

ICZM – Sustainable use of the Coastal Zone in Pembrokeshire, Wales

- Independent, neutral coastal partnership with 1000 + members
- Established in May 2000
- Funded via complex range of mechanisms grant, public and private
- Developing sustainable business model for coastal partnerships CIC
- Predominantly Pembrokeshire based but remit expanding via projects









David Jones (PCF) - Wales Activity Mapping - Valuing marine/coastal recreation CF 2014 Wales Activity Mapping – Background to project and GIS system

- Methodology a regional perspective what worked/what didn't
- Uses Evidenced Based Approach
- Non recreation (P&P)
- Economic Valuation of Marine Recreation Activity (MPC/Atkins)



Wales Activity Mapping

What is it?

A study into the type, amount and distribution of recreation/tourism carried out on the South West Wales Coastline including infrastructure and management issues

Why?

The data is stored in a web based GIS system primarily aimed at Recreation/Conservation/Tourism managers – wider uses

Activity tourism growing in Pembrokeshire

Evidence Based approach becoming more important

How can you measure planning/policy/management without baseline data?

Background

- PCF began project in 2004 (SWW Coastal Recreation Audit)
- Pembrokeshire expanded to SW Wales coastline
- Working Group LA in study area/ South West Wales RTP / Visit Wales
 / PCNPA / National Trust / CCW / EA / POMH / CBEEMS / PMSAC
- Initial work to consultancy recommended a more in depth study
- Began data collection again in 2008 -10

Methods

- Non Standardised 2008 No MEDIN/MMO standards Working Group input
- Workshops limited buy in
- Proforma /Maps email/post
- <u>Most effective</u> face to face interviews utilising proforma + maps (time consuming)
- Data collated in web based GIS system with source/date/contact details Confidence score to assist with management use



Coastal Recreation at St David's Peninsula





www.walesactivitymapping.org.uk



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Right click on activity areas on the map for additional details.

Filter



- PRIVATE SECTOR/CONSULTANTS TEL EIA
- WELSH GOVERNMENT- MRESF Coastguard Station coverage
- PCNPA Evidence based approach to Recreation Plan / Enjoy website / SeaScapes
- CARMARTHEN BAY EUROPEAN MARINE SITE for Management Plan
- LOCAL AUTHORITIES Beach Management Plans/ Blue Flag Status /Emergency Planning
- MCS angling bin pilot
- National Trust Licensing
- Evidenced based funding bids





Map of Recreation Character Areas (RCA) based on PCNP Landscape Character Assessment Study and the Compass Approach

<u>RCA</u>	Resort Beach Coast Developed Formal	Beach Coast Developed Semi Natural	Small Bay Coast Accessible Natural	Wild Cliff Coast Remote Natural	Islands Accessible and Remote Natural	Estuaries Developed Semi Natural	Inland Valleys Accessible and Remote Natural	Inland Commons and Hills Accessible and
Recreational Activity								Remote Natural
Beach Activities (passive)					n/a*	n/a	n/a	n/a
Beach Activities (active)					n/a*	n/a	n/a	n/a
Canoeing/Sea Kayaking							n/a	n/a
Climbing						n/a	n/a	
Coasteering						n/a	n/a	n/a
Cycling (Bridleways/lanes)								
Dinghy Sailing/Yachting							n/a	n/a
Diving							n/a	n/a
Dog Walking					n/a			
Horse Riding (Bridleway)					n/a			
Beach Riding				n/a	n/a		n/a	n/a
PWC/Jet skiing						**	n/a	n/a
Power Kite flying								
Kite Surfing							n/a	n/a
Land Yachting						n/a	n/a	n/a
Motorised Land Activities								
Power Boating							n/a	n/a
Rowing							n/a	n/a
Angling								
Snorkelling							n/a	n/a
Surfing						n/a	n/a	n/a
Swimming							n/a	n/a
Walking								
Waterskiing							n/a	n/a
Wildlife Boat Trips							n/a	n/a
Windsurfing							n/a	n/a
Matrix Categories	Encourag Encourag Encourag Encourag Do not er	Encourage and actively promote, management minimal except to provide associated facilities and access GROUP 1 table 2 Encourage and support, management to develop close liaison with users and operators GROUP 1 table 2 Encourage with responsible use, management to develop good practice and oversee out of season events GROUP 2 table 2 Encourage only proven good practice or out of season, lobby for stricter training, insurance and codes of practice GROUP 3 table 2 Do not encourage in this area/encourage elsewhere GROUP 4 table 2						
	n/a Not appli	Not applicable in this area (* except Caldey Island) Except Milford Haven Port Authority ski zone						
	** Except M							

Sustainable Recreation Toolkit CCW/PCNPA/Welsh Gov







anoeing/kayaking

Constrainthywing is a fractation were be enjoy the National Alex allowing access to sciows, Isada are energy and an energy and the endows and matters that have in it. Is a great chance to observe use to this tasks and gargetiese, solutions winders and what fired in an endomative and contrabuted ways. For the experiments are known where are extended of the single constrained and to the Material Alexander and any objecting the first tables. There are a specified with the material and the single and the the single constrained and the terminal and any objecting the first tables. There are a specified where the single constrained and the the Material and any objecting the first tables therein.

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L'hay	Info Email comment Caerfai to Solva	Base Layer OS mapp OCoast ou
	Coasteering Feasibility Management approach required Presence of one or more of the following sensitive featured nesting birds/mammals/unspolt wildness/private land ownershin/biotopes/geology/designated area	s - cliff
	Contact: tom.luddington@mhpa.co.uk - david.jones@mhp Reports National Watersports and Leisure user report 2009 Reports Welsh Outdoor Recreation Survey 2008 Reports Marine and Coastal Recreation Audit LUC&CCW report 200 Reports SWWMLF mooring and slipway survey Reports Pembrokeshre Marine SAC Management Scheme Papagete	<u>a.co.Uk</u>
Contradia de la contrada de la contr	Pembrokeshre Coast Path counter reports May - Sept 08	cans

Welcome Gazetteer	Layers Help			
Land based activities				
Water based activities				
Boat based activities				
Alert layers				
Other layers				
Public land	<u>200</u>			
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Beach awards				
🔲 Car parks	V			
🔲 Dog ban areas	· · · · · · · · · · · · · · · · · · ·			
🔲 Lifeguarded beaches				
Climbing Restrictions	N			
Mooring areas	22			
🔲 Slipways	\bigcirc			
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Marine Code				
European Marine Site Plans and Projects				
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Pembs Marine SAC layer showing consents for TEL tidal turbine

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Welcome Gazetteer Laye	rs Help				
Land based activities					
Water based activities	Water based activities				
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Other layers					
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Other					
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5		
Servine Service	Plan/Project overv	riew - Tidal Energy Ramsey 1
5	Applicant:	Tidal Energy Ltd
1	Brief	12 month trial deployment of
E)	description:	tidal energy turbine in Ramsey Sound, and cabling to land
2.,	Relevant date	Applied Oct 2009, permitted
m 5	<u>(s):</u>	Mar 2011, anticipated
27		completion summer 2013
C)	Consents:	Marine Works licence; FEPA
7		licence; Coast Protection Act
1		Incence; Costion 26 concept (Electricity)
		Act): Marina Protocted Species
		licence
	HRAISE	All consents concluded LSF
	HRA AFoST	All consents concluded no
		AEoSI
	CCW advice:	LSE, no AEoSI either alone or
		in combination

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Water based activities

Boat based activities

Alert layers

Other layers

Conservation Layers

Marine Code

European Marine Site Plans and Projects

Filter

Map confidence (1-5): < 💌 Data confidence (1-5): Five year trend (1-5): < • Useage scale: < 🗸 EMS feature: reefs large shallow inlets and bays Filter estuary sand banks mud and sandflats caves coastal lagoons saltmeadow seals sea lamphrey

0 500 m

V

Plan/Project overview - Fort Road Pembroke Dock shore defence 2008

* 🕺

Applicant:	Pembrokeshire County Council	
Brief description:	Replacement of gabion revetment with rock armour - land adjacent to car park	
<u>Relevant date</u> (s):	July 2008	m
<u>Consents:</u>	Planning consent: FEPA licence; SSSI consent	
HRA LSE:	LSE	
HRA AEoSI:	Not undertaken	1.5
CCW advice:	LSE, SSSI consent conditions issued including clearance of debris on completion.	
<u>Conservation</u> outcomes:	Initial deterioration of site due to debris & compaction by vehicles. Works prevented further deterioration of existing gabions and subsequent effects on the shore. PCC removed debris.	Ŧ

Base Layer

OS mapping OCoast outline

Economic Valuation of Marine Recreation Activity

A project commissioned by Welsh Government's Sustainable Development Fund and Port of Milford Haven

Parc Cenedlaethol Arfordir Penfro Pembrokeshire Coast National Park

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Sources

- Primary : Previous studies & national annual surveys
- Secondary : Business survey

Who

• Both local resident, visiting (day and overnight) and non paying activity participants taken into account

Expenditure

 All types of expenditure associated with the trip, e.g. food, accommodation etc

Assumptions

- The activity being undertaken is the main reason for the participant's trip
- If no exact activity match available then transfer values sourced from more generic or similar activity types e.g. windsurfing uses 'non-motorised watersport'

Expenditure per person per day

	Activity	Average (£)	Lower Bound (£)	Upper Bound (£)	Confidence
W	Beach activities	34	25	43	4
W	Body boarding	23	17	30	3
W	Canoeing/kayaking	27	23	30	4
W	Climbing	21	9	32	2
W	Coasteering	62	45	80	3
E (SE)	Cruiser sailing (£ per person)	38	28	49	2
W	Dingy sailing	41	23	62	1
W	Diving	72	69	93	4
Е	Dog walking	3	2	3	2
W	Horse riding	137	100	175	2
E (SE)	Jet skiing PWC (£ per boat)	153	112	196	1
W	Kite surfing	23	17	30	3
W	Land yachting	23	17	30	3
E (SE)	Power boats (£ per person)	38	28	49	1
W	Power kite flying	23	17	30	3
W	Rowing	23	17	30	3
W	Sea angling	55	44	68	4
W	Snorkelling	23	17	30	2
W	Surfing	23	17	30	3
Е	Swimming	25	23	26	2
W	Walking	23	14	32	3
W	Wildlife boat tours	48	35	62	4
W	Wildlife watching	26	19	31	3
W	Windsurfing	23	17	30	3

or the London 2012 Games

Staged Valuation of Maps

WAM participant numbers

- Daily usage and frequency provided by WAM
- Annual participants calculated

Translation of WAM to a grid and valuation of individual activity cells

- Assign proportion of participant numbers
- Calculate value per year

Combining activity values

• Simple sum of all activities

Sensitivity testing

- Upper and lower bound values
- Uses same principals in calculations

Confidence in combined activity expenditure value

• Weighted by value

Gridding individual activities Original Lay grid Extract Calculate Value per **Total** grid cells portion of expenditure WAM area over person participant per day per year days Valuation of individual activity cell 10125 participant Grid cell area relative 45% 4556 participant windsurfing £23 x 4556 = to whole area? £23 per person days days £104,788 per day £107,788 £23

Combining activity values

Expenditure All Activities: Dale

Confidence in Value Data

Moderate

Author:

1E

Headline Figures

St David's Characteristic Dale Source Population (permanent) 3,700 1,400 (ONS) Jobs 1,240 188 (ONS) Proportion jobs tourism & leisure relative to nat. av. Χ3 X 4 (ONS) Jobs marine recreation services 65 15 Survey Percentage of all jobs 7% 10% Calcs WAM activities 23 14 (WAM) Participant days per year 1.8m 0.2m GIS £7.2/3.5m GIS Annual expenditure / GVA £51.4 / 24.5m Calcs Average expenditure per participant £36 £28 Ann. Min expenditure / GVA £37.2 / 17.8m £5.5/2.6m GIS Ann. Max expenditure / GVA £65.6 / 31.3m £9.4/4.5m GIS Annual revenue / GVA £3.2 / 1.6m £0.8 / 0.4m Survey

Home

For more information visit www.walesactivitymapping.org.uk

Welcome to the website of the **Wales Activity Mapping** (WAM) project, formerly known as the South West Wales Coastal **Recreation Audit**. The project is a study into the type, amount and distribution of activities carried out on the South West Wales Coastline which includes information on relevant infrastructure and management issues. With activity tourism currently growing it is crucial that we begin to take a proactive approach in managing recreation to ensure the long term sustainability of the tourism and recreation industry.

This website provides information on the project, the GIS mapping system, its uses and potential uses. This includes an expansion of the project to map and display beyond recreation and South West Wales. It also has links to a Recreation Plan that uses the

Click on the map above to open the GIS Map