



## Theme 2: Spatial information on ecosystem components



*This is a deliverable from the TAPAS project, coordinated by HELCOM and co-financed by the European Union in 2016-2017.*

### Deliverable 1: Ecosystem component maps

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#### Introduction

Under the TAPAS project Theme 2, Baltic-wide maps for different ecosystem components have been collated and/or modelled. The maps were used e.g. in the implementation of the HELCOM Baltic Sea Impact Index (BSII) that has been further developed under TAPAS Theme 1.

The maps and metadata have been made publically available through the HELCOM Map and Data service.

#### Ecosystem component maps

The table below contains links to ecosystem component map metadata record (including downloading functionality) and link to map viewer.

Theme	Ecosystem component map	Metadata link	Map link
Benthic species	Charophyte distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/cc48a577-4dc6-40bc-aeed-783b48a29adf">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/cc48a577-4dc6-40bc-aeed-783b48a29adf</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=cc48a577-4dc6-40bc-aeed-783b48a29adf">http://maps.helcom.fi/website/mapservice/?datasetID=cc48a577-4dc6-40bc-aeed-783b48a29adf</a>
Benthic species	Fucus distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/be5f1685-f778-4492-bf62-4107f0128d22">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/be5f1685-f778-4492-bf62-4107f0128d22</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=be5f1685-f778-4492-bf62-4107f0128d22">http://maps.helcom.fi/website/mapservice/?datasetID=be5f1685-f778-4492-bf62-4107f0128d22</a>
Benthic species	Furcellaria lumbricalis distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3bf9ad6b-e164-44e9-bd73-ec383083b5bc">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3bf9ad6b-e164-44e9-bd73-ec383083b5bc</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=3bf9ad6b-e164-44e9-bd73-ec383083b5bc">http://maps.helcom.fi/website/mapservice/?datasetID=3bf9ad6b-e164-44e9-bd73-ec383083b5bc</a>
Benthic species	Mytilus distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/d83121ae-332b-401b-bd0e-208e907a7a40">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/d83121ae-332b-401b-bd0e-208e907a7a40</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=d83121ae-332b-401b-bd0e-208e907a7a40">http://maps.helcom.fi/website/mapservice/?datasetID=d83121ae-332b-401b-bd0e-208e907a7a40</a>

Benthic species	Zostera marina distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/611d9dae-eb1c-4b48-b638-ecbb75e6d782">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/611d9dae-eb1c-4b48-b638-ecbb75e6d782</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=611d9dae-eb1c-4b48-b638-ecbb75e6d782">http://maps.helcom.fi/website/mapservice/?datasetID=611d9dae-eb1c-4b48-b638-ecbb75e6d782</a>
Birds	Breeding areas for birds	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/bdd83f21-a5bf-4079-81fb-e671f2202231">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/bdd83f21-a5bf-4079-81fb-e671f2202231</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=bdd83f21-a5bf-4079-81fb-e671f2202231">http://maps.helcom.fi/website/mapservice/?datasetID=bdd83f21-a5bf-4079-81fb-e671f2202231</a>
Birds	Wintering areas for birds	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/a2333437-6344-425f-9012-2d8a5d44d390">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/a2333437-6344-425f-9012-2d8a5d44d390</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=a2333437-6344-425f-9012-2d8a5d44d390">http://maps.helcom.fi/website/mapservice/?datasetID=a2333437-6344-425f-9012-2d8a5d44d390</a>
Broadscale habitats	Circalittoral hard substrate	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/5a6e7d7b-47d1-44fe-a70b-c0717bbd8566">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/5a6e7d7b-47d1-44fe-a70b-c0717bbd8566</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=5a6e7d7b-47d1-44fe-a70b-c0717bbd8566">http://maps.helcom.fi/website/mapservice/?datasetID=5a6e7d7b-47d1-44fe-a70b-c0717bbd8566</a>
Broadscale habitats	Circalittoral mixed substrate	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/345a9bb8-33ea-4b23-b601-04d5e3257f59">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/345a9bb8-33ea-4b23-b601-04d5e3257f59</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=345a9bb8-33ea-4b23-b601-04d5e3257f59">http://maps.helcom.fi/website/mapservice/?datasetID=345a9bb8-33ea-4b23-b601-04d5e3257f59</a>
Broadscale habitats	Circalittoral mud	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/ef4a4440-d067-447f-84e5-83d443dbc7ed">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/ef4a4440-d067-447f-84e5-83d443dbc7ed</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=ef4a4440-d067-447f-84e5-83d443dbc7ed">http://maps.helcom.fi/website/mapservice/?datasetID=ef4a4440-d067-447f-84e5-83d443dbc7ed</a>
Broadscale habitats	Circalittoral sand	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/74880890-bdd8-46e7-8fec-dab0e877ccf0">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/74880890-bdd8-46e7-8fec-dab0e877ccf0</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=74880890-bdd8-46e7-8fec-dab0e877ccf0">http://maps.helcom.fi/website/mapservice/?datasetID=74880890-bdd8-46e7-8fec-dab0e877ccf0</a>
Broadscale habitats	Infralittoral hard substrate	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/1b20cb37-b365-4e82-9217-94fc776e964c">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/1b20cb37-b365-4e82-9217-94fc776e964c</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=1b20cb37-b365-4e82-9217-94fc776e964c">http://maps.helcom.fi/website/mapservice/?datasetID=1b20cb37-b365-4e82-9217-94fc776e964c</a>
Broadscale habitats	Infralittoral mixed substrate	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/ca6796fb-54e9-475b-9dcc-53a41d366940">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/ca6796fb-54e9-475b-9dcc-53a41d366940</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=ca6796fb-54e9-475b-9dcc-53a41d366940">http://maps.helcom.fi/website/mapservice/?datasetID=ca6796fb-54e9-475b-9dcc-53a41d366940</a>
Broadscale habitats	Infralittoral mud	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/a72559f4-bc2d-4882-bb1f-e0f005c4362b">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/a72559f4-bc2d-4882-bb1f-e0f005c4362b</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=a72559f4-bc2d-4882-bb1f-e0f005c4362b">http://maps.helcom.fi/website/mapservice/?datasetID=a72559f4-bc2d-4882-bb1f-e0f005c4362b</a>
Broadscale habitats	Infralittoral sand	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/6c68decf-9102-96d10495be64">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.sea_rch#/metadata/6c68decf-9102-96d10495be64</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=6c68decf-9102-96d10495be64">http://maps.helcom.fi/website/mapservice/?datasetID=6c68decf-9102-96d10495be64</a>

		<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3fb1-4138-9102-96d10495be64">3fb1-4138-9102-96d10495be64</a>	
Fish	Cod abundance	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/bf20ca3b-6ce1-484f-be9a-f53ba023e6cc">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/bf20ca3b-6ce1-484f-be9a-f53ba023e6cc</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=bf20ca3b-6ce1-484f-be9a-f53ba023e6cc">http://maps.helcom.fi/website/mapservice/?datasetID=bf20ca3b-6ce1-484f-be9a-f53ba023e6cc</a>
Fish	Cod spawning areas	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/e91d509d-bd3e-4bd8-a7c8-ac2d10bbfd1b">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/e91d509d-bd3e-4bd8-a7c8-ac2d10bbfd1b</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=e91d509d-bd3e-4bd8-a7c8-ac2d10bbfd1b">http://maps.helcom.fi/website/mapservice/?datasetID=e91d509d-bd3e-4bd8-a7c8-ac2d10bbfd1b</a>
Fish	Herring abundance	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/9cdc9e61-7ca2-47be-aebb-38a911acef49">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/9cdc9e61-7ca2-47be-aebb-38a911acef49</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=9cdc9e61-7ca2-47be-aebb-38a911acef49">http://maps.helcom.fi/website/mapservice/?datasetID=9cdc9e61-7ca2-47be-aebb-38a911acef49</a>
Fish	Perch recruitment area	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3f8fc3c7-e5f2-4f67-a0ae-cbdfea01f2f7">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3f8fc3c7-e5f2-4f67-a0ae-cbdfea01f2f7</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=3f8fc3c7-e5f2-4f67-a0ae-cbdfea01f2f7">http://maps.helcom.fi/website/mapservice/?datasetID=3f8fc3c7-e5f2-4f67-a0ae-cbdfea01f2f7</a>
Fish	Pikeperch recruitment area	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/7d6508ec-164e-4b65-b170-2074c2eec599">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/7d6508ec-164e-4b65-b170-2074c2eec599</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=7d6508ec-164e-4b65-b170-2074c2eec599">http://maps.helcom.fi/website/mapservice/?datasetID=7d6508ec-164e-4b65-b170-2074c2eec599</a>
Fish	Sprat abundance	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/8f55de2c-b115-4d54-b686-3b7532bd6427">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/8f55de2c-b115-4d54-b686-3b7532bd6427</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=8f55de2c-b115-4d54-b686-3b7532bd6427">http://maps.helcom.fi/website/mapservice/?datasetID=8f55de2c-b115-4d54-b686-3b7532bd6427</a>
Mammals	Grey seal distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/82765d87-d10d-4361-befe-ea5214ba110a">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/82765d87-d10d-4361-befe-ea5214ba110a</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=82765d87-d10d-4361-befe-ea5214ba110a">http://maps.helcom.fi/website/mapservice/?datasetID=82765d87-d10d-4361-befe-ea5214ba110a</a>
Mammals	Harbour seal distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/57a9e614-67bb-487c-99a3-d003320beb0c">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/57a9e614-67bb-487c-99a3-d003320beb0c</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=57a9e614-67bb-487c-99a3-d003320beb0c">http://maps.helcom.fi/website/mapservice/?datasetID=57a9e614-67bb-487c-99a3-d003320beb0c</a>

Mammals	Ringed seal distribution	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/04f0c94d-bfa5-437b-9660-048bfa1a098a">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/04f0c94d-bfa5-437b-9660-048bfa1a098a</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=04f0c94d-bfa5-437b-9660-048bfa1a098a">http://maps.helcom.fi/website/mapservice/?datasetID=04f0c94d-bfa5-437b-9660-048bfa1a098a</a>
Natura habitats	Baltic Esker islands (1610)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/67437eff-8382-493f-83cc-66356a834f39">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/67437eff-8382-493f-83cc-66356a834f39</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=67437eff-8382-493f-83cc-66356a834f39">http://maps.helcom.fi/website/mapservice/?datasetID=67437eff-8382-493f-83cc-66356a834f39</a>
Natura habitats	Boreal Baltic islets and small islands (1620)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/9329cf81-0d78-4ed7-b04b-297add9672ed">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/9329cf81-0d78-4ed7-b04b-297add9672ed</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=9329cf81-0d78-4ed7-b04b-297add9672ed">http://maps.helcom.fi/website/mapservice/?datasetID=9329cf81-0d78-4ed7-b04b-297add9672ed</a>
Natura habitats	Coastal lagoons (1150)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/6aaa6eaf-e7f5-4a56-9533-16bc94901a7c">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/6aaa6eaf-e7f5-4a56-9533-16bc94901a7c</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=6aaa6eaf-e7f5-4a56-9533-16bc94901a7c">http://maps.helcom.fi/website/mapservice/?datasetID=6aaa6eaf-e7f5-4a56-9533-16bc94901a7c</a>
Natura habitats	Estuaries (1130)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/d027c58b-aceb-4b51-940d-73ea7c531251">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/d027c58b-aceb-4b51-940d-73ea7c531251</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=d027c58b-aceb-4b51-940d-73ea7c531251">http://maps.helcom.fi/website/mapservice/?datasetID=d027c58b-aceb-4b51-940d-73ea7c531251</a>
Natura habitats	Large shallow inlets and bays (1160)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/738c72ce-3a67-43c7-9bda-0bff8fdd0303">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/738c72ce-3a67-43c7-9bda-0bff8fdd0303</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=738c72ce-3a67-43c7-9bda-0bff8fdd0303">http://maps.helcom.fi/website/mapservice/?datasetID=738c72ce-3a67-43c7-9bda-0bff8fdd0303</a>
Natura habitats	Mudflats and sandflats (1140)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/13cbc477-d23e-41a9-995f-817b6d7e9f48">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/13cbc477-d23e-41a9-995f-817b6d7e9f48</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=13cbc477-d23e-41a9-995f-817b6d7e9f48">http://maps.helcom.fi/website/mapservice/?datasetID=13cbc477-d23e-41a9-995f-817b6d7e9f48</a>
Natura habitats	Reefs (1170)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/7a7509de-53d5-4472-a1e9-f5857316d034">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/7a7509de-53d5-4472-a1e9-f5857316d034</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=7a7509de-53d5-4472-a1e9-f5857316d034">http://maps.helcom.fi/website/mapservice/?datasetID=7a7509de-53d5-4472-a1e9-f5857316d034</a>
Natura habitats	Sandbanks (1110)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/0820935a-5fde-4976-82e5-1392d631d535">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/0820935a-5fde-4976-82e5-1392d631d535</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=0820935a-5fde-4976-82e5-1392d631d535">http://maps.helcom.fi/website/mapservice/?datasetID=0820935a-5fde-4976-82e5-1392d631d535</a>

Natura habitats	Submarine structures made by leaking gas (1180)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3cef63ee-9a44-481f-8869-ea9b977df747">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/3cef63ee-9a44-481f-8869-ea9b977df747</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=3cef63ee-9a44-481f-8869-ea9b977df747">http://maps.helcom.fi/website/mapservice/?datasetID=3cef63ee-9a44-481f-8869-ea9b977df747</a>
Pelagic habitats	Deep water habitat (Bottom oxygen index)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/cac7da65-7984-453d-958b-843bee8334e6">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/cac7da65-7984-453d-958b-843bee8334e6</a>	<a href="http://maps.helcom.fi/website/mapservice/?datasetID=cac7da65-7984-453d-958b-843bee8334e6">http://maps.helcom.fi/website/mapservice/?datasetID=cac7da65-7984-453d-958b-843bee8334e6</a>
Pelagic habitats	Productive surface waters (Chl-a)	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/972c58e2-b197-4929-aa10-85e703510d64">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/972c58e2-b197-4929-aa10-85e703510d64</a>	<a href="http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/972c58e2-b197-4929-aa10-85e703510d64">http://metadata.helcom.fi/geonetwork/srv/eng/catalog.search#/metadata/972c58e2-b197-4929-aa10-85e703510d64</a>