privately owned railways
- Irish Sea Pilot Project for marine nature conservation

It was recognised that it would be necessary to focus on just a few of the above issues at the next meeting, and at the final meeting to be held jointly with the CoCoNet Project group.

It was felt that the meeting was extremely useful and, hopefully, many long lasting acquaintanceships have been instigated. The next meeting has been scheduled for late January/early February 2004 and the agenda is currently being prepared. It will be a two-day event with a number of site visits included.

The list of attendees is attached along with copies of the papers presented.

The project is on schedule to finish in the summer of 2004.

Meeting 1 - Attendees

Mr. Brendan Dollard	Enterprise Ireland
Ms Louise McGauran	Dun Laoghaire - Rathdown County Council
Ms. Mary Henchy	Dun Laoghaire - Rathdown County Council
Mr. Tim Carey	Dun Laoghaire - Rathdown County Council
Ms. Niamh Fleming	Dun Laoghaire - Rathdown County Council
Ms. Eithne Mallon	Fingal County Council
Mr. Hans Visser	Fingal County Council
Mr. Joe Ryan	Department of the Marine and Natural Resources
Mr. Dave O'Donoghue	Department of the Marine and Natural Resources
Ms. Jenny O'Leary	Marine Institute
Mr. Jim O'Mahony	Waterford County Council
Mr. Lorcan Griffin	Wexford County Council
Ms. Edel Birmingham	Wicklow County Council
Michael Rossiter	Wicklow County Council
Mr. David Poulter	Camarthenshire County Council
Mr. Ziggy Otto,	Countryside Council for Wales
Ms. Nia Davies	Gwynedd County Council
Mr. Edward Holdaway	Pembrokeshire Coastal Forum
Mr. John Wilkes	Ceredigion County Council
Mr. John Hamer	Countryside Council for Wales
Ms. Martina Dunne	Pembrokeshire Coast National Park
Mr. Phil Pickersgill	Environment Agency
Mr. Eamonn Hoare	Wexford County Council
Mr. Lorcan Griffin	Wexford County Council
Mr Kevin Lynch	Cork County Council
Ms Louise Weir	Dublin Docklands Authority
Dr. Mark Scott	Department of Regional & Urban Planning, UCD

Meeting 1 - Agenda

Agenda for first CZMNet meeting
Interreg IIIa (Wales-Ireland)
Coastal Zone Management Network
(CZMNet)
at the offices of the
Department of Communications, Marine and Natural Resources
Leeson Lane, Dublin 2
on 21st October 2003

1000 Welcome/coffee/tea

1030 CZMNet Introduction
Network project introduced by Brendan Dollard, Enterprise Ireland - Irish area project manager

1045 The Bantry Bay Charter
Kevin Lynch, Planner, Cork County Council

1110 CZM in Carmarthenshire
David Poulter, Carmarthenshire

1135 One-off rural housing in the coastal zone.
Dr. Mark Scott, Dept. of Regional & Urban Planning, UCD.

1200 Discussion

1230 Lunch

1330 Planning for climate change
Louise Weir, Dublin Docklands Development Authority

1355 How successful are by-laws in the coastal zone
Eamonn Hore, Wexford County Council

1420 Discussion & next meeting's agenda

1500 Coffee/tea
1530 Close

6. Meeting 2 - Minutes

The CZMNet group held its second meeting, at the North Wales Conference Centre, Llandudno, on 18 and 19th February 2004. The meeting was attended by twenty delegates, including ten from Wales, representing local authority planners and engineers, government agencies and higher education, all with an interest in coastal zone management.

The format followed was of presentations from guest speakers, discussion and field visits along the North Wales coast. The agenda, attached as Appendix Two, stemmed from discussion at the earlier conference in Dublin. Five presentations were made on Day One, as follows:-

- New housing in the open countryside – the Welsh experience, by David Poulter (Carmarthenshire County Council). Focussing on the evolution of policy in Wales and the UK since the 1930's, and its links with the political background to land use planning, with a closer look at the experience of the West Wales county of Ceredigion.

- Seascape and the visual impact of coastal defence structures by John Briggs (Countryside Council for Wales). A well-illustrated presentation based upon research carried out for CCW, demonstrating the value of coastal resources in Wales, the visual impact of coastal defences and ways in which their impact can be minimised. Discussion referred to man-made reefs and the maintenance of shingle defences by regular movement of stone.

- Seascape assessment – context and visual impact of offshore wind energy by John Briggs, (Countryside Council for Wales). A repeat of the presentation given to the Coastal Futures Conference in London in January 2004. Similarly well-illustrated, the presentation contained a detailed look at how coastal visual resources are publicly valued, how off-shore wind farms are likely to be perceived by the general public and how their visual impact may be analysed. Points referred to in discussion included the possibility of recreational boat trips to view wind turbines at close quarters, the creation of no-fishing zones around wind farms, and the scope for the Strategic Environmental Assessment Directive to address visual issues.

- The Water Framework Directive and Coastal Waters, by Alun Attwood (Environment Agency). The presentation, which had also been made to a meeting of the Wales Coastal and Maritime Partnership in February, outlined the emergence of the Directive as consolidating legislation linked to 12 other Directives. Factors affecting water quality, objectives for river basin mangement, UK secondary legislation and timetabling were all addressed. Links to sustainable development aims and ICZM were also stressed.

- The Habitats Directive and European Marine Sites in Ireland, by Liz Sides, (National Parks and Wildlife Service). The presentation gave a comprehensive overview of the significance of European nature conservation legislation to local authorities and other public bodies with coastal powers. The twelve coastal habitat types and key protected species were outlined. The presentation included a map showing the location of 83 Marine Sites distributed around the coast of Ireland. Concepts such as favourable conservation status and ecological assessment were explained. The presentation included an account of major issues affecting the management of Marine Sites and concluded with a powerful plea for greater attention to be paid to the implications of European nature conservation legislation.

Following the first three presentations and a buffet lunch, conference delegates continued discussion along the Llandudno seafront, from where North Hoyle windfarm was visible in the far distance.

Following the presentation on the Habitats Directive, Phil Hardwick (Conwy County Council) gave a talk showing how planning gain in the coastal zone could be achieved by a determined local authority when negotiating with the Highways Agency on road improvements. In this case the A55 Trunk road at Conwy, where views of Conwy Castle were protected by routeing the new road through a tunnel and an RSPB nature reserve created on the site used for spoil disposal.

NB No separate item will appear on this talk on the website, hence the notes below are fuller than those on the presentations above.

The proposed upgrading of the A55 Trunk Road, including a tunnel under the River Conway, and use of estuarine saltmarsh and mudlflats for disposal of spoil was originally promoted by a parliamentary Bill. Initially objections were raised by the then local planning authority (Aberconwy Borough Council) and the then Nature Conservancy Council.

Measures to realise the economic potential of the upgrading of the A55 were supported by the publication in 1989 of Land Use Consultants' "A Strategy for the A55". Planning guidelines supporting marina development also appeared at about this time.

The consortium of engineering firms which successfully tendered for the construction of the tunnel required additional land for carrying out the work which was offered by the local authority, in return for an exchange of land and an agreement to create a marina from the castings basin site and a wetland nature reserve on the land used for spoil disposal.

The Royal Society for the Protection of Birds took on the management of the nature reserve, with a 25-year lease from the Crown Estate. Support was also give for provision of social housing. Finance was also contributed by the Welsh Development Agency and the Wales Tourist Board.

The success of the project relied on three key factors:-

- clear intentions from the outset of the project;
- a clear strategy for achieving new land uses; and
- high quality staff.

Patience was also called for; work on Conwy Quay and a cycleway are still outstanding, several years after the completion of highway works.

The final part of Day One of the Conference was a discussion of the content of the third and final conference, which would be held jointly with the CoCoNet Project. The Conference would provide an opportunity for planners, engineers, ecologists and representatives of voluntary groups to discuss topics of mutual interest. It was felt important that consensus-building, rather than confrontation should be aimed at, based on examples of good coastal management practice. Organisers were open to suggestions from delegates.

Topics suggested included:-

- use of Geographic Information Systems; CMRC, Cork, may have useful experience
- coastal access, via footpaths and cycleways
- an exchange of overview, i.e. the Welsh view of Irish coastal zone management , and vice-versa
- maintenance of web-based information
- potential for future Interreg projects
- Irish Coastal Bill
- Dissemination of information within organisations
- Submission to both Governments on the views of the network groups.

In considering topics for the next conference it was borne in mind that the CoCoNet's second conference to be held in Aberystwyth in April 2004 would also generate ideas to be considered.

Day Two of the Conference began with a morning coach-based tour of inspection of a wide variety of coastal defences in the Llandudno area, and also views of the recently-constructed North Hoyle wind farm from a variety of rural and urban locations along the North Wales coast. Special thanks are due to John Briggs for manning the coach microphone and providing a well-informed local commentary.

Legs were stretched on Llandudno West Beach and the lower parts of the Great Orme, following in the footsteps of the author of Alice in Wonderland, before a pub lunch, rather than a Mad Hatter's tea party, in Llandudno Junction.

The Conference concluded with a visit to the Royal Society for the Protection of Bird's Conwy Nature Reserve. Key features of the Reserve were outlined by Alan Davies, the Reserve Warden, before delegates toured the Reserve. Striking views were had of wetland habitats of juxtaposed natural and man-made origin, and of Conway Castle, in its protected setting.

Meeting 2 - Attendees

Arwel Roberts	Anglesey County Council
Richard Edwards	Ceredigion County Council
Jon Wilkes	Ceredigion County Council
John Briggs	Countryside Council for Wales
Alan Attwood	Environment Agency
Kirsty Dernie	Countryside Council for Wales
Gareth Lloyd	Snowdonia National Park
Steve Morris	Pembrokeshire Coastal Forum
David Poulter	Carmarthenshire County Council
Kevin Lynch	Cork County Council
Billy Horgan	Cork County Council
Tim Carey	Dun Laoghaire - Rathdown County Council
Niamh Fleming	Dun Laoghaire - Rathdown County Council
Brendan Dollard	Enterprise Ireland
Hans Visser	Fingal County Council
Jim O'Mahoney	Waterford County Council
Gael Gibson	Wicklow County Council
Tony Quirke	Wexford County Council
Lorcan Griffin	Wexford County Council
Liz Sides	National Parks and Wildlife Service
Wendy Dodds	Cardiff University

Meeting 2 - Agenda

Interreg IIIa (Wales-Ireland)
Coastal Zone Management Network
(CZMNet)
Wales Conference

Seminar at the North Wales Conference Centre, Llandudno on Wed. 18th February 2004
Field excursions in the Llandudno/Conwy area. Thursday 19th February 2004

Day One

1000	**Welcome/coffee/tea**
1015	**CZMNet Update** David Poulter, Wales Project Manager
1030	**New housing in the open countryside – the Welsh experience** David Poulter, Carmarthenshire County Council
1100	**Discussion**
1115	**Seascape and the visual impact of coastal structures** John Briggs, Countryside Council for Wales, Bangor
1140	**Seascape assessment : context and visual impact of offshore wind energy** John Briggs
1210	**Discussion**
1240	**Lunch, followed by a stroll along the promenade**
1400	**The Water Framework Directive – implications for local authorities** Alun Attwood, Environment Agency Wales
1445	**The Habitats Directive – Management of European Marine Sites – the Irish experience** Liz Sides, National Parks and Wildlife Service, Dublin
1530	**Discussion**
1600	**Road development and habitat creation – Conwy RSPB Reserve** Question and answer session with Phil Hardwick, Conwy County Borough Council
1630	**Coffee/tea**
1645	**Discussion & next meeting's agenda**
1730	**Close**
1930	**Evening meal and discussion**

Day Two – Field Excursions

1000 West Shore, Llandudno; Penrhyn Bay; Conwy Marina

1230 Lunch

1400 Conwy RSPB Reserve
1600 Coffee/tea and close

7. Meeting 3

For a report on the joint CoConet and CZMNet Wexford conference go to;

http://coconet.ucc.ie

8. List of Presentations

A key feature of the conferences was the use of illustrated presentations, mainly with the use of Microsoft's PowerPoint computer programme. These presentations are included in this report. CZMNet is grateful to speakers for allowing these reports to be published, and for the inclusion where possible of speaker's notes.

1	CZMNet Introduction	Brendan Dollard
2	Bantry Bay Charter	Kevin Lynch
3	How Integrated is Coastal Zone Management in Carmarthenshire	David Poulter
4	One-off housing in the Irish Coastal Zone	Dr. Mark Scott
5	Planning for Climate Change	Louise Weir
6	How Successful are By-laws in the Coastal Zone	Eamonn Hore
7	New Housing in the Open Countryside – the Welsh Experience	David Poulter
8	Seascape and the Visual Impact of Coastal Structures	John Briggs
9	Seascape Assessment; the Context and Visual Impact of Offshore Wind Energy	John Briggs
10	The Water Framework Directive – Implications for Local Authorities	Alun Attwood
11	The Habitats Directive – Management of European Marine Sites – the Irish Experience	Liz Sides
12	The Future of ICZM in Europe	Arthur Martin
13	Community-based Coastal Management in the US and Croatia	Ana-Marija Frankic
14	Community-based Coastal Management in Croatia	Jadranka Pelikan
15	CZMNet – Status and Achievements	Brendan Dollard
16	CoCoNet – Status and Achievements	Prof. Rhoda Ballinger
17	Networks in Integrated Coastal Management	Jane Taussik
18	Coastal Practioners: Building on Regional Experiences across Europe	Alan Pickaver
19	The Need for Coastal Partnerships and the Role of the CoastNet UK Network	Alex Midlen

9. Presentation Contributors

Alan Attwood	Environment Agency
Prof. Rhoda Ballinger	Lecturer and Research Officer, Marine and Coastal Environment Group, Dept. of Earth Sciences, Cardiff University
John Briggs	Landscape Architect, Countryside Council for Wales, Bangor
Brendan Dollard	CZMNet Project Leader Ireland - Scientific Officer, Enterprise Ireland
Ana-Marija Frankic	Virginia Institute of Marine Science
Eamonn Hore	Senior Engineer, Environment Section, Wexford County Council
Kevin Lynch	Planner, Cork County Council
Arthur Martin	Partner, Brady Shipman Martin Consultants, Dublin
Alex Midlen	CoastNet/Colchester Borough Council
Jadranka Pelikan	EkoZadar, Zadar, Croatia
Alan Pickaver	EUCC Coastal Union
David Poulter	CZMNet Project Leader Wales - Planner, Department of Regeneration, Carmarthenshire County Council
Dr. Mark Scott	Dept. of Regional and Urban Planning, University College Dublin, University of Ireland
Liz Sides	National Parks and Wildlife Service, Dublin
Jane Taussik	EuroCoast
Louise Weir	Dublin Docklands Development Authority

Coastal Zone Management Network

CZMNet

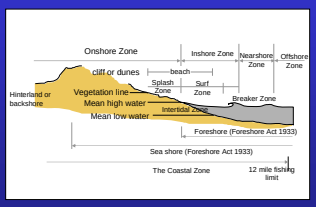
an INTERREG IIIa funded project

Priority 2 - Marine and Coastal Development and the Measure 1 Environment

ENTERPRISE IRELAND

Cyngor Sir Caerfyrddin
Carmarthenshire County Council

The Coastal Zone

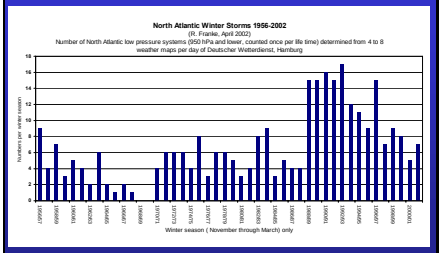


The Coastal Zone

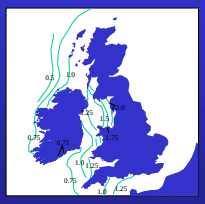
- A strip of land and sea territory of varying width depending on the nature of the environment and management needs
- Area of sea influenced by the land and the area of land influenced by the sea
- It seldom corresponds to existing administrative or planning units

The problems of the Coastal Zone

- Dealing with erosion
- Habitat destruction
- Loss of biodiversity
- Pollution
- Decline of small scale coastal fisheries
- Competition for resources
- Degrading of resources
- Destruction of cultural heritage
- Uncontrollable development
- Poor infrastructure to peripheral areas
- Climate change and sea level rise



Storm surge elevation (m) (50yr return)



Coastal Zone Management

Integrated Coastal zone management is defines as:

A continuous process of administration which seeks…

- to establish and maintain the sustainable use and development of the resources of the coastal zone so as to improve quality of life
- to maintain the biological diversity, productivity and quality of the coastal environment

….through efficient and holistic management

Coastal Zone Management strategy

A Strategy for Europe

'There is no simple, legislative solution…'

' The strategy aims to promote a collaborative approach to planning and management of the coastal zone, within a philosophy of governance by partnership with civil society.'

''The EU's role is one of providing leadership and guidance….at local, regional and national levels.'

Coastal Zone Management in Ireland

1933	Foreshore Act
1963	Coastal Protection Act
1973	National Coastline Study
1993	Coastal Management – A case for action
1998	Coastal Zone Management – A draft policy for Ireland
2000	Bantry Bay Charter
2004?	Coastal Zone Management Bill

Coastal Zone Management in Wales

1947on	Town and Country Planning Acts
1947	Coast Protection Act
1949	National Parks and Access to the Countryside Act
1981	Wildlife and Countryside Act
1991	Water Resources Act
1991	Land Drainage Act
1993	Development Below Low Water Mark
1994	Conservation (Natural Habitats, etc) Regulations
1999	The Coast and Inshore Waters of Wales
2000	Countryside and Rights of Way Act

CZMNet - OBJECTIVES

- To encourage and facilitate closer co-operation between local authorities in Ireland and Wales in the area of coastal zone management
- To provide a mechanism for the sharing of experiences of and knowledge on coastal zone management
- To initiate a long lasting network of contacts

PROJECT MANAGEMENT

Ireland

Brendan Dollard
Offshore & Coastal Engineering Unit
Enterprise Ireland

Wales

David Poulter
Carmarthenshire County Council
Carmarthenshire
Wales

CZMNET MEMBERS

IRELAND:
Enterprise Ireland, The Department of the Marine & Natural Resources, Waterford County Council, Wexford County Council, Wicklow County Council, Dun Laoghaire - Rathdown County Council, Bray Urban District Council and Fingal County Council.

WALES:
Carmarthenshire County Council, Ceredigion County Council, Conwy County Council, Countryside Council for Wales, Environment Agency, Gwynedd County Council, Pembrokeshire Coast National Park, Pembrokeshire Coastal Forum, Pembrokeshire County Council, Welsh Assembly Government and Ynys Mon County Council

CZMNET MEETING AGENDA

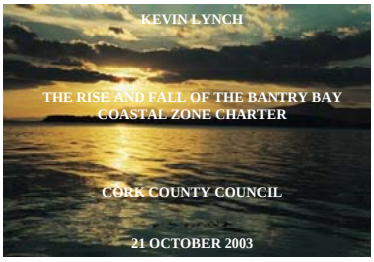
Meeting 1, Dublin, Ireland. 21 October, 2003

1030	CZMNet Introduction - Network project introduced by Brendan Dollard, Enterprise Ireland - Irish area project manager
1045	The Bantry Bay Charter Kevin Lynch, Planner, Cork County Council
1110	CZM in Carmarthenshire David Poulter, Carmarthenshire
1135	One-off rural housing in the coastal zone. Dr. Mark Scott, Dept. of Regional & Urban Planning, UCD.
1200	Discussion
1230	Lunch
1330	Planning for climate change Louise Weir, Dublin Docklands Development Authority
1355	How successful are by-laws in the coastal zone Eamonn Hore, Wexford County Council
1420	Discussion & next meeting's agenda
1500	Coffee/tea
1530	Close

CZMNET MEETING MINUTES

Download from….

http://coconet.ucc.ie/repczmnet13.pdf


KEVIN LYNCH
THE RISE AND FALL OF THE BANTRY BAY COASTAL ZONE CHARTER
CORK COUNTY COUNCIL
21 OCTOBER 2003


• Background
• Issues
• Problems

What Is The Charter

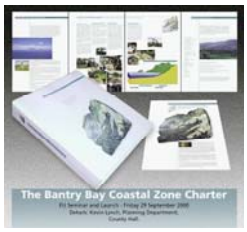
- An agreed approach to the management and development of Bantry Bay
- Over 70 organisations, businesses and regulatory bodies,
- Based on consensus

Work Programmes

- Review of Maritime Operations
- ADR
- Resource Identification
- ICZM Strategy
- Review of Maritime Operations
- Project Management
- Quality Assurance
- Preferred Approach
- Dissemination

How was the Charter Agreed

- Invitation to Participate
- Identifying Issues
- Representative Roundtable
- Working Groups address the Issues
- Proposal generated
- Building Consensus



Key Characteristics

- Open transparent and Inclusive
- To be neutral
- To be flexible and responsive to circumstances
- To maintain dialogue
- To be informed by the participants themselves

CZM Key Elements

- 'Coastal Zone management is not rocket since, its far harder than that'
- Bare elements
- Public participation,
- Communication/Integration

'People do the best they can with the erosional resources at their disposal and within the constraints of their particular map of the world imposes on them. There are no irrational or difficult people, just limits to our desire to understand and our ability to deal with those who think differently. Before anything useful can be done one has to notice what is going on for them and to know what we want them to do differently.'

Implementation

- Two years funded by Cork County Council
- Lack of support by regulatory bosies
- Not Gone Away
- Lessons should be learnt
- Need for Assessment

INSTITIUID PLEANÁLA NA HEIREANN
PLANNING ACHIEVEMENT AWARD 2000
IRISH PLANNING INSTITUTE

How Integrated is Coastal Zone Management in Carmarthenshire ?

And how much does it need to be ?

1

Summary of topics

- Defining Carmarthenshire's Coastal Zone;
- The Zone's general character;
- County Council services;
- Integration of Council Services;
- Wider integration of public services;
- General conclusions.

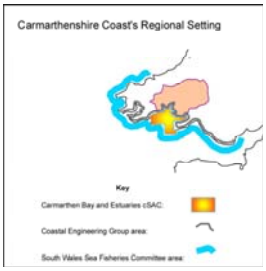
2

Landsat 2000

3

Satellite image Landsat 2000. From CD-Rom free with a Sunday newspaper. Inc. whole of Carms. coast plus part of North Gower.

Regional Setting



4

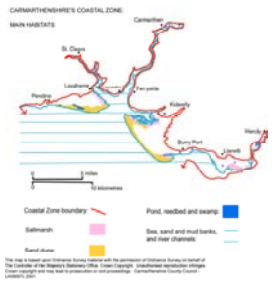
Carmarthenshire Coastal Zone

Natural Character

A wide variety of more or less modified habitats.

6

Main Habitats



7

Extensive Beaches

Pendine:

10 km of sandy beach

Scene of pre-war Land Speed Records. Mostly controlled by Qinetic, an MOD subsiduary. Extent of sand just visible top left, tide well out.

Dunes

9

Mudflats and saltmarsh

- E. of Machynys Peninsula, Llanelli, in the Burry Inlet

10

National Wetlands Centre of Wales, tidal scrape, EA sea wall, new lake at Penrhyngwyn

Estuaries

- Tywi, looking N. from Ferryside

11

Tywi Boat Club on left

Carmarthen Quay 1903

12

Sailing ship carrying Scandinavian timber “Ruth” Small steamship from Bristol

Bank repairs, Carmarthen October 2003

13

New steel sheathing to replace old. Seems to extend too far into river. Note also Japanese Knotweed problem

Cliffs

14

NR. Llansteffan

Rocky Shore and Coastal Slope

- Wharley Point, nr. Llansteffan

15

Special Features of Carmarthenshire's Coastal Zone

cSAC Features

16

Featured habitats:

Atlantic salt meadows;

Estuaries;

Large shallow inlets and bays;

Mudflats and sandflats not covered by seawater at low tide;

Sandbanks which are slightly covered by sea water all the time;

17

Note breadth of description. Reg 33 advice awaited with interest.

Featured Species

Salicornia (glasswort) and other annuals colonising mud and sand;

Twaite and Allis Shads;

River and Sea Lampreys;

Otter

18

Shads and lampreys are fish – not edible ones!

Common Scoter

Carmarthen Bay SPA recently designated

19

RSPB image Usbject of recent Ph. D studies

Eurasian Otter

20

Glasswort 2

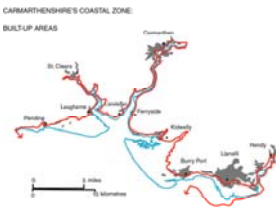
21

Human Influences

- Settlements
- Infrastructure
- Industry
- Recreation

22

Built-up Areas



23

Infrastructure

Harbour at Burry Port

24

Pt of Llanelli Millennium Coast Park. A marina-based village opposed by residents in mid-1980's. Mixed deve. Now aimed at to regenerate the town centre, with a new road.

New cill at Burry Port Harbour

25

Funded via Millennium Commission, as pt. of MCP. Provides longer periods for movement but prevents access by deep-keeled boats.

Industry

INA Bearings Ltd. Llanelli

26

Low-lying land is an important resource for industrial development.

Trostre Tinplate Works, Llanelli

27

Built 1947-51. Photo taken 1954. Note chimneys of older tinplate works, etc. nearer the coast in the distance. Employed in the tinplate industry in South Wales, centred on Llanelli declined from 18,000 in 1947 to about 2,500 by 1960. About 1,000 employed in 1994.

Recreation 2

Pt. Pembrey Country Park

A better view of car parks. Also ski slope (venue for the recent Welsh Open Ski Championships) and dunes.

Recreation 3

Cycleway at Pwll

Industrial Inheritance

- Settlement
- Infrastructure
- Dereliction
- Regeneration

32

As in pts. of world coastal area has attracted a high proportion of development – although mainly outside area defined as coastal zone.

Sandy Water Park – site of steelworks which shut in 1981, with 1,200 redundancies. Electric arc furnaces exported to Pretoria, South Africa. Poor road links made the site unattractive to industry, for which provision has been made on the east side of Llanelli. Restrictions on development in areas of flood risk have tightened sinc this development was permitted in the early 1990's

Infrastructure

Pont d'Agen cycleway bridge over the new Llanelli Coastal Link Road. Funded partly by SusTrans. A well-used local asset.

Dereliction

Pt of Castle Tinworks, Llanelli. Owned by the Steel Company of Wales and closed in 1957, following the denationalisation of the steel industry in the UK. Other uses since, inc. pallet-making and storage. Currently proposed for redevelopment.

Regeneration 1

National Wetlands Centre, site was owned by Llanelli Borough Council. Peter Scott, founder of WWT agreed the site's suitability. Opened in early 1990's

Regeneration 2

The Swannery, NWC Phase 2 of NWC, forming pt. of MCP, opened in 2000

Regeneration 3

Nicklaus Village, Machynys. Named after golfer who designed adjoining golf course. Residential development seen as essential to encourage development of this brownfield site . NB the site of tinworks see 24

The Need for ICZM

European Recommendation May 2002
"concerning the implementation of Integrated Coastal Zone Management in Europe

39

Hope everyone has seen it. Some sense of déjà vu to those who remember the interest in coastal planning in about 1992.

Key Phrases 1

Maintain the integrity of the coastal resource;
Ecosystem approach to environmental protection;
Recognise climate change;
Precautionary principle;
Long-term perspective;
Adaptive Management;

40

Key Phrases 2

Partnership;
Sustainable development principles;
National strategies;
Dialogue with neighbouring countries;
Coordinate administrative actors;
Work with coastal stakeholders;
Town and country planning accessorily concerned.

41

CCC Coastal Functions

22 functions;
10 Divisions;
4 Departments;
2 functions falling outside these Divisions and Departments

43

Functions are more or less coastal. Statutory and non-statutory. Some more important than others. Reorganisation has affected service delivery more or less continually since 1996, linked to a different style of local government, with greater emphasis on regeneration than statutory duties.

Intra Council Links

Corporate Policy;
Political Structures;
Unitary Development Plan;
Coastal Strategy Officers Working Group;

44

Corporate Strategy published for 2003-08. No specific coastal references. Supplemented by an annual improvement plan, linked to the Wales Programme for Improvement. Corporate role much expanded since 1996, transforming previous dominance of Departmental Directors and their committees. So much more integrated.

Political structures – move to Cabinet, with more power to Cabinet members (meet monthly with Heads of Services. Service-based scrutiny committees involve "backbenchers" meet approx ¼ ly. Also five area committees to bring forward issues, cf Area Fora. Also a Planning Committee for determining planning applications. Minor ones delegated to officers.

UDP. Public Inquiry in Feb 2003, following prep. from about 1998. Criteria-based coastal policies only. Coastal zone not defined in UDP. Much consultation with public and orgs.

Coastal Strategy Group. Officers first met in Nov 01, following approval of Prelim Report in April 01. Has met six times, although not since Feb 03. Second Coastal Report approved by Chief Officers Mgt Team Sept. 02. Report. Status of group is uncertain – no consistent level of representation. Econ. Dev. and land use planning have made little contribution.

Wider Links

APPLEs
Carmarthenshire Community Plan;
CBEcSACRAG;
Carmarthenshire LBAP Partnership;
DART;
Objective One Local Action Plan;
CCC/EA Strategic Partnership;

45

Area Plans for People and the Local Environment. 5 areas in Carms. 3 with coast. Area Fora made up of local people meet about 1/4 ly, identifying local issues under the broader umbrella of the Community Plan. 1st round of Plans made during last 2-3 yrs. Stat orgs. also feed into process. Open-ended timescale, but an annual review had been intended. Carms Community Plan, CCC + Health Authority, Police, CCW, EA. Pilot Plan for 2002/03. 15yr plan to be submitted to WAG in March 2004. 3yr action plans being prepared. Locality Plans for Area Fora proposed. NB not the same as APPLEs.

Carmarthen Bay and Estuaries candidate Relevant Authorities Group. Nine authorities rep. inc. 3 LA and 1 National Park. Meets 1/4ly. Attempting a joint management scheme, but funding difficult. Obj. 1 bid failed. Employ a fulltime Support Officer based in Swansea.

Carmarthenshire Local Biodiversity Action Plan P'ship. About 12 organisations rep. Has prepared 19 habitat and 25 species action plans since 2000. 7 HAPs and 7 SAPs are specifically. The coastal zone is also important for other spp. And habitats. CCC has a fulltime biodiversity officer. Manages local nature reserves and country parks with important biodiversity objectives.

Development and Regeneration Team. CCC (planning, econ. dev. estates) + WDA Est'd early 2003. Meets monthly. Obj. 1 Local Action Plan for 2001-07 supplemented by annual plans

CCC/EA Strategic Partnership. 1/4ly meetings to promote actions originally identified in LEAPs. Not well supported. Attempt at decision-making without the backing of financial control, despite representation at senior officer level. Only established in 2001, so scope for improvement.

Carmarthenshire Coastal Strategy

Origins
Achievements
The future

46

Origins: Formation of the Environment Strategy Group within the Department of Environment brought planners and engineers together in 1999. Responsible for coastal engineering, and coordination of marine cSAC management. Fulltime cSAC Support Officer started March 2000. Carm Bay Shoreline Management Plan published in September 2000. UDP at an early stage of preparation. Preliminary Report prepared April 2001. Coastal Strategy Officers Group set up Nov. 2001. Chief Officers Management Team approved coastal zone definition and continuation of Strategy in Nov. 2002, but declined to report to Executive Board.

Achievements: Defining the coastal zone – not easy. Raising awareness. Participation in Arfordir and Wales Coastal and Maritime Partnership. One of 71 "business strategies" as at 28/8/01 (check for update).

The Future: UDP Public Inquiry in February 2004 will address some coastal issues, inc. flood risk in South Llanelli. Coastal Strategy function transferred to Forward Planning. Reg 33 advice expected March 2004. New business plans following reorganisation, especially of Technical Services Dept. Research into Diarrhetic Shellfish Poisoning – local industry been badly affected.

Council projects

South Llanelli and Pembrey Peninsula Growth Area
Pembrey Country Park
Llanelli Millennium Coastal Park
Coastal Path
Nature Reserve Wardening

47

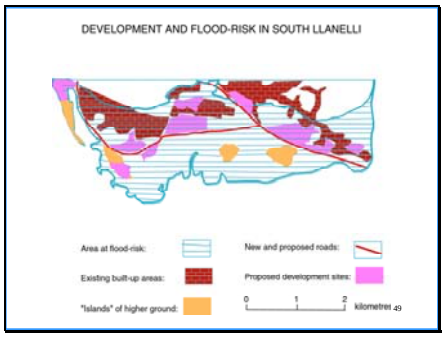
SLAPP – UDP Public Inquiry. New roads for Burry Pt. and Morfa/Berwick Link road. Flood-risk issue to be resolved.

Pembrey CP Partnership with recreation co. – holiday village 600 cabins! Aquarium, etc. 18-mth negotiating period with a leisure company.

MCP – Low budget for maintenance, coast protection issues.

Coastal Path – Still some gaps – part of recently prepared Rights of Way Improvement Plan.

Nature Reserve Wardening – Fulltime warden due to start in Nov. 2003. A 3 yr appointment, pt. funded by CCW. To look after Pembrey Saltings LNR and conservation sites in MCP, e.g. Ashpits Lagoon LNR and Lliedi Haven LNR.



Raising environmental awareness with CCC's economic development officers

50

"A Sandbag?" cartoon, Private Eye Annual 2001. Following severe flooding, especially in S. and E. England in Autumn 2000.

Other Projects

Ragworm Farm;
Razorfish Dredging;

51

Ragworm Farm – Failure to recognise coast protection issue. Scope for benefiting Dunes cSAC, effect on marine cSAC not significant, despite scale of project.
Razozrfish dredging – subject of a complaint to European Court. Experimental dredging currently being allowed.

Scope for more Integration

Problem solving;
Awareness-raising;
Drawbacks.

52

Problems: A great deal of integration has taken place since LG reorg in 1996 > confusing no. of strategies and plans. ICZM may be seen by many as yet another layer of bureacracy > important to identify problems that need an integrated solution, and to anticipate these problems. Examples:- ragworm farm and Nicklaus Village – coast protection issues – need for procedures, awareness-raising and/or commonsense.
Awareness-raising: Not much known about SMP or CLBAP. UDP better-known. Danger of publicizing a plan when it is becoming out of date. Reg 33 advice – how educational will this be?
Drawbacks: Bogged down in bureacracy and excessive information – like this talk! Scope for delay until things are properly integrated.

Where are we now?

Coastal Strategy;
CBEcSACRAG;
UDP.

53

Coastal Strategy. Need to find a chairman for officer meetings. Clarify standing. Demonstrate usefulness. Can't rely on section reps. forwarding info. Without making it genrally more appealing. Need to tie in with CPD events. Advice from Wales, UK or Europe may influence things, as may examples from other areas.
CBEcSACRAG. Funding difficulties. Delay in receiving Reg. 33 advice.
UDP. Inquiry to start in February, set to last 4 mths. Result expected 8-12 mths.

Where are we now? 2

ICZM Stocktake;
Gov't Planning Advice;
Wales Spatial Plan;
Sustainable Development.

54

ICZM Stocktake – Wales workshop held in September – range of views – general hope of a WAG initiative.
Gov't Planning Advice – Coastal Planning TAN needs updating. Implications of TAN15 Development and Flood-risk need to be tested in practice, inc. planning appeals.
Wales Spatial Plan – a list of good intentions. To be the subject of a presentation at the next meeting of WCMP, in Nov 03.
Sustainable Development – CCC's SD unit of 6 people is being broken up – some functions and staff to go to an agency, some staff returned to waste.

The Future 1

UDP Public Inquiry;
Review of SMP;
Too many Strategies?

55

UDP – already referred to.
Review of SMP – expected in 2005. Covers most of South Wales coast. Perhaps WAG, as main funder, will take a greater interest in content. Preparation of first SMP was left too much to consultants. For area see slide 4.
Too many Strategies – try an area-based approach – yet another layer! Perhaps need to see what the politicians think.

The Future 2

Strategic Environmental Assessment;
ICZM Stocktake outcome;
Amended land use planning regime.

56

Strat. Env Assess. Directive adopted June 2001. Not widely known in CCC. ODPM issued Guidance in October 2002, but Regulations will be used to bring the Directive into force in the UK. SEA will be required for plans beginning to be prepared after 21/7/04, and for plans begun before but not approved by 21/7/06. ODPM Guidance indicates that a plan will require 50-100 man-days on SEA/sustainability appraisal, and that its best done bv a partnership of plan-makers and outsiders, such as academics. How will non-statutory plans fare?
ICZM Stocktake See 51 above. Difficult to predict what will happen. Perhaps it will need action at the European level, I.e. a Directive to follow the Recommendation.
Amended land use planning regime. The Planning and Compulsory Purchase Bill currently before the UK Parliament will strengthen regional planning, replace development plans with development frameworks, and also provide a statutory basis for the Wales Spatial Plan, published in draft form in September 2003.

Conclusions

Too many strategies?

Political themes

Outside pressures

57

Too many strategies, therefore need to work within existing ones.
Political themes. Need to recognise that an authority may give priority to regeneration (as in Carms.) regardless of national aspirations, e.g. as expressed in the Wales Spatial Plan, or international aspirations as expressed in European Directives, etc. e.g. Habitats Directive.
Outside pressures likely to be important in developing commitment to a coastal strategy, either from below, via APPLEs, interest groups, local communities, etc (something for CoCoNet to promote). or from above via central government and perhaps a European Directive. ICZM Stocktake has heard frequent, although not unanimous, calls for new legislation.

A beacon for the future?

58

Always end with a pretty picture! NB not so pretty now that the new cill has been put in. See slide 22.

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One-off rural housing in the Coastal Zone

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Introduction

- Vexed relationship between local planning authorities and many rural communities;
  - Exemplified by rural housing debate, but encompasses other spheres of rural development
- Rural housing debate is characterised by contestation and conflicting constructions of rurality;
- Misleading to portray a singular 'one-off housing' debate
  - Development pressures, environmental and social context varies considerably across space
  - Towards a spatially-defined rural housing policy?

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Presentation outline

Managing rural settlement in Ireland

Policy context – the National Spatial Strategy

Rural housing in coastal areas
Dynamics of change and key issues

Second homes

Policy development

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Rural housing in Ireland

Increased difficulty has been experienced in addressing the issue of housing development in rural areas of Ireland.

This is due to an increasing pace of development, the changing population dynamics of rural areas, and the increased pressure to include environmental considerations in the planning process.

Over 1 in 3 new houses in Ireland over the last 5 years have been one-off housing in the open countryside

2001 – 40% of all new housing was one-off housing in the countryside

The issue of single house applications in rural areas is becoming a major one for most LPAs

All LPAs have recorded increases in no of applications for single dwellings between 1997-99

Most experienced increases between 20% and 70%

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Rural housing in Ireland

- Rural planning and housing is a contested area of public policy

  This debate is characterised by controversy and seems increasingly polarised with conflicting standpoints

  A conflict between the view of rural areas by rural and urban dwellers
  A conflict between socio-economic and environmental sustainability
  A conflict between central and local government
  A conflict between planning professionals and local authority management and Cllrs
  A conflict between conservation and community development interests

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Policy context

The National Spatial Strategy and Rural Housing

- Recognises long tradition of people living in rural Ireland
- Avoids detailed policy prescription
- Promotes a differentiated rural policy – i.e. policies should be tailored to local context avoiding 'one-size fits all' approach
- Links economic development with protecting the landscape, water resources and habitats
- Distinction between urban and rural generated housing in the countryside:
  - Urban generated – development driven by urban centres (including 2nd homes)
  - Rural generated – housing needed by those intrinsic to the rural community

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Rural housing in the coastal zone

Increased scale and pace of development of one-off housing in coastal areas:

- Demographic recovery of many rural areas
- A cultural predisposition to living in the countryside
- Increased mobility
- Laissez-faire approach and lax planning in rural areas
- Perception of quality of life factors (both urban and rural)
- Desire for living in a rural and coastal environment
- Retirement plans
- Relative lower costs in developing a one-off house
- Agricultural decline and availability of sites

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Rural housing in the coastal zone

Issues:

- Distribution and intensity
- Siting and design issues
- Environmental costs
- Infrastructural implications
- **Settlement patterns and community vitality**

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Rural housing in the coastal zone

Second homes

- Ireland – approx 1.5-2% of housing stock is second homes (approx 40% owned by non Irish)
- Regional variations
- Favoured locations for 2nd homes: the coast; mountain or lake areas; rural areas near large cities
- Influences promoting 2nd home ownership:
  - Leisure time
  - Participation in sporting activities
  - Retirement plans
  - Investment opportunity
  - Status
  - Accessibility

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Rural housing in the coastal zone

Second homes

- Influences inhibiting 2nd home ownership
  - Planning restrictions
  - Rates/taxes
  - Local opposition
- Planning opinion is divided:
  - 2nd homes as a means of addressing rural depopulation, restoring historic buildings and bringing life to villages
  - 2nd homes as a major cause of depopulation, forcing local people out of housing market – can lead to social dislocation

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Rural housing in the coastal zone

Policy development – key themes

- The coastal zone in rural Ireland is not an homogenous entity, but rather diverse in terms landscape, economic activity, development pressures and future prospects
- Policy response should reflect and be tailored for the local context
- Recognition that the rural coastal zone is both a place of intrinsic environmental value and a place of consumption
- Planning and ICZM can act as mediators between conflicting objectives for the rural coastal zone
- A need for further research

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Evidence-based approach to policy development

- Rural housing debate and policy development has taken place without an empirical understanding of key issues, including:
  - *Environmental* impacts;
  - *Economic* – whether infrastructure costs or local economic vitality;
  - The *Community* dimension – positive or negative impacts of rural housing

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Evidence-based approach to policy development

Research objectives:

- To provide an empirical basis and baseline information for decision-making in rural planning;
- To provide the basis to develop guidelines for an holistic approach to sustainable rural planning and an evidence-based approach to policy development;
- To develop rural sustainability indicators as a tool for planners in rural areas, through defining parameters and indicators of a rural community that is sustainable from a socio-economic perspective and defining parameters of carrying capacity of rural areas;
- To replace the perception of negativity by and towards planners of rural areas and communities through recommendations leading to a renewed legitimacy of planning in rural Ireland.

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Final thoughts:

- Public policy commitment to ensuring vibrant sustainable rural communities (Rural White Paper)
- Policy recognises that the countryside is not solely a productivist space
- The fate of smaller settlements and rural areas in Ireland has received less than significant attention from economic and physical planners
- Rural housing is a complex, multi-dimensional issue and requires a multi-disciplinary research approach
- Rural planning encompasses more than 'one-off' housing!

What is Climate Change and should planners be concerned?

- "Any change in climate over time whether due to natural variability or as a result of human activity" *IPCC 2003*
- **Impacts**
  - **Expected global average temperature increase from 1.5-6.0^{0}C between 1990-2100**
  - **The last century was recorded as the warmest of the last millennium**
  - **There has been a reduction in snow cover of 10% over the past 40 years**
  - **Sea level has risen by .1-.2 metres over the past century and a rise of approx. .5m is considered likely during 1990-2100**
  - **Precipitation has increased over landmass region**

Should planners be concerned?

- **"The *New Vision for Planning* sees planning as being about people and places, the natural and the built environment, immediate requirements and long-term stewardship" RTPI**
- **"ability to alter spatial relationships, its power to prevent or modify development and its degree of openness to public participation"**

Wood , 1998

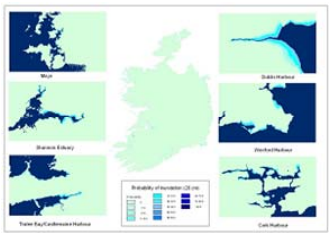
EFFECTS OF SEA LEVEL RISE

- Land loss
- Temporary flooding
- Salt water intrusion

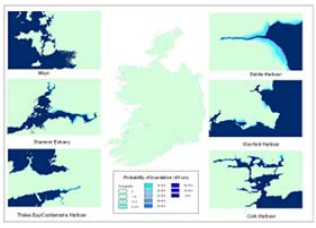
SIDE EFFECTS

- Land Use
- Occassional loss of land or life
- Degrade environmental resources

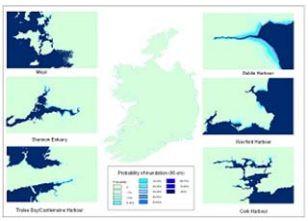
Probability of inundation with a sea level rise of 20cm



Probability of inundation with a sea level rise of 49cm

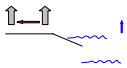


Probability of inundation with a sea level rise of 86cm

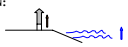


OPTIONS

RETREAT:



ACCOMMODATION:



PROTECTION:

THE NETHERLANDS

Non-Sustainable

Protection
- Hard engineering

Separate planning systems
- Inefficient
- Delays

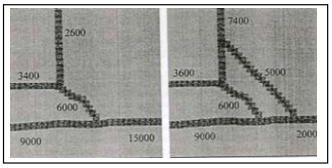
Sustainable

Room for the rivers
- Natural water process

Single organisation
- Avoid delays
- Efficient
- Increase public confidence

RIVER RHINE

River Rhine Project



IMPLICATIONS OF THE PROJECT

- Flooding of 40 houses
- Huge loss of infrastructure
- Loss of entire villages
- Major resettlement projects
- Loss of views to remaining inhabitants

SCOTLAND

- National Planning Policy Guidelines No. 7

  Flood Apprasial Groups

- "Climate Change: Flooding Occurences Review"

  Areas and properties at risk from flooding
  Local Authority catchment flood maps

PERTH AND KINROSS COUNCIL

"FLOODING: A STRATEGY FOR DISCUSSION"

Role for planning

- Avoid unsuitable areas
- Ensure development does not adversely affect flood plain storage
- Ensure flood defence works do not have adverse affects
- Ensure precautions are taken to prevent run-off from new development
- Reduce the occurrence of potentially damaging events

RISK FACTORS

The inherent vulnerability of the population
Proportion of time spent by any individual in the development
Number of people present
Ease of protection by temporary measures or evacuation

CATEGORIES

Essential services
Residential, shops, commerical
Industrial, commerical

ARE PLANNERS CAPABLE OF UNDERTAKING THIS ROLE?

"Planning is a visionary activity in which humans strive to improve conditions over that which would otherwise occur"

SUMMARY

- Highlight the role for planners to address the impact of climate change
- Open up channels of thought to look to other regions for ideas and possible approaches
- Highlight the amount of work that needs to be started

CONCLUSION

Planning's role will be:

Proactive or Reactive

WELCOME

Wexford Coastal Zone Management

Eamonn Hore
Senior Engineer
Environment Section
Wexford County Council

WEXFORD'S BEACHES

- BLUE FLAG BEACHES
  Courtown, Curracloe, Duncannon, Rosslare
- GREEN COAST BEACHES
  Ballymoney, Morriscastle, Ballinesker, Culleton's Gap

Beaches Designated for Water Quality Sampling

Ballymoney, Courtown, Morriscastle, Curracloe, Rosslare & Duncannon

MANAGEMENT ISSUES

- Length of Wexford Coastline is 125 miles
- Tourism Pressures
- Conflict between Beach Users
- Jet Skis
- Horses
- Beach Buggies
- Sand Removal
- Litter & Waste Management

BEACH PATROLS

- Community Warden Patrols
- July, August & September
- Every Sunday for 4 hours
- Blue Flag Beaches and Two other Beaches
- Patrol Hours > 312 hours per year
- Additional Hours if required

BEACH BYE-LAWS

- Implemented in July 2000
- 9 Beaches Covered By The Bye-Laws
  - Ballinesker
  - Ballymoney
  - Carne
  - Courtown
  - Cullenstown
  - Curracloe
  - Duncannon
  - Morriscastle
  - Rosslare Strand

BYE-LAW LEGISLATION

- WCC Beach Bye-Laws 2000
- Part VII, Local Government Act, 1994
- Litter Act
- Control of Dogs Act

PROHIBITED ACTS

- Deposition of Soil, Stones, etc
- Spread, Fix or Leave any nets, baits, etc.
- Use or Ride Bicycles or Mechanically Propelled Vehicles
- Restriction of the use of Horses on the beach
- Driving of Cars or any other vehicals on the beach
- Camping with tents or caravans on the beach
- Sale or Hire of any equipment on the beach
- Use of Jet Skis or Power Boats

OFFENCES & PENALTIES

- Contravention of Bye-Laws or Licences
- On-The-Spot Fines for a simple breach
  £ 25.00 (€ 32)
- Summary Conviction
  Not Less than £ 1000 (€ 1,270)
- Continued Contravention subject to Fines
- Authorised Persons issue fines

PROBLEMS

- Non – inclusion of many beaches
- Use of Jet Skis
- Quad Bikes
- Illegal Encampments
- Parking
- Control of Horses
- Control of Dogs
- Illegal Dumping & Litter
- Enforcement Issues

SUGGESTIONS

- Prominent Display of Bye-Laws at each Beach
- Launch Location of Jet Skis
- Garda Support on Patrols
- Off-shore Support
- Implement Bye-Laws at other or all Beaches
- Policy for Control of Horses, Dogs, etc
- Review of Litter Collection at Beaches

The scale and locations of new "one-off" dwellings in the open countryside of coastal areas of Ireland has become a major planning issue.

In the UK West Wales and Cornwall, have been notorious for the number of dwellings permitted in the open countryside. Perhaps in contrast to Ireland, planning policy has been in place for a long time. In these areas, in particular, there was reluctance to comply with the policy. The perceived remoteness of these areas is significant.

Longstanding UK planning policy important. Part of the general approach of gov't to land use planning.

Before "the Emergency" – major shifts in economic activity and population, especially between North and South East England. New light industry, cheap public transport and depressed agriculture supported rapid growth of low density housing development around major cities, especially London. Garden city – Ebenezer Howard's ideas, outdoor recreation demands supported a planned approach to land use, linked to gov't economic intervention after the mid 1930's.
Earliest town planning legislation dates back to 1909. Discretionary then, but may have got local authorities thinking. 1935 Act applied only to trunk roads –designed for free flow of traffic rather than to influence settlement form.
1938 much more far-reaching – affecting a band of countryside around London about fifteen miles wide, and no compensation for loss of development opportunities.

General gov't intervention. War Agricultural Committees to direct production techniques.
Government commissions meeting during "the Emergency", looking to post-war reconstruction.
Main themes: vulnerability of cities to bombardment, uncontrolled loss of the best agricultural land, importance of agriculture to rural character.

Barlow Report – Distribution of Population > new towns programme, mainly around London, but also throughout UK
Scott Report – Land Utilisation in Rural Areas > supremacy of agriculture

Brave new socialist world! Central and local government roles both greatly expanded. Radical town and country planning legislation survived Conservative governments, early expression of "nimbyism".
1950 – the advice included "a strong presumption against the building of dwellings outside established rural settlements unless they were required for the agricultural labour force".
1955 – encouraged local authorities to establish green belts to restrict the sprawl of built-up areas. None have been designated in Wales. Currently being considered for the Cardiff area.
1969 – Aims of planning inc. preventing the c'side from being spoiled and safeguarding agricultural land. Therefore development away from existing settlements is strictly controlled. "The fact that a single house on a particular site would not be very noticeable is not by itself a good argument for permission. (see extract) Stayed current advice until replaced by PPG's in the mid-1980's

1980- New Conservative gov't. "presumption in favour of development" weakened commitment to policies. – out-of-town retail sheds began to appear.
1991 – s54A – Legislation made it a statutory requirement that "planning applications shall be made in accordance with the plan unless material considerations indicate otherwise". Doesn't sound much but great importance has been attached to it. Farm diversification – Declining agriculture economy recognised. Perhaps more opportunities for barn conversions, etc. although in may parts of Wales these have not been much restricted. Importance of being able to buy and sell agric. Land without development hope value has not been given enough emphasis. Agricultural units are being restructured – fewer medium-sized units, more large and more small. Same in Ireland? Hope value hinders this process.

Agricultural dwellings – Been exceptions since 1947. Occupancy conditions inc. "last employed in agriculture" used as a loophole to allow b'lows for retiring farmers – widely exploited in West Wales but not so much elsewhere.

PPG7 (1988?) allowed "the filling of small gaps within a small group of houses or minor extensions to such groups may often be acceptable". - tends to undermine some of the principles of control e.g. service provision costs. NB s p c never received sufficient emphasis. Has led to inclusion of settlement limits for very small groups of housing in development plans – difficult then to avoid treating them as settlements.

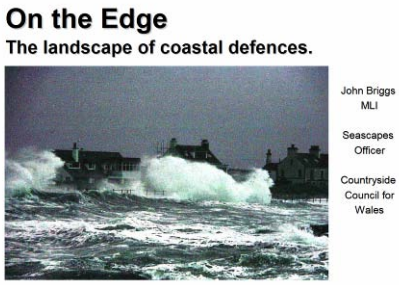
Affordable housing. LA's have lost their direct powers to provide housing, and housing associations focus effort on urban areas. Pressure to do something led to "the exceptions policy" (WO 31/91 Planning and Affordable Housing). Not used much in rural areas in Wales, due to lack of firmness of development plans, leading to retention of "hope value" and lack of demand from housing associations, etc.

Ceredigion – Low housing demand due to declining agricultural opportunities and lack of industry – land ownership important for social status > grass roots rejection of general planning principles. Lottery mentality. > professional difficulties.
Change came in 1970's and since with strong outside demand for rural property, inc. new buildings as conversion opportunities were used up, especially in the more salubrious and accessible parts of the countryside. > changing social patterns, inc. use of Welsh language caused reduction in grassroots support for a laisser-faire approach.
Detailed study 1986-89. About half of all residential applications were for land outside settlements, 43% were approved. 25% (883) of all approved dwellings were outside settlement limits. About half had been prefessionally recommended for refusal.
Study referred to "substantial disregard for the national and local policies of restraint
Scale of abuse of central government planning policy in Ceredigion led to the Welsh Office monitoring relevant applications throughout the 1990's.
Local government reorganisation in 1996 puts, for the first time policy and control responsibilities within the same local authority. Unitary development plans are emerging as a product of the new authorities.
Elsewhere Remainder of West Wales shares Ceredigion characteristics, although modified in more accessible areas where the impacts of ribbon development have long been apparent. National park status has also led to firmer adherence to policy in three areas of Wales, including the Pembrokeshire coast. Reluctance to oppose central government policy may also be less where local authorities work more closely with central government and its agencies, on e.g. regeneration schemes. In many areas "nimbyism" is likely to have political force.

Long history of countryside protection and housing provision as public services.

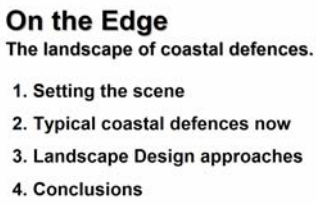
Planning principles – clear and generally understood. Green belt concept often misapplied, but this demonstrates its popular appeal.

Planning is operated in the public interest – long-term, not in the interests of individuals or short-term gain. How long is the life of a house? 60yrs has been used, not sure from where. Sustainable development principles now apply as well.



Background

- Landscape Architect
- Work for CCW – government agency in Wales that deal with landscape, nature conservation and countryside recreation issues
- Remit includes both terrestrial and marine environment.
- This talk touches on all these aspects.
- Speaking for about 20 minutes

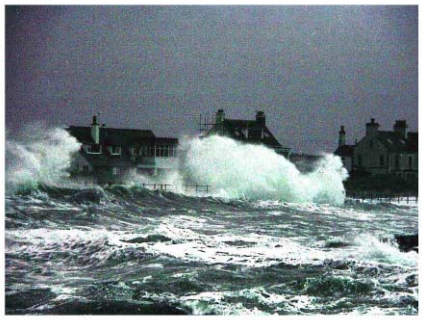


After setting the scene which summaries **why** we need so **many** coastal defences **today**, I'll take a look at why it's important to consider their landscape and visual **impacts**, with particular reference to **tourism** in Wales;

Secondly, I'll take a look at coastal defences as we can typically find them **today**

And **then** look at approaches to **enhance** them to give added value benefits;

Before **finally** making some **conclusions** and summarising the key **messages** of this presentation.



Turning first to the **picture**, it's evident here at Trearddur Bay on Anglesey that **if** we live next to the sea, we do so at our **peril**.

We are told these turbulent times are set to get **worse**, due to global warming, with sea level rises and increasingly stormy weather.

Unfortunately, many of our major **towns** are located **on** or **near** the coastline, on low ground, and many of our 2.9 million population live within a few km of it.

In the last 150 years we've **built** on that conveniently flat land behind the sand dunes, not really appreciating the **shifting** nature of these **soft** coastal environments.

Of course we've been attracted to the sea for a multitude of **reasons**.

Initially it was about **food, defence** or **trade**, but then came the **railways** and latterly the **motor** car, and seaside **resorts** like **Llandudno** sprung up in this **attractive** environment for **living**, **holidays** and **retirement**.

However, natural processes continue to **shift** or **erode** parts of the coastline we've built on, and **as** we humans **don't** like giving up our real estate, coastal defences have **resulted**.

Although we should now **realise** our folly, we've inherited many **miles** of defended coastline. In the county of **Denbighshire**, on the North Wales coast, **individual** coastal protection works now link **together** and I've been told there's now only a few hundred yards of **un**defended coastline **left**.

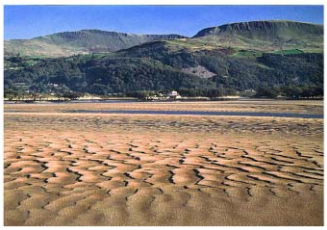
Unsustainable

Because we're also **upsetting** natural coastal processes, our defences **fail** in due course, as they become undermined, so there are lots of **management**, **repair** or **redesign** requirements.

It all means:

- That **human** actions are fundamentally **altering** the **character** and **appearance** of the coastal **edge**, the **beach** and the landscape **hinterland**.

Sustainable



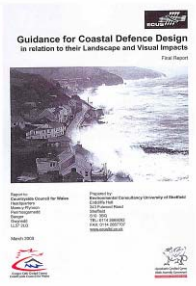
- Perhaps the ideal **solution** is too **radical** for us, as it would involve letting the **natural** status quo of **erosion** and **accretion return**, but it's **not** an ideal world, so we'll continue to **need** defences in **many** locations for the foreseeable future.
- The **issue** therefore, is to see how we can make the **best** of an unfortunate situation.

Utilitarian?

As with any other **landscape**, the **design** of coastal defences needs to consider a great many **factors**.

Of course many **characteristics** of the design are determined by their need to protect the coastline, but thought is **also** needed on fitting it into the **landscape** setting and the way the coastline is used for **recreation**.

So a design response that **only** considers coastal protection, perhaps needed for say a very important **5%** of its time in existence, may end up being a clumsy **intrusion** without **purpose** for the other **95%** of the time. A more **holistic** design approach is therefore **needed**.



Guidance for coastal defence design in relation to their landscape and visual impacts

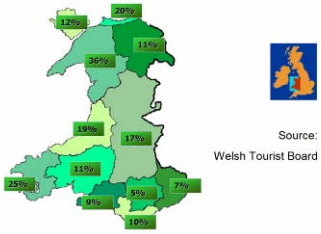
Consultant: ECUS

To **promote** this, CCW commissioned some **research** which painted a fairly **dour** picture, so some **guidance** on the issue was produced**.**

This is the guidance document, Guidance for coastal defence design in relation to their landscape and visual impacts and its available for **download** from our **website** – the web page **address** is on the **flyer**, together with that of **another** document, on seascape **character** assessment.

CCW understands **both** these documents to be the **first** such guidance in the UK on these issues.

Where do visitors go?



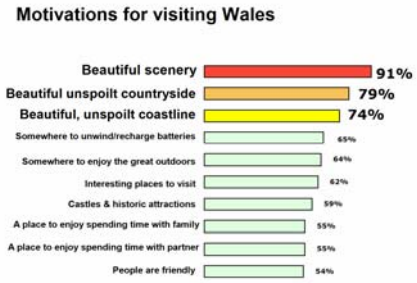
Source:
Welsh Tourist Board

With **this** in mind, its important to consider **how** our coastline is used by **people**, and just **how** important its landscape character, visual amenity and recreational value are.

Tourism is one of Wales's **strongest** economic sectors and **this** map shows where the visitors **go**:

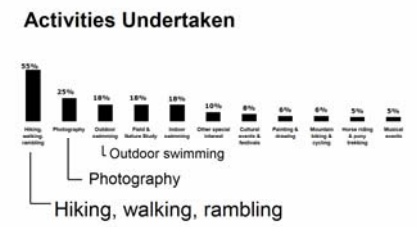
- Top at **36%** - Gwynedd
- 2nd is Pembrokeshire at **25%**
- Third is the North Wales coast at **20%,** even though it's just a small **area.**

This is taken from a recent Welsh Tourist Board **survey**.



And **why** do people visit Wales?

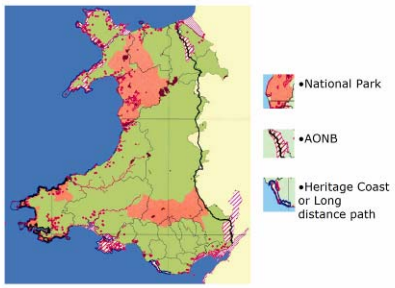
Beautiful scenery came top (shown in **red**), followed by something sounding quite similar, closely followed by "**beautiful unspoilt coastline**" (as shown in **yellow**).



This what they **do** – top is **walking**, **hiking** or **rambling**, closely followed by **photography**.
That's also an **indication** of how **important** the **visual** aspect of landscape is, to visitors.

There isn't actually a category for playing or relaxing on the beach, but the **third** highest level of activity is shown as '**outdoor swimming'**, which implies **coastal** as well as river locations.

Elsewhere in the study it was established that for **many** people the **beach environment** was a highly significant factor when deciding on their holiday destination.



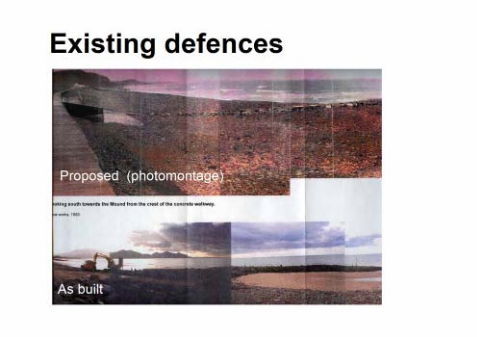
1. We have such a beautiful natural coastal environment, in all its variation, from the Gower peninsula to the Mawddach estuary, from the dunes of Shell island to the cliffs of Glamorgan.
2. Overlain the natural heritage we have a very rich historic and cultural landscape heritage, including castles, harbours, landmarks and viewpoints.
3. There is a long established history of tourism in such places in Wales – 89% of visitors typically come from outside Wales, and so can easily choose to go elsewhere if the 'product' we offer here does not meet their expectations. And a great many of our visitors head for the coast.
4. Indeed Wales relies on the quality of its environment for its economic success - £6bn Welsh GDP is directly dependent on the environment. A key finding in "Valuing our environment – the economic impact of the environment of Wales" – is that the quality of Wales's natural environment is a key economic advantage. Tourism spending with environment motivated trips amounted to £821 million in 1999.

It's **also** worth remembering just what a **special** scenic resource we have in Wales, with over **75%** of the Welsh coast affected by **designations** that reflect its **scenic** qualities and value. **Many** of these designated areas are **natural** or **nature**-dominated or managed **rural** environments, which **closely** tally with what the visitors **preferred** in the Tourist Board surveys.
So we have a potentially excellent product to **offer**.

Alas our **man-made** coastal environments can be very **different** as you can see here.

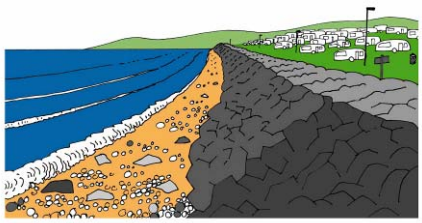
It's essential that man-made defences don't **devalue** Wales's marketable seaside image.

And with man-made **coastal** environments like **this**, perhaps you can understand why CCW commissioned some **research** on the matter and produced the **guidance,** with the aim of encouraging more **holistic** design approach.



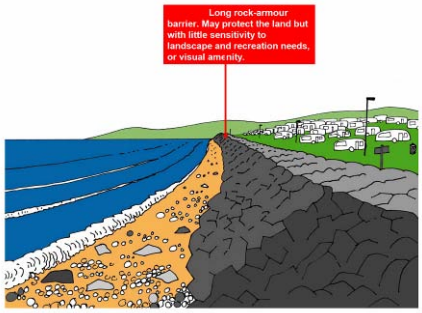
8 case studies throughout Wales
LVIA done for each
Standard methodologies used – so fair comparison could be made. Compared 'as-built' works with photographs taken before development, or original photomontages where available – as here (sorry about poor quality copy – taken from the paper report) In this case, there was considerable difference between what was proposed (top) and how it was built (bottom). The study considered:
LANDSCAPE IMPACTS
Changes in the fabric, character and quality of the landscape as the result of development
VISUAL IMPACTS
Changes in available views of the landscape and the effects of those changes on people.
I have added here for this presentation:
RECREATIONAL IMPACTS
Changes in the way people can use the place for enjoyment, both mentally and physically.

The result **wasn't** generally very complimentary.
"The revetment is a physical and potentially dangerous barrier to pedestrians between the caravan site and the foreshore"
"They are artificial… structures that detract from, and change the character of, the natural, rural, shoreline setting".
The consultants also found some positive things to say too:
"The curving, organic forms of the (fishtail) groynes create an intimate bay in front of the village and compliment…the natural… coastline"
and
"The sea wall is a neat frontage to the urban setting, unifying a diverse array of development…and provides a convenient pedestrian route and vantage point"



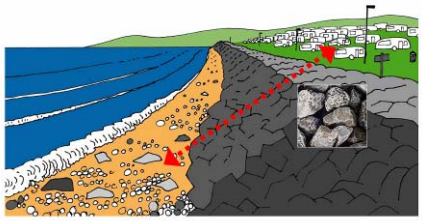
Although **each** coastal defence project was found to present many negative **and** positive attributes, perhaps for **simplicity** I can paint a **typical** picture of the issues affecting their **landscape**, **visual** and indeed **recreational** effects.

So, as you can see **here**, we have a hypothetical caravan site defended with rock armour.

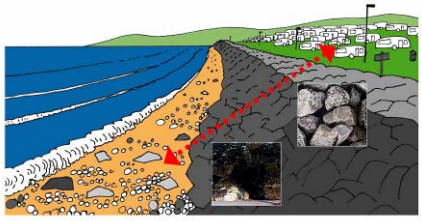


This long rock-armour structure may **protect** the land but with **little sensitivity** to landscape and recreation needs or visual amenity. It forms a visually **dominating**, **continuous**, **barrier**. It does **not** appear to relate coastal landscape character and indeed appears to have been **imposed** in a most **un-natural** manner **against** what might have been the **natural** or **intrinsic** character of this coastal edge.

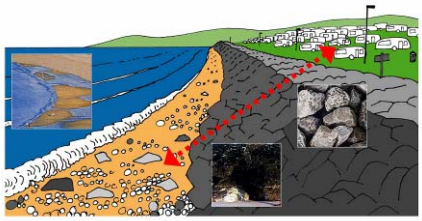
It has the **sole** utilitarian purpose of **protecting** the land but offers almost **no** added value **beyond** that.



It's angular rock armour **construction** creates real **difficulty** in getting onto the beach. In **reality, many** such rock armour barriers have **few** beach access points, and the spaces between the boulders can be almost **large** enough to **lose** small children or pets down.

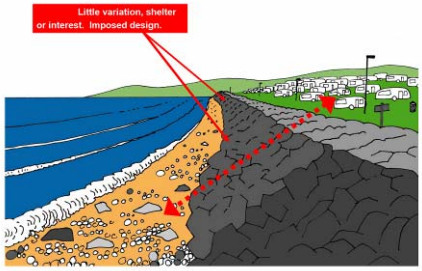


As **part** of the rock armour lies **below** the high tide mark, **those** bare rock faces are soon colonised by **seaweeds**, which is good habitat creation, but this makes them very **slippery**, and near **impossible** to **cross**.

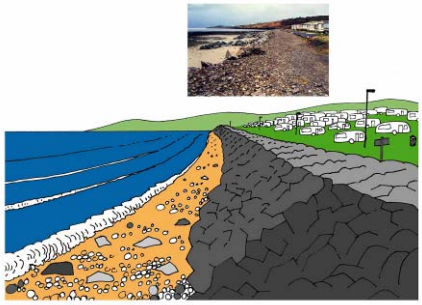


The effect of **starving** the beach of **nourishment** means that this once **sandy** beach has eroded **down** in level, and there are many **rocks** and **shingle** patches which have become **exposed**, and include washed out materials from failed **previous** coastal defences.

The beach is completely **covered** at high tide, which significantly reduces the period of **time** it can be **accessed** for recreation.



A section of coastline like **this** offers relatively little **variation**, **shelter** or **interest**, and there are only **limited** opportunities to **sit**, **picnic**, **sunbathe, walk**, **swim** and so on.



There's also the more fundamental issue of **whether** this coastline should **continue** to be protected at all, and whether **what** is being protected **here -** a caravan site – should really pull **back** from the edge **instead**.

A seafront **plot** with a sea **view** can be very **sought** after, but **if** to **protect** it, we end up **despoiling** the very character and qualities that **brought** the caravaners there in the **first** place, then perhaps the **original** reason for **coming** has been **lost**, and what **perpetuates** the occupancy is more to do with our natural desire to **defend** our real estate.

From the guidance document…

1. Consider landscape and visual impacts **EARLY** in the design process;
2. **Identify** landscape character and qualities;
3. What needs **conserving**?
4. How do **people** use the place – can this be enhanced?

Consider landscape and visual impacts EARLY in the design process; This also means that a mutli-disciplinary approach is needed on the project team;
This means that an assessment of the intrinsic character of the existing landscape should be done BEFORE a brief for designing construction works is finalised.
Only by doing it like **this** can the **results** of the assessment – of what character and qualities are important and valuable to conserve – be incorporated as a **consideration** in possible engineering **design** options.Part of the assessment should include the ways in which the coastal landscape is used by people, so that the evolving design can take account of their needs, and where possible, use it as a **creative** opportunity to **enhance** them – for example by providing a new coastal **cycelway** where **access** was difficult **before**.

View from old promenade, Penrhyn Bay…

Therefore design solutions that **emerge** need to relate to **both** the intended use for the all important 5% of their time as coastal protection, **and** the **other** uses needed for the other **95%** of the time.

Developed and undeveloped coastline

Given the **prime** importance of getting the **engineering** design right, what can **landscape** design offer here?

To **answer** this I'd first like to **split** the coastline into '**developed**' and '**undeveloped**' – because I think very **different** design approaches are warranted at **each**.

Of course I'm not the **first** to think of the coastline in **these** terms, for there's various reference to developed and undeveloped in **Planning** guidance …

Developed and undeveloped coastline

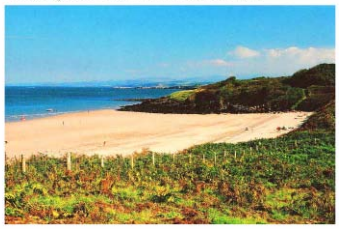
… for example **TAN 14** - Technical Advice Note (Wales): Coastal Planning, which **refers** to this but gives no **definition** …
… and the **Scottish** Planning Advice Note – PAN 53: classifying the coast for Planning Purposes which details a **method** for splitting, and in the **Scottish** context also has a **third** category "**Remote** Coast".

Developed and undeveloped coastline

But as a **designer**, I am referring more to a distinction we can see with our **eyes** between coast which has buildings **fronting** it, and coast which does **not**.
Where buildings **front** the coast, such as here at **Beaumaris**, the landscape and recreational interests are addressed **primarily** within an **urban-design** framework.
But in **other** locations, such as **Gallows Point** shown bottom right, it's **natural** processes that dominate the intrinsic character, with **varying** degrees of human interference.

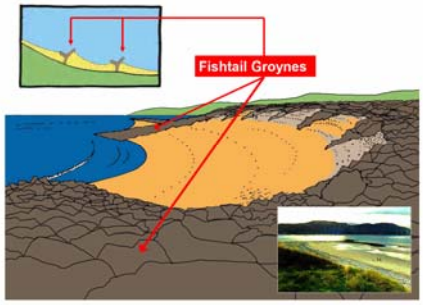
Most important to any designer:

Take your cue from NATURE



So on an **un**developed coast the most **important** message I can think of is **this**:

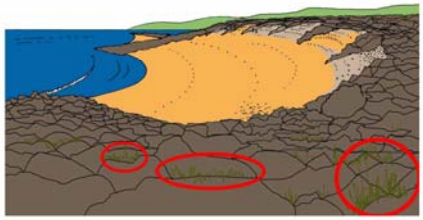
Keeping in mind the **attractions** of the **natural** environment, in respect of landscape, visual and recreational **value**, we **first** need to see how we can take our cue from **nature**.



On the face of it we can't easily **recreate** natural environments – nature is too **complex** and the cost would be **prohibitive**. But we **can** work with natural **processes** to create a beach, and one of the most **successful** ways to **start** this process is to install rock armour fishtail **groynes**.

Although the rock armour can be visually **dominating**, it's **effect** is to create mini-**headlands**, **between** which small sheltered bays **trap** beach materials so beach levels then **rise**.

On the coach tour we'll **see** some fishtail groynes working **successfully** in this way at Llandudno West shore.



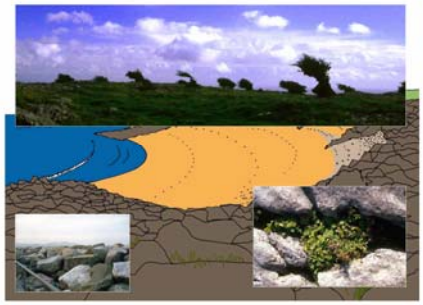
Note something **else** too.

Exposed rock, in a newly created stable environment, above the high water mark, is, like any other bare surface, an opportunity for **plants** to **colonise**.

Initially it's a very **hostile** environment, with **no** soil, **strong** winds and salt **spray**. But **because** these new structures have turned a previously **un**stable coastal environment into a more **stable** one, suitably adapted **plant**s have a greater **likelihood** of gaining a **foothold**. And where **their** leaf litter falls, **other** plants can move in **too**.

And the **same** process occurs on the new bare rock surfaces in the **inter**-tidal and **sub**-tidal areas. As we can see **here** at Llandudno west shore, it's the marine equivalent of using **planting** to soften **man**-made structures, to help integrate them into their more **natural** setting.

Stable inter-tidal bare rock can colonise surprisingly **quickly** - this scheme is only about **10** years old.



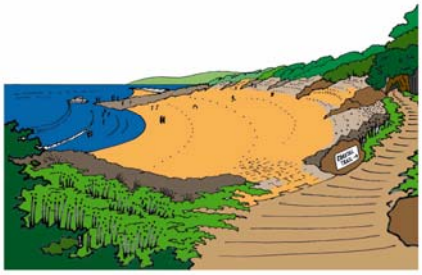
So **what** could the longer term result be for rocks **above** the high tide mark?
I suppose **that** depends on the degree of **exposure**, but this is where the **design** process and natural processes have an opportunity to work hand-in-hand.
Perhaps those huge **spaces** between the rock armour **boulders** offer an opportunity to create sheltered pockets?
Once a few plants start to **establish**, then others can **follow**, through a process of natural succession.

We're **used** to seeing this on exposed limestone **pavements** or old **slate** heaps, and when plants such as these **hawthorns** grow **out** of their sheltered pockets, and **into** exposed conditions, their strange **stunted** shapes are clear to see.

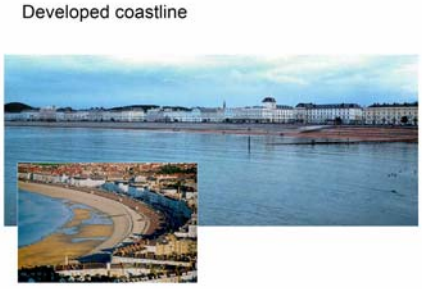
Between the rock armour headlands, more sheltered embayed areas of loose material would form.
If the rock armour creates more **stable** conditions for this loose material, we could see **vegetated** shingle ridges or even **sand** dunes appearing.
And, **tomorrow**, we'll see that **start** of this process at Llandudno West Shore on our **tour**.

Natural vegetated shingle ridges are a nationally **rare** habitat, and **this** example is at Cemlyn Lagoon on the north Anglesey coast.
It would be great to see **habitat** creation as well as **landscape** and **visual** benefits, arising from the increased **shelter** and **stability** caused by **man-made** coastal defences.

And if the coastline was **successfully** protected for a **long** period of time, then what lies immediately **inland** from the storm beach could be a mosaic of woodland, wetland and grassland **habitats**.
If we **have** to accept **some** coastal caravan sites, then it'd be **far** better to create **this** kind of "Center-Park" setting for them, rather than the container depot effect we are more used to seeing.
Perhaps as we change our **outlook** on agricultural **grant** systems **away** from **production**, there'd be more **scope** to carry out such projects in **association** with both coastal **defences** and established **recreational** uses, and which would enhance **landscape** character and **visual** amenity.



So taking **this** example again, we could assist the establishment of a more **stable** environment for **plants** to establish, ….
And eventually…
We can create a new coastal landscape.



The developed coastline I said is a very different environment in which to design.

Here, it's not nature that dominates but man, and man's needs and expectations of the place have to feature strongly in the coastal defence design.

Take a look just **here** in **Llandudno**, and the broad **promenade** and grand sweep of **buildings** around the **bay** provides a **memorable** seaside town experience.
The shingle ridge is **artificial**, and although it means you can't walk **barefoot** between the **prom** and the **sand** like you could before, it just about looks natural.
Between the prom and the **road**, an innocent looking little ornamental **wall** adds a foot or two of **additional** storm protection to seafront **properties**. **Splitting** the defences and putting the **prom** on the sometimes **wet** side, is **good lateral** thinking.
It's all been done very **sensitively** so as **not** to appear **intrusive** in this fine **townscape**.

The traditional 'prom'

Bathing beaches

The traditional **promenade** is an important **feature** of many urban seafronts, and **direct** access from **prom** to sandy **beach** is an important characteristic to **maintain** where possible. In fact on **any** bathing beaches, **surfacing** from adjacent **car** parks and down beach **access** points needs to be **smooth** enough for bare feet. This **may** mean creating **special** features to **retain** or **enhance** access, and road **re**surfacing needs to **avoid** the use of sprayed tar and gravel chips.

The historic environment

Many of our **built** coastal environments have a **historic** character, and here, traditional **materials**, used in traditional **ways**, are likely to fit into the character much better than rock **armour**.

I had to search **far** and wide for a good example of flood defences which are of the same high townscape quality as the historic built environment, and this example, at Perth in Scotland, which is on the upper tidal limit of Britain's largest river by volume, the Tay. The works vary, but here on Tay Street are in the form of a wall. Much environmental enhancement disguises what would otherwise have been a concrete wall. The whole street level has been raised about a foot to ensure the wall was low enough to see over.
Its success is down to combining the needs for flood protection with those of environmental enhancement, giving symbiotic benefits to both aspects.Many more subtle design features have been incorporated into the scheme, and if you think the sculptural ironwork in the gateway will let the water through, I can assure you there's a flood gate that opens flush on the outside of the wall, and emergency planners know to shut the many gates when necessary.

One such gate elsewhere on Tay Street opens onto a semi-circular viewing balcony enhancing the overall visitor experience.
The quality of both design, materials and workmanship is very high throughout, as is the immaculate standard of maintenance and cleanliness, coupled to outstanding floral displays and street tree planting.

The whole project is a credit to the the town, the conservation area, and the pride of the people of Perth. I don't know of any townscape schemes in Wales of this standard excellence at all levels.

Conclusions 1. coastline - important scenic and recreational asset 2. One-issue design solutions are inappropriate 3. Wide ranging design brief 4. Good landscape is good mitigation 5. Creative landscape design adds value 6. Multi-disciplinary approach essential.	What can we conclude from all this? 1. That our coastline is a very important scenic and recreational asset 2. bald heavy-weight construction with one objective – coastal protection – may degrade this asset 3. That remedies lie in incorporating landscape, visual and recreation considerations in the design brief, and that this needs to be informed by initial assessments of landscape character, visual amenity and recreational uses and potentials. 4. That landscape design can assist greatly in mitigation; 5. In addition, the **creative** potential of landscape design and management should not be ignored as this can 'add-value' to the scheme; 6. Bringing in a Landscape Architect or urban designer **after** the design has been finalised, for a bit of cosmetic **decoration**, entirely **misses** the contributions they can make to such a project. A **multi-disciplinary** team approach to design is therefore needed. And in the case of Perth, tangible benefits can be gained from combining flood defence needs with environmental improvement works.
The end  1. coastline - important scenic and recreational asset 2. One-issue design solutions are inappropriate 3. Wide ranging design brief 4. Good landscape is good mitigation 5. Creative landscape design adds value 6. Multi-disciplinary approach essential. **John Briggs, CCW**	

Visual Impacts and Offshore wind farms

Out of **sight** and out of **mind**?

John Briggs
Countryside Council for Wales

We thought it was worth putting **this** topic in the programme because the issue of visual impacts is one that has been **traditionally** seen as quite an **emotive** issue that is often seen as being wholly **subjective**.
The perception of **offshore** wind is perhaps summed up with the famous phrase: "out of **sight** and out of **mind**?"
We might indeed think they **are** out of sight and out of mind **if** we are putting turbines several kilometres **offshore**. **But**, as the photo shows, they're certainly **not** out of sight **so** far, which leaves the question "Are they out of mind?"There's **another** famous phrase worth mentioning here:"It's **all** in the eyes of the beholder", which sums up the **subjective** point of view, with the implication therefore that it is a very **difficult** topic to say much **more** about. **However**, there are **plenty** of **objective** things we can say about visual impacts, and, if **many** people say the **same** subjective things, then we can pick up on the **patterns** and **trends** of opinion and give visual issues a level of **validity**, given that, at the end of the day, the **public** is our **jury**. Well, over the next 20 minutes or so, I'll try to summarise the main issues surrounding visual impacts of offshore wind farms and offer some ways forward.

Visual impact issues

1. **Public Attitudes**
2. **Level of visibility**
3. **Best-fit location and layout**

To do this, I shall be looking at:

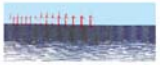
(1) public attitude studies, to help us see **patterns** and **trends** of public **support**,and what they can tell us about visual impacts;

(2) Secondly I'll be looking at to what extent offshore turbines will actually **be** visible.

And finally, to summarise what we can learn from all this to inform design, location and layout in the **future**.
So what can we say about public attitudes towards the visual impacts of offshore wind?

About public attitude surveys

- Mainly 'onshore' wind.
- "Does it look 'good' or 'bad'?
- Variation between surveys.



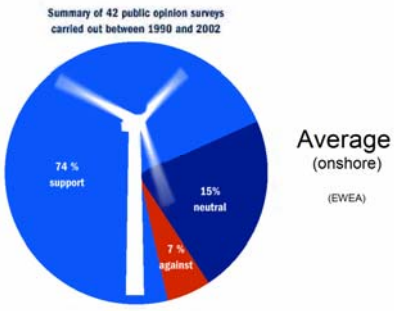
Wind farm studies to date in the UK have been mainly concerned with '**onshore'** wind turbines, often using **photomontages** which show **mock-ups** of the **visual appearance** of a completed development, in its **setting**, which are used as a basis for gauging public **reaction**.
Getting reactions are one thing, but the reasons **behind** the reactions are **harder** to distil. **Most** surveys are essentially about whether the turbines look '**good**' or '**bad**' in the view, but **some** studies also **probe behind** that to try to **separate** whether (on the one hand) it is the renewable energy benefits that people are reacting to, or (on the other hand) whether it is the visual appearance they reacting to, or some sort of balanced judgement of both issues.
Perhaps **because** of this dilemma, and the different **emphasis** that different studies put on these 2 issues, there's quite a lot of **variation** between one study and another.

Survey variation

- Country Life readers: "Britains's No. 1 eyesore"
- Greenpeace at Scarweather Sands: "90% prepared to [accept] development".

To **illustrate** the variation, these are the 2 most **extreme** survey results that I could find.

On the **one** hand, Country Life readers voted wind turbines as "**Britain's No. 1 eyesore**" last autumn, whilst on the **other** hand, **Greenpeace** interviewed people enjoying a day on the beach, near Porthcawl in South Wales, and were able to conclude that **90% of those** people were prepared to either support or be neutral about a proposed offshore wind farm there.



It's therefore worth looking at more **average** figures to pick out the **general** trends in support, and **here** we see a pie chart showing the combined results of **42** surveys over the 12 years to 2002. Note the overwhelming support at **74%.** These results are comparable with other European studies. **Most** of these surveys were for **land**-based wind farms. **Many** surveys are based on people responding to **visual images.** Results like these would suggest very **little** opposition to development proposals.**However** these **don't** explain the **difficulty** developers have when faced with individual development proposals, and public opposition on the grounds of visual impact. So perhaps the public prefer **some** types of locations more than **others**, to site wind farms?

And, the answer is a definite **'yes'**.
This graph is based on a study by the Welsh Tourist Board, shown here by kind permission ahead of publishing.
It shows **relatively** the level of public preference for wind farm developments at different environmental locations:
Note 3 things:
(1) **Offshore** locations (blue, top) are by far the most **popular** choice
(2) **On** the coastline **itself** gets much **less** support (yellow, middle)
(3) Areas with scenic designations get **least** support (bottom, red). And of course many **coastal** areas are **affected** by scenic designations.
Because of the **greater** sensitivity of **coastlines** here, for clarity, it is reasonable to assume that the **spirit** of the meaning of '**offshore'** is: to be seen to be **noticeably** offshore, measured in **kilometres**, and **not just** being in the water a little bit beyond the **low tide** mark.
However, can we be **sure why** people choose '**off**shore'? Is it because they think that will be **so** far offshore that it will be just about out of sight and therefore out of mind?

There's another way to look at preferred location, that is to establish why people choose to visit the places they do, as tourists, to try to establish what it is about those places that they value.
Here, we're looking more at the qualities of a place, rather than the type of place.
The recent WTB study looked at motivations for visits to Wales, and top of the list came "beautiful scenery" closely followed by "beaches, sea and coastline", with smaller but important numbers of repeat visits and being attracted to remote or 'unspoilt' places. There's a strong **visual** element in underlying all these qualities.
A similar type of study done for VisitScotland in 2002 came up with "scenic qualities" and "remote or unspoilt" – 4 in 5 respondents said that beautiful scenery was particularly important in their decision to visit. Responding to mock-up images of wind farms, the largest proportion of respondents were negative towards their impact on scenery (31%), whilst, like in Wales, the most preferred location was offshore (49%).

Scottish MORI Poll

(EWEA)

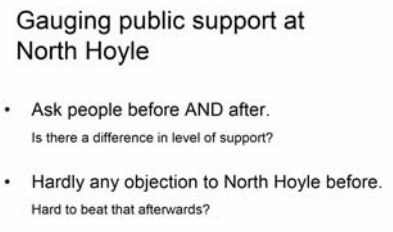
Base: All who have lived in the area before the windfarm was built (1,547)

	Thought might be problems %	Have been problems %
Noise from the turbines	12	2
The look of the landscape being spoiled	27	12
Interference with TV and radio reception	6	1
Damaging effect on local business	3	1
Damage to plants or animals	12	3
Noise or disturbance during construction	15	4
Extra traffic during construction	19	6
A reduction in house prices	7	2
None of these	54	82

A further way to consider people's attitudes is to ask them both before and after development.

These MORI Poll figures relating to a landward wind farm indicate, as shown in red, that many people who thought they would be a problem in visual terms, aren't actually so concerned after they experience them in reality.

But will this be the case for offshore wind farms? With such good support, perhaps people really do imagine they will be out of sight and out of mind.



Such information for offshore wind is **not** yet available, but soon **will** be for the North Hoyle offshore wind farm in North Wales, where a study is underway at present to gauge support **before and after** development. This will be an interesting study to see, since the public were so positive or neutral **before** development.

So what **will** they think afterwards?

Well this **newspaper** article, (courtesy of the North Wales Daily Post newspaper), tells us that some people weren't expecting the turbines to appear so large at North Hoyle, the argument being:

"How far out are they?" as it says.
"About 4 miles offshore" they are informed.
"Residents…believe the turbines are less than **2** miles away", it says.

So in this case, definitely **not** out of sight and not out of mind.

Research on sea view preferences

- Public prefer natural seascape most.
- Natural features / islands add interest.
- Static man-made objects seen as negative visual elements.

CCW, the Countryside Council for Wales, commissioned some research in 2000 with Dr Robert **Morgan**, University of **Glamorgan**, to gauge public **reaction** to offshore wind farms, when compared to **other** objects in the sea.
The results were:
First – the public prefer **natural** seascapes most.
Second - Natural features / islands **add interest**.
Thirdly – Modern, static, man-made objects are seen as **negative** visual elements,
BUT: Respondents were **less** negative about **wind turbines** compared to some other industrial infrastructure.
So what could that **mean** for us?
Perhaps people see with **'attitude'** – their positive **associations** of the green energy **benefits** of wind turbines, makes their visual impact, on **balance**, **less** of a visual problem to them.

Conclusions: (1) Public perception

- Public support
- Well offshore
- Are they really that close?
- All for the greater good

So **what** can we conclude about visual impacts of offshore wind farms based on currently available public **attitude** surveys?

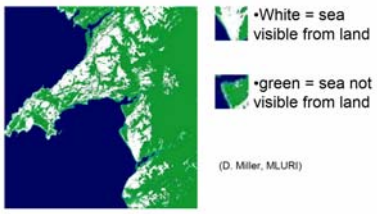
1. That there's a lot of public support in principle – currently far more for **off**shore than for **land**-based wind farms;
2. That **off**shore has to be visually **well away** from the coastline, particularly in **scenic** areas, as scenic qualities are very important to people as expressed through their value to **tourists**;
3. That perhaps people's attitude towards visual impact may **differ** when they see the development in **reality**, and that first indications are that people may perceive them as being visually **closer** to shore than they really are, and we **don't yet know** how this will affect the **level** of support for offshore;
4. The public may be more willing to **accept** the visual impacts if they think they help the environment in other respects.

Visual impact issues

1. **Public perceptions?**
2. **Level of visibility?**
3. **Best-fit location and layout**

Lets look now at **visibility**, and with the Daily Post illustration in mind, try to establish what **extent** and **level** of visibility there is.

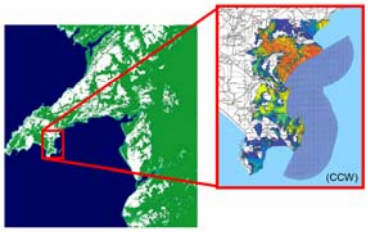
Land – sea visibility



It's worth starting from a spatial planning perspective since **some** locations on land are more visually **exposed** to the sea than **others**.

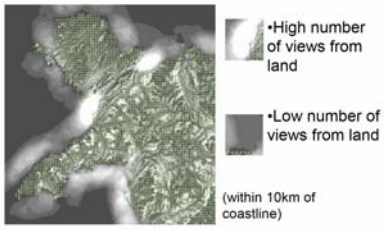
The map shows the Lleyn Peninsula in Wales, **white** areas being land **with** sea views, and **green** areas being land with **no** sea views.
The crinkled pattern shows how visibility of the sea is determined by **topography** rather than proximity to coastline.
The patterns that emerge are quite **complex**.

Land – sea visibility



If we zoom into a small area –this is about 6km by 7km, we can use **colour** to show patterns of **open** and **restricted** views of the sea. **And,** we can relate particular patterns to particular **parts** of the sea **surface**. This kind of information helps us to understand **not** only the **level** of visibility from land, but **also,** if we reverse the calculation we can actually show….

Land – sea visibility

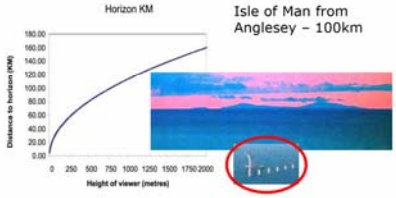


…. that **some** areas of sea have a much **higher** level of visibility from land than **other** areas.

This is what I call the **'fog** map', where the **whiter** areas of sea receive visibility from many **more** places on land than the **greyer** areas. The calculation was run within 10km buffers out to sea, so we don't have the information for any further out at this time.

But, we **can** see a pattern emerging where **embayed** areas tend to have a **concentration** of views from land, **particularly** where surrounding topography is gradually **raised** as one travels inland, **maximising** visibility, in effect like a giant **grandstand**.

Distance to horizon

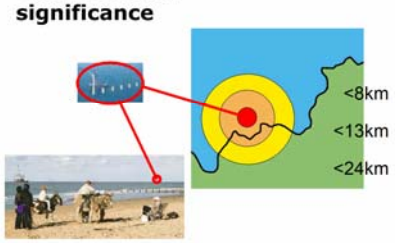


Of course looking **out** to **sea**, the level of visibility in such an **open flat** environment depends **simply** on how **far away** the object is from the **viewer**. The **taller** the object, **or, higher** the viewer's **elevation**, the **greater** the theoretical distance the object can be seen from.

So, **here** we can see the Isle of Man at sunset, as viewed from **Anglesey** – a distance of about **100km**.

But, because offshore wind turbines are of a much smaller visual **mass**, their **visibility** here would be much **less**, unless they are located much closer to the viewer.

Limit of visual significance



At its simplest we can draw rings around turbines on a map to show the limits of high, moderate and low levels of visibility based on distance and size of object.

If we could establish commonly accepted visual impact distance thresholds through public preference surveys, then in theory we could simply calculate and apply measurements to these rings, based on the height of the turbines. And that would help to focus visual impact studies in the area where they really matter.
There have been a number of attempts to do this, one of the most well known being the "Thomas Sinclair Matrix", which is very helpful as it is based on a number of wind farms, although it was **originally** worked out for much smaller, land-based turbines that were about a third the height of what is currently proposed offshore. Recently, figures of 8km, 13km and 24km have been suggested for offshore wind turbines, representing the limits of high, moderate and low levels of visual impact respectively.

North Hoyle: Informed observation and analysis

Comparison of photomontages with reality:

- Perspective
- Resolution
- Movement
- Lighting
- Atmosphere
- Visual composition

www.ccw.gov.uk

But our **experience** of that visibility is affected by a number of factors, and these are the subject of **another** study at North Hoyle, this one based on a **comparison** of **photographic** and **real-life** views as **experienced**.

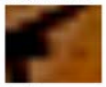
Some of these **other** factors include: perspective, resolution of the image, movement in the view, lighting (both natural and artificial), atmospheric clarity, and the visual composition of the view.

We hope to publish this study on our website later this spring, at www.ccw.gov.uk

Reality verses photo

1. Stereo vision

2. Greater resolution



3. Concentration of attention

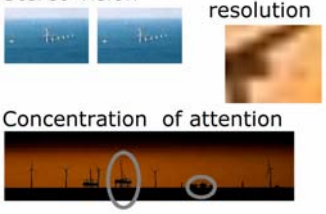
By way of illustration, here are **some** of the factors affecting our experience of views that are missing in **photographs**:

(1) Most of us have stereo vision in reality. This helps us to place objects relative to distance. Whereas a photomontage or mock-up of the development, might show turbines somewhere near the **horizon** (and therefore they **must** be a long way away), a sense of perspective can help us to appreciate the difference between the horizon line and the development location, and the distance between the development location and the coastline.

Because turbines are such **huge objects**, and the open sea is such a **huge visual space**, as the Daily Post showed, it is easy to judge the turbines as much **smaller objects**, which must therefore be much **closer** to the coastline.

Reality verses photo

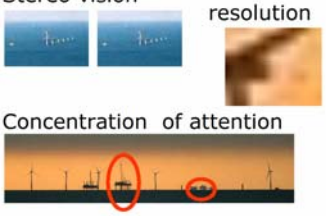
1. Stereo vision
2. Greater resolution
3. Concentration of attention



(2) Our eyes have a much greater resolution for detail than in a photomontage. That means we can notice details that aren't really noticeable in a photomontage. Thus the visual prominence of small details in a view can appear somewhat greater than in a photograph;

Reality verses photo

1. Stereo vision
2. Greater resolution
3. Concentration of attention



And (3) we have the ability in reality to concentrate our attention on certain parts of a much larger view. It means that although the wind turbines may be just a small part of the overall panorama, we have the ability to focus most of our attention on whatever unusual objects catch our eye. The alien form, their location on the horizon line, and the movement of turbines could all combine to attract our attention.
This research project is looking into these and other factors. What we are finding is that the developers' photomontages are fairly accurate optically, and therefore help us to see where the development is located within the view. But, it is much harder to use them to judge visual impact because of the missing richness of context and detail that we would get in reality.

Lighting and contrast

(Countryside Agency)

One of the factors we **usually** find are that developers **photomontages** show turbines in lighting conditions during the **middle** of the day, whereas as these 2 **hypothetical** photomontages, produced for the Countryside Agency, illustrate very **well** how visual **prominence** appears much **greater** in **early** morning and **evening** lighting conditions when there is much more **contrast** between the **turbines** and their **background**. During the **day**, when there is **minimal** contrast between the light colouring of the turbines and their background, their visual prominence appears much **less**.
Setting aside matters of **accuracy** for a moment, **this** aspect was picked up by the opponents of the Scarweather Sands offshore wind farm in their **own** photomontage, which they showed in **high** contrast **evening** lighting, whereas the **developer's** photomontage was shown in more standard 'during the day' lighting conditions.

Conclusions:

(2) Visibility

Objective, analysis-based:

1. Distances and zones for visual significance;
2. Land-sea inter-visibility patterns;
3. Factors affecting visual prominence

So what can we conclude by looking at issues to do with the level of visibility?

1. It offers us an **objective** and **analytical** way to **use** the **results** of public preference studies to help to define **zones** with**in** which visual impact is likely to be an **issue**;
2. We can calculate and show patterns of relative visibility using topography models, and show both patterns of visibility from land, and patterns of visibility on the sea;
3. Through an **analysis** of views and how we see them, we can become aware of what makes objects **more** or **less prominent**, such as if they **move**, or if we see them in **contrasting** lighting conditions.

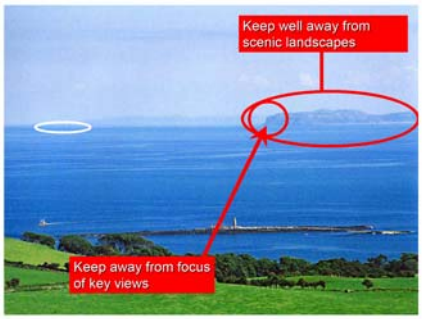
Visibility of offshore wind farms

1. **Public perceptions?**
2. **Level of visibility?**
3. **Best- fit location and layout**

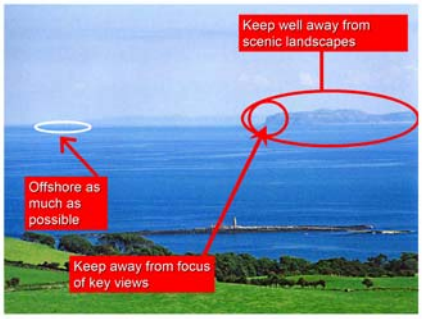
Finally, where does that leave us in respect of best fit design, layout and location, with regards to minimising visual impacts?

Its important to consider each item carefully because there's only a limited number of things that can be done, many of which refer to location, which therefore requires attention at a very early stages of site selection.

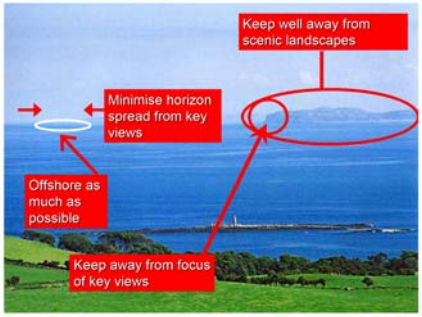
Firstly, remember what the public said about scenic – particularly designated - landscapes, and their unspoilt character, and , basically, maximise distance from them.



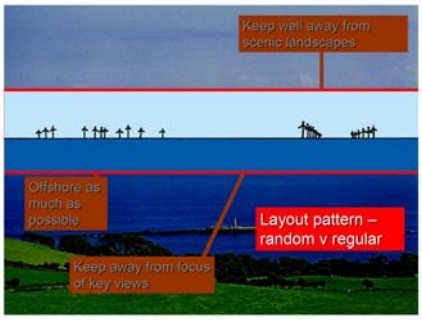
Secondly, identify key views in the study area, and try to keep development sites away from being in line with the main subjects of those views, such as major headlands as shown here;



Thirdly, try to maximise distance offshore as much as possible, to reduce the levels of visibility from land;

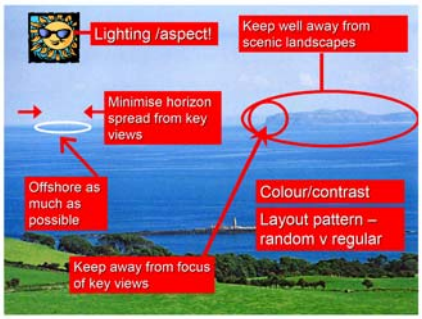


Fourth, try to work out layouts that don't occupy a large spread of the horizon line;

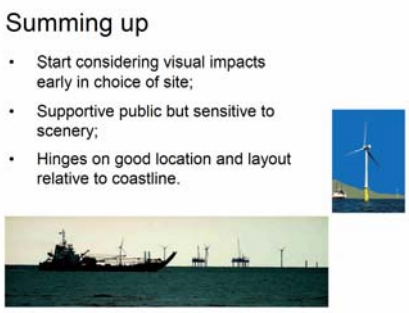


Fifth, try to make a conscious decision about the effect of layout patterns on visual prominence, knowing where the appearance of bold, straight lines can be seen from land.

And, try to make a conscious decision about the effect of turbine colour in relation to its background, with reference to camouflage and lighting conditions.



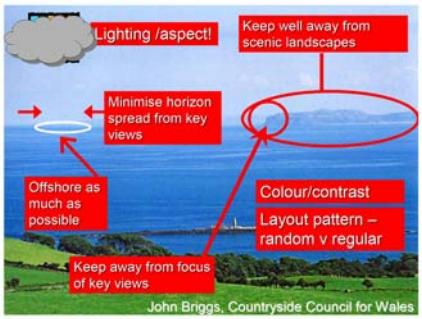
And make sure that the different effects of aspect and lighting are considered when judging impacts, so as not to underestimate the visual prominence at certain times of day….
…Or night, due to night lighting requirements.



Of course dealing with visual impact issues is but one strand within a multitude of other considerations, so in reality some degree of compromise is usually needed. But, there are important and objective things we can say about the issue of visual impact, like these:

- Consider visual impact issues **early** on in the development and consenting process, ideally long before a particular site is chosen;
- Understand that public support in principle **wont** mean the public are happy for them to be **anywhere**, and that offshore probably has to look **visually** a long way offshore, to sustain public support, and that the public can be very **sensitive** about making developments which are visually close to **scenic** places, including coastlines themselves.
- Finally there are a limited but important number of location and layout issues we can consider in relation to the coastline, that can help to reduce the prominence of visual impacts.

So where does this **leave** us? Well, it would be useful to have **more** research on public **attitudes** towards offshore wind, and in **particular**, to establish **what** visual images are in people's **minds** when they think of '**offshore**', to try to work out **why** there's so much **more** support for **offshore** when compared to land-based wind farms.
And, as **part** of this, to carry out more 'before and after' studies of visual impacts for offshore wind farms, to see the extent to which **what actually** gets built lives up to people's **expectations**.
We would benefit from **more** survey and assessment of both land-sea **inter-visibility, and,** information on the **seascape** resource – that includes the qualities of coastal **scenery** and **what** people **value** about it, **where** and **why**. This would be **best** carried out as a **UK wide** exercise, and there is an outline **method** for this in "Guide to best practice in seascape assessment" which we published in 2001. Work is **also** underway in **Scotland** on this topic too.



Finally, it would be helpful to publish some basic **guidance** on location and layout in respect of visual impacts, as this would help **all** parties to **focus** their discussions when considering the issue.
I appreciate I've talked about just **one** issue here today in **isolation**, and that in **practice** there's a multitude of **other** - sometimes more important - considerations **too**, but its **worth** highlighting the visual issue for once, because in **practice** it can otherwise lurk mysteriously at the very **end** of Environmental Impact Assessments, looking suspiciously like something carried out as an **after-thought**, and at such a **late** stage in the process that **nothing** much can be done about its results **anyway**. And **that** doesn't help **anybody**.
Thank you very much. There's a few minutes left now for discussion, so perhaps I can hand back to the **Chair** to take any questions or comments from the **floor**.

What can we see at 9-12km distance?

Perhaps it is worth taking a look, during the day, at North Hoyle, as it is the **first sizeable** offshore farm yet built in the **UK**.

And, when I visited last August, the **construction** phase was well under way with all the **monopiles** in place, and just a **few** of the **masts too**.

9km away

This turbine, in red, is some **9km** away from this view point.

11km away

This one, now in red, is 11 km away.

9 and 11km away don't appear very different

Bearing in mind what I have said about the limits of photography, I have to report from my own observations on site, that the difference in distance between the 9km and 11km was really not very significant in terms of a difference in visual impact.

10km away

Similarly this turbine, with its mast already in place, is 10km away from me.

12km away

Whilst this one is 12km away.

12km away

They are more spread out than the other two because of the angle of view, but, the perspective appears very flattened, and it is hard to appreciate that the one on the right is 2km further away than the one on the left.

It all means that when sites in the sea are planned for turbines, that tweeking locations just by 1 or 2 kilometres is not going to make much difference to the level of visibility – unless of course that would hide them behind a headland.

ENVIRONMENT AGENCY

The Water Framework Directive and Coastal Waters

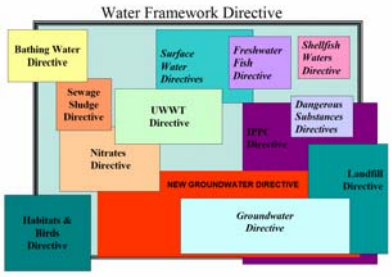
Alun Attwood, Environment Agency Wales

INTRODUCTION

- Introduction to the WFD
- Progress towards Implementation
- Links between WFD, CZM and Local Authorities
- Coastal Pressures and Impacts Assessment

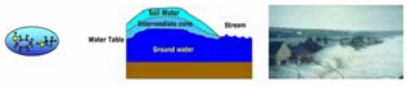
WFD PHILOSOPHY

- Rationalises and updates existing EU water legislation
- Consistency in water policy and management
- Integrated catchment / supra-catchment management covering all waters
- Management based on better understanding of processes in catchments
- Risk based management delivering environmental outcomes
- Enabling framework to allow member states to achieve objectives

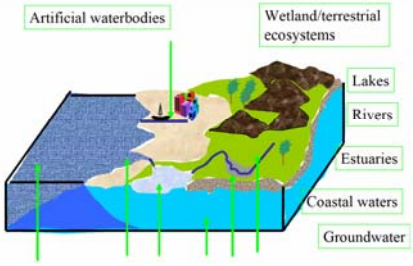


AIMS

- Prevent deterioration, enhance status of aquatic ecosystems & associated wetlands
- Promote sustainable water use
- Reduce pollution from priority substances
- Prevent deterioration / reduce pollution of groundwater
- Contribute to mitigating effects of floods / droughts

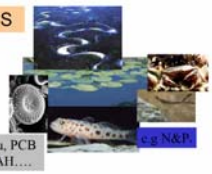


WHAT WATERBODIES DOES THE WFD COVER?



STATUS OBJECTIVES

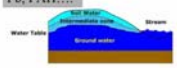
- Surface water status assessed using:
  - Ecological status
  - Chemical status



Zn, Cu, PCB Pb, PAH….

e.g N&P

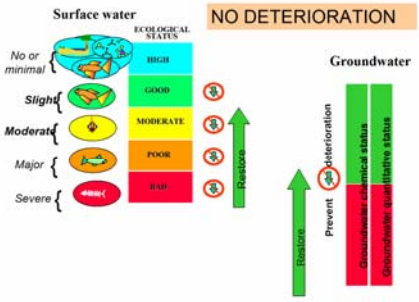
Zn, Cu, PCB Pb, PAH….



- Groundwater status assessed using:
  - Quantitative
  - Chemical

- Default objective is "good SW/GW status"

NO DETERIORATION



STATUS OBJECTIVES

- "Exceptions" to lower standards
  - designation as heavily modified/artificial; ("good ecological potential")
  - timescale & objective derogations (technically infeasible, disproportionately expensive)
  - unforeseen or exceptional circumstances, flood or drought;
  - new modifications to physical characteristics or from new sustainable human developments

STATUS OBJECTIVES

- Protection to Higher Standards - Protected Areas
  - e.g. recreational waters, nutrient sensitive waters, conservation sites, drinking water sources

River Basin Planning Cycle

PROGRAMME OF MEASURES

Programme of measures
- set out within RBMP
- sets out the plan of how to meet WFD Environmental Objectives

Basic measures
- obligatory
- existing EU Legislation
- controls on main pressures

Supplementary measures
- optional
- non-exhaustive list of measures
- projects, initiatives, codes of practice

IMPLEMENTATION TIMETABLE

Year	River Basin Planning Requirements
2004	Directive transposed River basin districts identified and Agency is competent authority
2004	**Characterisation and risk assessment** Economic analysis of water use Register of protected areas
2006	**Monitoring programmes** Work programme for first River Basin Management Plans
2007	Interim overview of the significant water management issues
2008	Publish draft River Basin Management Plans for consultation
2009	**Finalise and publish first River Basin Management Plans**
2012	Measures fully operational Work programme for second River Basin Management Plans
2013	Review characterisation and risk assessment Review economic analysis of water use Interim overview of the significant water management issues
2014	Publish second draft River Basin Plans for consultation
2015	**Achieve environmental objectives in first Basin Plans** Finalise and publish second River Basin Plans

RIVER BASIN MANAGEMENT PLANNING: BOUNDARIES

- River Basin Districts (RBDs)
  - 11 have been proposed for England &Wales, including 2 cross-border RBDs with Scotland
  - defined on hydrological catchments, or groups of catchments

WFD REGULATIONS

- Water Environment (Water Framework Directive) (England and Wales) Regulations 2003.
- Regulations came into force on 2 January 2004.
- Minimalist Regulations - supported by Delivery Plan
- SoS / WAG overall responsibility for WFD implementation.
- EA, as Competent Authority responsible for:
  - Characterisation of RBDs
  - Establishment and maintenance of Protected Areas Register
  - Establishment of Monitoring Programme
  - Preparation of environmental objectives and Programme of Measures
  - Preparation of River Basin Management Plan

WFD LINKS TO ICZM and COASTAL PLANNING

- Incorporates principles of Sustainable Development
- Provides for greater integration of policy, planning and management
- Ecosystem approach to protection and management of aquatic environment
- Collaborative approach - public participation
- BUT ICZM is about more than water management

WFD and LOCAL AUTHORITIES

- WFD should inform future land-use and marine planning
  - water resource demand and availability
  - water quality
  - physical habitat
- WFD Regulations - "….each public body must, in exercising their functions so far as affecting a river basin district, have regard to-…. the river basin management plan for that district"
- SEA / Sustainability Appraisal
- EA developing guidance with LGA / WLGA
- LGA Conference, 20 May - WFD & Sustainable Water Use

WHAT IS INVOLVED IN THE RISK ASSESSMENT

Very short deadline for producing the first assessments

A basic risk screening rather than very detailed assessments

Risk assessment process will not end in 2004

PRESSURES FOR INITIAL RISK ASSESSMENT

RIVERS
Nutrients
Hazardous substances
Pesticides
Sediments
Acidification
Abstraction
Flow Regulation
Morphology
Fishing
Urban pressures
Minewaters
Pollution incidents
Alien species

COASTAL
Nutrients (N&P)
Hazardous substances
Organic enrichment
Morphology
Commercial Fishing
Alien Species

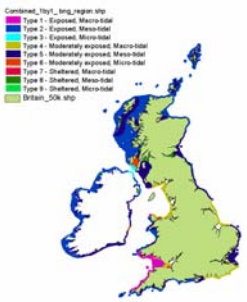
GROUNDWATER
Nutrients (N&P)
Pesticides
Minewaters
Significant pt. sources
Abstraction
Urban pressures

TRANSITIONAL
Nutrients (N&P)
Hazardous substances
Organic enrichment
Morphology
Commercial Fishing
Abstraction
Industrial Intakes
Alien Species

LAKES
Nutrients (P)
Acidification
Abstraction
Morphology
Alien Species

Morphological Pressures in Coastal Waters - Examples

Pressure	Morphological alteration	Possible effects on biology
Land claim for agriculture, ports, industry, housing and transport	Loss or damage to inter-tidal zones; reduction in sub-tidal bed	Loss or damage to species supported by such habitats
Spoil disposal from dredging works	Damage to structure or condition of bed	Smothering action; alteration of invertebrate assemblage
Disturbance or removal of bed substrate as a result of seabed trawling and dredging works	Loss or damage to structure and condition of bed	Loss and disturbance to habitats and species
Structures for flood control, sea defences	Loss or damage to inter-tidal zones	Loss of inter-tidal habitats and the species they support
Structures for coast protection / sea defence, erosion control, navigation, jetties and piers, road crossings etc	Interruption of long-shore coastal sediment transport, or upstream / downstream tidal river transport of sediment, leading to enhanced erosion rates for habitats 'downstream' of barrier	Degradation or loss of sedimentary habitats causing changes in species composition



Coastal

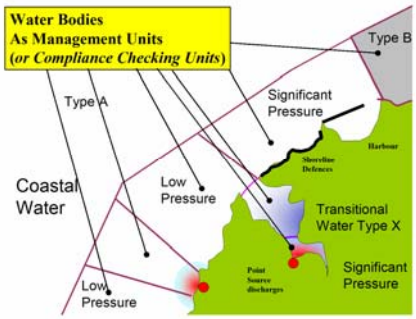
- 9 Types
- 66 Water Bodies

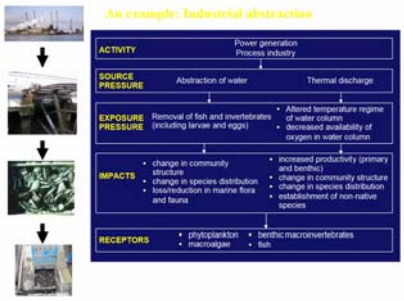
(+sea lochs and lagoons)

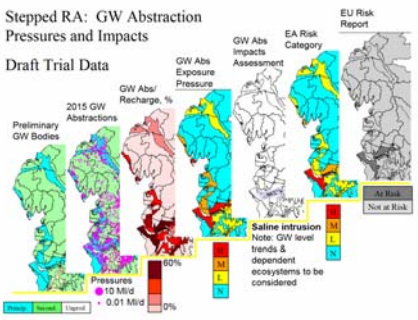
Transitional

- 4 Types
- 123 Water Bodies

(+ 80 lagoons)







SUMMARY

- Fundamentally important Directive that will form main driver for water management in future
  - Replaces key, but outdated Directives
- RBMPs will form the basis for Integrated River Basin Management in E&W
- ICZM and coastal planning will be very important in helping to deliver WFD objectives in coastal and estuarine waters
- Work closely with Regional Assemblies and Local Authorities to ensure integration of planning

THE COASTAL ZONE MANAGEMENT NETWORK (CZM-NET)

WORKSHOP 17TH. JUNE 2004-06-16

'Future Opportunities for Integrated Coastal Zone Management in the Southern Irish Sea Region.'

THE FUTURE OF ICZM IN EUROPE?

Introduction

Good morning ladies and gentlemen and my thanks to Brendan Dollard and both Networks for giving me this opportunity to participate in your workshop. To be honest, at the time, I did not give much thought to the topic Brendan asked me to address. Had I done so I might have insisted on a more modest title. I don't suppose that you will be too surprised to learn that I do not know what the future holds for ICZM in Europe, that lies in the hands of the Member States Governments and, to an extent, with the Commission's Expert Group and the High Level Forum.

Over the last eighteen months or so changing patterns of work meant that I was not as involved in ICZM affairs as in previous years and for that reason I can at least claim to take a reasonably objective view of what has – or has not – been going on. Of course the big thing has been the 2002 'Recommendation' and the path that this has laid out for ICZM in Europe and in the individual Member States - at least up to 2007 or so.

I think that there are now several strands of ICZM evolving at EU, National, Regional Seas and Local levels and the success of ICZM in the future will depend on how well we manage to spot the opportunities for synergy across these different strands. My personal concerns would be that the process does not falter, that a high level strategic perspective is cultivated and that a common language of ICZM is put in place.

Background. Evolution of ICZM - a personal perspective.

Throughout my 30+ years of involvement with Coastal Planning and management I have been aware of the fact the European brand of ICZM did not arrive on the scene fully fledged. The notion has been evolving over time usually spurred by initiatives that are in response to need (mostly local) and sometimes in response to opportunities afforded by National, EU and other programmes such as the European Exchange Programme, Life, Interreg, etc. which provide sporadic - and usually - inadequate funding for such efforts. Over the years, however, I have witnessed the level of interest grow across Europe on all administrative levels and, to a lesser extent across the various sectoral interests. Each new initiative expands the base of knowledge bringing new stakeholders on board, creating new perspectives and, yes, in some ways complicating the issue. Certainly during my time as Technical Assistant to the

Demonstration Programme I became aware of the need to return frequently to the question of what we are trying to do with ICZM and to seek always to create a common language amongst people working in the field.

This evolutionary process has led to ICZM being thought of variously as;

a framework for integration
a catalyst …..
a process - an iterative process
a mechanism .
an instrument

and lately, thanks to the Council, Harry Coccossis et al;

a *platform for reflection.*

This latter is interesting because much of what is going on in ICZM initiatives, certainly amongst the Demonstration and other projects *is* 'reflection', a process of trying to understand what is happening and how the good bits can be exploited and the bad bits controlled. This is similar in many ways to the notion (Kidd, Massey and Davies) that the ESDP provides a framework, a basis for ordering thought. Most of the networks are engaged in this activity and for that reason they are potentially important incubators highlighting issues and allowing new ideas to be aired and tested. In my opinion networking must continue to be a crucial element in the future of ICZM in Europe – provided, of course that they are properly and consistently funded and that their work is co-ordinated with the 'official' mainstream of ICZM development put in place by the current Recommendation..

Speaking of reflection, my first experience of coastal management was back in the late 1960s when BSM were commissioned by the then Foras Forbartha (the Planning Institute) and Bord Failte (the tourist board), to undertake a UN sponsored study of the entire coastline of the Republic. The motivation for the study was the realisation that the coastal area was being damaged by gratuitous non-strategic development (another way of describing one-off rural housing) and that large swathes of coastal land was being bought up by speculators – mainly Dutch and German, the situation seemed to be getting out of control, beaches were being fenced off, access denied, beauty spots lost forever under holiday homes and cottages - sound familiar?

The objective of that study was very clear:

'To identify, by zones and stretches the limits of conservation and development in the coastal zone'.

The definition of the zone was equally simple:

'That area between the coast road and the sea and within the visual influence of the sea'.

We were also charged to take account of the '*needs and wants (which are not synonymous)'* of the local communities and other interested parties.

The task took three years to complete and necessitated the invention and adaptation of various survey methods and analysis techniques to allow it to happen. I was very pleased recently to read the outline methodologies devised to 'elaborate a national stock taking within Spain' in line with Recommendation 2002/413/CE. - the method proposed is almost identical, albeit supported by a much wider knowledge base, to that used in our 1998 National Coastline Survey.

The completed survey and the strategies proposed, which presented the results on National, Regional and County Council levels, served a useful purpose for many local authorities in development control, though few authorities bought into the development/conservation strategies proposed. The regional planning tier was virtually non existent at that time.

Of course the shortcomings of that early exercise are obvious now.

For example, it did not take the marine dimension into account. We realised this at the time of course but there was so little information or data available at that time on the marine zone that we could achieve little apart from the identification of known critical sea areas. Besides, the Government Departments and Agencies dealing with the marine were not a direct party to the exercise.

Another omission was the major Ports of Dublin and Cork. The port authorities of the day were not interested in the study, they were, however, consulted in the matter and they were quite amazed that we should think their activities would have a bearing on the coast beyond their jurisdiction. This was still a problem with a number of the Demonstration Projects twenty five years later that got around tricky Stakeholder issues by simply omitting them from the effort! The need to ensure that sectoral interests appreciate their role in coastal zone management remains a critical issue today and a key to their involvement in ICZM in the future. I see, at last that the importance of the big urban port and industrial areas as generators is now acknowledged and I hope that part of the future of ICZM in Europe will be the *meaningful* integration of the major cities in local and regional initiatives as well as in the larger Regional Seas strategic efforts.(Naples was the only large city/port participating in the Demonstration Programme)

A third weakness of the 1968 study was that, whilst An Foras Forbartha could be said to have represented the local authorities, there was no formal mechanism for local authorities to take the results of the study into the statutory planning system and in particular into the County Development Plans and they were under no obligation to do so in any case. As a result of this the local Authorities 'cherry picked' the study recommendations, using the proposed zoning and strategic objectives either to support or oppose particular developments as it suited them. A few brave and far sighted Local Authorities – like Counties Wexford, Waterford and Cork – did incorporate (with appropriate adaptation) the principles of development and conservation proposed in the NCS into their County Development Plans.

Sectoral involvement was minimal, confined to the consultants meetings and discussions with the different departments and agencies of the day. Finally the follow up at National level was weak to say the least. Weighty economic matters came to

dominate Government thinking and interest in coastal management as a National issue waned for a time, until about 1992 in fact when the possibility of the EU coming up with a Directive on ICZM encouraged the Government to commission another national study which produced the discussion document *'Coastal Zone management: A Draft Policy for Ireland'*.

So in the old 1968 NCS we have a straightforward coastal management plan that was motivated by a limited number of issues, which was geared toward a physical/spatial expression of policy and which sought to influence the management of the coastal zone through conventional planning devices such as zoning and land use development strategies. ICZM apart, I often think that it deserves to be re visited – a systematic physical re-survey of the same zone 35 years on would tell an interesting tale!

It was not until 1986 (20 years) following on from the European Coastal Charter in 1983, that the EU endorsed a similar approach based on an 'integrated planning policy combining the objectives of development and protection of coastal zones'. I think that that was about the time we all began to think about coastal management in terms of *integration*.

'Only' six years later in 1992 we had the Council Resolution calling for a European Strategy on Coastal Zones and in 1993 a draft strategy was produced and a management unit was created in DGXI Environment to deal, inter alia, with coastal matters. About this time also there were a number of coastal management networks established under the Exchange of Experience programmes and these helped to fuel interest in coastal management, particularly at regional and trans-national level.

In 1996 we had the Demonstration Programme and this, of course has led to the 'Strategy for Europe and in 2002 the Recommendation.

One thing stands out clearly from this - the evolution of Integrated Coastal Zone Management is a very slow process. The process is unlikely to speed up in the future so it is as well to be aware and accept that involvement in ICZM is a long term commitment. This, in my opinion, is an important consideration for the ICZM Networks.

Back to basics. What are we trying to achieve?

The reason I have laboured somewhat over the 'evolution' of ICZM (without reference to other CZM 'evolutions' elsewhere in Europe, UN, OECD, in America, etc.) is to draw attention to the need for clarity in what we are trying to achieve. As more and more 'communities' – the Scientific community, the academic community, the NGO/Voluntary communities, multi layered administrative and sectoral communities and so on and so forth become involved, the motivations and objectives of ICZM become less clear cut. Read as a briefing document the Recommendation has been a great help in this regard, indeed the task set for the Member States is onerous, everything would appear to be covered.

One thing in particular bothers me, however, and that is that the Recommendation seems to sideline the spatial element of ICZM - which is the bottom line when all is said and done.

I confess that I am not at all sure what item 16 of the 'Whereas' section of the Recommendation is getting at. If it means what I think it means i.e. that land use and town and country planning are bit players – more or less *optional accessories* in the drawing up of National strategies, then I think we have lost the plot all together. Land use and sea use planning systems are the principal means of implementation when it comes to controlling and managing development in the coastal zone. ICZM has to begin with an analysis of what is actually happening on the ground and on and under the sea if we are to come even close to determining what should and should not happen where and when in these spaces and then manage it – surely that is what we are trying to do?

(And, by the way, what is '*An* integrated coastal zone management'?)

Admittedly this is offset to an extent in Chapter IV which describes the scope of the national Strategies and includes reference under 3 (b) (i) to 'developing national strategic plans for the coast to promote integrated management ensuring, inter alia, *the control of additional urbanisation and of exploitation of non-urban areas while respecting natural features of the coastal environment*'. An instruction not unlike the old '…limits of conservation and development' which drove the 1968 Irish NCS>

However from my perspective on ICZM the Recommendation is far too heavy on review of legislation, administrative systems, identification of roles, instruments etc. and light on practicalities. Hopefully the Expert group will steer the thing in the right direction.

Principles of good practice established - are they achievable?

Although as TA to the Demonstration Programme I helped to draw up the Principles of good ICZM, I have always had some reservations about their appropriateness. The Principles could be seen as a council of perfection (reflected elsewhere in the Recommendation?) and in my view we do not have the time to wait for all the pieces to fall into place. There are a number of elements in the Recommendation that could stall the effort. Indeed I wonder whether the 45 months given the Member States is even halfway adequate to carry out adequately all of the tasks called for in the document? I wonder too if the Commission/Council will be able to react to the results in only 10 months? The threats to the coastal/sea resource are immediate and increasing, I would like to have seen a Recommendation that focused equally on the need for rapid action to help contain the situation in the short term.

Issue led vs. holistic approaches;

A part of the problem with ICZM in Europe has always been the fragmentation of Initiatives both in terms of their geographical coverage, their scope and their lifespan as dictated by the availability of funds, etc. I think that the Recommendation and the course that we are on now will go some way to addressing that problem perhaps even yielding up the much sought after 'unified approach' to CZM.

ICZM and ESDP

At EU level ICZM has been seen as being concerned with 'process' and as having a very strong conservation/environmental focus. When the ESDP emerged (in the middle of the Demonstration Programme) there was a period of confusion as to how ICZM and ESDP would interact. ESDP laid claim early on to the Holistic approach, thus the perception of ICZM was that it was limited whereas ESDP was spatial, holistic, forward looking and grounded in socio economic reality. It is possible that this sort of thinking influenced the drafting of the recommendation. I am afraid I have always seen the two (ICZM/ESDP) as sides of the same coin. To me ICZM has always needed to be spatial, always seeking a holistic approach to management. The whole thing has been about achieving a sustainable balance between economic, social, cultural and environmental values in the zone.

I should mention of course that the EU Demonstration Programme was itself an exercise in co-operation/integration. DG XI Environment was partnered by DGXIV Fisheries and DGXVI Regional Policy in the Programme and this was one of the first occasions in which these three important DGs had worked together. As far as the future of ICZM in Europe is concerned I would expect to see a great deal more of this type of co-operation amongst key DGs in the Commission - as an example to the Member States of what can be achieved.

Conclusion

Given that the focus would appear to be on the strategic holistic approach I would be reasonably assured that the future of ICZM in Europe is on the right track – provided, of course, that we do not get bogged down in detail and that there is a marriage of ICZM and ESDP objectives and frameworks to secure a basis for trans-national and cross border co-operation and, perhaps, win even greater political support.

The Recommendation paved the way for the establishment of formal National Policy in respect of the coastal zones. It remains to be seen what the Member States come up with at the end of the day and this will be led to a considerable extent by the guidance offered by the Expert Group and the various working groups and forums they may establish. I would be particularly interested in the idea of a European Stakeholders Forum because the involvement of stakeholders – particularly commercial/sectoral stakeholders has always been a problem not least because it is so difficult to achieve reasonable representation of different interest groups and to sustain interest on their part over time.

I would expect that once the Member State Strategies are in place (provided the MS co-oporate) that the EU would take on a more proactive role in respect of the strategic management of the regional Seas and, eventually, in the drawing up of a formal Europe wide ICZM strategy, and it's implementation.

Arthur Martin
Brady Shipman Martin
June 2004

Coastal Zone Management Network

CZMNet

an INTERREG IIIa funded project

Status and Achievements

CZMNet - OBJECTIVES

- To encourage and facilitate closer co-operation between local authorities in Ireland and Wales in the area of coastal zone management
- To provide a mechanism for the sharing of experiences of and knowledge on coastal zone management
- To initiate a long lasting network of contacts

CZMNet - STATUS AND ACHIEVEMENTS TO DATE...

- Current workshop is the third network meeting and the last in the series
- Previous two meetings minutes and presentations have been disseminated through the CoCoNet website

CZMNet - STATUS AND ACHIEVEMENTS TO DATE

- A total of 32 individuals from Central / Local Government, State Agencies and academia have attended CZMNet workshops
- 9 papers presented in the first two workshops on topics such as One-Off-Housing, Bye-Laws, the Water Framework Directive, the Bantry Bay Charter and Climate Change
- Knowledge and experience shared

CZMNet - COMMENTS ON NETWORKING

- Its very easy to network with the Welsh
- Small groups are easier to deal with
- Set goals for the Network
- Raise the issues and let networking take over
- Try to include a few network evenings

PROJECT MANAGEMENT

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CZMNET MEMBERS

IRELAND:
Enterprise Ireland, The Department of the Marine & Natural Resources, Waterford County Council, Wexford County Council, Wicklow County Council, Dun Laoghaire - Rathdown County Council, Bray Urban District Council and Fingal County Council.

WALES:
Carmarthenshire County Council, Ceredigion County Council, Conwy County Council, Countryside Council for Wales, Environment Agency, Gwynedd County Council, Pembrokeshire Coast National Park, Pembrokeshire Coastal Forum, Pembrokeshire County Council, Welsh Assembly Government and Ynys Mon County Council

CZMNET MEETING MINUTES

Download from....

http://coconet.ucc.ie

10. WEXFORD DECLARATION

A key outcome of the workshop was consensus on the content of what has been called the Wexford Declaration (below). This Declaration has been formulated to address two key issues to emerge from previous CoCoNet and CZMNet workshops i.e. lack of public awareness of coastal issues and political apathy towards coastal management. The Declaration, which represents the common view of CoCoNet and CZMNet project participants, is directed towards decision makers responsible for coastal policy within the Southern Irish Sea region. The text will also be directed towards the media in the region to raise general awareness of the need for sustainable coastal development in Ireland and Wales.

WEXFORD DECLARATION:

In recognition of the EU ICZM Recommendation and in the context of the principle of subsidiarity, governments are urged to support the empowerment of local communities, including local government, to secure local sustainability of the coastal and marine environment.

To achieve this, priority actions include measures to:

1. **Engage local communities in the formulation of coastal policy and in the adoption of responsible local management practices.**
2. **Secure government support for the development and implementation of ICZM programmes, including national programmes, which promote local actions and the provision of guidelines for local authorities.**
3. **Raise public awareness, respect and understanding of the coastal environment, including its natural, historic, cultural and socio-economic character, and related issues.**
4. **Share experiences of and promote best practice in implementing local community-based management initiatives.**
5. **Facilitate communication and collaborative working between coastal stakeholders in recognition of the environmental, socio-economic and cultural benefits of integrated management.**
6. **Support and promote coastal networks in achieving ICZM at all levels.**