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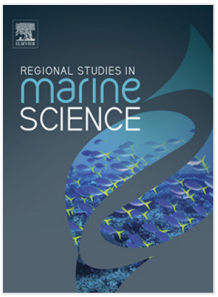


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# Dublin Port and Dublin Bay: reconnecting with nature and people

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## Abstract

Dublin, the capital city of Ireland, was developed by the Vikings in the 9th century. Today, Dublin Port is the busiest port in Ireland, handling 31 million tonnes of cargo a year and over 1.6 million ferry passengers and covering an area of 260 hectares in the centre of Dublin Bay, which encloses an area of about 296 km$^2$. Close to the port there are wetlands that are home to internationally important populations of birds and a range of coastal, intertidal and subtidal habitats, many of which are protected under EU and other legislation. The bay has been designated as a UNESCO Biosphere.

Dublin has a population of over a million people. The bay has high cultural value and is extensively used for recreation. There is a power station and a waste water treatment plant close to the port, together with oil storage, scrap metal recycling and cement manufacture. There were some shell and fin-fish fisheries in the past but commercial fishing is very limited today, although there are some important nursery areas for fish species harvested in the Irish Sea. Levels of contaminants have reduced in sediments due to reductions in shipbuilding, although concentrations of PAHs, metals and a range of pesticides are high in some areas. Dublin is a major oil trans-shipment port and oil exploration has been proposed in the bay, so there is risk of further oil contamination. Water quality is generally good, but sewage infrastructure and treatment capacity need further enhancement to sustain recent improvements. Sea level rise will bring increased risk of coastal flooding and threatens some of the wetland habitats. Additional sea-defences will further add to the extent of artificial structures along the foreshore. Dublin Port is set to expand and there are concerns over invasive species and climate change, particularly given lack of knowledge of potential impacts of invaders and the complex combined effects of multiple local and global stressors.

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