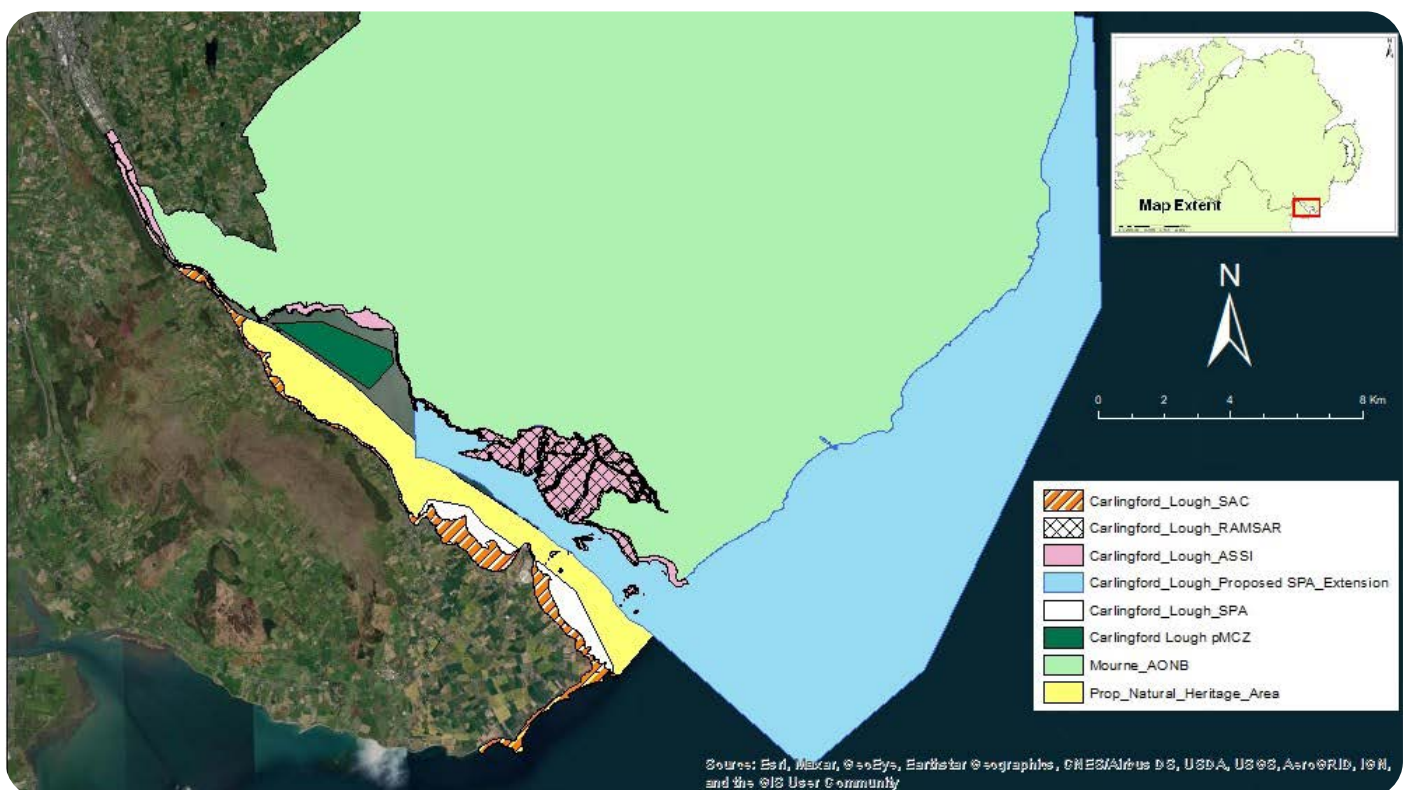


Carlingford Lough

BACKGROUND

Carlingford Lough is a sea lough at the mouth of the Newry (or Clanrye) River on the east coast of Ireland, bordering both the Republic of Ireland (County Louth) and Northern Ireland (Counties Down and Armagh). There is no formal, agreed international maritime boundary in the Lough, necessitating the development of a common approach to management of its shared marine resources where possible.

The population of the catchment is approximately 61,000. The main settlements are Newry City with a population of 26,893, and Warrenpoint, Burren and Rostrevor with a population of 11,509, all of which are in Northern Ireland (NISRA, 2011).



Carlingford Lough conservation designation (credit: AFBI)

This factsheet has been produced as part of SIMAtlantic, a two-year project (2019-21) co-funded by the European Union to support the establishment and implementation of maritime spatial planning in five European Atlantic countries: France, Ireland, Portugal, Spain and the United Kingdom. For more information, see www.simatlantic.eu.



Carlingford Lough from Flagstaff viewpoint

On the southern side of the Lough, Carlingford has a population of 1,445 and Omeath has a population of 603 (CSO, 2016).

The areas of Carlingford Lough on the Southern side of the dredged channel host the following designated features:

- Special Area of Conservation (SAC) for the Annex I habitats
- Annual vegetation of drift lines and Perennial vegetation of stony banks
- SPA for overwinter (non-breeding) Light bellied Brent Geese and wetland
- Proposed Natural Heritage Area

The areas of Carlingford Lough on the Northern side of the dredged channel host the following designated features:

- Special Protection Area (SPA) for breeding Sandwich and Common Terns and overwintering (non-breeding) Light Bellied Brent Geese
- Area of Special Scientific Interest (ASSI)
- Area of Outstanding Natural Beauty (AONB)
- RAMSAR site (as designated under the Convention on Wetlands of International Importance (also known as the Ramsar Convention).
- Marine Conservation Zone (MCZ) to support the habitat for *Philine aperta* (white lobe shell) and *Virgularia mirabilis* (sea-pen) in soft stable infralittoral mud

The Loughs Agency was set up as a cross-border body under the 1998 Agreement between the Government of the United Kingdom of Great Britain



Pacific Oyster (*Magallana gigas*)

and Northern Ireland and the Government of Ireland. The Agency has a number of strategic and operational functions which contribute to promoting and managing marine activities within Carlingford Lough.

AQUACULTURE ACTIVITIES

Blue mussels (*Mytilus edulis*) and the Pacific Oyster (*Magallana gigas*) are the dominant shellfish species cultivated in Carlingford Lough.

- Intertidal aquaculture occurs predominantly in the form of off-bottom (trestle) culture of the Pacific oyster *M. gigas*
- Subtidal aquaculture involves the bottom culture of the blue mussel. *M. edulis* seed is dredged from naturally settled wild seed mussel beds (outside Carlingford Lough) then re-laid onto licensed aquaculture beds within the Lough for on growing to harvestable size.



View across the Lough to Carlingford Castle

The shellfish aquaculture sector in Northern Ireland was valued at £4.8 million in 2018 (DAERA)

Production value of the shellfish aquaculture in County Louth was €8.3 million in 2019 (BIM)

- Licensed aquaculture sites occupy approximately 23.9% of the total area of the Lough. Actual area under culture will be significantly less than this.

In the Northern side of Carlingford Lough the Department of Agriculture, Environment and Rural Affairs (DAERA) Marine and Fisheries Division is responsible for the granting of fish culture licences, shellfish fishery licences and marine fish fishery licences under the Fisheries Act (Northern Ireland) 1966.



Intertidal off-bottom (trestle) culture of the Pacific Oyster (*Magallana gigas*)

In the Southern side of Carlingford Lough the Aquaculture and Foreshore Management Division of the Department of Agriculture, Food and the Marine (DAFM) is responsible for aquaculture licensing under the Fisheries (Amendment) Act, 1997 and Foreshore Acts, 1933-2011.

A programme of monitoring has been established for all new licensed intertidal aquaculture sites on the northern shore of Carlingford Lough granted since 2014. This is to ensure any changes in benthic sediments and communities from bioaccumulation remain small and localised.

For coastal communities, aquaculture can:

- Provide jobs and contribute to diversification
- Contribute economically through associated activities such as processing facilities, etc.
- Provide quality local seafood to retailers and restaurants, enhancing local tourism
- Relieve pressure on wild stocks

Shellfish flesh is routinely monitored for levels of *Escherichia coli* and classified for human consumption. Levels are measured per 100g of flesh. The standards that must be achieved and the level of treatment required for each classification is set out in EU Law.

WATER QUALITY

The European Water Framework Directive (Directive 2000/60/EC) addresses issues of water use, water quality, river morphology and the ecological value of waterbodies and their surrounding areas (NIEA, 2015a). It has been transposed into Northern Ireland regulations through The Water Environment Regulations 2017. The Northern Ireland Environment Agency is the competent authority tasked with implementation of the regulations. In the Republic of Ireland, The European Communities (Water Policy) Regulations 2003 (SI 722 of 2003) implement the objectives of the Water Framework Directive.

AFBI delivers remotely deployed automated in-situ instruments capable of monitoring a range of physico-chemical and environmental variables. These moored instruments in Carlingford Lough routinely monitor:

- Temperature
- Salinity
- Chlorophyll concentrations
- Dissolved oxygen
- Turbidity
- Surface seawater fluorescence

Working both within in-house teams and with other organisations, the Department of Agriculture, Environment and Rural Affairs (DAERA) Marine and Fisheries Division survey, monitor and assess the marine and coastal environment of Northern Ireland, including bathing water quality.

In the Republic of Ireland, a National Marine Monitoring programme is coordinated by the Environmental Protection Agency (EPA). Sites are monitored for biological and chemical parameters within both jurisdictions.

Shellfish are filter feeders, filtering phytoplankton from the seawater. Some phytoplankton species can be harmful to humans if eaten, therefore routine monitoring is carried out through the Food Standards Agency to determine if toxic phytoplankton is present in the water within the shellfish production areas.

The Urban Waste Water Treatment Directive is transposed in Northern Ireland by the Urban Waste Water Treatment Regulations (Northern Ireland) 2007 (DAERA, 2015).

In the Republic of Ireland, it is transposed by the Water Services Act, 2007 and the Urban Waste Water Treatment (Amd.) Regulations, 2010. Compliance

with the requirements of the directive is monitored by the EPA.

There are a total of 17 wastewater treatment works (WWTWs in-service) registered within the Carlingford Catchment.

TOURISM AND RECREATION

The Carlingford Catchment hosts a population of approximately 61,000 and attracts tourists year round.

- Boating activity is widespread in the lough with multiple sailing and yacht clubs, slipways, private moorings and jetties. Boating activity includes dinghy and yacht racing and cruising, sail and powerboat training.
- The Albert Basin is the main water-based recreation resource in Newry. Managed by Newry and Mourne District Council it provides tie-up mooring facilities, with an overall Quay length of approximately 186 metres.
- Carlingford Lough hosts 10 designated access points to the "South East Coast Canoe Trail" which stretches more than 50 nautical miles along the south east coast of Northern Ireland into County Louth in the Republic.
- The Newry, Mourne and Down District Council manages several fish angling stands, marinas and tie-up moorings within its jurisdiction
- Cranfield Beach is an identified bathing water with public facilities (managed by Newry, Mourne and Down District Council)
- Local companies offer daily day-trip sailings between Warrenpoint and the small village of Omeath from June to September.
- Carlingford Marina boasts a 300 berth marina and boatyard. The Omeath to Carlingford Peninsula Greenway is utilised by sail boats and has floating moorings outside the Carlingford harbour.



Recreation on Carlingford Lough (credit: Loughs Agency)

- Shore angling is popular along various points of the Carlingford Lough coastline and numerous watersports, outdoor and adventure centres operate within the Lough.

PORTS AND HARBOURS

Warrenport Harbour is a large commercial port, the second largest in Northern Ireland.

It is a designated Competent Harbour Authority (providing pilotage). Its revenue exceeded £5.9 million in 2019.

It is a Trust Port, not owned by the government but operates autonomously in a commercial manner. As a Trust Port, it has a statutory obligation to dredge its approach channels and berths so that vessels can access the Port safely. For the past 40 years the Port has carried out a major dredging campaign approximately every 5 years, with more localised dredging within the port every 2 years in the areas where the loss of navigable water depth is most severe. Dredged material is currently placed at a licensed offshore site 26km from the port and 11km outside of the sheltered waters of Carlingford Lough.

On the Northern Shore there are anchorages at:

- Greencastle
- Killowen Point
- Rostrevor

On the Southern Shore anchorages can be found at:

- Omeath
- Greer's Quay
- Carlingford Marina

The council-run Carlingford Harbour is approximately 1km south along the shoreline from Carlingford Marina, which dries to soft mud at low tide.

Greer's Quay and slipway were constructed for commercial fishing and are still utilised as such.

The village of Greenore is dominated by the large privately owned commercial deep water port.

MARINE FISHERIES

Within Carlingford Lough there are a few small-scale wild fisheries.

A wild fishery for the blue mussel (*Mytilus edulis*) operates within the Narrow water area of Carlingford Lough, whilst pot fishing occurs in the main body of the lough and is primarily for Green Crab (*Carcinus maenas*), both for market and as predator control over mussel beds. Small-scale intertidal collection of winkles, mussels and wild cockles also take place.

MARINE SPATIAL PLANNING

In Northern Ireland, marine spatial planning is implemented through the [Marine Plan](#), to inform and guide the regulation, management, use and protection of our marine area.

In the Republic of Ireland, the [National Marine Planning Framework](#) covers marine spatial planning and is transposed into national legislation.

FURTHER INFORMATION

For further information, please see www.simatlantic.eu.

