



## BirdWatch Ireland submission/observation to An Bord Pleanála Case OA29N.320768 (Codling Wind Park)

A submission by staff at BirdWatch Ireland

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## **Introduction**

BirdWatch Ireland is Ireland's leading charity focused on the conservation of wild birds. Established in 1968, we currently have over 15,000 members and supporters and a local network of over 30 branches nationwide. As an organisation, our conservation team is actively involved in seabird conservation, research, and monitoring. Our policy and advocacy team are active stakeholders contributing to marine conservation at a national and EU level. We are the Irish partner of Birdlife International and are members of the Irish Environmental Network, Stop Climate Chaos, and the Sustainable Water Network, and a founding partner of the Fair Seas coalition.

Our vision is that Ireland should become a world leader in marine conservation and the sustainable management of our marine environment. The protection and restoration of Ireland's biodiversity is vital, and rapid decarbonisation is an essential element of this process. BirdWatch Ireland therefore supports the production of renewable energy and offshore wind to help achieve this. However, offshore renewable energy (ORE) devices and infrastructure must be sensitively located to minimise negative impacts on marine and terrestrial ecosystems, and on seabirds in particular as these may be more impacted than other taxa.

## **Ireland's Seabirds**

Ireland's marine environment plays host to a huge diversity of ornithological life year-round. In summer, our offshore islands and cliffs host seabird breeding colonies, many of which are of international importance or regional significance. In winter, our coasts and estuaries are of huge importance for wintering waterbirds. Seabirds, as top marine predators exposed to all threats affecting the ocean, are excellent biodiversity indicators, providing us with an insight into the health of, and pressures facing, our marine environment [1].

However, 23 of 24 breeding seabirds in Ireland are either Red or Amber listed Birds of Conservation Concern [2]. They are highly vulnerable, facing current pressures and future threats, including (ranked in order of frequency of occurrence) [3].

- Bycatch and incidental killing (due to fishing and hunting activities) [4]
- Desynchronisation of biological/ecological processes due to climate change
- Decline or extinction of related species (e.g. food source/prey, predator/parasite, symbiote, etc.)
- Other invasive alien species (other than species of Union concern).
- Potential impacts from wind, wave and tidal power, including the associated infrastructure

Even though Ireland has designated a network of Special Protected Areas (SPAs) at coastal sites aimed at protecting the most important areas for breeding seabirds, trends in population and range for some species are declining [5]. At a European level, of the 24 seabird species regularly breeding in Ireland, nine are declining (Atlantic puffin *Fratercula arctica*, Black-headed gull *Larus ridibundus*, Kittiwake *Rissa tridactyla*, European herring gull *Larus argentatus*, European shag *Gulosus aristotelis*, Great black-backed gull *Larus marinus*, Little tern *Sternula albifrons*, Mediterranean gull *Larus melanocephalus*, and Fulmar *Fulmarus glacialis*) and an additional four have an unknown population trend (Black guillemot *Cephus grylle*, European storm petrel *Hydrobates pelagicus*, Leach's storm petrel *Hydrobates leucorhous*, and Manx shearwater *Puffinus puffinus*) [6]. Nationally, of these 24 species, two are declining in Ireland (Atlantic puffin and Kittiwake) with an additional two species facing probable declines due to Highly Pathogenic Avian Influenza (HPAI) H5N1 since last census (Arctic tern *Sterna paradisaea* and Common tern *Sterna hirundo*); population trends for a further three species (Great cormorant *Phalacrocorax carbo*, European Shag, and Fulmar) are unknown [5 and Pers Comm Dr. Steve Newton, Senior Seabird Conservation Officer, BirdWatch Ireland October 8th 2024]. Due to the sensitive nature of these populations, special consideration should be given to the potential effects of offshore developments on these seabird species. In particular, the cumulative effects of multiple developments must be adequately assessed.

For many years BirdWatch Ireland has been working to gather data and information on the importance and usage of our marine environment for seabirds and waterbirds. Our work in the Irish Sea includes tagging and tracking of seabirds at key sites, Digital Aerial Survey (DAS) work and observations on the daily movements and flight lines of a range of species. The latter in particular has been part of our annual monitoring and management of key seabird colonies in the Irish Sea for more than 20 years (carried out largely under contract to the National Parks and Wildlife Service (NPWS)). BirdWatch Ireland therefore has a unique understanding of the importance of the Irish Sea for seabirds and the possible impacts of new offshore windfarm developments on their populations.

The main impacts of ORE windfarm projects on seabirds and waterbirds include displacement, disturbance, and collision risks. However, there are a range of other possible impacts, including:

- Barrier effects: wind turbines and structural development can interfere with birds foraging and migration routes, potentially increasing their individual energy expenditure and limiting the available habitat.
- Cumulative impacts: how are the cumulative impacts being examined? We are extremely concerned that the cumulative impacts of all current and future ORE projects in the Irish Sea are not being adequately assessed.
- Wider ecological impacts on fish stocks/prey base and its impact on fishing effort and location: Knowledge of the impact on the prey base/fish stocks is essential to be able to fully assess the impacts on seabirds. How will fishing efforts be shifted and what is the likely impact of such a shift on seabird foraging opportunities? Particular consideration

should be given during construction and post-construction on how the additional disturbance and new structures within the marine environment may change prey location and numbers.

- Impacts on non-seabird species, waterbirds and other larger birds using the air space.  
The flight heights are not known for key species and this data has not been collected, as many digital aerial surveys don't collect height data.

## **Submission/observation in relation to Bord Pleanála Case OA29N.320768 – proposed development known as Codling Wind Park**

BirdWatch Ireland's key concerns and questions are detailed below. These include general concerns and more specific concerns related to the proposed Codling Wind Park (hereby referred to as CWP). We stress that these may not be comprehensive, as additional concerns could arise as our knowledge increases and/or seabird populations change over time.

### **1. Data and knowledge gaps**

We are concerned in general about the key data and knowledge gaps that exist on the impact of offshore wind farms on important and threatened bird species. With many unknown variables about how seabirds utilise the marine environment, it is hard to address all the potential effects or threats that may occur and additional concerns and questions may arise as knowledge increases. In the case of scientific uncertainty, we would advocate for risk avoidance and conservative approaches to development in order to limit the potential harm to birds and ask for more robust research into the use of the marine environment by birds and how offshore wind farms affect birds and their habitats.

### **2. Limited definition of tolerance**

In relation to the CWP, a significant concern relates to the definition of tolerance set out in EIAR Volume 3: Chapter 10: Ornithology. Tolerance is defined '*as the potential for an impact to affect survival and/or reproductive rates, with consideration given to: the persistence of such effects while the impact is ongoing (i.e., habituation) or after the impact ceases (i.e., recoverability); and the ability of the receptor to adapt behaviours to avoid effects to survival and/or reproductive rates*'. Our concern is with the second part, where mention is made as to whether seabirds (the receptor in this case) adapt their behaviours to avoid effects from the proposed wind farm on survival and/or reproductive rates. Although a species may adapt and change its behaviours in response to a new wind farm within the marine environment, it does not follow that this adaptation means that the species is tolerant of its effects. The effects could still have negative impacts on the individual's survival or the population's reproductive rates despite (or because of) the change in behaviour. Adapting behaviours may have an associated cost, such as increased energy expenditure and decreased fitness, which in turn can impact the survival and reproductive rates of the individual and the regional population. For example, while a species may continue to forage within the footprint of a wind farm during operation (and after initial

displacement during construction), there could be increased energy expenditure associated with foraging as the birds put more effort into avoiding structures; or there could be less energy-dense prey available as construction altered the benthic substrate and different prey now occupy the waters. Both of these, either alone or in conjunction, could reduce the individual seabird's fitness and/or increase mortality, which in turn could affect the reproductive rate of the local/regional population; however, these effects are ignored within this definition of tolerance. While potential costs in terms of fitness and energy expenditure are mentioned in Volume 5 of the Natura Impact Statement (NIS), consideration for the fitness and health of seabirds in relation to the proposed actions of the CWP project is lacking within EIAR Volume 3: Chapter 10: Ornithology, which mainly focuses on direct mortality and displacement. We would suggest that more consideration is given to the fitness and cost of adapting to construction activity and permanent infrastructure on individual birds and species populations in both the definition of tolerance and within the EIAR, as it has the potential to greatly impact survival and reproductive success of Irish seabirds.

**For the rest of our concerns within this submission**, we have organised them into 3 sections (Offshore concerns, Estuarine/Liffey and Onshore concerns, and Cumulative and other concerns) to aid in the understanding of where our concerns lie within the context of all the proposed development associated with the CWP project. As seen above, we have also included a brief summary of each concern at the beginning of deeper discussion of the concern to aid in navigating through our response.

### 3. Offshore concerns

For the proposed offshore array construction and operation for CWP, we have some concerns that we wish to address in this submission. For the sake of clarity, we use the term 'CWP marine footprint' to talk about all proposed development and operation offshore (i.e. the array site, associated buffers, and offshore cabling route).

#### 3.1 Lack of data on migrant and migratory species

Firstly, we found that there was a lack of information and assessment of seabird species that utilise the CWP marine footprint that are not breeding in Ireland. There are a host of wintering and passage migratory birds that are using the Irish Sea marine environment, sometimes at a lower frequency or not for the entirety of a prescribed bio-season; we believe these are not being appropriately addressed within the Ornithology Chapter (EIAR Volume 3: Chapter 10: Ornithology). There are several rare but regularly occurring species that have not been scoped in for further assessment, which we believe should have been due to their conservation importance, either being included in the Red or Amber lists of Birds of Conservation Concern in Ireland (BOCCI), occurring on Annex 1 of the Birds Directive, or assessed as Globally Threatened/Near Threatened by BirdLife International. These include European storm-petrel (*Hydrobates pelagicus*), (Annex 1, BOCCI Amber list); Great skua (*Stercorarius skua*), (BOCCI

Amber list) and Balearic shearwater (*Puffinus mauretanicus*) (Globally Threatened, Annex 1, BOCCI Red List). Together with Arctic skua (*Stercorarius parasiticus*), these three species were recorded during the DAS and/or Boat-based ESAS surveys undertaken for this project; however, none are mentioned in the Ornithology chapter, save for one mention of storm-petrel as a qualifying interest (QI) for the Skomer, Skokholm, and Seas off Pembrokeshire SPA in Wales. While Balearic shearwaters are relatively rare in the Irish Sea, they are critically endangered [6]. Additionally, BirdWatch Ireland's *Seatrack* surveys between 2010 and 2013 also identified all four of these species within the marine environment where the CWP is being proposed [7]. While the frequency of these species within the Irish Sea may be sporadic and their usage cannot necessarily be categorised within a specific bio-season, the project surveys have identified their occurrence, both within the Irish Sea and in the CWP marine footprint. Given their conservation importance, the impacts on these species should be assessed, even if they don't strictly meet the criteria for scoping species in or out. On the whole, the offshore assessments of the CWP project focus mainly on breeding seabirds, omitting in particular migratory species of conservation importance that also occur and which could be impacted. We would therefore ask that the impacts on these other species are fully assessed.

### **3.2 Inappropriate proxy species used**

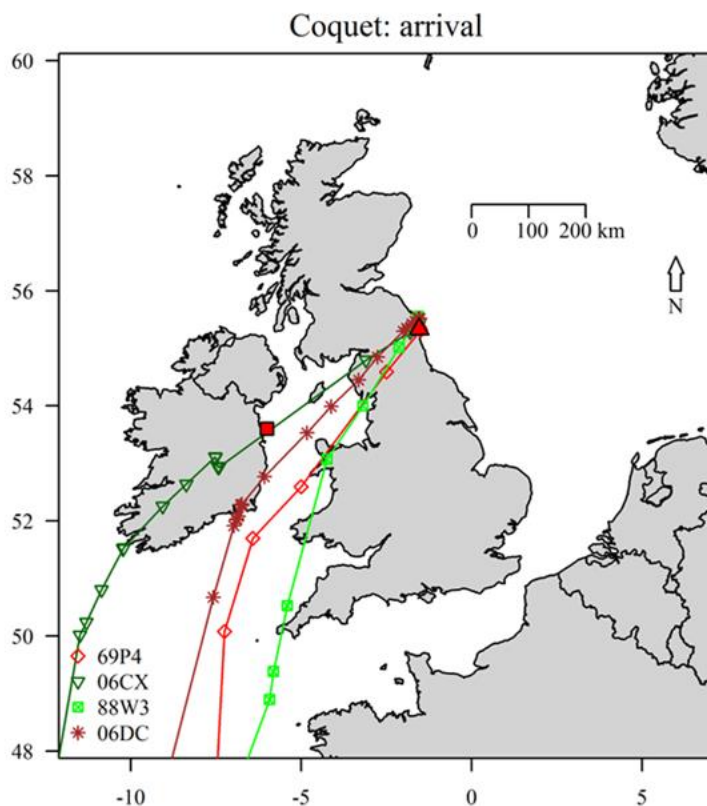
Secondly, on pg. 308 of the Ornithology Chapter (EIAR Volume 3: Chapter 10: Ornithology), in Table 10-115 '*Screening of key seabird species for risk of collision*', Cormorants are assessed as a very low collision risk, using Shag as a proxy, and subsequently screened out for further analysis. The reason for the use of Shag as a proxy for Cormorant is given as they are the '*most similar species*'; however, in our opinion, this is not appropriate due to differences in flight patterns and heights. Cormorants often fly at greater heights than Shags, often in a V-formation and up to 100m; Shags, however, usually fly within 1m of the sea surface, except when utilising cliff nests [8]. By using Shags as a proxy for Cormorants, the flight height of this species is not being accurately assessed, with the assumption being that they fly lower than they actually do. This in turn would lead to an underestimated risk of collision with CWP structures at sea. Given the assessment for '*No potential for non-negligible collision mortality*' for Cormorants, it is our view that this assessment is inaccurate and should be redone using species specific information or a more appropriate proxy species that flies at a similar height on average to Cormorants.

### **3.3 Lack of impact assessments for Roseate Terns nesting on Rockabill SPA**

Within Table 10-18 in the EIAR Volume 3: Chapter 10: Ornithology, when assessing the QI species of SPAs that could potentially see impacts from the CWP project, only Arctic terns are scoped in for Rockabill SPA. In Volume 5 of the NIS, this choice of not including or scoping in Roseate terns (*Sterna dougallii*) is expanded further with the statement '*As all project development areas are sited beyond the mean–maximum (+1 SD) foraging range of this SCI (23.2 km; Woodward et al., 2019) from Rockabill SPA, this SPA is considered to lie outside the zone of influence (Zol) defined in Screening*'. Roseate Terns are an Annex 1 species and Rockabill SPA is the largest Roseate tern colony in Europe [9]. Roseate terns also use the Irish

Sea on migration. For these reasons, the impacts on Roseate terns should be assessed and the omission of this species is of grave concern.

The majority of the Northwest European population of Roseate terns is found at just three colonies: Rockabill SPA (Dublin), Lady's Island Lake SPA (Wexford), both in the Irish Sea, and Coquet Island SPA (Northumberland) in the English North Sea. Together these sites act as a metapopulation; Rockabill is the main source population and the other two are more often 'sinks', especially when the subpopulations nesting at Coquet and Lady's Island Lake were lower and recovering [10]. This situation may be recurring now given the recent (2022-23) outbreak of HPAI-H5N1 that disproportionately impacted Coquet Island SPA. There is continual inter-connection between the three colonies, with individuals emigrating from one site and recruiting (to breed) at another. This inter-colony movement is illustrated by Redfern *et al.* (2020a) [11]. Significantly, the movement (autumn/spring migration) of Roseate terns to and from Coquet Island is largely oriented northeast-southwest overland (Northern England) rather than via the sea corridor of the North Sea. The majority of tagged birds are passing through the northeast Irish Sea lying between the Isle of Man, Cumbria and North Wales, with individuals also moving through the Irish Sea near or through the CWP marine footprint (see Figure 1 below). This research clearly illustrates the importance of the Irish Sea for Roseate terns moving between these three colonies.



**Figure 1:** Tracking data on the arrival routes of 4 individual Roseate terns to Coquet Island SPA that show use of the Irish Sea in migration.

We are concerned that this internationally important and rare European (Annex 1) Red-listed species was not identified as a species of interest or risk and scoped in to the environmental assessments of the CWP project. BirdWatch Ireland finds this a significant oversight and would request that the impacts of the CWP and all future developments in the Irish Sea consider impacts to Roseate terns and the connections between these important colonies.

### **3.4 Potential adverse effects on fledgling Little terns within the Irish Sea**

We also have concerns about the potential effects that the CWP project's offshore construction and permanent infrastructure could have on Little terns, particularly fledgling Little terns, who move within the Irish Sea. While appreciate that Little terns were scoped in for assessment despite not being recorded in the CWP surveys (outside a single individual) due to being observed within the CWP marine footprint in other aerial surveys and the importance of the species to the nearby Murrough SPA colony, it is our view that the effects of the CWP offshore infrastructure on Little terns is not being accurately assessed and potential impacts are underestimated. In both the EIAR Volume 3: Chapter 10: Ornithology and Volume 5 of the NIS where effects to Little terns are discussed, Little terns are either screened out due to expected little/no effects from offshore impacts or impacts are concluded to be not significant/negligible to the population; however, it is our view that the assessments of Little tern use within the CWP marine footprint is underestimating their usage of the Irish Sea, potentially due to the focus on use during discreet bio-seasons not allowing for assessment of movements that do not fall clearly into these bio-season patterns. The use of bio-seasons to delineate when species are using the CWP marine footprint emphasises migration, but studies have shown that Little terns regularly move across the Irish Sea outside of migration as well [12]. Studies of Little terns in the UK and Ireland show equal and frequent movement between populations by fledglings during both July and August, particularly between Gronant, the largest Little tern colony on the west coast of Britain, and Kilcoole, the largest Little tern colony in Ireland and located within the Murrough SPA [12]. The movement of fledgling Little Terns is shown below in Figure 2.





**Figure 2:** Recorded movements of colour-ringed Little Tern fledglings during 2014-2018.

This movement of fledglings is also documented as being rapid and bidirectional (i.e. fledglings from Britain are also flying across the Irish Sea to Ireland as well) [12], so there is potential for construction and infrastructure within the CWP marine footprint to affect both locally nesting Irish Little terns and the larger regional population of Little terns within the Irish Sea and nesting in the UK. We worry that the CWP's EIAR and NIS are not acknowledging this frequent and documented movement of Little tern fledglings, which are already at greater survival risk than adults, and therefore we cannot support conclusions of no or non-significant effects from impacts on Little terns without further study and assessment of these tern movements across the CWP marine footprint.

### 3.5 Desire for marine maps of seabird density

Maps of bird density and location within the CWP marine footprint from the boat-based European Seabirds At Sea (ESAS) and DAS surveys undertaken by the project should be presented in the Ornithology Chapter. Without such maps, it is difficult to clearly understand and interpret the information which has been collected. While these types of maps are reported and given for surveys within the Intertidal area, there are none for the offshore area within the EIAR Volume 3: Chapter 10: Ornithology and its associated appendices. Given the size of the CWP

marine footprint, and the northern and southern reference areas added in during surveys, a map of where the birds were seen would be helpful for assessment of seabird usage of this offshore area. We acknowledge that this information is given in Table 2.2 for the boat-based ESAS surveys in Appendix 10.05 *Offshore Ornithology Baseline Characterisation Report*; however it is our view that maps of this information in combination with the DAS surveys should be provided in order to better understand where exactly different seabirds were seen and how they are utilising the marine environment within the CWP marine footprint.

### **3.6 Lack of surveys during all sea/weather conditions**

Finally, we would like to highlight that all offshore surveys for seabirds and other birds within the CWP's marine footprint have only been undertaken in ideal conditions. We acknowledge that this may be due to necessity and safety for both the aerial and boat-based surveys, and we are not suggesting changing this or putting anyone at risk; however, it is very important to note that birds are still using the marine environment outside of these perfect conditions and therefore there could be increased or differing uses of the offshore marine footprint by birds that we do not know or understand at this time.

A potential way to address this knowledge gap would be increased research into the offshore usage of the marine environment by seabirds using tracking. Tracking key species of concern, or species that are shown to use the CWP marine footprint in high density during ideal conditions, can give information about the usage of the marine environment by birds at any time and despite weather conditions that limit the ability to collect data using alternative methods (e.g. radar). Studies utilising GPS tracking of seabirds have already been used in assessing the effects of offshore wind farms on certain species, including a study that showed strong avoidance effects for Guillemots (*Uria aalge*) during the breeding season particularly when commuting and less so when resting or diving [13]. This study highlights the specific type of information on usage and behaviour that can be collected with tracking work of seabirds, and it is worth noting that breeding Guillemots from Wicklow Head SPA and Bray Head forage on Codling Bank and could be similarly affected by the CWP. Radar is another alternative method to collect data during poor weather and nighttime usage of the marine environment by seabirds. Until it is known how seabirds and other birds are using and utilising the marine environment in all conditions throughout the year, there is potential for increased or differing usage of the area that could be affected by the permanent nature of offshore wind farm infrastructure that is not being addressed. We would argue for caution to be taken in assessing the CWP offshore data and surveys until more research is done to better understand how birds are utilising the marine environment in all sea/weather conditions.

## **4. Estuarine/Liffey and Onshore concerns**

### **4.1 Potential impacts to nesting terns**

We also have serious concerns with the construction within Dublin Bay for the CWP project, which is addressed in the Onshore and Estuarine/Liffey sections of the EIAR Volume 3: Chapter 10: Ornithology and its associated appendices. The Common and Arctic terns nesting within Dublin Port are regionally important and are amber-listed species with declining populations within Ireland [14]. Data collected by the Dublin Bay Birds Project and funded by the Dublin Port Company shows that the two closest 'dolphins' closest to the construction site (ESB Platform and CDL Dolphin) had a combined 101 nesting Common tern pairs and 13 nesting Arctic tern pairs in 2024 accounting for approximately 37% of the total Common tern nesting population and 100% of the total Arctic tern nesting population within Dublin Port in 2024 [15]. The 2024 season saw the lowest overall number of breeding pairs in the Dublin Port Tern Colony since 2005, with the 286 nests recorded during the census representing just 49% of the previous year's figure. The most significant decline (over 60%) since the previous year was evident on the ESB Platform, which is also a SPA, with numbers in 2024 the lowest since regular monitoring began in 1995, 29 years ago [15]. With the proximity of the proposed construction to these nesting dolphins and the declining population trends of the entire Dublin Port Tern Colony, we are concerned that, even with mitigation, the nesting terns could be negatively affected and we cannot see where it is shown that it is beyond reasonable scientific doubt that there will be no negative impacts on these qualifying interests of the designated site.

Of particular concern are the nesting Arctic terns on the CDL Dolphin, which is the closest pontoon to the CWP onshore construction site and the only pontoon that has nesting Arctic terns, despite the availability of alternative nesting areas on additional nesting pontoons. While we do not know why the Arctic terns only nest on the CDL Dolphin, the fact is that they do. It may be related to high nest site fidelity, or the clear 360 view of the surrounding area that allows views of approaching threats; there may also be some other feature that we have not identified that renders this platform attractive to Arctic terns for nesting. We are therefore very concerned that construction could negatively impact this and that any change to the nearby environment could cause abandonment. In terms of limiting the view for nesting terns, the building will block their view both during construction and operation, which could limit their perceived or actual ability to see predators, and affect nest site selection of this dolphin. CWP construction onshore risks the potential loss of all nesting Arctic terns within the Dublin Port, as it cannot be assumed that they will just move to another pontoon or dolphin, and we therefore advocate for extreme caution in the construction of the substation building. We recommend that additional mitigation measures and strategies are implemented before construction to ensure that the entire Arctic tern nesting colony within Dublin Bay is not lost.

While we acknowledge and appreciate that pre-emptive mitigation methods will be undertaken during the construction of the substation building, we would like to put forward two additional asks. The first is that the period of limited construction and screening of construction activity be extended to include mid-late April, as both your and our data shows that Common and Arctic terns are engaging in nest site selection during this time and we are concerned about

construction activities causing terns to not select the nearby dolphins for nesting. Secondly, we would ask that the monitoring done during construction to assess and ensure the nearby nesting terns are not being disturbed is done by a qualified individual familiar with seabirds, as seabird and tern behaviour is specific and is best assessed by someone familiar with the species, and that all activities are ceased when the colony is showing signs of disturbance or distress until such a time that the birds are settled and resuming natural behaviours.

#### **4.2 Cumulative effects of Dublin Port and CWP projects**

Of most concern in the Estuarine/Liffey section is the potential in-combination impacts that may result from the CWP's new building adjacent to the CDL Dolphin with those in the DPC Masterplan proposal (new quay and vessel turning circle). Within the '*Offshore and intertidal – construction: impact 2 – disturbance and displacement*' section of the Ornithology Chapter (EIAR Volume 3: Chapter 10: Ornithology), there is mention of the Dublin Port Master Plan 3FM project that is earmarked for development near the onshore CWP development area for the substation and landfall of cables. It states '*Whilst it is acknowledged that projects such as the Dublin Port Master Plan 3FM and MP2 projects are earmarked for development in the vicinity of the CWP landfall; at the time of writing these projects are yet to proceed through planning, and it is assumed that they will have EIAs and appropriate mitigative measures employed*'. We acknowledge that both the Dublin Port 3FM and MP2 projects are also listed in Appendix 10.01 *Cumulative Effects Assessment*; however, all that is stated is that '*There is potential for a temporal overlap between the construction phase of this project and that of the CWP Project. If construction does overlap, concurrent construction activities within 50 m of the CWP Project onshore development area could cause cumulative effects*' with no mention of how these cumulative effects might be addressed by either party. With significant elements of both in very close proximity to the tern colonies, which will alter the immediate surrounding landscape for both Common and Arctic terns, and the potential that the timings of both projects will overlap, there are significant concerns that these projects will have adverse cumulative effects that are not being addressed.

We do not know how all this construction may affect nesting tern breeding success in terms of site selection or predation pressure and other factors like vigilance. This is exacerbated by the severe mortality due to HPAI-H5N1 in 2023 resulting in 2024 having the lowest number of breeding pairs of Common terns in the Dublin Port colony since 2005. As stated above, 2024's nesting pairs of Common terns on ESB Platform (a QI species of the SPA) were the lowest since regular monitoring began 29 years ago. Due to its location between the proposed activities of both projects, the ESB (SPA) Platform is the nesting site most vulnerable to any potential cumulative effects that may occur. Since the construction of both projects has the potential to be concurrent and a full cumulative assessment of the two projects has not been done, we cannot see beyond reasonable scientific doubt that there will be no negative impacts on these qualifying interest species of the designated site and would request that a full

cumulative impact assessment of the CWP's onshore construction with the DPC Masterplan proposal be done before any construction begins.

#### **4.3 Over-reliance on nesting mitigation measures**

While we appreciate the intention of creating additional nesting sites for Black guillemots and Sand martins, and are not against this as a mitigation method, we would like to issue some caution in that just because it is built does not mean that it will be used. While artificial and constructed nests are used by birds of many different species, it is also not uncommon for birds to not take to artificial/constructed nests for a variety of reasons [16, 17]. Sometimes the reasons for birds' disuse of artificial/constructed nests are not known, and even the best designed and placed nesting areas are not used [16, 17]. A picture of the planned precast sand martin wall is shown in the Ornithology chapter (EIAR Volume 3: Chapter 10: Ornithology), but we do not see any information or studies about whether this artificial nesting structure has been tested as an effective nesting alternative or if sand martins have used similar structures in the past at other sites. While it is impossible to know whether birds will use the artificial additional nesting sites that are planned in the CWP proposal before they are implemented, we do think it is important to acknowledge that just because they are there does not mean that birds will use them and there is a chance that Black guillemots and Sand martins will not use these structures at all; therefore, they would not compensate for the loss of nesting areas due to construction.

### **5. Cumulative and other concerns**

#### **5.1 Inappropriate Common Tern population estimate**

Common terns are assessed throughout the EIAR Volume 3: Chapter 10: Ornithology including sections on Offshore, Intertidal, and Estuarine/Liffey areas, and we would like to address concerns that the population numbers used in assessments for Common terns are likely overestimating the current population size. Within the chapter, the annual (biogeographic) population is assessed at 480,000 individuals and we are concerned that this number is an estimate of the population before 2023's HPAI-H5N1 outbreak, which greatly affected Common terns. On breeding colonies throughout Ireland, including Dublin Port, Rockabill SPA, and other colonies monitored by BirdWatch Ireland, a decrease of approximately 50% was noticed in 2024 and it is assumed that the Irish breeding population of Common terns is now significantly lower than previous estimates made before the effects of HPAI-H5N1 mortality could be seen [Pers Comm Dr. Steve Newton, Senior Seabird Conservation Officer, BirdWatch Ireland November 10th 2024]. Since assessments are likely using a population estimate that is higher than reality, it is possible that effects from the CWP's impacts could be underestimated and more serious than described within the EIAR. A smaller actual population increases the potential that mortalities and displacement from the CWP project could have severe adverse effects on Common tern populations regionally in the Irish Sea and at specific SPAs where they are QI species. We would ask that the calculations for the impacts to Common terns be redone with updated lower population estimates to more accurately reflect the current population and that

extra consideration is given to the potential risks and impacts on Common terns from CWP construction and operation.

## **5.2 Intertidal concerns for South Dublin Bay**

While we appreciate that the timing of works within the intertidal area to the south of Dublin Port being done in the summer (exclusively April to August) to limit impacts to wintering birds that utilise the mudflat, we would still like to highlight that the associated intertidal and mudflat habitats within this area are still being used by birds during the construction months as well. This habitat, which is a part of the South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC, is important for a variety of local and regularly occurring Irish birds, many of which are highlighted within the EIAR and its associated appendices, and its use is not limited to the winter by QI species. There are often notable, and sometimes nationally and internationally important, numbers of the SPA's QI species including Redshank (*Tringa totanus*), Black-tailed godwit (*Limosa limosa*), and Oystercatcher (*Haematopus ostralegus*) within the SPA during the summer. We understand that summer is the best time for cable laying works and other construction within the intertidal habitat but would ask for consideration to be made for any large flocks of QI species that are within the intertidal or nearby habitat when construction works are ongoing. An alternative works plan for when species are in large numbers within the nearby habitat should be ready to implement if required.

We also appreciate the mitigation of limited construction hours (from sunrise to 1 hour before sunset from mid-July through the entire month of August) when terns are utilising this area for roosting after the breeding season and before migration. Within the conservation objectives for South Dublin Bay and River Tolka Estuary SPA, Common, Roseate, and Arctic terns are mentioned as important avian species using this habitat [18] and studies have found that the sandflats of Sandymount Strand are of particular importance to local Irish and regional European populations of terns [19]. It is important to note that many of these roosting terns are also likely to be juvenile birds and that it is highly likely that there is a high turnover of birds within the flock, thereby increasing the number of birds using this pre-migration staging area [19]. With this in mind, we would ask for the most care possible to be given to not disturbing these birds before they undertake their energetically demanding migration and potentially expanding the limited construction hours to 1 hour after sunrise and 1 hour before sunset from mid-July through August to give more time for roosting birds to leave the intertidal habitat of South Dublin Bay naturally before construction activities begin.

## **5.3 Lack of assessment of effects across lifespan of project**

Additionally, mortalities and displacement across the operational years of the CWP do not seem to have been addressed within the EIAR Volume 3: Chapter 10: Ornithology. When reporting mortality estimates of the different impacts, the '*annual impact to the regional and biogeographic populations*' is reported; however, as reported in the Non-Technical Summary, the operational lifetime of this project is 25 years. While annual assessment of mortality may be low, when

looking across the lifetime of the CWP project, the totality of the mortality could be impactful to seabird populations locally and within Irish waters. We would ask that this additive assessment be done to look at the expected mortality to bird species across the entirety of the lifespan of the project to ensure that all mortality associated with the CWP project during its entire lifespan will not negatively affect birds in Irish waters. Given that most impacts are assessed at non-significant, it is possible that effects could be more significant than assumed when they are assessed in totality across the lifespan of the project, and this is important to know and report before construction is undertaken. This could also be true in the NIS, as annual collision and displacement mortalities are also assessed within the NIS for all potentially impacted SPAs and without an additive look at the lifespan effects of the CWP project on these different QI species, there is the potential that the CWP project could have significant adverse effects on individual QI populations of birds within a SPA. We would suggest that these analyses be done, and the numbers reported so we can be sure that the CWP project will not have greater adverse impacts on Irish birds than currently reported.

#### **5.4 Cumulative impact assessment concerns**

While we appreciate the complexity of the cumulative impacts assessment that has been undertaken, we find the Ornithology Chapter's (EIAR Volume 3: Chapter 10: Ornithology) Appendix 10.01 '*Cumulative Effects Assessment*' difficult to understand in its approach and therefore its conclusions are hard to assess or support. This is particularly concerning considering how important understanding the cumulative impacts of the many offshore developments planned within the Irish Sea will be to the success and survival of Irish birds that utilise this marine environment. We understand the idea of trying to show multiple scenarios and organising the other offshore projects by what stage of the planning process they are in; however, the overall result is confusing (and we are not confident in the assumptions being made about the viability of other projects).

The bolded scenario ('25:1 Tier 2/ 50:1 Tier 1' for most species with two species specific exceptions) is the scenario the document favours as being the closest to the reality, or the most-likely scenario, with additional scenarios shown '*to support cumulative assessment conclusions insofar that even where higher, although still potentially feasible, displacement and/or mortality rates are used, conclusions in relation to cumulative impact assessment are unaffected.*'; however, many of these additional potential impact scenarios for a different seabird species, including Guillemot, Razorbill (*Alca torda*), Red-throated diver (*Gavia stellata*), Great black-backed gull, and Herring gull, show high predicted mortalities close to the 1% threshold when the CWP's mortalities are assessed cumulatively with all planned development projects within the Irish Sea. Great black-backed and Herring gull cumulative operation and maintenance collision impacts even exceed the 1% annual regional mortality rate for both CWP array designs for Great black-backed gulls and Design A for Herring gulls (Design B's predicted increase to annual regional mortality rates is 0.988%, which is very close to 1%) when assessed in tandem with the mortality estimates from other developments. We acknowledge that unless a species

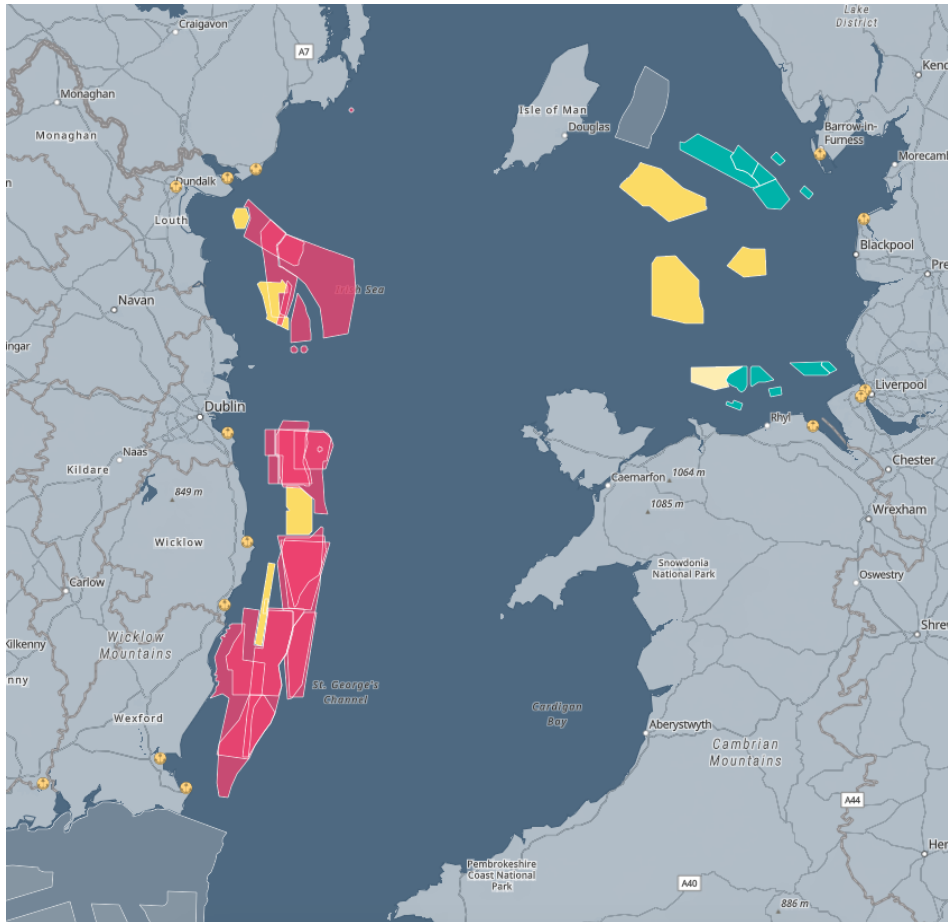
has crossed over the 1% threshold there is no legal obligation to consider the impacts to the species further, but the number of species found with high predicted increases to annual regional mortality in the additional scenarios is particularly worrisome especially given these cumulative scenarios are *'still potentially feasible'* outcomes.

Additionally and related to concerns detailed above, there is a lack of focus on migrant and non-breeding seabirds that still use the marine environment as none of these species are addressed within cumulative impact assessments and, while Common terns are assessed, the maximum bio-seasonal population is likely overestimating the current population post-HPAI outbreak and therefore underestimating the cumulative impacts offshore developments could have on the species. Taking this data into account along with the lack of information available about seabird usage at sea and the potential for increased offshore development within the Irish sea to 'squeeze' birds into ever smaller areas (see below concern for more information), we do not see how *'the CEA for ornithology does not identify any significant cumulative effects resulting from the CWP Project alongside other development'*.

#### **5.5 Proliferation of ORE projects in the Irish Sea and inappropriate assumption of available habitat**

We are also concerned in general about the proliferation of offshore renewable energy construction in the Irish Sea. With projects progressing in the UK and Ireland, the Irish Sea is in danger of becoming congested with offshore wind farms, with insufficient understanding of how this will impact the important bird populations of this area. Throughout the EIAR Volume 3: Chapter 10: Ornithology chapter and its related appendices, particularly in Appendix 10.01 *'Cumulative Effects Assessment'*, there is mention that associated displacement from the array site and CWP marine footprint will not be significant to a majority of the bird species assessed due to the *'large expanse of available habitat outside of the array site'*; however, it is our view that this does not take into account the large amount of planned offshore wind planned within the Irish Sea. There are proposed offshore wind projects on both the Irish and UK sides of the Irish Sea, as well as some that are already operational, all of which can be seen in Figure 3 below:





**Figure 3:** Map of the proposed and current offshore wind development within the Irish Sea, as taken from the 4C Offshore website [20]

As a whole, the Irish Sea is a unique and interconnected ecosystem with the range and habitats of many seabird species crossing multiple borders within it. With an increase in the amount of proposed renewable development in the Irish Sea, from within Ireland and outside Irish borders, the cumulative effect these projects may have on birds needs to be better understood and planned for. The migratory nature of seabirds and the large size of their ranges make it possible that the populations of seabirds within the Irish sea intermix and are inter-connected between the countries; this should be further studied in order to understand how cumulative and transboundary impacts could affect the overall populations of seabird species utilising these waters. Given the amount of offshore renewable development planned in the Irish Sea, we at BirdWatch Ireland worry that the increase in turbines and expansion of windfarm development in the Irish Sea will have an effect where the birds are being squeezed into ever smaller areas and the assertion that there is a *'large expanse of available habitat outside of the {CWP} array site'* does not take this concern into account appropriately and is not appropriate or applicable as a conclusion.

## Conclusion

Despite the length of the CWP's EIAR Volume 3: Chapter 10: Ornithology, its appendices, and the Natura Impact Statement, there are missed opportunities to address important issues for Irish birds. While mortality estimates are one way to address effects on birds and Irish breeding birds are an important and threatened group, we would suggest more focus on fitness and migratory species throughout the ornithological assessments. Where addressed above, we suggest that analysis be redone to ensure that appropriate conclusions are reached. Also, there is a very genuine possibility that cumulative effects of all these new wind developments could be a serious threat to seabirds that utilise the marine environment within the Irish Sea and we would push for continued and better cumulative assessments of effects to birds. An increase in the transparency of the data collected by CWP project and used to come to the conclusions made in the documents would also aid in our ability to address whether inappropriate or incorrect conclusions are made. We at Birdwatch Ireland would support conservative and cautionary approaches be taken to limit the potential of negative effects to Irish birds caused by CWP development, not just when data is limited but also for locally and regionally important seabirds and habitats like the Arctic terns nesting in Dublin Bay and Roseate terns on Rockabill SPA. With so much unknown about seabird and migratory bird use of the Irish marine environment, cautionary approaches tailored to the local environment and implemented with care and flexibility to address new issues or information are key to ensuring the smallest impacts possible on ornithological biodiversity with offshore wind development.

With our concerns addressed above, we would also like to acknowledge the time and consideration given to the variety of different birds and habitats that will be affected by the planning, construction, and operational phases of the CWP project. The acknowledgement made within the EIAR and the NIS of the importance of the habitats that will be affected by the CWP to both local Irish populations of birds and regional European birds cannot be understated, and we appreciate that is acknowledged throughout the documents. We also appreciate the pre-emptive mitigations that are being considered and added into the planning, particularly as it relates to the substation construction within Dublin Port to minimise the disturbance to nesting terns species and the timing of construction in the intertidal area to avoid impacts to the wintering birds and roosting tern species. While we have detailed a few asks in the paragraphs above, we would also ask for more study to be done in conjunction with the CWP project. The potential that windfarms could have positive benefits for fish spawning, increasing prey availability for foraging seabirds, should be explored as it could help mitigate some negative effects of increased offshore development to seabirds. Another possible mitigation that should be added to planning is to consider painting at least one turbine blade black as a collision-reduction measure [21], and request that funding is made available to find out if painting a blade black would lower any risk of collisions with seabirds in the Irish Sea and also to encourage further tern tracking work to better understand tern migration through the area.

From the evidence presented to us in the supporting documents (EIAR, its appendices, and NIS) of the application and the gaps in the identification of seabirds at risk from the proposed development for the Codling Wind Park, it is our view at BirdWatch Ireland that additional research and assessments should be done before it can be concluded that the project will not have significant adverse effects on Irish local and European regional populations of birds.

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