



Assessment of contaminant status of indicators of biological effects using CHASE+, Dec. 2019

This data set presents the resulting assessment grid (based on the EEA reference grid) with the classification of chemical status of the transitional, coastal and marine waters in the context of the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD), providing a mapping of contamination 'problem areas' and 'non-problem areas' based on measurements of biological effects.

This classification has been performed using the CHASE+ tool, with classifications of the of contaminant status of indicators of biological effects. The status is evaluated in five classes, where NPAhigh and NPAgood are recognised as 'non-problem areas' and PModerate, PApoor and PAbad are recognised as 'problem areas'.

Monitoring biological effects is restricted to a few indicators (e.g. imposex) and data coverage is currently limited. Biological effects have thus been addressed in only 134 assessment units, mostly in the Baltic Sea, the North Sea and the North-East Atlantic Ocean.

This data set underpins the findings and cartographic representations published in the EEA report "Contaminants in Europe's seas" (No 25/2018). See the mentioned report for further information.

Simple

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Point of contact

No information provided.

Maintenance and update frequency	As needed
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none">Oceanographic geographical featuresSea regions
Keywords	
Keywords	
GEMET	<ul style="list-style-type: none">biological effectmarine ecosystemseagood chemical statusoceanmarine biology

	<ul style="list-style-type: none"> • marine biota • sea water • contamination • environment • environmental quality • aquatic environment • indicator-based assessment
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • Kattegat • Celtic Sea • Bay of Biscay • Baltic Sea • North Sea
Spatial scope	<ul style="list-style-type: none"> • European
EEA Management Plan	<ul style="list-style-type: none"> • 2018 1.6.2
EEA topics	<ul style="list-style-type: none"> • Chemicals • Seas and coasts • Water • Biodiversity • Pollution
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
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).
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Association Type	Cross reference
Spatial representation type	Vector

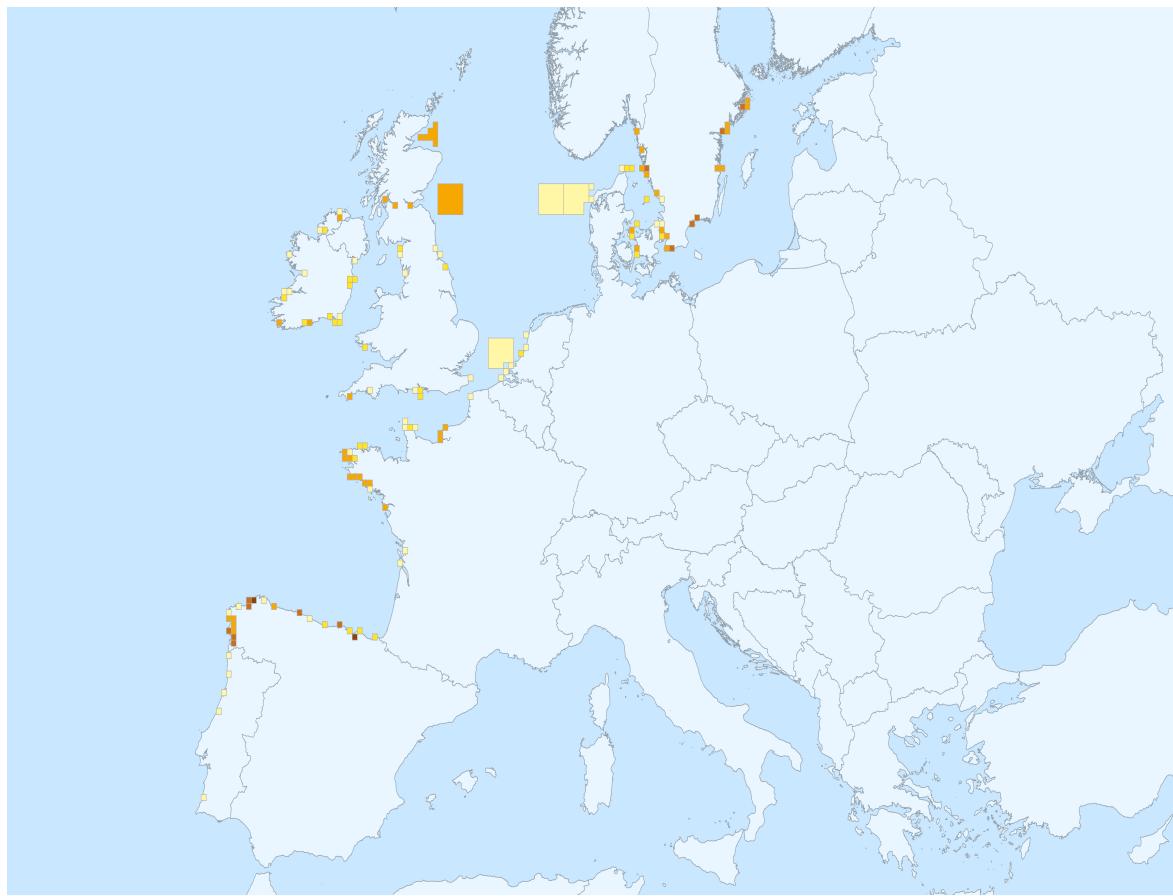
Distance	20 km
Distance	100 km
Language of dataset	English
Topic category	<ul style="list-style-type: none">• Environment• Oceans



Begin date	2009-01-01		
End date	2016-12-31		
Coordinate reference system identifier	EPSG:3857		
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OnLine resource	Protocol EEA:FILEPATH WWW:URL WWW:LINK-1.0-http--link WWW:DOWNLOAD	Linkage https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_3857_20_km_chase-bioe_p_2009-2016_v01_r00/CHASE_Contaminants_biological_effects_WGS84.shp https://sdi.eea.europa.eu/data/49eb412e-3002-492c-8323-ab5cac07fc40 https://sdi.eea.europa.eu/catalogue/srv/api/records/49eb412e-3002-492c-8323-ab5cac07fc40/attachments/Contaminants-in-Europe-seas-online-material-INPUT.xlsx https://sdi.eea.europa.eu/catalogue/srv/api/records/49eb412e-3002-492c-8323-ab5cac07fc40/attachments/Contaminants-in-Europe-seas-online-material-RESULTS-final.xlsx	Name Direct download Contaminants-in-Europe-seas-online-material-INPUT.xlsx Contaminants-in-Europe-seas-online-material-RESULTS-final.xlsx
OnLine resource	Protocol WWW:LINK-1.0-http--link	Linkage https://www.eea.europa.eu/publications/contaminants-in-europe-seas	Name Contaminants in Europe's seas
OnLine resource	Protocol ESRI:REST OGC:WMS	Linkage https://marine.discomap.eea.europa.eu/arcgis/rest/services/Marine/CHASE_contaminants_Biological_effects/MapServer https://marine.discomap.eea.europa.eu/arcgis/services/Marine/CHASE_contaminants_Biological_effects/MapServer/WMS?request=GetCapabilities&service=WMS	Name Marine

Hierarchy level	Dataset										
Conformance result											
Date (Publication)	2010-12-08										
Explanation	See the referenced specification										
Statement	<p>This assessment is based on data on contaminants, monitored in transitional, coastal and marine waters in the context of the WFD and the MSFD. For this analysis, Europe's seas were divided into grid cells of $20 \times 20 \text{ km}^2$ in coastal waters and $100 \times 100 \text{ km}^2$ in offshore areas. The CHASE+ methodology is a simple five-step procedure applied in every assessment unit. For 'biological effects', a contaminant ratio ($\text{CR} = \text{Cstatus}/\text{Cthreshold}$) is calculated. The values are then subdivided into five status classes with class boundaries: 0.0-0.5 (NPAhigh), 0.5-1.0 (NPAGood), 1.0-5.0 (PAmoderate), 5.0-10.0 (PApoor) and > 10.0 (PAbad).</p> <p>Based on the EEA reference grid, two grids have been developed covering the Marine Regions and Sub-regions of Europe. The first grid $100 \times 100 \text{ km}$ cell is used in offshore areas (> 20 km from the coastline); the second grid $20 \times 20 \text{ km}$ covers the coastal areas ($\leq 20 \text{ km}$ from the coastline). The grid sizes were chosen after an evaluation of data availability versus the need for sufficient detail in the resulting assessment. Each cell in the grids has a unique identification defined from the lower left UTM coordinates. The CHASE+ results are associated to the unique cells in the grids.</p> <p>More information can be found in the report "Contaminants in Europe's seas" and online material on https://www.eea.europa.eu/publications/contaminants-in-europees-seas/.</p>										
Source	<ul style="list-style-type: none"> • EEA marine assessment grid, Jan. 2017 										
Metadata											
File identifier	49eb412e-3002-492c-8323-ab5cac07fc40 XML										
Metadata language	English										
Character set	UTF8										
Hierarchy level	Dataset										
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Overviews



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