

Name of Method: Valued Ecosystem Components (VECs)

Summary of Method: The method draws on the approach and assessments presented in the online MarLIN database (www.marlin.ac.uk). It was developed to assist in assessing cumulative impacts of offshore industries on nature conservation and seascape. The method concentrated on 3 specific VECs, namely potential feeding habitat for common scoter, spawning habitat for plaice and sole, and visual seascape value, with the intention being to present the specific examples as tests of the methodology. The vulnerabilities of each of the VECs were assessed for each effect, from all current and proposed activities in Liverpool Bay, using the following formula:

$$V_1 = E \times S$$

$$V_2 = V_1 \times R$$

Where

- V_2 = **Vulnerability**
- V_1 = vulnerability (not weighted against recoverability)
- E = Exposure
- S = Sensitivity
- R = Recoverability

Advantages of Method: Production of maps within a given geographic area indicating vulnerability to different effects at different timescales. Enables visual identification of vulnerable areas and where cumulative effects may occur.

Limitations of Method: Results are limited by the availability of ecological data.

References: Oakwood Environmental Ltd, 2002. Development of a Methodology for the Assessment of Cumulative Effects of Marine Activities using Liverpool Bay as a Case Study. CCW Contract Science Report No. 522.