Marine Spatial Plan Review Submission

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The JMSP is an important document and will play a crucial role in the future as the seascape becomes even more crowded and can potentially solve areas of potential conflict before they arise.
Correct management of the Jersey waters will ensure long term gains and sustainability for all users.
The proposed 1 GW Offshore Wind Farm(OWF) will likely consist of about 120 wind turbines and cover an area of up to 150 km2. Research by the Technical University of Denmark, National institute of aquatic resources "Effects of operational off-shore wind farms on fishes and fisheries. Review report. Svendsen, Jon Christian et al. 2022) concludes that the environmental benefits of OWF is positive. The scour protection (often boulders) forms artificial reefs in sandy areas. The artificial reefs allow spawning areas and areas for juvenile fish and shellfish to mature. The artificial reefs also encourage a broader seaweed biodiversity which in turn attract molluscs, prawns etc.
Each wind turbine will attract verticle growth that also ensures different biodiversity according to water depth and the sand areas between each pile of rocks soon self seeds with eel grass. This combined with the fact that areas around OWFs are fishing free zones means that Jersey will get an area of high marine biodiversity where fish stocks can recover, breed and develop in peace.
Research also shows that as soon as fish are juvenile they move away from the structures and so mature fish are available to the commercial fishing fleet. This is especially true for scallops that can breed in the sandy areas between wind turbines and migrate to other areas to be caught.
Additional enhancements in OWF design can augment this. Specially designed artificial reef structures can improve biodiversity even more and offshore bird structures can provide nesting opportunities in close proximity to a good food source.
Boulders dumped on underwater pipelines and electrical cables also provide similar benefits.
OWF Supply vessel routes should be designated to ensure that regular engine noise does not disturb the marine environment, particularly large marine mammals such as dolphins.
Onshore treatment of sewerage and storm surge tanks that stop sewerage flow into the sea during heavy rain should be prioritized to protect the coastal environment. This and mitigating the runoff of fertilizer into streams and the sea will help reduce toxic algae blooms and the desertification of the sea bed due to excess nitrogen levels and deoxygenation. "Fertilizer Leakage to the Marine Environment, Ecosystem Effects and Population Trends of Waterbirds in Denmark. Møller, Anders Pape et al. 2014"
Planting of eel grass and kelp fields is a great idea for CO2 removal with a lot of scientific evidence to prove it is more effective than reforestation.
Investigation should also be done into whether historically boulders were removed for use as ballast and the effect of dredging for aggregate and sand. Re introducing artificial reefs and seeding effected areas can help to regenerate any seabed deserts.
Use of strategically placed wave power generators, OWFs, offshore solar can all keep marine activity away from sensitive areas or create new biodiversity islands.