Marine beach litter in the Baltic Sea -Outcome from the HELCOM BLUES project

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The HELCOM BLUES project 2021-2022

- Support the development of new and regionally coordinated measures to achieve Good Environmental Status

- Improve monitoring, notably on biodiversity, marine litter and, underwater noise

- Support the Holistic Assessment of the Baltic Sea (HOLAS III)
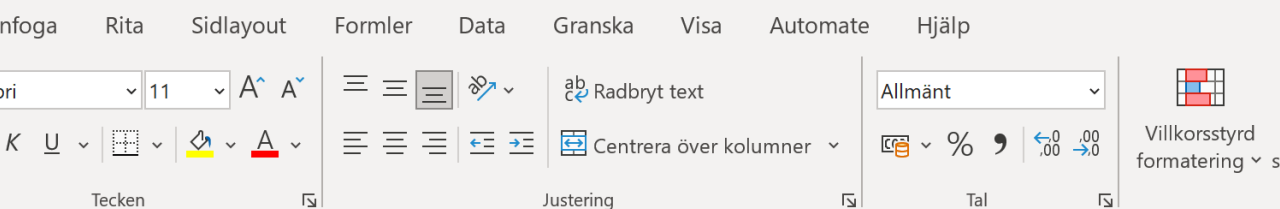   - Status for the years 2016-2021

BLUES

Co-funded by the European Union

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The marine beach litter tasks

- Translation of historical litter data

- Execute assessment of beach litter

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Translation of historical litter data

B	D	E	F	G	H	I	J	K
mmon name	Reporting id HELCOM	J-Code	G-Code	OSPAR	Denmark	Germany MV	Germany SH	MARLIN
astic six-pack rings	R1	J1	G1	1	1	1	1	PL05
astic bags	R2	J3	G2/G3	2	2	2	2	PL07
	R2	J4	G4	3	3	3	3	PL07
	R2	J5	G5	112	112	112	112	
	R2	J101	G101	121	121	121	121	PL07
astic bottles	R3	J7	G6/G7	4	4	4	4	PL02
	R3	J8	G8	4	4	4	4	PL02
	R3	J9	G9	5	5	5	5	PL02
	R3	J11	G11	7	7	7	7	PL02
	R3	J12	G12	7	7	7	7	PL02
	R3	J13	G13	12	12	12	12	
astic packaging for food and bevarage	R4	J30	G30	19	19	19	19	PL06
	R4	J31	G31	19	19	19	19	PL06
	R4	J224		620	620	6	6	FP02
	R4	J225		610	610	6	6	PL06
	R4	J226		21, 212	212	21	21	PL06
	R4	J227		21, 211	211	21	21	PL06
	R4		G10	6, 610, 620	6	6	6	PL06
	R4		G33	21, 211, 212	21	21	21	PL06
rger plastic containers	R5	J14	G14	8	8	8	8	PL03
	R5	J15	G15	9	9	9	9	PL03

used | **Common list (clean) May 2022** | Joint List of Litter Categories | Key to 3-letter codes

ghet: Utforska

- Harmonisation of data for assessment in HOLAS III

- Currently, 7 different lists are used in the HELCOM area

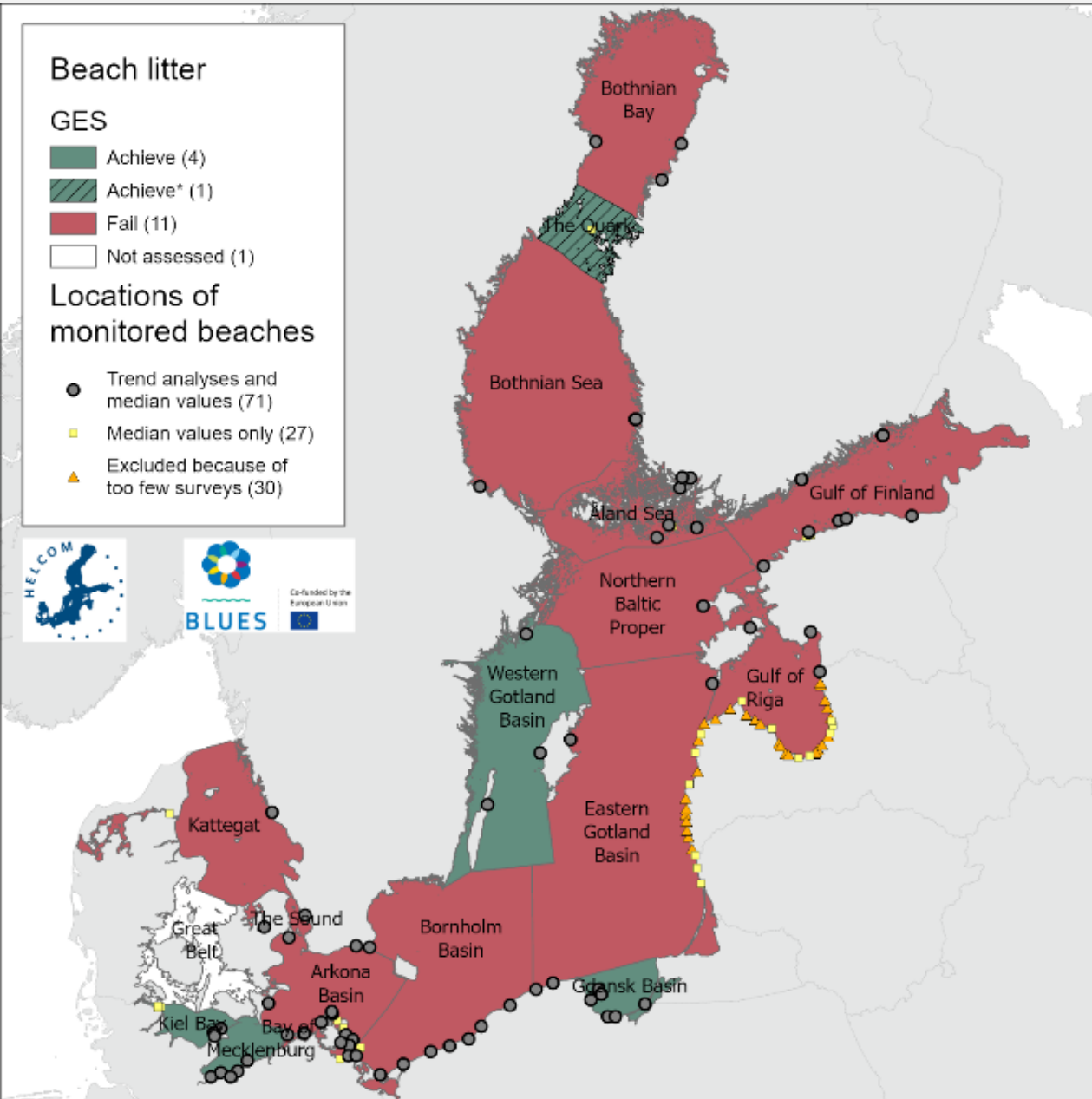- A **"Common list of beach litter"** was developed

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Execute assessment of beach litter (2016-2021)

- Assessment of TOC, SUP, and FISH related litter items – 16 (17) subbasins in the Baltic Sea

- The statistical programme LitteR

- Median values for TOC were compared with the HELCOM threshold value of 20 litter items per 100 m coastline

- Trend analyses for the assessment period

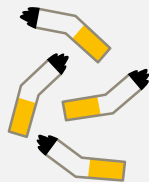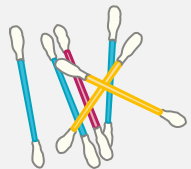- A top-ten list of litter items for the entire Baltic Sea

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Results for total count

- 11 sub-basins did not achieved GES
  - The Sound (313)
  - The Gulf of Riga (156)
  - Eastern Gotland Basin (96)

- 6 of the sub-basins show significant improving trends

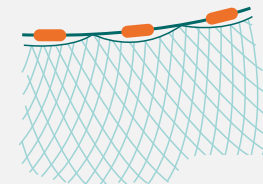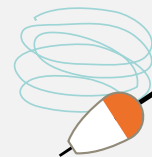- Gdansk Basin showing a significant increasing trend

Results for single-use plastics (SUP)

- Medians of SUP litter items varies between 0-26 per 100 m beach and subbasin

- SUP litter items appears to be a driving force in the time trends

- For the significant trend results, only Gdansk basin shows an upward trend
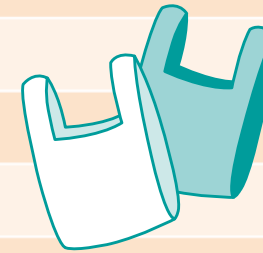
Results for fisheries related litter (FRL)

- Medians of FRL items varies between 0-20 per 100 m beach and subbasin

- The significant trends for FRL items are going:
  downwards for the Arkona Basin, and the Eastern Gotland Basin,

  upwards for the Gdansk Basin and the Bothnian Sea,

  the Bornholm Basin has a stable level

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Top-ten beach litter categories 2016-2021

Rank	Litter categories
1	Various plastic items and fragments >2,5 cm
2	Plastic packaging for food and beverage
3	Plastic bags
4	Plastic caps and lids
5	Other glass and ceramics
6	Plastic six-pack rings
7	Ropes, strings, and cords
8	Paper excluding newspaper and magazines
9	Plastic syringes
10	Plastic bottles

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Key messages for science and policy makers

- Harmonisation of beach litter protocols is key
- Better geographical coverage with improving monitoring efforts
- Including types of beaches, e.g. remote vs urban/peri-urban beaches in the assessments
- More research on identifying sources of litter

- Further work on actions against marine litter is required to reach good environmental status in the Baltic Sea

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Outputs

- Indicator report on macrolitter on beaches, March 2023

- A "Common litter item list" for beach litter, included in the Indicator report

- Thematic assessment input for HOLAS III, 2023

www.blues.helcom.fi

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- EMODnet database and additional national data providers

- Jakob Strand, co-lead for beach litter in HELCOM EG ML
- All members in the HELCOM EG ML

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