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IWT Submission to the Public Consultation on Marine Strategy Framework Directive (2008/56/EC) - Article 17

Overarching concerns

1. We believe that this document lacks ambition and presents an overly optimistic picture of the status of the Irish marine environment. Most of the descriptors cite that GES has been partially or fully achieved, often based on too few criteria and little data to get a good picture of what is actually happening in the entire MSFD region. The summary sheets provided with the public consultation document were lacking in detail. We contacted the Department at msfd@housing.gov.ie to ask for access to the full descriptor assessment sheets so that we could get a better picture of how the conclusions of the consultation document were reached. Sadly we were not granted access to those sheets.
2. For many pressures and drivers it is difficult, sometimes impossible, to be certain that all possible impacts have been accurately considered. Climate change is one very obvious driver that is already impacting our environment with increasing temperatures (especially during summer heat waves, which will become more and more frequent), more frequent and stronger storms, decreasing oxygen and ocean acidification. Ocean acidification in particular is a permanent threat to calcifying organisms and therefore a very important driver to add to the list of biodiversity, seafloor integrity and food webs at the very least. Even if the Directive is not clear on how climate change should be integrated, Ireland cannot choose to ignore it as a driver and pressure in all but two descriptors.
3. Art. 8 of the directive requires *"an economic and social analysis of the use of [Ireland's marine] waters and of the cost of degradation of the marine environment."* However, no analysis of the cost of degradation of the marine environment is presented, merely the value of ecosystem services is shown.
4. Threshold values that have not been agreed upon, are not habitat specific and properly backed up by scientific studies for habitat loss or disturbance are very irresponsible. Ireland's MSFD area is massive so almost any issue can be made to look insignificant by expressing it as a proportion of the entirety of our marine waters. This approach is misleading and should not be used in the absence of proper thresholds. If such percentages are to be reported, they should be expressed in relation to the area or habitat in which the impact is likely to occur. Some habitats and species are more vulnerable than others, are more fragile or take longer to recover or they may be biodiversity hotspots. The loss of such habitats should not be excused by saying that they only account for X% of the entire MSFD area and their loss is therefore insignificant.
5. All eleven descriptor assessments are based solely on official national or international datasets. No academic studies, eNGO datasets, or citizen science were included. We believe that some important supplementary sources of data are being overlooked, for example Coastwatch survey data for D10 Litter or Irish Whale and Dolphin Group cetacean records for D1 Biodiversity or even D11 Underwater Noise.
6. The public consultation process was severely lacking in necessary engagement. The document was published just before Christmas and overlapped with the equally important MSP consultation. Ten weeks (or less assuming most people do not work on public consultations over the Christmas period) is not enough to engage meaningfully with the public. In addition, there were no public meetings scheduled, which is an issue with such a complex and important document where people should have been given the chance to ask questions before submitting their responses.

Descriptor-specific concerns

1. **Biodiversity**

In the main biological diversity is considered to be compatible with Good Environmental Status (GES), even though some criteria are not compatible with GES. The assessment focuses on higher trophic guilds (predators): Three common bird species, a turtle, a dolphin, a porpoise and two seal species, along with 56 by-caught fish species. Of the 56 fish species, the status of 23 species is unknown, 11 have achieved GES, and 18 have not achieved GES. Of the bird species included, the kittiwake population is in decline and causes of this are unclear. Gannet and fulmar have achieved GES. Bottlenose dolphin, harbour porpoise, grey seal and harbour seal have also achieved GES while the status of the leatherback turtle is unknown. This shows that a total of 17 species have achieved GES while 18 have not achieved GES and 25 are unknown. How can this document come to the conclusion that the overall GES has been achieved when the species that have achieved GES are vastly outnumbered by the species that have not achieved GES or where the status is unknown? The precautionary principle should be applied here to ensure that all species, or at least the vast majority, can be brought to GES through the programme of measures.
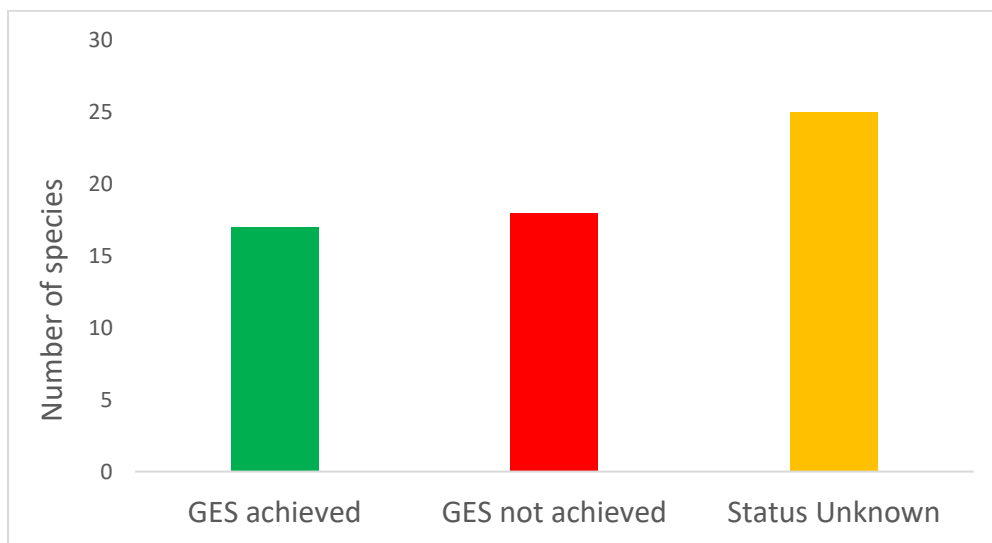
2. **Non-indigenous species**

It is unclear why the determination of GES was based on one primary criteria alone – namely "*the number of NIS which are newly introduced via human activity into the wild per the assessment period 2012 to 2018, is minimised and where possible reduced to zero (D2C1)*". The overall descriptor "non-indigenous species do not adversely alter the ecosystem" is clearly not met due to already established invasive species that are causing harm. The pacific oyster is a significant stressor on estuarine ecosystems and one of the main reasons why the conservation status of estuaries and tidal mudflats and sandflats is classed as inadequate. Invasive alien species are also the cause for the bad condition of large shallow inlets and bays. It is not clear why there is no current evaluation under the two secondary criteria for Descriptor 2 namely: "*Criteria D2C2 (Abundance and spatial distribution of established NIS, particularly of invasive species, contributing significantly to adverse effects on particular species groups or broad habitat types)*" and D2C3 "*(Proportion of the species group or spatial extent of the broad habitat type which is adversely altered due to NIS, particularly invasive*

NIS)". If these two criteria were included, GES would almost certainly not be achieved. This descriptor should therefore be GES partially achieved.

3. Commercial Fish and Shellfish stocks

The key messages and conclusions of this descriptor are overly optimistic. While there have been some improvements over the past few years, these have not been nearly fast enough to meet the original CFP and MSFD targets in 2015 and 2020. The stocks that have not achieved GES and those that are unknown still vastly outnumber the stocks that are compatible with GES.

4. Food webs

This descriptor is a very difficult one to assess, however after over a decade since the MSFD was implemented even such a complex descriptor should be more developed. There is plenty of research available in Ireland from marine scientists at various Irish institutions that could help inform the status of food webs, but for some reason only research from government departments was considered. Climate change needs to be added to the list of stressors as this could have huge implications for the distribution of plankton.

5. Eutrophication

Various sources of pollution, including domestic wastewater, agriculture and marine aquaculture are contributing to eutrophication and causing inadequate conservation status in estuaries and tidal mudflats and sandflats - with a deteriorating trend according to the Habitats Directive Article 17 report. Areas close to the shore where most eutrophication events occur are also the most productive. The vast majority of the open Atlantic ocean will of course have good water quality, but the many areas near the coast that have inadequate water quality should outweigh the good quality of the open ocean. Ireland's marine area is so vast that even 0.05% of it is too great an area to be "classified as a problem area with regard to eutrophication". Therefore, the compatibility of this descriptor with GES is completely unjustified, even if the coastal areas are already covered by the WFD. In addition, aquaculture is not listed as a main stressor even though intensive finfish aquaculture can affect nutrient levels in the water severely and cause a decrease in dissolved oxygen on the benthos.

6. Sea-floor integrity

This descriptor is divided into two categories, namely physical loss and physical disturbance. For physical loss, the conclusion is that "the extent of habitat loss is compatible with Good Environmental Status (GES)", where loss of habitat accounts for 0.5% or 2,440 km² of the entire Irish MSFD region. This seems to be the threshold value applied to all habitat types, regardless of sensitivity or current environmental status of these habitats.

While 0.5% might not sound like a lot, the Irish marine region is very large and therefore even such a seemingly small percentage should be well above any threshold value. By comparison, 2,440 km² is the same as 500,000 football fields and larger than the size of county Wexford. This level of habitat

loss is not a sign of good environmental status by any definition. In addition, the percentage threshold values should be different for each habitat type depending on sensitivity of the keystone species in each habitat. Loss of seagrass or maerl habitat, for example, should be 0% in order to be compatible with GES. But even sedimentary habitats, of which some show losses of up to 5.5% and disturbance as high as 73% should not be regarded as fair game. It is also unclear why habitat loss and habitat disturbance were separated without a clear definition of either.

Habitat disturbance has occurred over 64,860 km² which is nearly the size of Ireland's landmass. Habitat disturbance at this scale on land would be proclaimed an environmental disaster, yet at sea this seems to be acceptable. It seems that no determination could be made on whether GES was achieved for this criteria because it does not cover all the Irish MSFD area. However, we believe that this scale of disturbance should be enough to come to the conclusion that GES has not been achieved due in large part to bottom contact fishing gear in Ireland's OSPAR III region, which is a major cause for concern and this should be acknowledged in this document so that the subsequent programme of measures can address this.

7. Hydrographical conditions

This descriptor of GES demands that hydrographical conditions such as temperature, salinity, depth, currents, waves, turbulence and turbidity are not permanently altered. This descriptor has been classed as compatible with GES. There is a strong link between this descriptor and climate change, as a change in seawater temperature is one of the main effects of climate change. Therefore, climate change should be mentioned as a main driver here.

8. Energy, including noise

D11 is deemed to be compatible with GES based solely on one criteria, impulsive noise. Continuous low-frequency noise was not assessed at all even though it is a primary criteria. This descriptor should be deemed "unknown" or at best "partially compatible" since one of the two primary criteria remains unassessed and there is no agreed or proposed threshold for the one that is. The precautionary approach should prevail here as the true impact of underwater noise on cetacean species is still largely unknown. Declaring it as achieving GES despite not knowing the impacts on populations or ecosystems while only having data on a subset of the potential noise inputs is irresponsible.