

## Did you know?

- Ireland has 7,500 km of coast and one of the largest sea areas in the EU.
- Ireland has a seabed territory of about 880,000 km<sup>2</sup>. This is more than 10 times the size of the island of Ireland itself.
- In 2016, the direct economic value of the Irish ocean economy was worth about €1.8 billion. (Ireland's Ocean Economy Report, 2017, SEMRU).

Ireland's coastline contributes to our citizens' wellbeing, health and quality of life.

In 2016 the Irish ocean economy was worth

**€1.8bn**



## National marine monitoring programme

A monitoring programme to provide an overview of ecological health in transitional and coastal waters is undertaken by the:

- Environmental Protection Agency (EPA),
- Marine Institute,
- Inland Fisheries Ireland, and
- National Parks and Wildlife Service.

The programme is coordinated by the EPA.

As our tidal waters cover more than 14,000 km<sup>2</sup>, the area is broken down into more manageable units called water bodies. A representative number of these water bodies were selected to be monitored to provide an overall indication of the quality (status) of Ireland's marine waters. Currently 80 transitional (estuaries) and 43 coastal waters are included in the national monitoring programme.

## What is monitored?

Both the plants and animals (biological communities) as well as chemical measurements in each water body are monitored. The biological communities include:

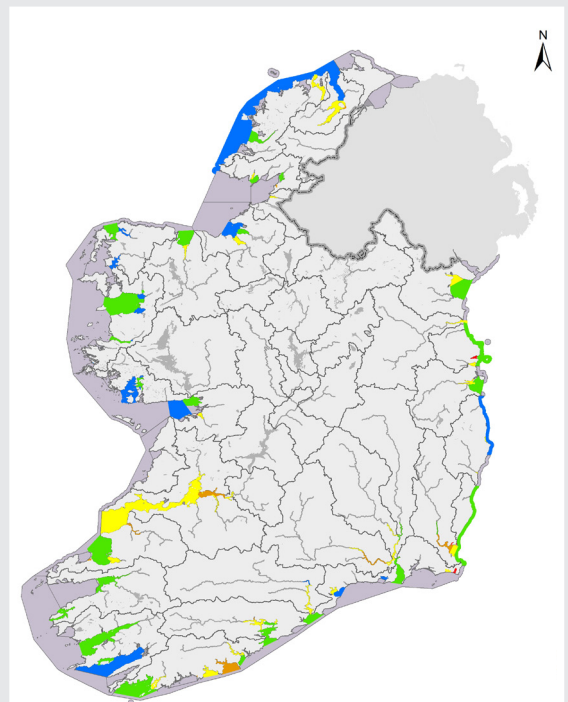
- tiny free-floating plants (phytoplankton),
- animals without a backbone living in the bottom muds (benthic invertebrates),
- fish,
- opportunistic seaweeds (seaweeds that grow very quickly when environmental conditions suit causing large accumulations of

plant matter, for example sea lettuce),

- rocky shore seaweeds,
- seagrass (the only true marine plant found in Irish waters); and
- saltmarsh - (a community of salt tolerant plants that form a band along the upper tidal limit of water bodies).

The assessment also measures:

- dissolved oxygen, and
- nutrients, including nitrogen and phosphorus, and
- specific chemical pollutants.



Transitional and Coastal water body Water Framework Directive Status 2010-2015

High	Poor
Good	Bad
Moderate	Unassigned
	WFD Catchment

## Marine waters assessment

Ecologically healthy marine waters are a valuable natural resource. They support a rich and diverse range of ecosystems, habitats and species, and they are also a source of food - from wild fisheries and aquaculture. They are also important for recreational activities and tourism.

Transitional and coastal waters are assessed under the European Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD). Having coordinated frameworks for water quality for all the water bodies in Ireland, and across Europe, allows us to compare our results with other countries. It allows us to see what works to help us make sure all our water bodies achieve at least 'good' status, and no deterioration occurs.

Human activities can cause pollution. We can restore water bodies to 'good' status by doing something about these activities. Under the WFD, waters are classified into five quality categories ('ecological status').



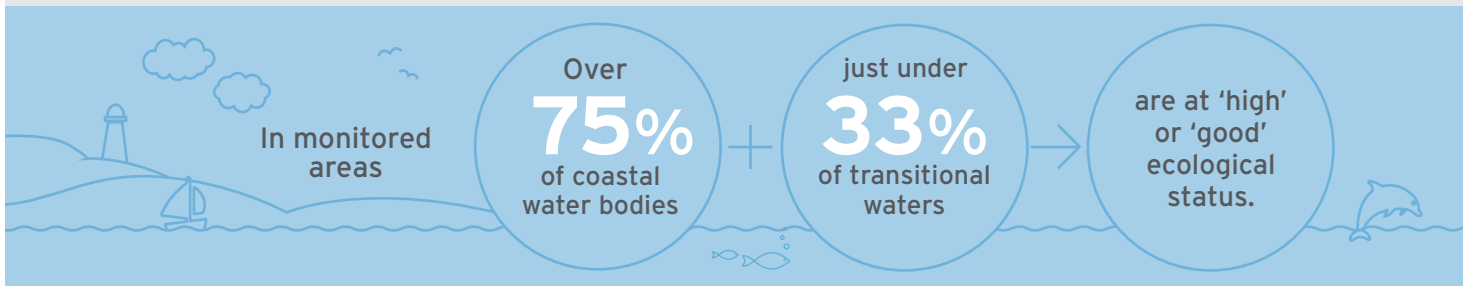
'High' is when the water is not polluted at all, and 'bad' is when the water is most polluted.

## The ecological status of transitional and coastal waters

Over three-quarters of monitored coastal water bodies and just under a third of monitored transitional waters are at 'high' or 'good' ecological status. This means that a quarter and two-thirds of coastal and transitional waters, respectively, will need measures to be taken so as to achieve the objectives of the WFD.

Percentages of waters in each ecological status class.

Ecological status	'High'	'Good'	Total 'high' and 'good'	'Moderate'	'Poor'	'Bad'	Total 'moderate', 'poor' and 'bad'
<b>Transitional waters 2010-2015 (number = 80)</b>	12%	19%	31%	49%	15%	5%	69%
<b>Coastal waters 2010-2015 (number = 45)</b>	23%	56%	79%	16%	5%	0%	21%



You can find more information about transitional and coastal water quality in Ireland and the environmental pressures on these waters at [www.estuaries.ie](http://www.estuaries.ie) and [www.catchments.ie](http://www.catchments.ie)

For the latest information go to [www.epa.ie/irelandsenvironment](http://www.epa.ie/irelandsenvironment)