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Further Reading:

Norton, D., Hynes, S., & Boyd, J. (2018) Valuing Ireland's Coastal, Marine and Estuarine Ecosystem Services. Non-technical report [Available online: http://www.nuigalway.ie/semru/publications.html#Monographs_and_Reports]

Norton, D., Hynes, S., & Boyd, J. (2018) Valuing Ireland's Coastal, Marine and Estuarine Ecosystem Services. EPA Research Report No. 239 [Available online: <http://www.epa.ie/pubs/reports/research/water/research239.html>]

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Read More About: The Socio-Economic Marine Research Unit Cluster (SEMRU) within the Whitaker Institute for Innovation and Societal Change. [here](#)

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Valuing Ireland's Blue Ecosystem Services (VIBES)

The European Union (EU) aims to protect, value and, where necessary, to restore nature both for biodiversity's intrinsic value and for its contribution to human wellbeing and economic prosperity through ecosystem services. The main policy drivers in achieving these goals are the Marine Strategy Framework Directive (MSFD) and 2020 Biodiversity Strategy. Both policies recognise that trade-offs may have to be made and both require that member states value the benefits that nature contribute to societal wellbeing and incorporate these benefits known as 'ecosystem services' into policy making.

Most of Ireland's nature is hidden under the waves as its marine territory covers 880,000km² which is 10 times its terrestrial territory. The benefits that Ireland's coastal, marine and estuarine ecosystems or 'blue' ecosystems provide vary from the fish landed from our waters, to a walk along a beach or the carbon dioxide captured; lessening the effects of climate change.

For some of these ecosystem services such as fish landings or aquaculture, market prices give some idea of the value society puts on these benefits. Others, including coastal recreation or wastewater treatment may be measured but do not have market prices while other benefits including possible future medicines or heritage values are harder to measure let alone value.

Research Findings

The authors used an ecosystem services classification system called the Common International Classification of Ecosystem Goods and Services (CICES) to identify the most significant ecosystem services generated in Ireland's coastal and marine waters. Once identified they used a variety of appropriate indicators to measure the level of ecosystem services provided. Examples include the tonnage of fish landed from the Irish EEZ, the volumes of wastewater pollutants absorbed by the coastal and estuarine waters or the number of trips Irish residents undertook to coastal environments.

Where sufficient data was then available, the ecosystem services were mapped and valued. Examples of valuation exercises from the project include using market prices to estimate the €660 million of marine produce extracted from Ireland's marine waters. Other examples include using value transfer to estimate the value of wastewater treatment services to be at least €316 million and the estimated value including consumer surplus for coastal and marine recreation at over €1.6 billion.

Policy Implications

The outputs of the VIBES project provide indicators, estimates, maps and values for some blue ecosystem services while also providing a foundation for further work on other blue ecosystem services where there are currently significant knowledge gaps. These estimates are needed for incorporating all ecosystem service values into plans and decisions related to Ireland's marine and coastal environment.