

Seagrass *Zostera noltii* and *Z marina* around Ireland PROPOSALS TO FIND – PROTECT – MANAGE – RESTORE and COUNT

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Seagrass forms underwater lawns, meadows and forests which are of highest biodiversity and carbon sequestration value. Collectively we refer to them as **Seagrass beds**. Seagrass beds feature in EU Water & Nature law and are a wetland habitats prioritised for restoration under the Nature Restoration Regulations passed on June 17th 2024 and several conventions.

Worldwide seagrasses have been lost or damaged due to pollution, nutrient enrichment, disease, invasive alien species and physical damage. Heat waves and storms associated with climate change are adding to the pressure. Recent information and citizen science campaigns, like the one now led by Coastwatch www.coastwatch.org have demonstrated that the value and need for seagrass protection can grasp the public's imagination.

The Irish government now has a marine planning frame and law in place and passed a Climate Action Plan. Ireland has a unique chance now to take a suite of dove tailed actions for seagrass. Action to protect, manage and restore, monitor and report. Actions where citizens are partners and a new public participation approach is piloted. While volunteer support for locating and protecting seagrass is strong, lack of progress on law, guidance and responsibility for seagrass protection are obstacles which need to be addressed

Four key actions we are asking for:

- 1. Seagrass protection wherever it occurs under the Wildlife Acts.
- **2. Management** as DMAP (under the MAP act 2021. A new approach integrating citizen science, community participation and government bodies with shared goals including protection and restoration of conditions= for seagrass to thrive. County Development Plans as extended into the 'near shore' zone (MAP act) would anchor this further in planning.
- **3. Funding** for the above and for public awareness, expertise and timely information.
- 4. Accounting by inclusion of blue carbon in Ireland's National Determined Contributions.

Context Notes

• The National Biodiversity Data Centre collects seagrass location data, the EPA monitors intertidal seagrass for WFD reporting, while NPWS and universities have select seagrass distribution and health data. Coastwatch asks citizens to report seagrass growing or swept up in the annual autumn shore survey, noting widespread confusion between green seaweed and seagrass initially, but also interest to learn once the importance of seagrass was understood and subsequent volunteer finds of new beds. In May 2021, Coastwatch launched a Seagrass Search and Health Campaign. Swimmers, kayakers, paddle borders, divers and fishermen reported new beds and some reporting on size and health. Based on this data, experience of trying to address obvious pressures and many hours of brain storming and discussion, we developed the core action points above with more detailed ones on awareness, ed etc.

- While so far Flora Protection Orders https://www.irishstatutebook.ie/eli/1976/act/39/section/21/enacted/en/html have been used for rare and threatened plants, Section 21 of the Wildlife Act does not limit itself to these. A FPO for seagrass, based on its importance for biodiversity/ blue carbon could be put in place quickly, giving local authorities the clarity they need when taking over planning responsibilities for the near shore zone. The guidance and support they would need to enforce the FPO could be provided under the umbrella of a seagrass DMAP which would also provide the frame for monitoring, advice and public participation. An alternative would be to protect under the amended section 21 of the Wildlife Act.
- Secure funding and recognition of local community efforts is essential. As new catchment
 management models are rolled out under the Water Action Plan seagrass monitoring and
 protection tasks can be integrated. Marine Institute commissioned research published in 2021
 estimated that our seagrass stores 0.6 Mt of carbon, based on an area of 62 km2 of seagrass
 nationally1.) Coastwatch agrees with the authors that this is likely to be an underestimate of
 area. The Coastwatch map of seagrass sites found by citizens highlights this. Cross border
 protection of seagrass and island-wide sharing of data, knowledge and action is in our grasp.

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¹ Cott, G. M., Beca-Carretero, P. and Stengel, D. B. (2021) Blue Carbon and Marine Carbon Sequestration in Irish Waters and Coastal Habitats. Marine Institute, Ireland