

Incorporating cultural ecosystem services into marine spatial planning:

Identifying and mapping culturally significant sea area

ICES WKCES Report 2013





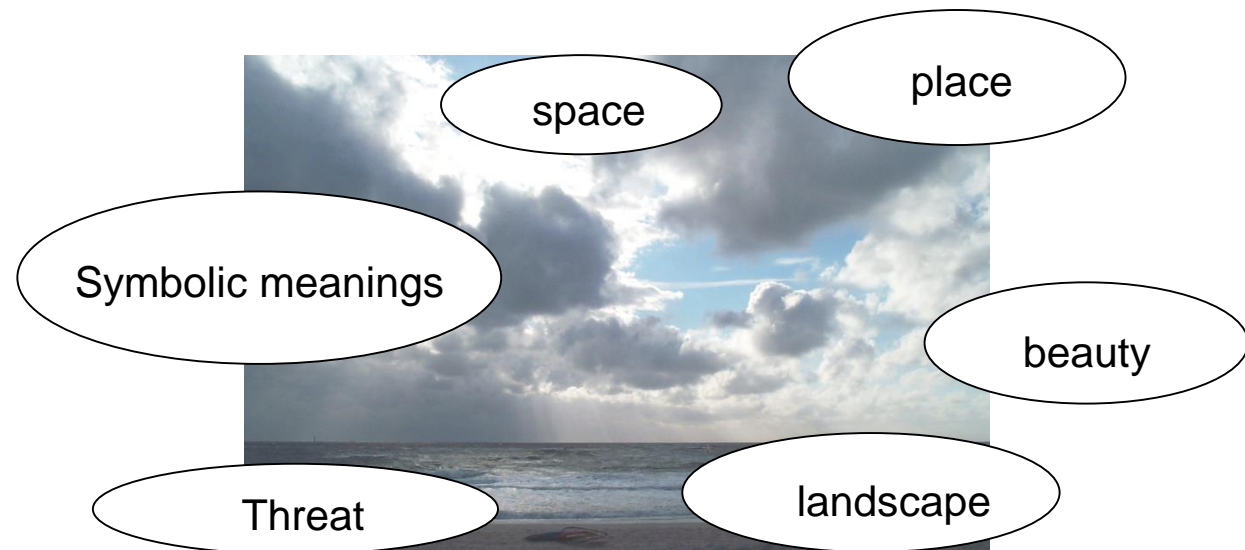
- A dynamic context: A growing range of ecosystem, social, cultural and economic demands placed on the sea by a growing range of stakeholders

Requirements for MSP:

- **Get to know the resource:** What are we dealing with? (ecology, different sea values, goods and services)
- **establish risks** that new uses or cumulative impacts might bring to the resource and to goods and services
- **Set priorities** for MSP/management

Socio-cultural knowledge gap

- The sea as a place of multiple meanings...
- The sea as a personal and social construct...
- ... a setting for generating economic and intangible value...



1. Codifying cultural values for MSP purposes

→ How to describe cultural values? Strengths and limits of concepts such as Cultural Ecosystem Services (CES)

2. Identification of marine places of socio-cultural importance

→ Method?

3. Criteria for rating impacts on cultural places of importance

→ Method?

4. Mapping cultural places of importance

→ Identify techniques capable of delivering cultural values information in the spatial format required by planners.



1. **Values = preference-based values** rather than social norms
→ The sea as a collection of goods and benefits
 2. Cultural values in MSP = **place-based values**
 3. There is **no universal classification** or definition of cultural values.
 4. Cultural Ecosystem Services as one way of framing cultural values
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Cultural ecosystem services

Aesthetics
Beauty of landscape
Sense of place
Cultural heritage
Habitat and species value
Regional image
Inspiration
Informal education
Knowledge systems
Recreation

Millennium Ecosystem
Assessment (2005)

ICES WKCES proposal: The concept of Culturally Significant Areas

“An area containing a culturally significant feature, or a feature in its own right.”

- Significance is based on the **cultural connection of a community** to a given area
 - Culturally significant areas should be **identified in a participative process** using **locally relevant classifications**
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Participative process to establish a baseline of cultural features of importance:

- What is it?
 - Where is it?
 - When is it?
 - To whom is it important?
 - What qualities are needed to sustain it?
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ICES WKCES criteria for determining cultural significance

- Cultural uniqueness
 - Broad cultural/community reliance
 - Importance of the feature to the resilience of the social-ecological system
 - Degree of tradition
 - Dramatic cultural change
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Identifying places of cultural importance

<p>Cultural Uniqueness <i>(Do we have many or few?)</i></p>	<p>Extent to which the feature/place/activity is unique within the region or to which the same or similar features exist in the same region</p>	<ol style="list-style-type: none">1) Each instance of it is irreplaceable and distinct (e.g. burial ground, sacred site, historical or archaeological site);2) It belongs to a culture that is distinct/cultural diversity (unique historical sub-cultures, indigenous cultures in most places);3) It is unique in a global context though abundant locally (e.g., special type of landscape), or unique in a local context though abundant globally (e.g. a city park or recreation area)
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Identifying places of cultural importance



<p>Broad Cultural Reliance</p> <p><i>(How many people or groups rely on it? How many functions does it fulfill?)</i></p>	<p>a) an area, activity or feature which is important to many different communities or to a very large community/large number of people;</p> <p>b) an area or feature which is essential to sustaining many other important activities;</p> <p>c) an area of feature which holds importance for a given group for many different reasons, or supports many aspects of their culture or traditions.</p>	<ol style="list-style-type: none">1) Proportion of the total population using the feature/place,2) Number of human communities using it (e.g. sport anglers and bird watchers),3) Type (e.g. indigenous groups, ethnic minorities) of human communities using it.
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Identifying places of cultural importance



<p>Importance to Resilience (<i>How essential is it to cultural integrity or to the group of users? What would happen if it was lost, changed or degraded?</i>)</p>	<ul style="list-style-type: none">a) impact of losing one service on other services,b) impact of losing one service on user groups (e.g. user group can no longer perform this and / or other activities in the region),c) consequences of loss for the local community / regiond) role in adaptive capacity	<ul style="list-style-type: none">1) Loss of this feature will affect the benefits from many other features (e.g., salmon fishing which has material, activity, recreation, spiritual, heritage/traditional, artistic, ceremonial benefits);2) The feature is essential to the cultural integrity of a community or user group and plays a central role in the groups' identity, function or performance of essential activities (e.g., an important ceremonial site);3) Loss of the feature would have irreversible consequences (e.g. losing a type of fisheries can increase unemployment because no alternatives exist and people move out of the region);4) The feature allows the community to better adapt to changes (e.g., a place people go to recuperate from stress, a prayer site for difficult times, an alternative species that has similar cultural functions to an endangered one)
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Identifying places of cultural importance



<p>Degree of Tradition <i>(How long has the culture valued the feature?)</i></p>	<p>The feature has a long or deep tradition of importance to the culture</p>	<ol style="list-style-type: none">1) The feature has a long history of importance (many generations of a ceremony or activity);2) The feature has a strong commitment from the user group or very high participation rates
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Identifying places of cultural importance



<p>Dramatic Cultural Change</p> <p><i>(Does the unique context of the culture that values the feature give it special importance?)</i></p>	<p>The feature has importance in consideration of agents of change or the historical context of change; loss of essential ecosystem function; invasion or conquest; severe changes on the culture, outside of normal cultural change</p>	<p>Many indigenous groups around the world have been subjected to attempts at cultural extermination. This situation may justify special consideration of features associated with these cultures.</p> <p>Other unique cultures also face extreme pressures from internal and external forces (e.g. collapse of a fishery).</p>
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Risk criteria for rating impacts on cultural places of importance: A scale of five from Extreme to Negligible

Severity	Criteria
Extreme	<p>A permanent or long-term damage to a cultural ecosystem service that would undermine the cultural integrity of the community.</p> <p>The result of which would create long term loss of trust accompanied by a significant unwillingness to cooperate on marine planning issues.</p>
Very High	<p>An impact to a cultural ecosystem service that would require extensive additional management measures to mitigate the consequences to the cultural integrity of the community.</p> <p>The result of which would create significant loss of trust and strong resistance to collaborate. Agreements would not be achievable and negative impacts on other marine planning activities.</p>



Aspects to consider:

- **Location/spatial extent** (area boundaries)
 - **Temporal scale** (area boundaries)
 - **environmental quality** (qualities outside the area that nevertheless determine its significance)
 - **Relevance to particular social groups and risk of resistance and non-cooperation**
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- Some cultural ecosystem services are easier to map than others.
 - The significance of the service is not related to the ease with which a service can be mapped.
 - Temporal change (requiring temporal mapping) - short term variability and seasonality
 - Need to identify and map spatial interdependence between cultural values and the elements of the ecosystem upon which they rely (may be at some distance)
 - Cultural values exist at different scales (societal vs community significance) , requires multi-scale maps .
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Recommendations for data collection

- Include the community of interest, stakeholders and rightholders
 - Ensure community engagement
 - Understand and recognise different value sets
 - The importance of language/a “translator”
 - Take time to prepare and build trust
 - Compensate research participants
 - Take account of indigenous knowledge
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Assessing the Cultural Significance of the Dart Estuary (Devon, UK)



**MARINE &
COASTAL POLICY**
WITH
PLYMOUTH
UNIVERSITY

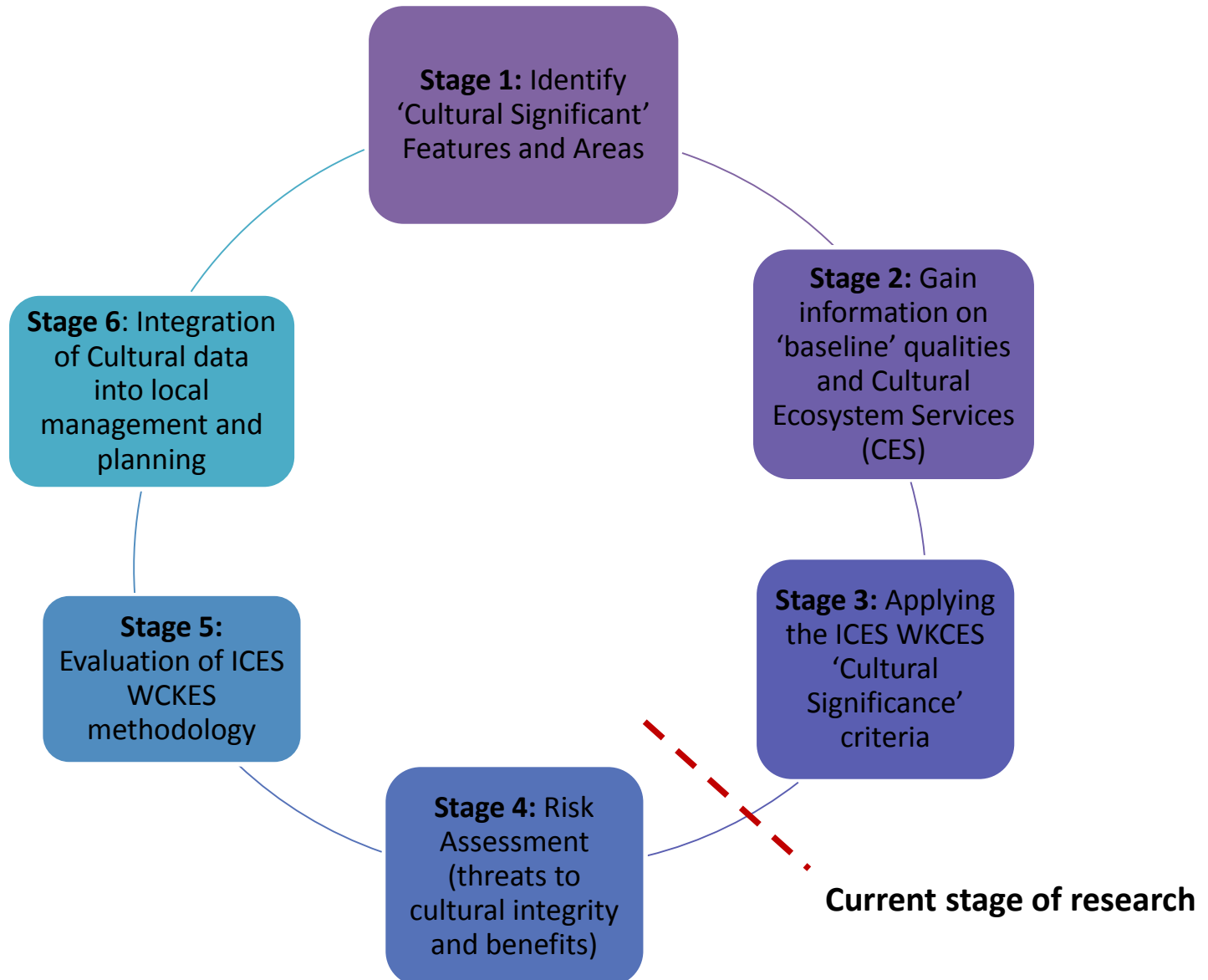


Dart Harbour



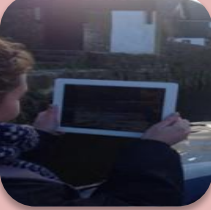
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Research Process:



'Assessing the Cultural Significance of the Dart Estuary (Devon, U.K)'

Cultural Significance Criteria	Historian Meetings 	Semi-structured interviews 	Online Surveys 
(1) Cultural Uniqueness		X	X
(2) Broad Cultural Reliance		X	X
(3) Importance to Resilience		X	X
(4) Degree of Tradition	X	X	X
(5) Dramatic Cultural Change	X		

'Assessing the Cultural Significance of the Dart Estuary (Devon, U.K)'

Applying the ICES WKCES methodology: Initial Lessons Learnt

Semi-structured interviews are useful for assessing:

- Uniqueness
- Broad Cultural Reliance
- Degree of Tradition

However, more challenges in assessing:

- **Importance to Resilience**
 - Difficulty in theming questions to test this criteria.
 - Challenges in creating simple questions that provide scenarios where the area or feature is lost or damaged (knock-on effects).
 - Mixed success in gaining this information from interviews.
 - Especially when area is large or participant only uses the banks of the river (e.g. for scenery/views).
- **Dramatic Cultural Change**
 - Difficulties in assessing this criteria; using local resident information alone.
 - For example require information on the following: fishery collapses, invasions, conquests and shipwrecks.
 - Requires meetings with historians and local experts.



- Cultural values can be included in MSP
- Concept of culturally significant areas analogous to „ecologically significant areas“
- No universal definition of cultural values, dependent on context and scale
- Importance of inclusiveness when determining culturally significant areas and the risks to them
- Broad method, open to adaptation
- Testing is required!