Assessment of marine litter in all four regional seas, 2010-2021

This is the metadata for the data showing the results of a preliminary classification and identification of 'non-problem areas' and 'potential problem areas' with respect to marine litter in Europe's Seas, using the prototype Marine Litter Assessment Tool (MALT), a multi-metric indicator-based status assessment tool. Please see the European Topic Centre (ETC) report "Marine Litter in Europe - An integrated assessment from source to sea" (2022).

Simple

Date (Creation)	2022-11-21
Date (Publication)	2022-12-12
Edition	01.00
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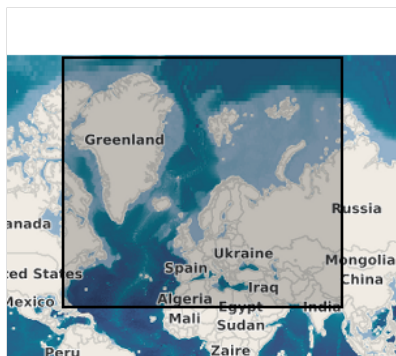| Point of contact					
	Organisation name	Individual name	Electronic mail address	Website	Role
	European Environment Agency		sdi@eea. europa.eu	http://www. eea. europa.eu	Point of contact
	European Environment Agency		sdi@eea. europa.eu		Custodian

Point of contact

No information provided.

Maintenance and update frequency	Not planned
GEMET - INSPIRE themes, version 1.0	• Oceanographic geographical features • Hydrography
Keywords	
Keywords	
GEMET	• water
Continents, countries, sea regions of the world.	• Black Sea • Baltic Sea • Mediterranean Sea • Bay of Biscay and the Iberian Coast
Spatial scope	• European
EEA Management Plan	• 2022 3.1.12
EEA topics	• Water
Access constraints	Other restrictions
Other constraints	no limitations to public access
	Other restrictions

Use constraints	
Other constraints	EEA standard re-use policy: unless otherwise indicated, re-use of content on the EEA website for commercial or non-commercial purposes is permitted free of charge, provided that the source is acknowledged (http://www.eea.europa.eu/legal/copyright). Copyright holder: European Environment Agency (EEA).
Spatial representation type	Vector
Distance	100 km
Language of dataset	English
Topic category	• Environment

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Begin date	2010-01-01
End date	2021-12-31
Coordinate reference system identifier	EPSG:3035
Distribution format	• GDB ( ) • Geopackage ( )

OnLine resource	**Protocol**	**Linkage**	**Name**
	EEA:FOLDERPATH	https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_3035_100_k_marine-litter_p_2010-2021_v01_r00/	
	WWW:URL	https://sdi.eea.europa.eu/data/15389e51-5204-4c6b-b40f-ad4af9a6f590	Direct download
	OGC:WMS	https://water.discomap.eea.europa.eu/arcgis/services/MarineLitter/MALT_Status/MapServer/WMSServer?request=GetCapabilities&service=WMS	
	WWW:LINK-1.0-http--link	https://www.eea.europa.eu/data-and-maps/figures/assessment-of-marine-litter-in	Static map

OnLine resource	**Protocol**	**Linkage**	**Name**
	ESRI:REST	https://water.discomap.eea.europa.eu/arcgis/rest/services/MarineLitter/MALT_Status/MapServer	

OnLine resource

No information provided.

Hierarchy level	Dataset

Conformance result

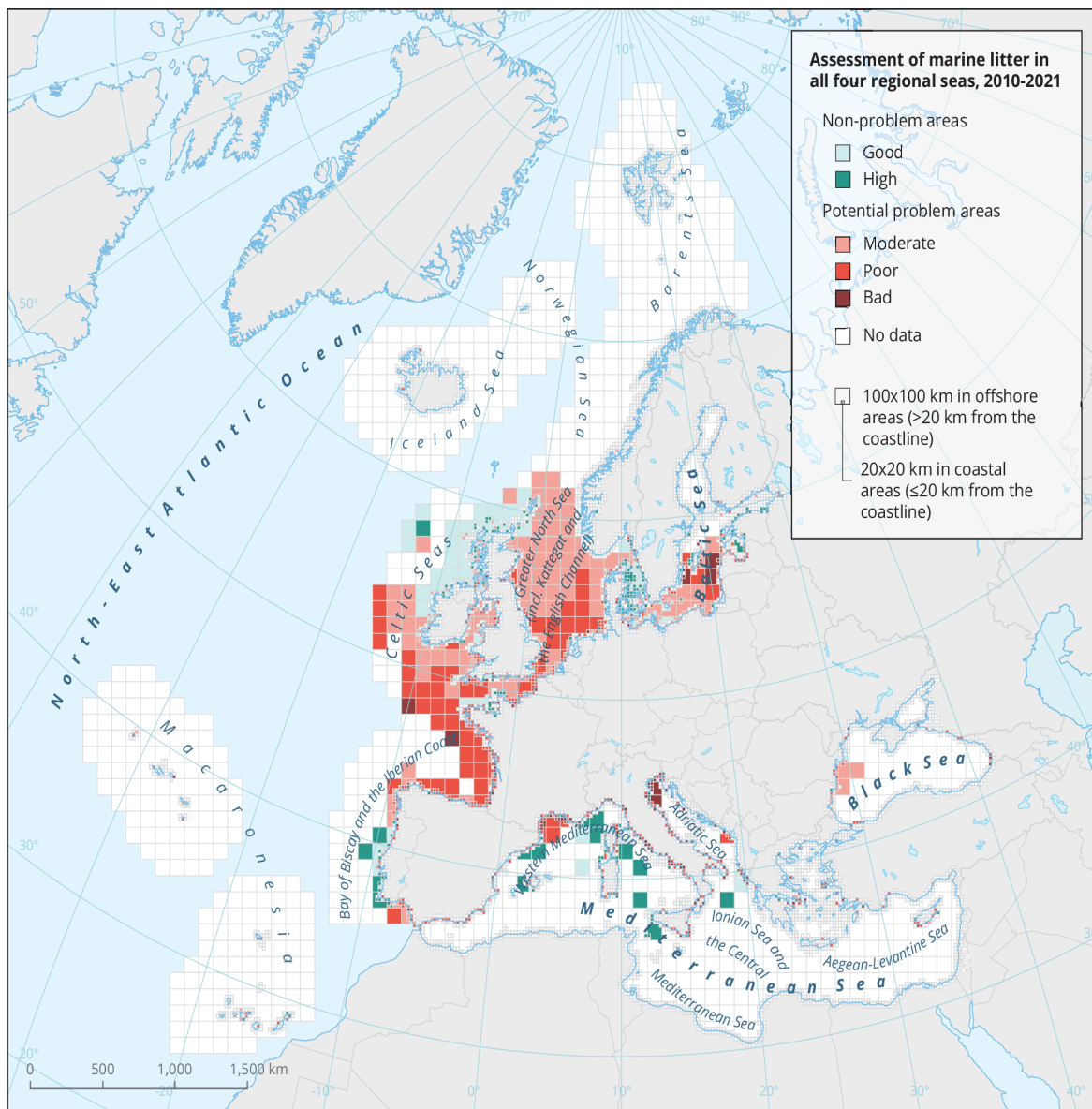|	
Date (Publication)	2010-12-08
Explanation	See the referenced specification
Statement	This datalayer gives the results of the integrated assessment of marine litter in Europe's seas, using the MALT tool to provisionally identify 'non-problem areas' and 'potential problem areas'. Please see ETC report "Marine Litter in Europe - An integrated assessment from source to sea" (2022) for a full explanantion of the assessment method and data used. As described in the report, the tool uses observation data "from multiple sources publicly accessible in EMODnet: a) the seafloor litter data comprise 20551 surveys at 20021 sites in 22 countries, taken in the period 2010-2021. The surveys included in the dataset were done by their respective marine litter projects, which included MEDITS, EVHOE, Baltic International Trawl Survey, DeFishGear, Demersal Young Fish Survey, IBTS, North Sea Beam Trawl Survey, and PROMARE; b) the European beach litter data were collected by more than 72 originators (institutions and projects). The MLW data contained observations from 2013 to 2021, covering 1424 individual beaches whilst the OSPAR data covered 124 beaches from 2012 to 2018. EMODnet data contained observations from 2010 to 2020 at 1225 beaches; c) floating microlitter data came from 839 trawls conducted on 60 cruises between 2011 and 2020. "

A broad summary of the methodology is in the European Topic Centre (ETC) report "Marine Litter in Europe - An integrated assessment from source to sea" (2022). "5.4. Indicator-based assessment on the status of marine litter pollution". It is long, would you like me to use it here or is it fine if we provide a link? Details on the MALT methodology is also provided in Annex 5 an 6 of the ETC report. I picked up the most relevant part from 5.4 for you:

Although the MALT tool is designed to integrate multiple indicators, this preliminary assessment is based on the use of three indicators: (i) the count of beach litter items per 100 m; (ii) the count of seafloor litter items per km2; and (iii) the count of floating microlitter particles per m3 in surface water samples. It is

preferable to apply indicators for which a published threshold value exists. In the case of the beach litter, the European threshold value defined by the TGML of 20 items per 100 m (van Loon et al., 2019) is used. For the seafloor litter count, no officially approved threshold values were found. As such, the 15th

percentile of the counts of seafloor litter in the assessment dataset is applied (corresponding to 15.4 items/km2). This method is therefore analogous to the method used to derive the beach litter threshold. An alternative, less restrictive threshold value (230 items /km2) is proposed by UNEP (2016) and tested in

Malta (Borja et al. 2021). The effect of these alternative threshold values on the MALT assessment results, both on the seafloor litter indicator as well as the overall status are shown in Annex 6. For floating microlitter, a tentative threshold value of 10 items per m3 was applied.

The litter counts corresponding to the minimum limit on the Ecological Quality Ratio (EQR) scale (corresponding to EQR = 0.0) were selected for each indicator by taking the 99th percentiles of all the litter counts available. It should be noted that altering this limit will affect the distribution of results between the "problem" classes ("Moderate", "Poor" and "Bad") but does not affect the overall fraction of results assessed to be "problem" or "non-problem" areas, since this is determined by the Good/Moderate threshold value."

Source	• EEA marine assessment grid, Jan. 2017 • Marine litter (tabular data from LitterWatch)

Metadata

File identifier	15389e51-5204-4c6b-b40f-ad4af9a6f590 XML
Metadata language	English
Character set	UTF8
Hierarchy level	Dataset
Date stamp	2024-04-17T12:27:13.718046Z
Metadata standard name	ISO 19115/19139
Metadata standard version	1.0
Metadata author	

Organisation name	Individual name	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu		Point of contact

Overviews

Assessment of marine litter in all four regional seas, 2010-2021

Non-problem areas
Good
High

Potential problem areas
Moderate
Poor
Bad

No data

100x100 km in offshore areas (>20 km from the coastline)

20x20 km in coastal areas (≤20 km from the coastline)

North-East Atlantic Ocean

Barents Sea

Norwegian Sea

Iceland Sea

Macaronesia

Celtic Seas

Greater North Sea incl. Kattegat and the English Channel

Baltic Sea

Bay of Biscay and the Iberian Coast

Black Sea

Adriatic Sea

Western Mediterranean Sea

Ionian Sea and the Central Mediterranean Sea

Aegean-Levantine Sea

Mediterranean Sea

0   500   1,000   1,500 km

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