



Aim

To understand the opportunities to enable nature-based solutions (NBS) through the marine licensing service and consider the extent to which the licensing of NBS the licensing service could be evaluated.

Introduction and methodology

This study explores how Nature-Based Solutions (NBS) can be better integrated into England's marine licensing system. **NBS are increasingly recognised for their role in climate adaptation and ecosystem restoration, yet uptake in marine environments lags behind terrestrial applications.** The study acknowledges that NBS are defined differently by various organisations. For consistency, Defra's definition is adopted: marine NBS are actions using marine features to protect, enhance, or restore biodiversity, deliver climate mitigation/adaptation, and realise benefits for people and nature.

The "evaluability" of the marine licensing system was assessed – whether it can be assessed and adapted to enable and scale up NBS. It focuses on MMO's strategic goals: restoring marine ecosystems (Goal 1) and managing a responsive marine planning framework (Goal 2).

The methodology was divided into two phases. Phase 1 involved interviews with MMO staff and a literature review to inform a systems map and gap analysis identifying where NBS could be integrated. Phase 2 developed an evaluation plan with tailored questions, indicators, and a stakeholder engagement strategy. The study was supported by an MMO Steering Group and is intended to inform future licensing practice and service transformation initiatives, including the Marine Planning and Licensing Programme (MPLP).

Results

The systems map defines 5 stages within the licensing service including: pre-application; application; assessment and consultation; determination; and post-determination. Drawing on this map, 12 gaps and associated opportunities where the licensing service could facilitate inclusion of NBS, were identified. Of the 12 opportunities:

- **Six** relate to the regulatory regime and application process
- **Three** link to guidance and training
- **Two** focus on evidence generation and use
- **One** concerns policy implementation.

The evaluation plan developed in Phase 2 includes seven evaluation questions, with four for MMO Goal 1 (restoration/recovery of marine ecosystems) and 3 for Goal 2 (marine planning framework). Each question is supported by sub-questions, indicators, and data sources in an evaluation matrix. A separate data collection plan includes the proposed collection approach as well when data will be needed (e.g. at the start of the evaluation). The engagement plan identifies six types of stakeholder who should be involved (e.g. applicants, local stakeholders), along with a sampling strategy.



Conclusions and recommendations

The study confirms that MMO's marine licensing service has significant potential to enable NBS, supporting ecosystem recovery and delivering wider environmental benefits. The twelve opportunities identified include practical measures such as introducing exemptions for low-risk NBS projects, embedding NBS prompts in application forms, and strengthening internal capacity through training and dedicated roles.

Barriers to implementing NBS remain, however. Legislative constraints, procedural complexity, and resource limitations could hinder implementation. Many opportunities require alignment with ongoing initiatives such as the MPLP and the ReMeMaRe Marine Licence Application Review, as well as collaboration with Defra and statutory advisors. The dynamic nature of NBS also demands adaptive approaches and tolerance for uncertainty, which may challenge current regulatory norms.

The study recommends the following next steps:

- Implement the evaluation plan developed in Phase 2 to
- Start with a stocktake of related initiatives (e.g., MPLP, ReMeMaRe) to avoid duplication and ensure alignment
- Engage stakeholders early, including applicants, technical advisors, and local authorities, to ensure recommendations are practical and widely supported.
- Strengthen internal capacity
- Improve data collection and tracking
- Embed NBS in licensing processes

Together, these steps provide a clear, phased route to embedding NBS within marine licensing and advancing MMO2030 goals. They will help reduce barriers, improve consistency, and create a more enabling environment for projects that deliver biodiversity and climate benefits.

MMO comments

The gap analysis within Phase 1 identified several opportunities where NBS could potentially be facilitated through the licensing service. Limitations and barriers will need to be worked through before opportunities can be realised, however. Implementation of the evaluation plan from Phase 2 could provide additional insight that could further inform the evolution of the licensing service, alongside the MPLP. Whilst this study included interviews with MMO staff, the evaluation would benefit from engagement with the full range of stakeholders involved in the licensing service beyond those interviewed for this report.

The MMO plans to ensure recommendations are implemented as far as possible through the MPLP.

Further information

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