

## **The ICES Approach: A case study from Devon, England.**

### **Summary (150 words)**

There is increasing recognition of the importance of cultural values contained within marine and coastal environments. Despite this, cultural values have rarely been incorporated into Marine Spatial Planning (MSP), Integrated Coastal Zone Management (ICZM). The ICES approach has addressed this and provides the first proposal of how cultural values could be integrated in practice. Current research has applied the theory to its first case study, the Dart Estuary (Devon, England). This presentation expands on the introduction by Kannen et al and will discuss the results of applying the cultural significance criteria to the Dart Estuary. This will include the challenges associated with operationalization and suggested refinements to the criteria. The usefulness of the criteria in supporting MSP and marine governance will be discussed in the context of local management, specifically in relation to the Dart Harbour and Navigation Authority and its 'Forward Vision'.

### **Abstract (600-1200 words)**

Our understanding and recognition of cultural values contained within marine and coastal environments has progressed quickly over recent years (Milcu et al., 2013). Despite this, cultural values have rarely been incorporated explicitly into marine spatial planning (MSP), Integrated Coastal Zone Management (ICZM), or in the designation of Marine Protected Areas (MPAs) (Fletcher et al., 2014). The inclusion of cultural values into marine governance is necessary because such values play a significant role in generating a sense of place and identity for coastal and marine spaces, which underpins many economic activities as well contributing to human-wellbeing and quality of life. Furthermore, just like ecological values, cultural values can be also threatened by changing marine activities, but are largely neglected in vulnerability and risk assessment. Therefore a key question is how MSP can take account of cultural values in risk assessments in a way that is commensurate with ecological or economic values. To examine this question, a workshop entitled 'Mapping Cultural Dimensions of Ecosystem Services' (WKCES) was organised by the ICES Working Group on Marine Planning and Coastal Zone Management (WGMPCZM). The working group developed an approach to identify and map culturally significant areas using a criteria-based method and a linked risk assessment method to integrate the resultant values into MSP (ICES 2013).

In order to test the ICES approach, it has been applied to the Dart Estuary (Devon, England). The 14km estuary is an Area of Outstanding Natural Beauty and is central to the local tourism and marine economy (Fletcher et al, 2012). However challenges likely to impact the Dart Estuary and its management over the next ten years include the impacts of new legislation and imposed governance arrangements, environmental change, and changes to the local economy (particularly tourism and commercial activity) (Fletcher et al., 2012). The Dart Harbour and Navigation Authority are preparing for these changes through the development of a 'Forward Vision'. This is a 10 year action plan for the Dart Estuary which aims to 'manage, protect and enhance the River Dart as a safe and thriving community asset.' The results of the application of the ICES cultural significance criteria will feed into the Dart Forward Vision action plan through the identification of 'Culturally Significant Areas' which, when combined, with risk assessments, will help to guide plans for infrastructure, environment, and community well-being. In this context, Culturally Significant Areas provide cultural services that are critical to the wellbeing and identity of a community.

Evidence to support the application of the ICES cultural significance criteria to the Dart Estuary was obtained through a multi-method approach involving an online survey, semi-structured interviews, and expert meetings with historians. A total of over 700 responses were received.

These methods were used to enable survey participants to identify Culturally Significant Areas. Questions were themed in order to assess for the five criteria of cultural significance, including:

- i. Uniqueness
- ii. Community Reliance
- iii. Importance to social-ecological resilience
- iv. Degree of tradition associated with the feature
- v. Association with dramatic cultural change.

To date, over 300 important areas and features have been identified on the Dart Estuary and they will be assessed for cultural significance using the five criteria. The assessment of Culturally Significant Areas and their dependent ecosystem services will be followed by a risk assessment process. This will help to identify vulnerable ecosystem based on the pressures occurring in the planning area.

The presentation will discuss the results of the application of cultural significance criteria to the Dart Estuary, offer reflections on the challenges of operationalizing the criteria, and suggest refinements to the criteria. The usefulness of the criteria to support MSP and marine governance more broadly will be discussed in the context of local management, specifically in relation to the Dart Forward Vision.

#### **References:**

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