

A public - private managerial system for dunes breached by land-sea structures, Scotland - UK

1. Policy Objective & Theme

- ADAPTATION TO RISK: Preventing and managing natural hazards and technological (human-made) hazards
- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space

2. Key Approaches

- Integration
- Participation

3. Experiences that can be exchanged

The process of reaching effective agreement within a management regime can provide some general guidance for similar developments elsewhere.

4. Overview of the case

An effective, long term management structure involving different stakeholders from the public and the private sector has been overseeing the coastal region where the dune system is breached by North Sea oil and gas pipelines. Not only is the oil and gas supply handled but the management team ensure that the dune systems and their biodiversity are maintained. A similar approach can be appropriate for similar, or other, land-sea structures.

5. Context and Objectives

a) Context

At St Fergus, north eastern Scotland, large diameter gas pipelines cross the dynamic beach and dune systems from the North Sea to reach the terminals from which a series of land pipelines carry the gas (methane) into the National Gas Grid

b) Objectives

To ensure that the system of pipelines bringing oil and gas from the North Sea would not affect the landscape or the ecology of the dune system at landfall.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The managerial structure is based on a Committee with the following membership – Terminal Operators (viz. the gas terminal operators at St. Fergus, ExxonMobil, Shell, Total and the National Grid), the Local Planning Authority and an Independent Scientific Advisor. There is a permanent secretariat and the entire burden of cost, i.e. administration, monitoring and special Projects, is met by the Terminal Operators.

At this mature stage of development, participants have slimmed down from a wider group, e.g. Scottish Natural Heritage, the Scottish Wildlife Trust and a Local Ornithological Group are no longer on the committee and the committee now has a more direct operational focus. It is likely that, after a period of time, all these former 'members' had realised that the project had reached a stage where attention to the conservational interest had been, and would continue to be, guaranteed by the membership of the current committee. This has been helped by the practice of placing all monitoring and related information into the public domain unless there were obvious commercial and/or financial imperatives. The existing Committee is also a single entity, whereas at the outset it had a two-tier structure, i.e. management/budgetary (the Terminal Managers) and a subcommittee for monitoring and ad-hoc scientific advice.

b) ICZM tools

The managerial system anticipated most of the core values of an ICZM approach, i.e. avoidance of conflict, maintenance of landscape and environmental value, co-operation and consultation between developer and local/national interests, and integration from planning through construction and restoration to operational stages. The St Fergus experience also embodies large measures of independent scientific advice.

At present the Committee meets twice each year and has standing agenda items: 1. the annual report (mainly concerned with assessing progress of restoration and the general state of the beach and dune environments), 2. to agree to fund and receive independent monitoring reports in the following four areas – hydrology, vegetation, geomorphological change and ornithology/wildlife, and 3. implications of any new development that might affect the beach and dune system, e.g. a new pipeline landfall. The Committee also plans for the publication of these scientific reports, normally in the form of a symposium at intervals of 5 to 7 years, but academic publications at conferences, etc. are also encouraged. Several other publications describe both the landfalls and associated management practices, e.g. The St. Fergus Environmental Monitoring Baseline Manual was produced in 1990, whilst the St. Fergus Coastal Environment Committee's 25 Years of Caring for the Environment was published in 1997. Popular literature for a wider audience is also produced e.g. Working together for the future of the St. Fergus coastal environment (none currently available).

All monitoring is contracted out on a commercial basis to independent scientific experts, e.g. the recurring vegetation survey approximately every three to four years. The Committee also provides capital for instrumentation and support information, e.g. boreholes, water table measurements, aerial photography and other survey techniques.

7. Cost and resources

No costs are available.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

This committee structure works well because it is a true partnership with a clear, single aim – good practice environmental management. It also fills a gap between statutory monitoring and compliance and wider, non-governmental bodies and individuals. It derives its success from independence and good peer-reviewed science – plus open public communication. Increasingly, the value of its long existence has been recognised so that trends in environmental changes can be distinguished from the usual, short-term events and variances.

To date, the maintenance of the quality of the beach and dune environment in an area that can provide up to 50% of the entire natural gas supply to mainland Britain has been commended and well-received, e.g. as a recent BBC case study of environmental management. There have been no local or public enquiries as a consequence of seeking planning permission for pipeline landfalls at St Fergus. Further, many groups have visited St Fergus to use it as a model of an effective, mature and harmonious system of managing major localised impacts on a dynamic, open coast beach and dune system with considerable, but not exceptional, landscape and conservational value and importance.

9. Success and Fail factors

One of the key success factors has been the cooperation between the public and the private bodies involved in the collaborative process. Another has been the willingness of the private sector to take full responsibility for much of the costs

involved. In many instances, this conscientiousness has gone beyond the limits of the management structure e.g. organising international symposia of relevance to the coastal area. This has further contributed to the trust element explicit in such a working relationship.

10. Unforeseen outcomes

None so far.

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13. Sources

- A managerial system for coastal dunes breached by oil and gas pipeline landfalls (2006) Ritchie W. available by download from
- www.databases.eucc-d.de/files/