

RECAP FROM JUDITH OAKLEY

- Biodiversity is a material planning consideration.
- Planning applications have to be accompanied by sufficient information to assess the ecological effect of the proposed development.
- The presence of protected species, habitats or designated sites on or in the vicinity of the application site is unlikely to prevent development as long as adequate measures are in place to prevent adverse effects on them.
- It is the responsibility of the applicant to check land/ buildings for the presence of protected species and their habitat and to take them into account at the design stage of a development and before planning permission is sought

RECAP

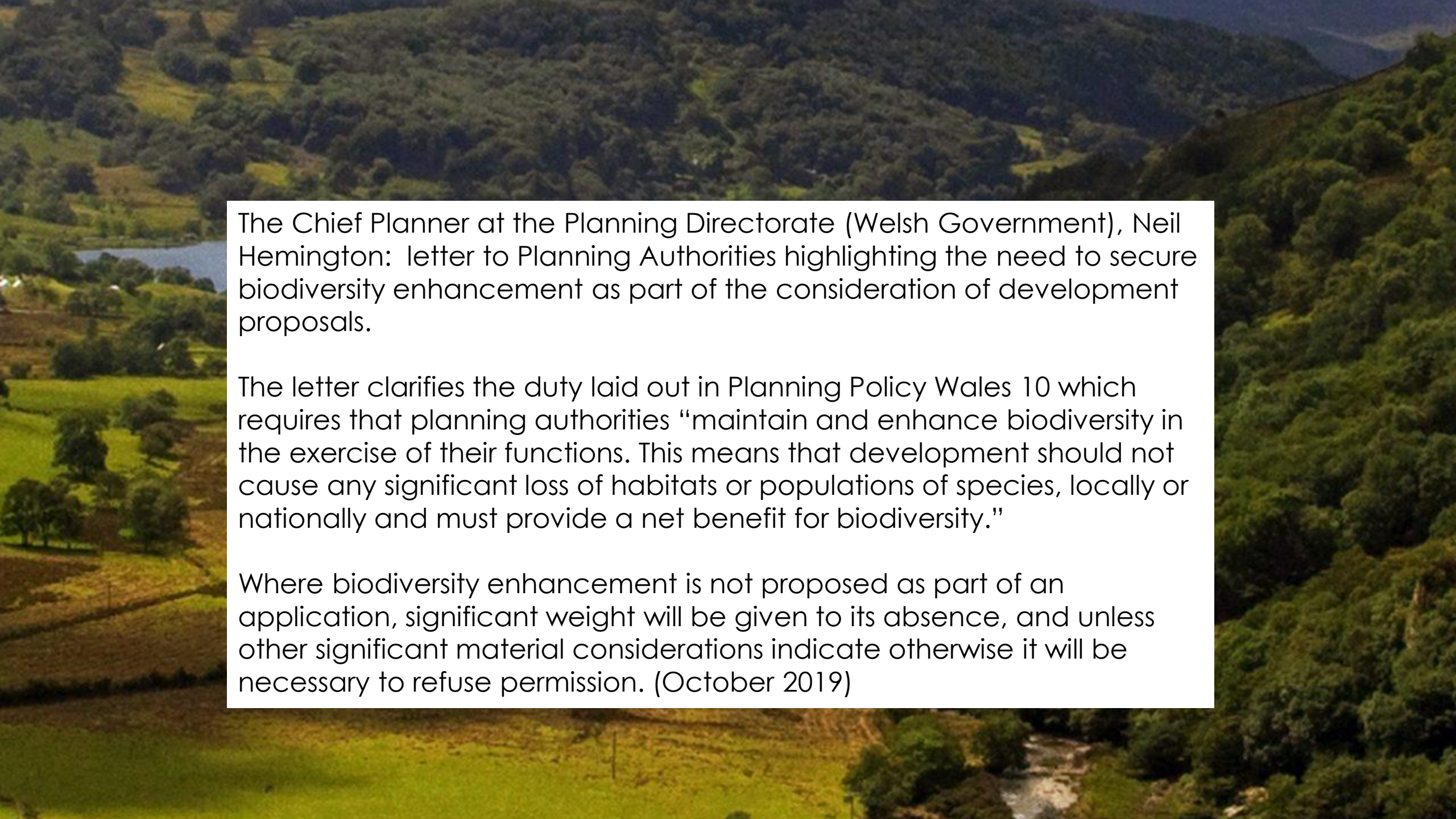
- Applicants are obliged to provide all required information to allow the local planning authority to assess the impact of the proposed development on biodiversity.
- Planning applications may be delayed in registration ('validation') due to missing ecological surveys or assessment works.
- Ecological surveys and assessments must be carried out by an independently trained ecologist. (CIEEM - Chartered Institute of Ecology and Environmental Management)
- The submitted documents should not only present results but clearly show how the development proposal was informed by the outcomes and recommendations of ecological reports.



RECAP

- Should protected species be affected by the development proposal there may be a need for protected species licence prior to commencement of development.
- The licensing body is Natural Resources Wales.
- “**Enhancement**” not just “no net loss” through mitigation or compensation





The Chief Planner at the Planning Directorate (Welsh Government), Neil Hemington: letter to Planning Authorities highlighting the need to secure biodiversity enhancement as part of the consideration of development proposals.

The letter clarifies the duty laid out in Planning Policy Wales 10 which requires that planning authorities “maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity.”

Where biodiversity enhancement is not proposed as part of an application, significant weight will be given to its absence, and unless other significant material considerations indicate otherwise it will be necessary to refuse permission. (October 2019)

STRATEGIC ENVIRONMENTAL ASSESSMENT

- Strategic environmental assessment (SEA) is a systematic decision support process, ensuring that environmental and possibly other sustainability aspects are considered effectively in policy, plan and programme making.
- Tiered decision making framework
- Evidence based



STRATEGIC ENVIRONMENTAL ASSESSMENT

- Strategic environmental assessment (SEA) is a tool used internationally to improve the environmental performance of plans – lead to sustainable development
- Predicts and evaluates environmental impacts of plans
- Considers their alternatives at an early stage in their preparation.
- Identifies improvements to plans through the involvement of environmental experts and the participation of the public.

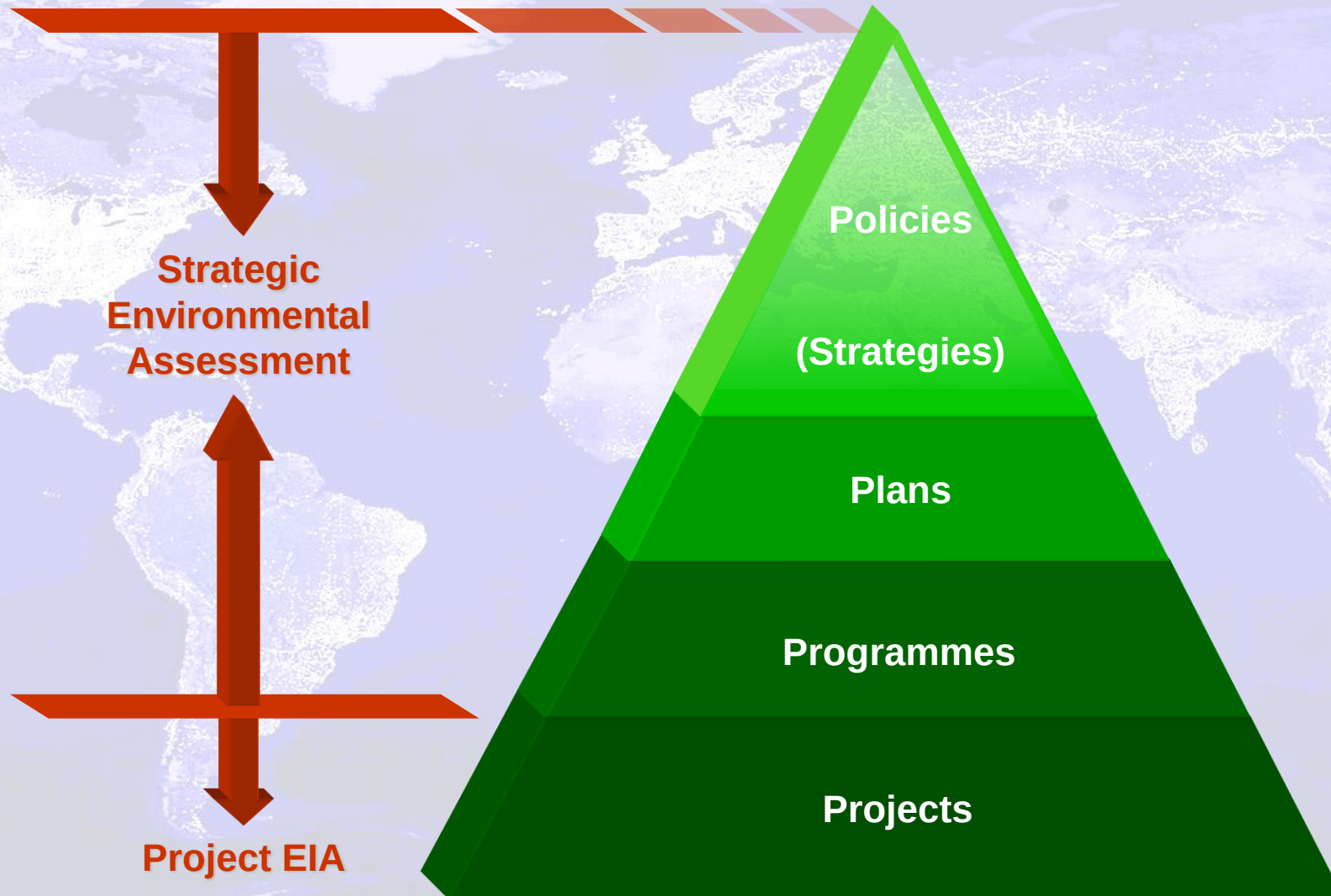


STRATEGIC ENVIRONMENTAL ASSESSMENT

- The European Union Directive on Environmental Impact Assessments (85/337/EEC) – project based
- Local effects
- Many environmentally-damaging decisions are made at a strategic level.
- SEA originated from regional development / land use planning
- In Europe the Convention on Environmental Impact Assessment in a Transboundary Context the (Espoo Convention) laid the foundations for the introduction of SEA in 1991.
- In 2003, the Espoo Convention was supplemented by a Protocol on Strategic Environmental Assessment.
- The European SEA Directive 2001/42/EC required that all member states of the European Union should have ratified the Directive into their own country's law by 21 July 2004.



Hierarchy of Proposal and Assessment



SEA AND BIODIVERSITY

- Help ensure biodiversity objectives are built into plans.
- Closer department working – Planning Dpt
- Identify and evaluate alternatives to proposals that may be better for biodiversity
- Present recommendations to avoid and reduce identified impacts and safe guard biodiversity.

(RSPB, 2004)



SEA and biodiversity

SEA is intended to help achieve a high level of environmental protection.

1. **The precautionary principle** implies favouring biodiversity protection where certainty of impact is lacking. Or, where adverse impacts are identified, but not enough data to confirm 'no significant impact'.
2. **The 'no net loss' principle** requires the status quo to be maintained in terms of quantitative and qualitative aspects of biodiversity (how much is there, how it is structured and distributed).





SEA and biodiversity

Designated sites are important at a number of stages in the SEA process, including **screening** (determining the need for SEA), **scoping** (agreeing the scope of the study), **developing and selecting alternatives** and designing **mitigation**. Plan alternatives that are likely to damage a designated site should not be selected, or should be selected only for reasons of **overriding public interest** if effective, proven **mitigation** or **compensation** is possible. Mitigation proposals for unavoidable impacts on designated sites must ensure that the integrity of these sites and the viability of their habitats and species populations is maintained or restored.

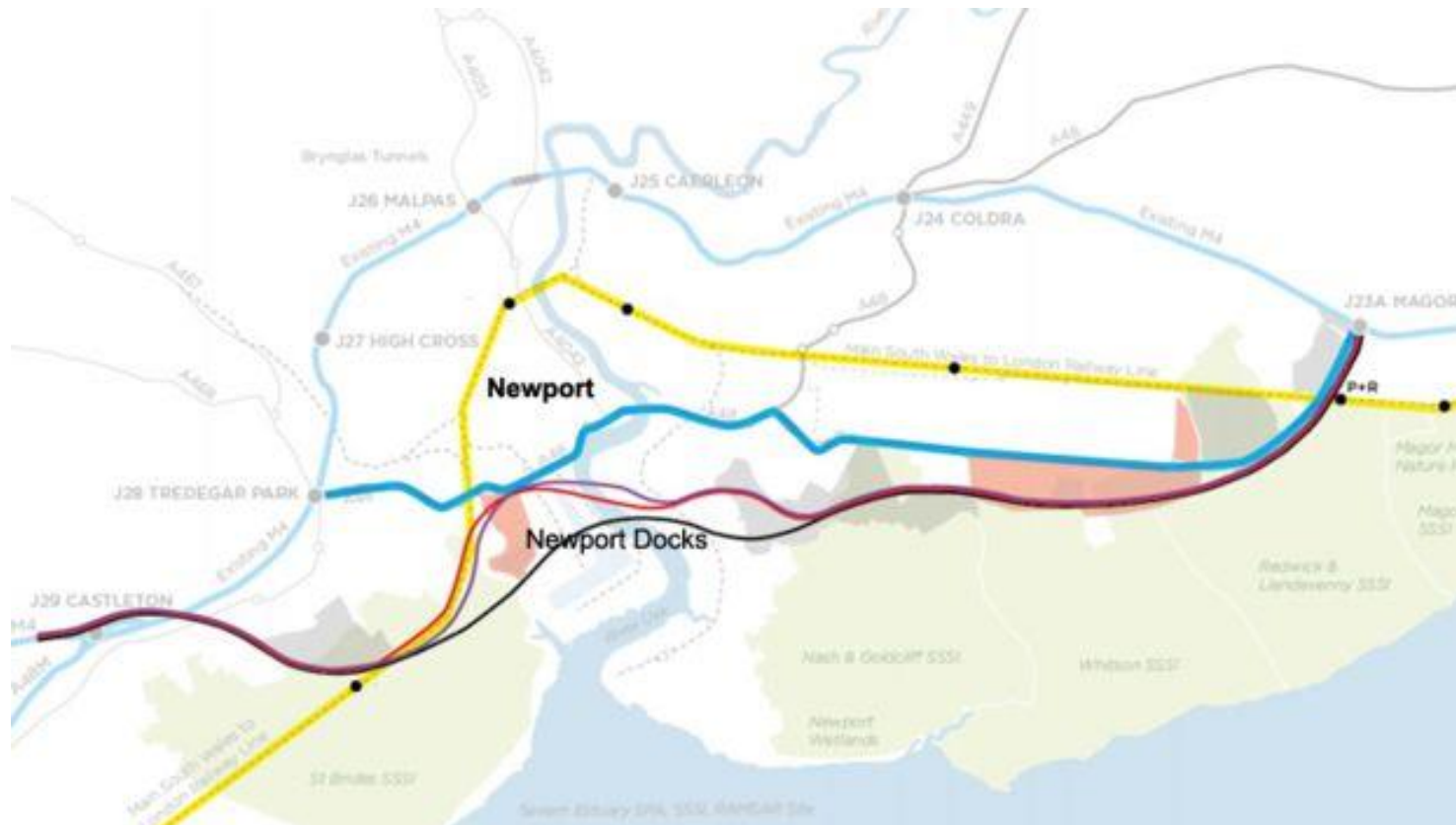
NEWPORT GWENT LEVELS vs M4 RELIEF ROAD

If the proposed M4 extension goes ahead, it will fatally undermine the Welsh Government's commitment to sustainable development (Wildlife Trust 2017)

Discuss.....



M4 RELIEF ROAD OPTIONS



— Railway

— Black
Route
through
Gwent
Levels

NEWPORT GWENT LEVELS VS M4 RELIEF ROAD

- SSSI
- One of the largest remaining areas of ancient grazing marsh and drainage ditches (reens)
- Otters *Lutra lutra* and water voles *Arvicola amphibious*
- Breeding waders – lapwing *Vanellus vanellus*, snipe *Gallinago gallinago*, curlew *Numenius arquata*
- 144 National Notable or Red Data book invertebrate species
- Nationally scarce rootless duckweed *Wolffia arrhiza*



NEWPORT GWENT LEVELS VS M4 RELIEF ROAD

- Proposed route cuts through:
 - Redwick & Llandevenny
 - Whitson
 - Nash & Goldcliff
 - St Brides
- It would cross:
 - River Usk Special Area of Conservation (SAC)
- It would pass close to:
 - Magor Marsh SSSI
 - Newport Wetlands SSSI and National Nature Reserve



WELSH GOVERNMENT JUSTIFICATION

- Improved network links
- Reduction in congestion – economic benefits
- Reduce travel time for local commuters. Mitigation and economic benefits outweigh environmental impact
- Traffic on M4 and around Newport peaked in 2004
- Cheaper and less damaging options (investment in sustainable transport provision for eg)
- Cost – estimate £1.4 billion – burden on public expenditure in Wales



THE WELL-BEING OF FUTURE GENERATION ACT"

The Welsh Government said it accepted during construction and operation of the new road there would be "a large or very large adverse effect on the landscape character of the Levels".

But it added: "That effect has to be weighed against the significant social, economic and other environmental benefits that the scheme would bring to Newport, the wider Cardiff region and Wales as a whole."

WELL-BEING GOALS

- More prosperous
- More resilient
- Healthier
- More equal
- Cohesive communities
- Vibrant culture and thriving Welsh language
- Globally responsible



MITIGATION VS COMPENSATION

- The developer - funding is set aside specifically to address any necessary alteration to mitigation measures,
- conditional of any permission granted and will be enforceable through normal planning enforcement procedures.
- Where European protected species are present - obtain development licences for the relevant species



MITIGATION VS COMPENSATION

- impossible either to avoid adverse impact on the ecology of the site, or to mitigate to reduce the adverse impact.
- Last resort after all on-site options have been investigated
- Like-for-like habitat
- Site must be appropriate for the species and habitats they are intended to support
- Long-term commitment



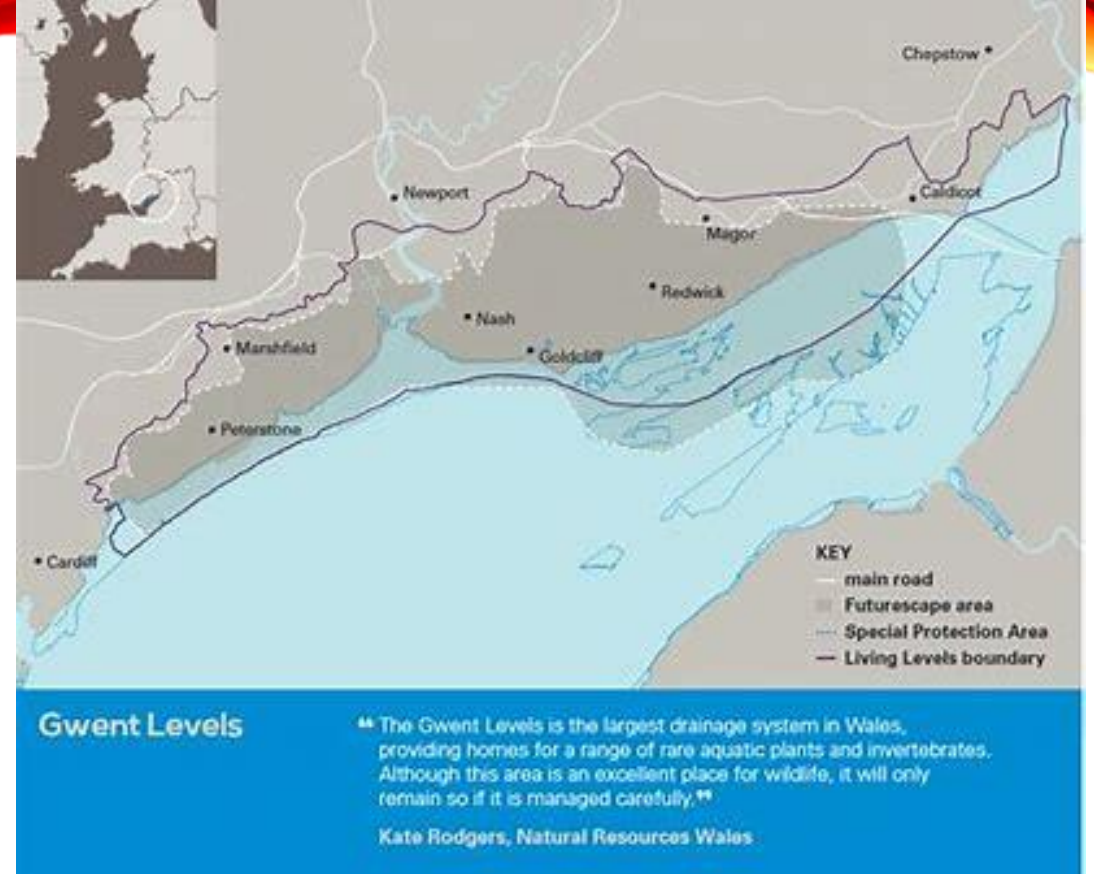
Mitigation and Compensation – suggested definitions relevant to sites designated under the Habitats and Birds Directives

Mitigation: normally involves measures that reduce and/or minimise impacts within the site boundary such as: changes to timing, engineering design, use of different piling techniques, sediment by-passing to avoid sediment loss or reductions to the extent of a project. However, there will be circumstances where there are impacts that affect mobile species and functionally linked habitats, which may involve measures to address these impacts beyond the boundaries of designated sites.

Compensation: involves measures, such as new habitat creation, taken beyond the site boundary that offset the residual impacts that have a detrimental impact upon the conservation objectives for a protected site. Compensation is a last resort and should only be considered where there are residual adverse effects on site integrity that the competent authority agrees cannot be mitigated.



Under the deal with the EU, compensation for the loss of the mudflats meant creating a new wildlife habitat by flooding 1,000 acres of farmland, 15 miles further along the coast in the Gwent Levels, with sewage water.



At the time, FoE Director Tony Juniper said: "They are destroying a saline mudflat and creating a freshwater marsh. "It's like knocking down the Tower of Pisa and building a cinema and calling it compensation."

EIA vs SEA

- An SEA is conducted before a corresponding EIA is undertaken.
- Information on the environmental impact of a plan can cascade down through the tiers of decision making and can be used in an EIA at a later stage.
- Reduce the amount of work that needs to be undertaken.
- SEAs help in the preparation of an EIA but do not remove the need for one



PROCESS OF SEA

The structure of SEA (under the Directive) is based on the following phases:

1. "**Screening**", investigation of whether the plan or programme falls under the SEA legislation
2. "**Scoping**", defining the boundaries of investigation, assessment and assumptions required,
3. "**Documentation of the state of the environment**", effectively a baseline on which to base judgments,
4. "**Determination of the likely environmental impacts**", - Direction of Change rather than firm figures
5. **Public consultation**
6. **Influencing "Decision taking"** based on the assessment
7. **Monitoring** of the effects of plans and programmes after their implementation.

MANDATORY REQUIREMENTS

Article 3(2) makes SEA mandatory for plans and programmes:

- a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent for projects listed in Annexes I and II to the Environmental Impact Assessment (EIA) Directive (85/337/EEC); or
- b) which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive (92/43/EEC).



PROJECTS SUBJECT TO SEA

Land use and spatial planning

The Directive applies to plans and programmes in the following categories:

- Structure Plans
- Local Plans
- Unitary Development Plans
- The Wales Spatial Plan
- Waste Local Plans

Other regional and local authority plans and programmes

- Local Air Quality Action Plans
- Local Housing Strategies
- Local Transport Plans
- Municipal Waste Management Strategies
- Regional Economic Strategies
(prepared by Regional Development Agencies)



PROJECTS SUBJECT TO SEA

Environmental protection and management

- Areas of Outstanding Natural Beauty Management Plans
- National Park Management Plans
- National policy statements on planning for waste management
- Salmon Action Plans

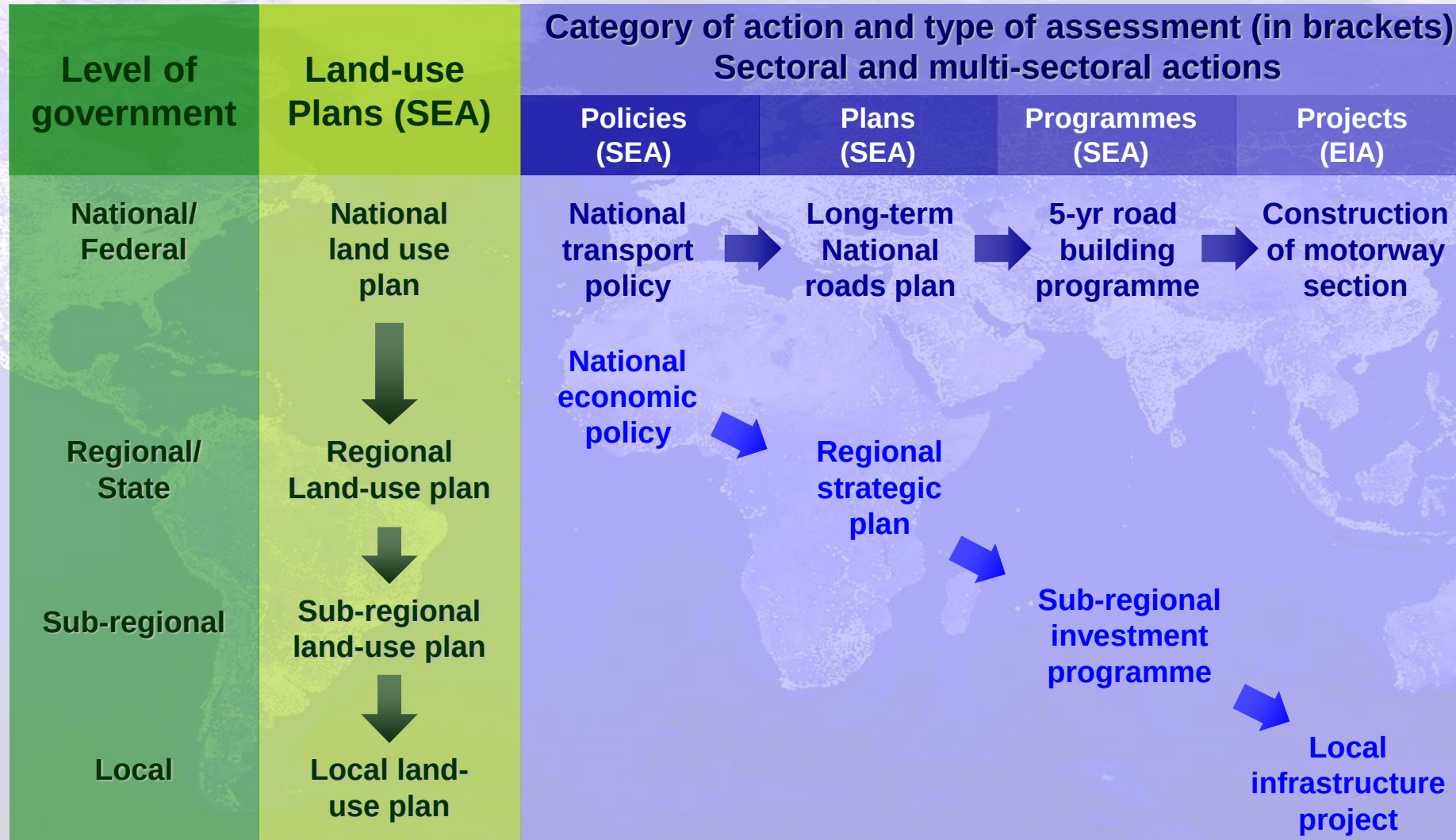
Other plans and programmes

- Oil and Gas Licensing Rounds
- Offshore Windfarm Site Licensing Rounds
- Nuclear Decommissioning Strategies

Taken from : A Practical Guide to Strategic Environmental Assessment (UK Government, 2005)



Tiering of Policy, Plan, Programme and Project Environmental Assessment



Source: Adapted from Lee and Wood (1978)



DIFFERENCES BETWEEN SEA AND EIA

	EIA	SEA
Which type of development	Projects listed in Annex I. Annex II projects determined by a case by case basis (Schedule 1 and 2)	Any Plan or Programme (a) for certain sectors which set the framework for future development consent, or (b) Require Article 6. HD assessment
What impacts need to be assessed?	Significant effects on Biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives	Likely significant effects on the environment, including on issues such as biodiversity and interrelationships

DIFFERENCES BETWEEN SEA AND EIA

	EIA	SEA
Who carries out the assessment?	The developer provides necessary information to be taken into account by the competent authority. Biodiversity should be taken into account in the screening process (Annex II.a, EIA amendment Directive)	Competent authority for planning
How binding are the outcomes?	The result of consultations and information must be taken into consideration in the development consent procedure	The environmental report & opinions expressed shall be taken into account during the preparation of the plan/programme

Best practice examples of SEA

Humber flood risk management –
Environment Agency:

Appraisal - Key issue addressed by
the SEA at strategy level.

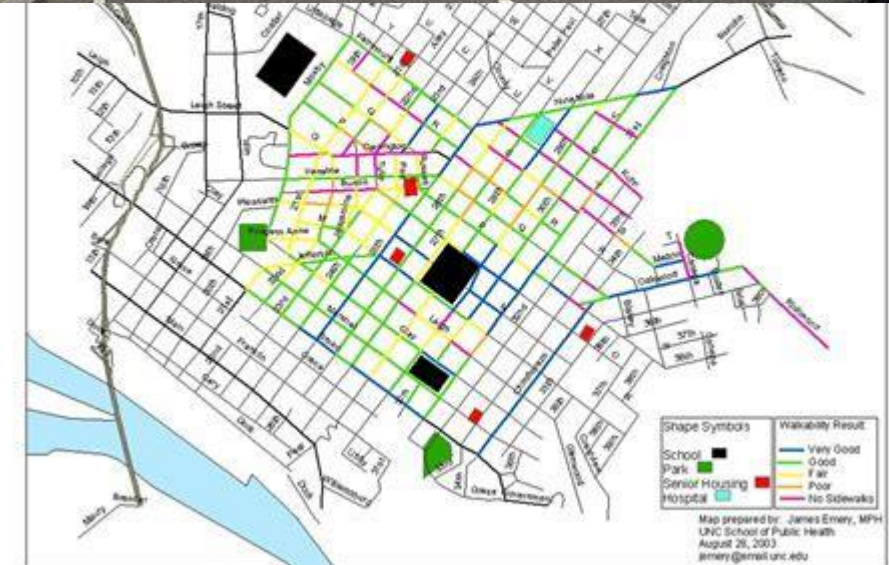
- Protection of people, property and infrastructure.
- Protection and enhancement of a European site.
- Port and navigation activities (geomorphology).

Aspirational Issues - identified as
'non-strategic' but still important.

- Risks of unknown archaeology and contamination.
- Detail of protected species.
- Local landowner concerns and aspirations.

Best practice examples of SEA

- To prepare for the SA/SEA of the Royal Borough of Kensington and Chelsea's Local Development Framework, Scott Wilson Consultancy
- Use of GIS - spatial collection of baseline data for the Scoping report
- public transport accessibility levels, indices of deprivation, census data, air pollution models, listed buildings, strategic views, locations of GP surgeries and bus stops.



Recommendations for a successful SEA process (RSPB, 2008)

Preparation - ensure the assessment process gives a high level of protection to the environment and contributes to sustainable development:

- Start SEA at the earliest stage of plan making
- Select a team that collectively has knowledge of SEA techniques, the plan sector and geographical area

Undertaking the Assessment

- Arrange regular contact between the SEA and plan making teams
- Consult with interested parties during the scoping stage of SEA
- Involve professionals with relevant expertise
- Evaluate the proposed alternatives
- Where conflicts are identified - recommend how these conflicts can be avoided or resolved.

Using the results to inform the plan

- Concise environmental report produced
- Present specific recommendations for improving the plan and indicate how they can be implemented.
- Establish that the SEA process and report have been carried out to a good standard. the Institute for Environmental Management and Assessment offers a review service.
- In producing the post-adoption statement accompanying the adopted plan, document and justify in full how environmental issues and consultee opinions were taken into account to finalise the plan.

SEA AND THE HABITATS DIRECTIVE

- The Department for Business, Energy & Industrial Strategy (BEIS) have undertaken a series of Strategic Environmental Assessments (SEA) relating to plans for offshore energy licensing/leasing since 1999. The most recent Offshore Energy SEA3 (OESEA3) was completed in July 2016 and covered oil and gas, offshore wind, other marine renewables (wave and tidal technologies), hydrocarbon gas import and storage, and carbon dioxide transport and storage.



RECOMMENDATIONS

“The offshore wind and marine renewable industry remains relatively young, with appreciable technological development expected A firm base of information is required to inform risk assessments and adaptive management, and consequently in respect of ecological receptors a precautionary approach to facility siting in areas known to be of key importance to bird and marine mammal populations is recommended unless evidence indicates that impacts can be appropriately mitigated”.



RECOMMENDATIONS

“Efforts are underway to identify offshore Marine Conservation Zones/Marine Protected Areas under the Marine Strategy Framework Directive, OSPAR and the Marine and Coastal Access Act (2009). Where marine renewable energy and other large footprint developments are proposed that do not conflict with the conservation objectives of an MCZ, opportunities for co-location should be explored which could mitigate potential spatial conflicts with existing users. ”.



RECOMMENDATIONS

As part of the Natura 2000 and linked initiatives, further offshore SACs, SPAs, MCZs and MPAs (and extensions to them) are being identified. Such sites are not intended or treated as strict no-go areas for other activities, but competent authorities have a responsibility to secure compliance with the requirements of the Habitats and the Wild Birds Directives.



RECOMMENDATIONS

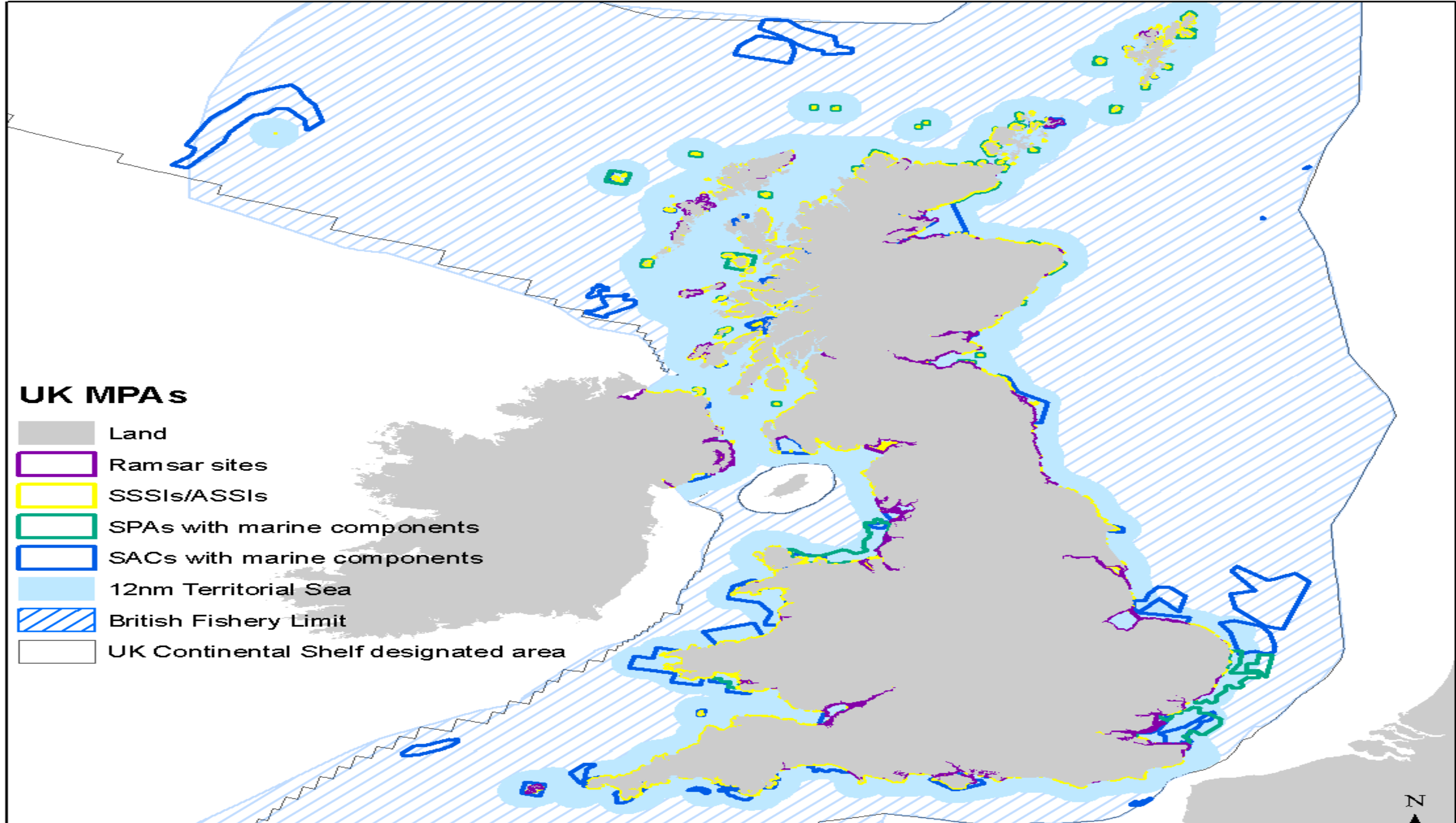
“For areas which contain habitats/species listed in the Habitats Directive Annexes, developers should be made aware that a precautionary approach will be taken and some areas may either not be leased/licensed until adequate information is available, or be subject to strict controls on potential activities in the field.”.



All of the above are done via the Habitats Regulations Assessment and EIA process



- **The Marine and Coastal Access Act 2009 enables the designation and protection of Marine Conservation Zones (MCZs). These are a type of marine protected area, which will exist alongside European marine sites (Special Areas of Conservation (SACs) and Special Protected Areas (SPAs)), SSSIs and Ramsar sites to form an ecologically coherent network of marine protected areas.**



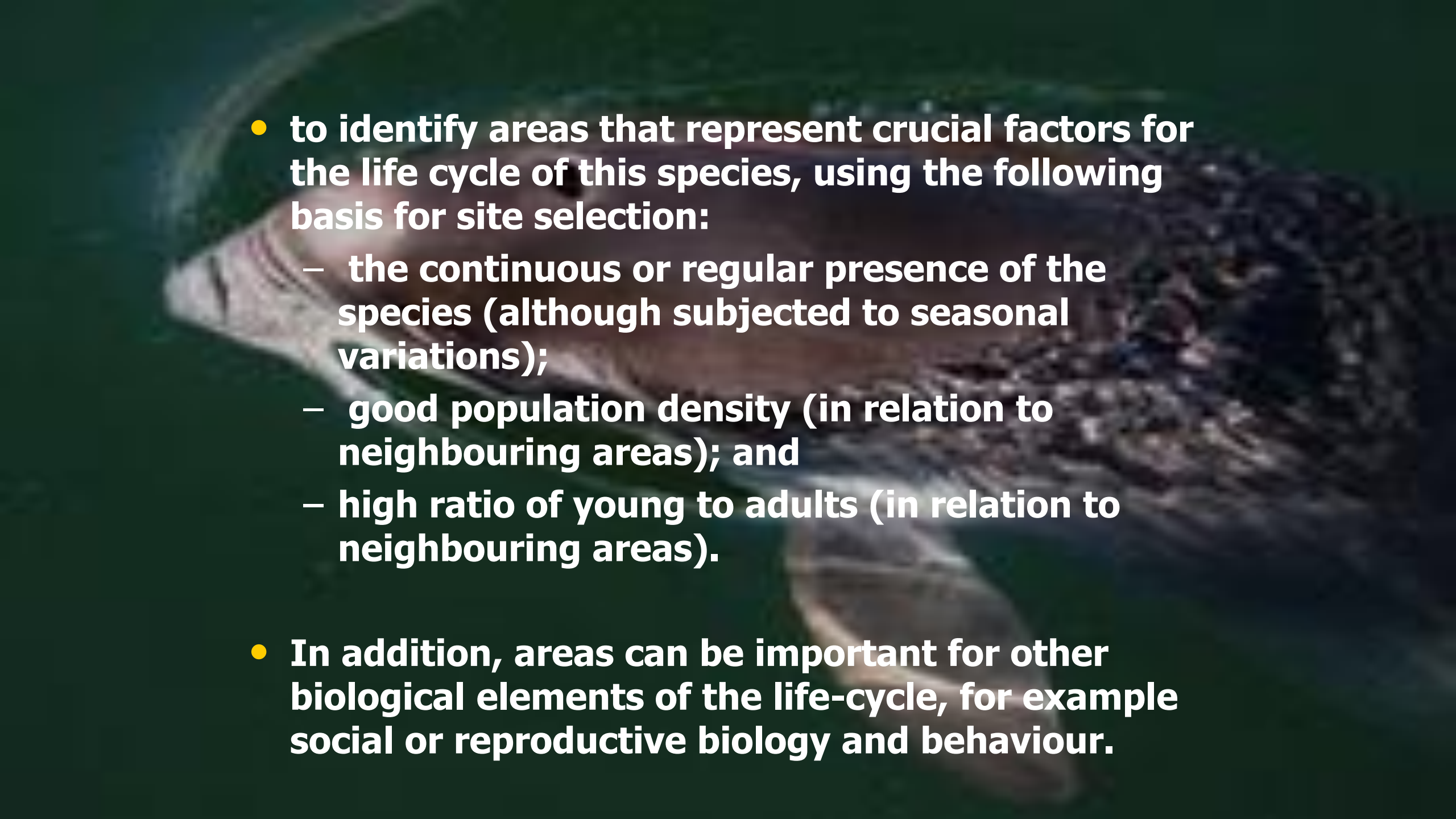


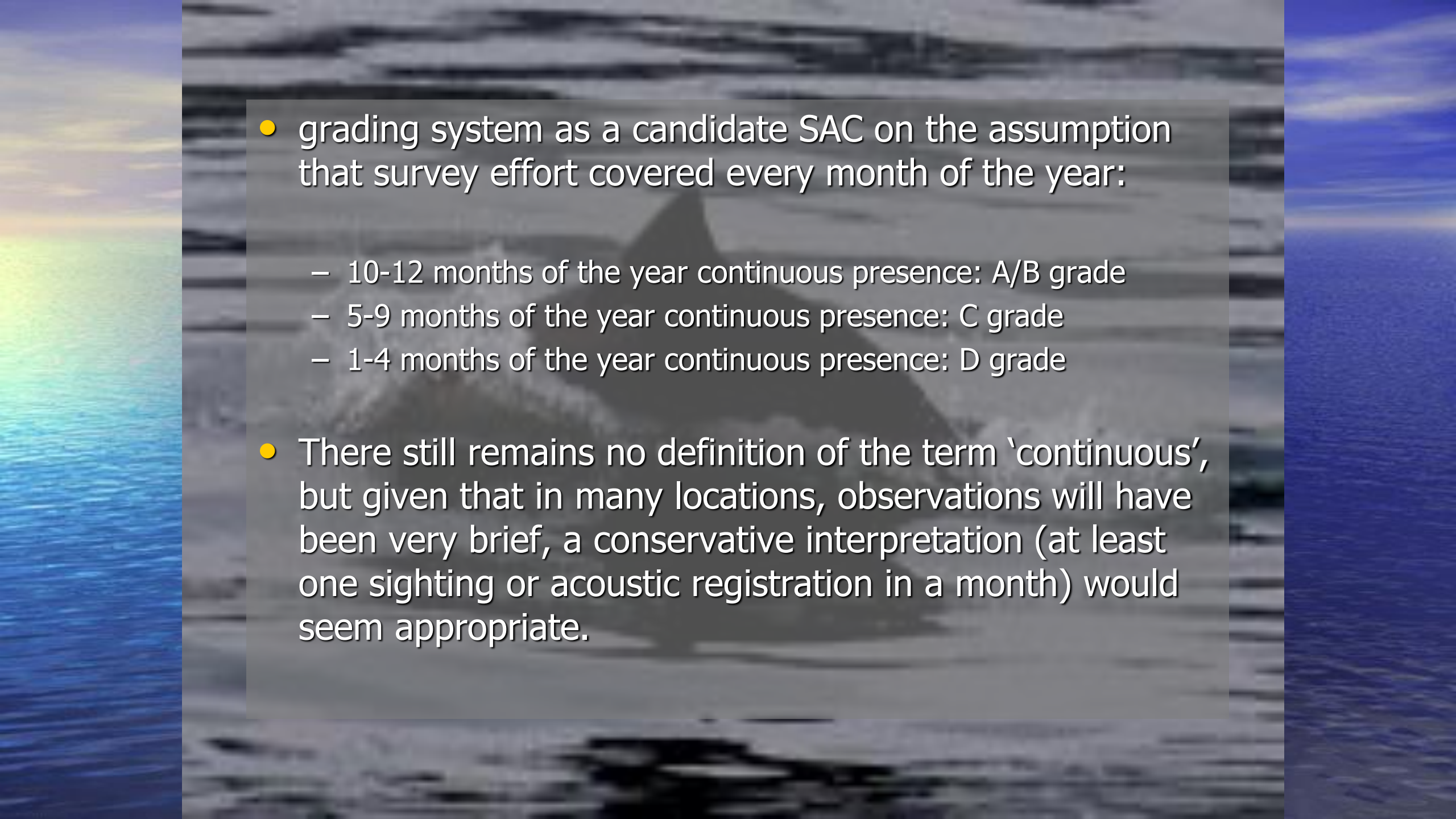
- Under the Habitats Directive 92/43/EEC all cetacean species are listed for protection, and member states are obliged to **identify and designate SACs** for both the BND and harbour porpoise. It is widely recognised that UK seas form an important stronghold for harbour porpoise in north-western Europe, and although site protection measures are more complicated to apply to mobile species, there is good evidence of particular sites being used persistently by this species in UK seas
- UK has been slow to submit any potential sites for the harbour porpoise

Just an aside.....



- European Commission announced infringement action against the UK Government for failing to identify sites to protect harbour porpoise
- Sites include the Outer Bristol Channel for example
- Case of the Atlantic Array – “harbour porpoise, common dolphin and grey seals are present all year round” (Environmental Statement from RWE, 2013)
- Government has had 27 years to protect harbour porpoise under the Habitats Directive by designation Special Areas of Conservation
- According to Defra, the Government want wind farms and want to abide by EU legislation..... irony?

- 
- A large shark, possibly a tiger shark, is seen swimming in the water. The shark's head and upper body are visible, with its distinctive dark stripes on a lighter background. The water is dark and slightly murky, with some ripples visible. The shark is moving towards the left of the frame.
- **to identify areas that represent crucial factors for the life cycle of this species, using the following basis for site selection:**
 - **the continuous or regular presence of the species (although subjected to seasonal variations);**
 - **good population density (in relation to neighbouring areas); and**
 - **high ratio of young to adults (in relation to neighbouring areas).**
 - **In addition, areas can be important for other biological elements of the life-cycle, for example social or reproductive biology and behaviour.**

- 
- A large whale breaching the ocean surface, creating a massive splash. The whale's head and back are visible above the water, and a large plume of water is being thrown into the air. The background is a deep blue ocean under a clear sky.
- grading system as a candidate SAC on the assumption that survey effort covered every month of the year:
 - 10-12 months of the year continuous presence: A/B grade
 - 5-9 months of the year continuous presence: C grade
 - 1-4 months of the year continuous presence: D grade
 - There still remains no definition of the term 'continuous', but given that in many locations, observations will have been very brief, a conservative interpretation (at least one sighting or acoustic registration in a month) would seem appropriate.

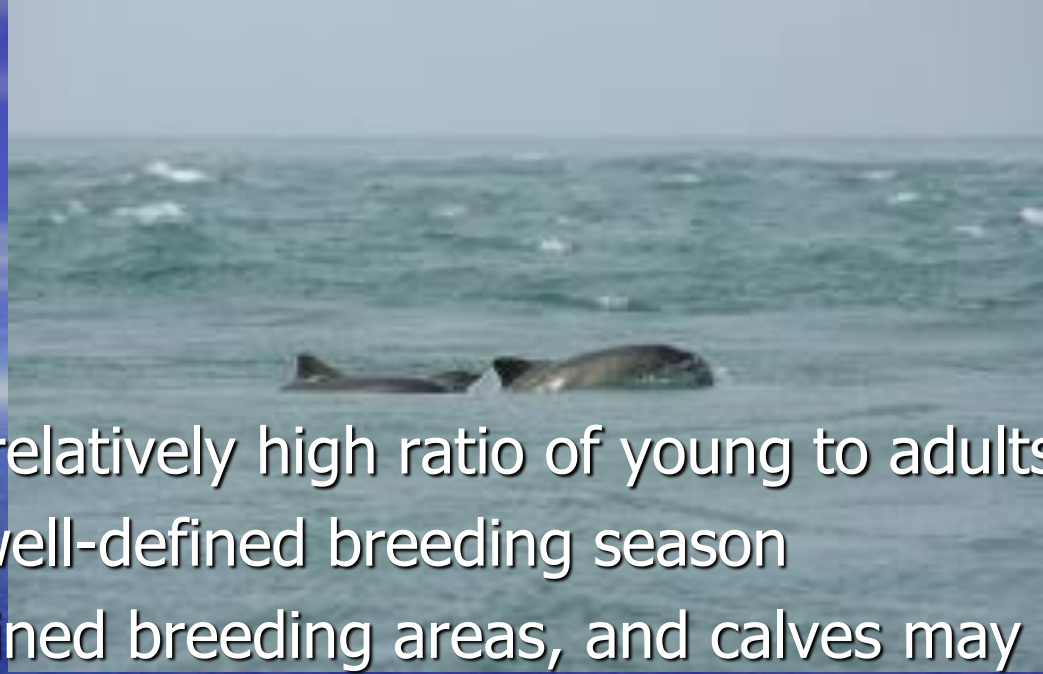
A more appropriate scheme might better reflect the animal's life history:

- **10-12 months of the year continuous presence: A grade**
- **7-9 months of the year continuous presence: B grade**
- **4-6 months of the year continuous presence: C grade**
- **1-3 months of the year continuous presence: D grade**

More relevant from a conservation perspective is whether the site remains in use by porpoises over a period of years. For most countries, such assessment has been based on surveys for a period of 1-5 years and no more.

- **Good population density** in relation to neighbouring area – mapping and density metrics e.g. numbers per sq km; numbers per km travelled or per hour of observation
- No European country has systematically achieved this yet
- Denmark – telemetry studies

- Presence in the breeding season (relatively high ratio of young to adults)
- the harbour porpoise has a fairly well-defined breeding season
- No indication that it possesses defined breeding areas, and calves may be born virtually anywhere within its range
- Inconspicuous in first 1-2 mnths
- Strandings records



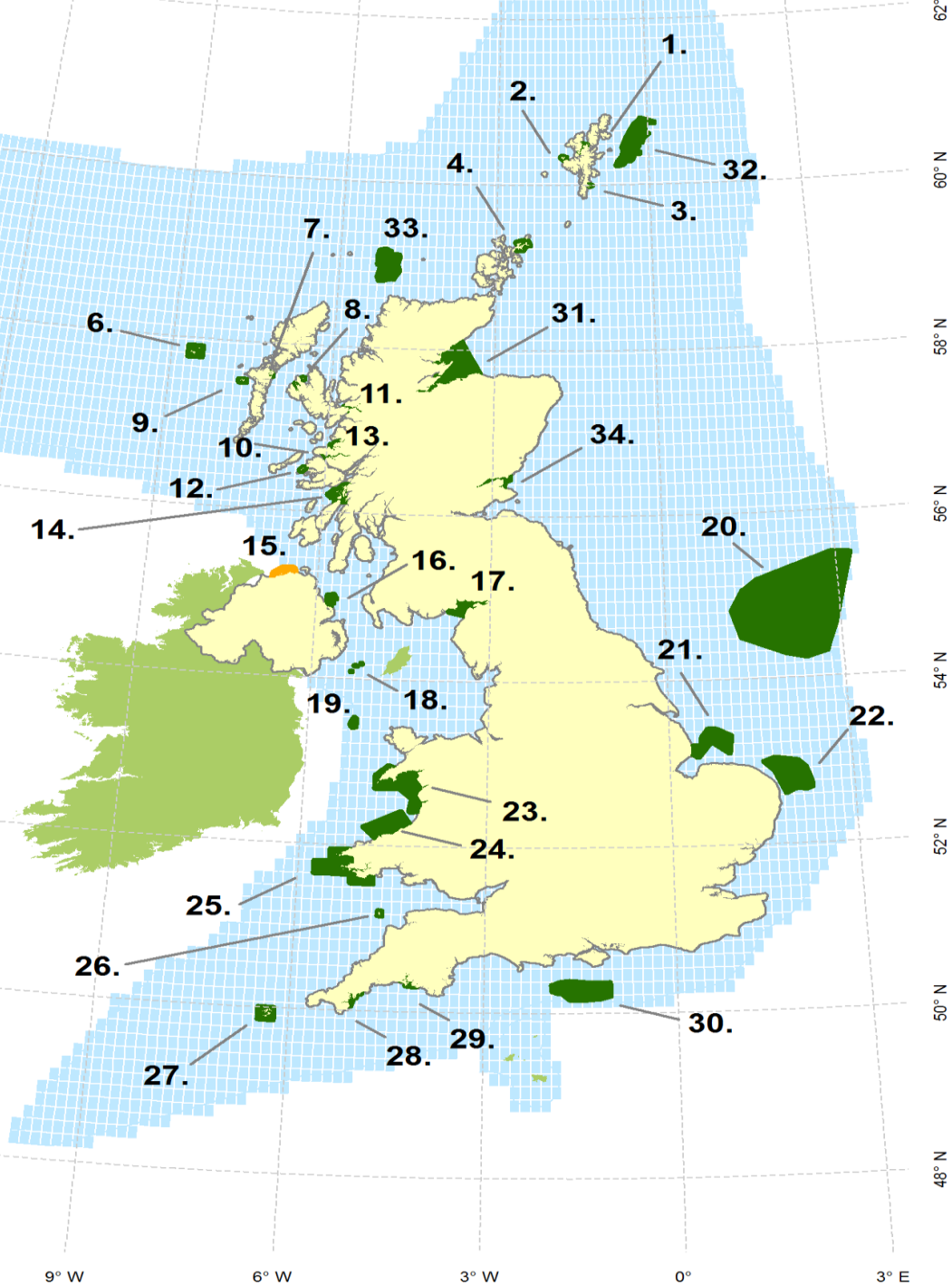
WDCS, 2013

UK SACs (SAC, cSACs and SCIs) with Harbour Porpoise as a feature (Grades C & D)

- Grade C site (Skerries and Causeway only)
- Grade D sites
- UK Exclusive Economic Zone - EEZ (including Isle of Man and Channel Islands Crown Dependencies)
- United Kingdom of Great Britain and Northern Ireland
- Other territories including the Republic of Ireland and the Crown Dependencies of the Isle of Man and the Channel Islands

Site List:

1. Sullom Voe - 2. Papa Stour - 3. Mousa - 4. Sanday - 5. North West Rockall Bank - 6. St. Kilda - 7. Loch nam Madadh - 8. Ascrib, Isay and Dunvegan - 9. Monach Islands - 10. Sunart - 11. Lochs Duich, Long and Alsh Reefs - 12. Treshnish - 13. Sound of Arisaig - 14. Firth of Lorn - 15. Skerries and Causeway - 16. The Maidens - 17. Solway Firth - 18. Pisces Reef Complex - 19. Croker Carbonate Slabs - 20. Dogger Bank - 21. Inner Dowsing, Race Bank and North Ridge - 22. Haisborough, Hammond and Winterton - 23. Pen Llyn a'r Sarnau - 24. Cardigan Bay - 25. Pembrokeshire Marine - 26. Lundy - 27. Isles of Scilly Complex - 28. Fal and Helford - 29. Plymouth Sound and Estuary - 30. Wight-Barleur Reef - 31. Moray Firth - 32. Pobie Bank - 33. Solan Bank - 34. Firth of Tay and Eden Estuary



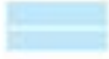
Initial Proposals
based on Criteria

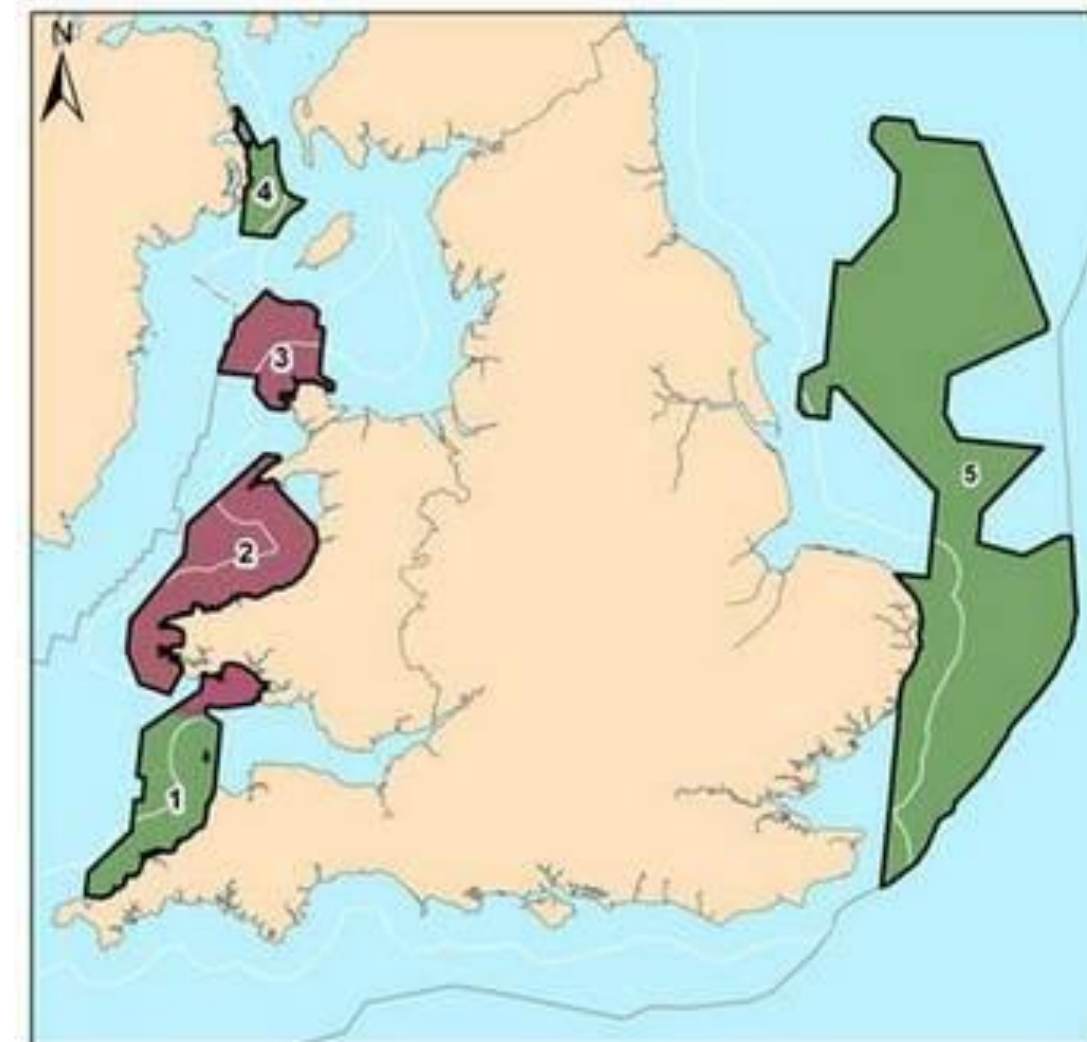
Taken from the Inshore Special Area of Conservation: Skerries and Causeway Management Plan

Harbour porpoise

The monthly effort watch (100 minutes per watch) conducted from Ramore Head showed the presence of harbour porpoise in every month of 2009 and therefore is continuously or regularly present. In addition, calves and juveniles are regularly recorded during effort watches. Although there is continuous presence the population densities are relatively low with harbour porpoise mostly sighted as individuals or very small groups. The Ramore Head site within the SAC boundary contains the highest calf-adult ratio and the second highest young-adult ratio in all of Northern Ireland's coastal waters. The oceanographic features at this site are thought to provide suitable conditions for aggregations of prey species in sufficient quantity and quality to support individual growth, reproduction and development and to allow for movement rest and foraging

5 CANDIDATE SAC's

-  Possible SAC (pSAC) boundary
 -  Welsh consultation
 -  English/Northern Ireland/
Offshore consultation
 -  UK EEZ (April 2014)
 -  UK Territorial Seas (12nm limit)
 -  Northern Ireland Adjacent Water
1. Bristol Channel Approaches
(split consultation)
 2. West Wales Marine
 3. North Anglesey Marine
 4. North Channel
 5. Southern North Sea



SWANSEA & GOWER PORPOISES

Continuous or regular presence (subject to seasonal variation)

- Porpoise encounters each month of the year
- Peak activity 2011-2013 – April, August and November
- Highest encounters hr^{-1} on west facing shorewatch sites in Carmarthen Bay and Pwll Du

Good population density in relation to neighbouring areas

- 0.38 km^{-2} (Swansea Bay)
- 0.63 km^{-2} (N. Anglesey)
- 0.23 km^{-2} (Cardigan Bay)
- 1.5 hr^{-1} (Swansea Bay and Gower)
- 2 hr^{-1} (Outer Bristol Channel)

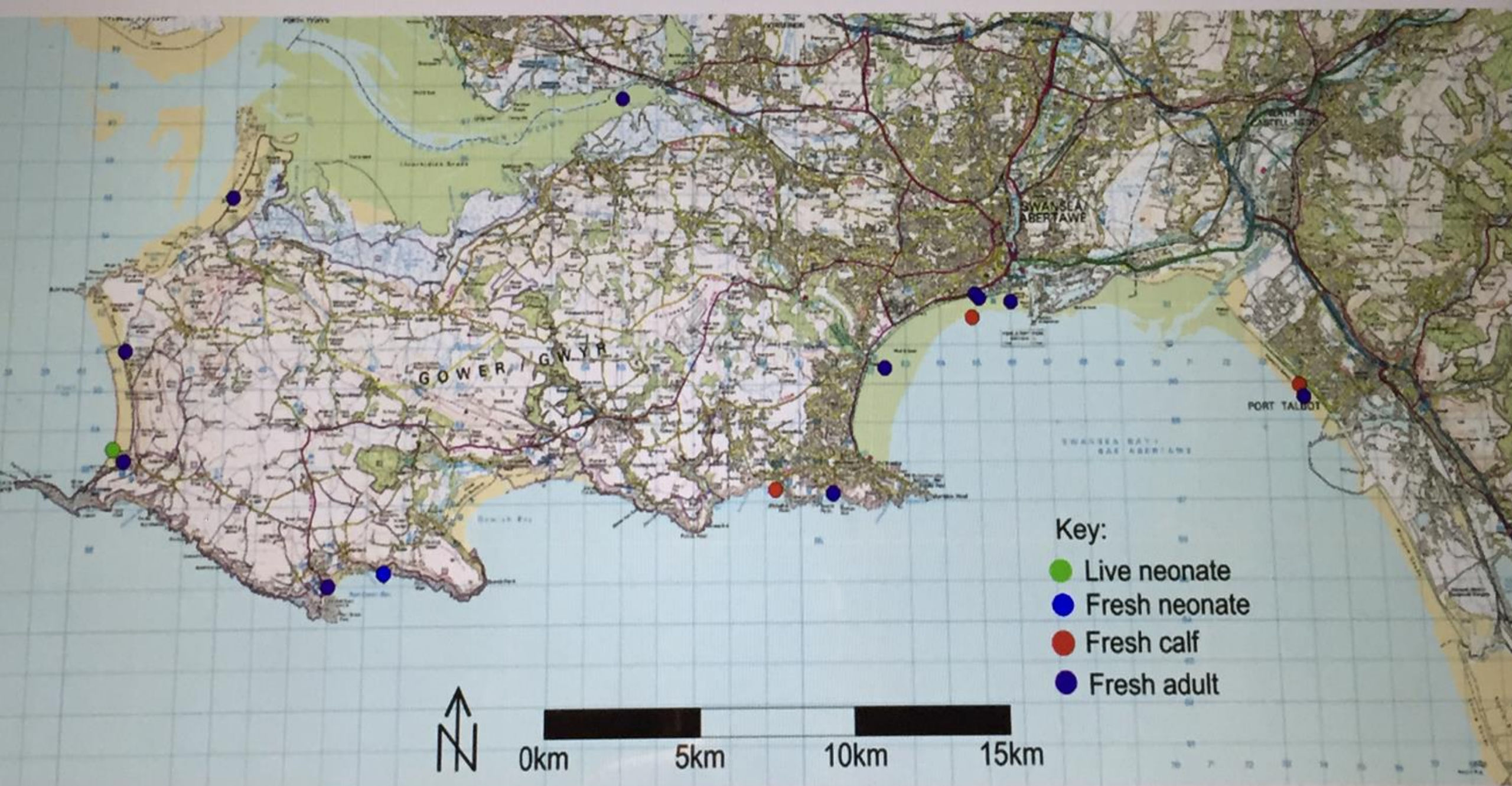


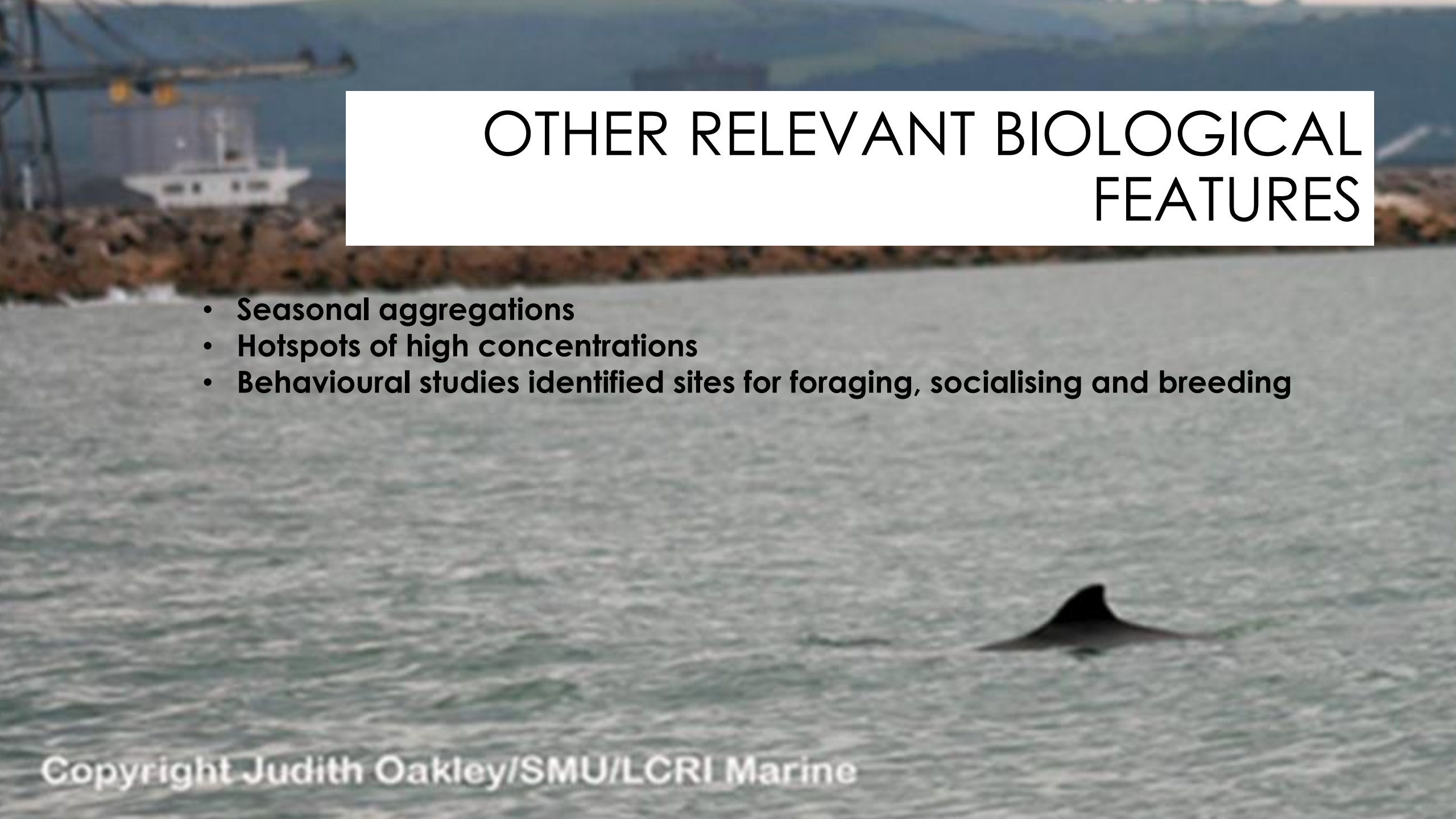
SWANSEA & GOWER PORPOISES

Presence in the breeding season (relatively high ratio of young to adults)

- Highest frequency of calf sightings – Port Talbot harbour ~(22%)
- 10% of all sightings in area are mother and calf pairings; 18% noted by Pierpoint in 2007
- Ratio 1:13 young to adults not high but seasonal significance
- Neonates and calves found in Swansea Bay and Gower
- Suggestion that western areas are used for calving; eastern areas a nursery ground
- Surveys between 2002-2005 and 2011-2013 – 9/12 mnths





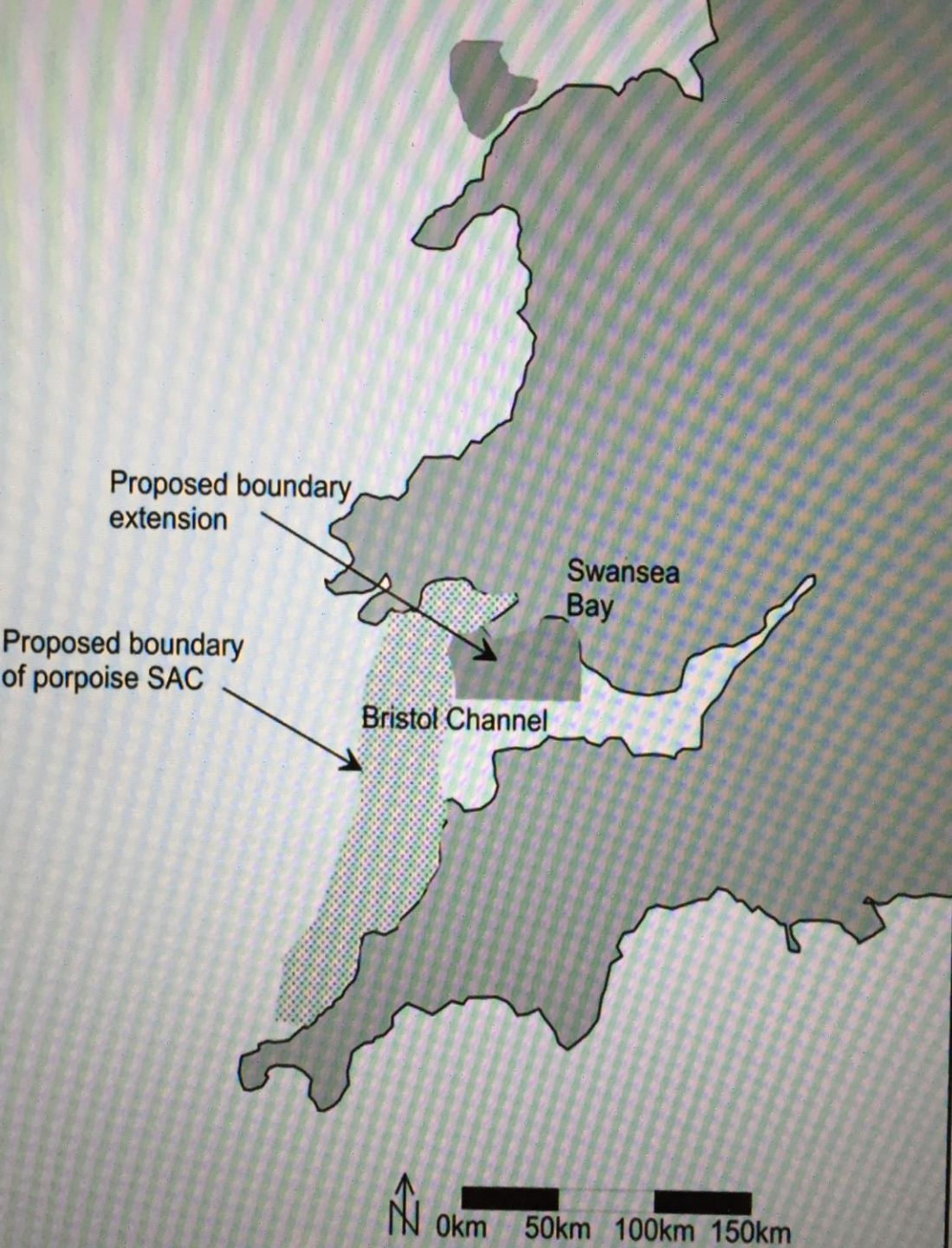
The background image shows a coastal scene. In the upper left, a white ship with a crane is visible. The middle ground is a body of water with a dolphin's dorsal fin visible in the lower right. The background features a rocky shoreline and distant hills under a clear sky.

OTHER RELEVANT BIOLOGICAL FEATURES

- Seasonal aggregations
- Hotspots of high concentrations
- Behavioural studies identified sites for foraging, socialising and breeding



SUGGESTIONS FOLLOWING CONSULTATION REPORT



- Decisions still being made on inadequate and outdated information (initial Tidal Lagoon)
- Failure to engage with local stakeholders/groups early on in the process
- Given data collected by SMU, UWTSD, LCRI, Gower Coast Adventures, Wildlife and Wetlands Trust, MARINElife, MCS and EA, CCW and Pierpoint – 10 yrs worth data via aerial, vessel and shore = need to extend boundary

CONSULTATION TO INTERESTED PARTIES

- Decision to designate SACs and SPAs in inshore waters – Welsh Government
- Scientific data
- Views on economic and social considerations can help inform but not influence decisions
- Offshore waters – UK Government and JNCC (Joint Nature Conservation Committee)
- NRW and JNCC jointly report to Welsh & UK Government – manage the consultation process



The five harbour porpoise SACs consulted on in 2016 were given Ministerial clearance and were submitted to the European Commission for approval to designate on 30 January 2017.





DOCUMENTS ON MOODLE

- JNCC – SAC Selection Assessment Document
- Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners
- NRW Consultation Request letter
- Habitat Regulations Assessment – for Nationally Significant Infrastructure Projects
- Success of Compensation at Gwent Levels (published paper)
- Creation of compensatory habitats (published paper)
- Gwent Wildlife Trust – Response to Consultation document