

HELCOM Metadata catalogue

Coastal defence and flood protection (HOLAS 3)

The dataset contains coastal defence and flood protection data that was made available by HELCOM Contracting Parties in response to a data call. Data were collected by the HELCOM Secretariat in 2022. Data were reported by Denmark, Finland, Germany, Poland and Sweden.

For Latvia, the dataset was classified as no data available.

Estonia and Sweden requested the use of HOLAS 2 data.

HOLAS 2 data was also used to complement data from Poland and Denmark.

Attribute specification and units with predefined values specified from the data call

Name: name of the structure for polygon format

Zone: Location of the site for line format

Type: Type of structure (sea walls, breakwaters, groynes, flood protection, gabions, stone protection, dike, other)

Year: Year of construction, especially if built between 2016-2021

Status: Status of the structure harmonized with the values from a predefined list (operational, under construction, application submitted, planned, approved, other), and following a precautionary approach that attributed the value operational for values that were out of the predefined list

Dimension: Spatial dimensions of the structure in m2

Notes: notes regarding the reported data and HOLAS 2 data indication.

Status_original: original status declared by the Contracting Parties

Simple

Date (Publication)	2023-02-24
Unique resource identifier	https://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/ae284376-defd-4288-a98e-ac14aacda28e
pointOfContact <i>HELCOM Secretariat</i>	
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none">Human health and safety
GEMET	<ul style="list-style-type: none">coast protection
Keywords	<ul style="list-style-type: none">MADSHOLAS3human activities
Use constraints	Other restrictions
Other constraints	Use constraints: Data can be used freely given that the source is cited (following creative commons license CC-BY). The source should be cited as: "HELCOM HOLAS 3 Dataset (2023)".
Access constraints	Other restrictions
Other constraints	Access constraints: No limitations on public access.
Spatial representation type	Vector

Metadata language	English
Topic category	<ul style="list-style-type: none">• Environment

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End date	2021-12-31 Now
Unique resource identifier	EPSG:3035
Distribution format	<ul style="list-style-type: none"> ESRI Shapefile (1.0)
OnLine resource	Download Coastal defence and flood protection lines (WWW:LINK-1.0-http--link)
OnLine resource	View Coastal defence and flood protection lines (WWW:LINK-1.0-http--link)
OnLine resource	Download Coastal defence and flood protection points (WWW:LINK-1.0-http--link)
OnLine resource	View Coastal defence and flood protection points (WWW:LINK-1.0-http--link)
OnLine resource	Download Coastal defence and flood protection areas (WWW:LINK-1.0-http--link)
OnLine resource	View Coastal defence and flood protection areas (WWW:LINK-1.0-http--link)
Hierarchy level	Dataset

Conformance result

Date (Publication)	2010-12-08
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Statement	<p>The dataset was created in order to update the information regarding coastal defence and flood protection in the Baltic Sea Region for the HELCOM Assessments. Data was collected by the HELCOM Secretariat in 2022. Data were reported in points (Finland, Sweden), polylines (Germany, Denmark, Poland), and polygons (Germany, Poland, Sweden).</p> <p>National remarks:</p> <p>Germany: Coastal Protection buildings between 2016-2021. Data set in good quality, consisting of *shp- datafiles.</p> <p>For Schleswig-Holstein data collection: The 3D points along the dike lines were derived using GPS-data (RTK - Real Time Kinematic). The other datasets are based upon on-screen digitizing (using different basemaps) or similarly gps-data.</p> <p>data origin: All the data is taken from the "coastal defence information system". The state of the flood protection data corresponds to the coastal defence master plan for Schleswig-Holstein (Update 2022). Note: Due to problems concerning the delineation of the flood protection data it isn't possible to deliver polygon geometries for all dikes. Therefore only a polyline geometry is transferred.</p> <p>Finland: The dataset includes breakwaters, embankments, and other erosion protection constructions. The dataset is based on spatial data extracted from the Vesistötyöt VESTY database and aerial photo mapping from Metsähallitus. VESTY is a database for reporting construction and other activities conducted in water areas. Reporting is done mainly by ELY Centres. Metsähallitus conducted the mapping in 2018-2019, with aerial photos from ca 2017-2019. Includes sites from before 2016.</p>
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Poland: Localisation of coastal defense and flood protection constructions built in the period of 2016-2021. 2 elements: the flood protection – wall and the dike were based on executive measurement after construction. 2 elements: the water threshold and the sea wall were based on a master map.

Sweden: This dataset is based on information from court decisions, the Swedish maritime administration and two different map providers: Lantmäteriet and Google Earth. Court decisions are used to identify places where constructions have occurred. There is a bias towards places where dredging has occurred, since this type of information has been characterized in another dataset. This identification process has been complemented with notification from the Swedish maritime administration and searching in the Swedish Agency for Marine and Water Management archives for cases related to coastal defence. However, these archives do not generally contain decisions on erosion protections.

There are likely many more places where coastal defence has been constructed in Sweden during this time period. Especially coastal protection like seawalls and riprap are very common along the Swedish coastal line. However, these types of decisions are hard to identify. Beach replenishment is rather uncommon in Sweden, compared to for example Denmark, but will likely be used more in the coming year due to erosion in the south of Sweden.

The area for coastal defence has in general not been estimated for this dataset since this type of information is missing in the decisions. The area of the modified coastline is simply the area of the construction. However, a construction or beach replenishment could affect a much larger part of the coastline, depending on for example streams, pollutants, etc.

The quality of this data set is rather low since it is difficult to determine from maps and court decisions if coastal defence has been constructed or not.

The symbol * in the column construction year indicates that the construction was made between 2017-2021.

The area for coastal defence has been estimated either by 1. stated in the permit or 2. estimated in google earth. The area of the modified coastline is simply the area of the construction. However, a construction or beach replenishment could affect a much larger part of the coastline, depending on for example streams, pollutants, etc.

"Length of modified coastline (m)" has not been estimated due to a lack of information.

Note that some permanent coastal defence constructions are as well a land claim and will then be presented in the land claim dataset.

Denmark: The data is not fully updated as the regulatory task of granting permits was moved from the Danish Coastal Authority to the municipalities 1st of September 2018.

Data sources:

Germany: Staatliches Amt für Landwirtschaft und Umwelt Mittleres Mecklenburg, Abteilung Küste (StALU MM); Bund/Länder-Arbeitsgemeinschaft Nord- und Ostsee (BLANO)

Finland: Finnish Environment Institute

Poland: Maritime Office in Gdynia

Sweden: Swedish Agency for Marine and Water Management

Denmark: The Danish Environmental Protection Agency

Data quality: The dataset is unbalanced between countries, as a result of national interpretation of the definition of a coastal defence structure.

File identifier	ae284376-defd-4288-a98e-ac14aacda28e XML
Metadata language	English
Character set	UTF8
Hierarchy level	Dataset
Date stamp	2023-03-03T13:59:39

pointOfContact
HELCOM Secretariat

Overviews

Provided by

