

Web mapping application to connect cultural and natural heritage in Estonia

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Kista Karro², Maili Roio², Liisa Randmaa³**

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Introduction

- Spatial data on marine underwater cultural heritage and nature values compiled during the project
- Compiled data used for producing project deliverables and during project meetings
- Web mapping application was created in order to
 - Make the data publicly available
 - Enable quick and easy access to the data in a web browser (user does not need special GIS software or GIS knowledge)
 - Enable the linked use of cultural and nature values in the same public web application – a feature that was not available in other web applications in Estonia



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www.sea.ee/mch4blue

mch4blue - ParticipatoryGIS

INTERREG BSR BalticRIM project

Baltic Sea Region Integrated Maritime Cultural Heritage Management



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 **Interreg**
Baltic Sea Region

Ventspils



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FUND



2018  **EUROPEAN YEAR
OF CULTURAL
HERITAGE**
#EuropeForCulture

Switch layers

Environmental Data

- Water transparency (Secchi depth i)
 - High : 6.58536
 - Low : 0.45
- Species richness of benthic fauna
- Species richness of benthic flora
- Environmental vulnerability profile

Protected Areas

- Nature protection areas
- Natura 2000 bird areas
- Natura 2000 nature areas

Underwater Cultural Heritage

- Estonian Maritime Museum
- Cultural monuments (points)
- Cultural monuments (polygons)

Administrative boundaries

- Exclusive Economic Zone
- Territorial Waters

Map

Zoom (also mouse wheel) and pan

Basemaps

Switching layers on and off

Change layer transparency

Clicking on a layer displays feature information incl. links to national registries

FID = 2 (1 of 2)

Layer: Cultural monuments (points)
Name: Miniveeskja "Jenissei" vrakk
Description:
URL: [Additional information in the National Registry of Cultural Monuments](#)

National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

POWERED BY esri

Switch layers

Map

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Environmental data

- Protected Areas
 - Nature protection areas
 - Natura 2000 bird areas
 - Natura 2000 nature areas

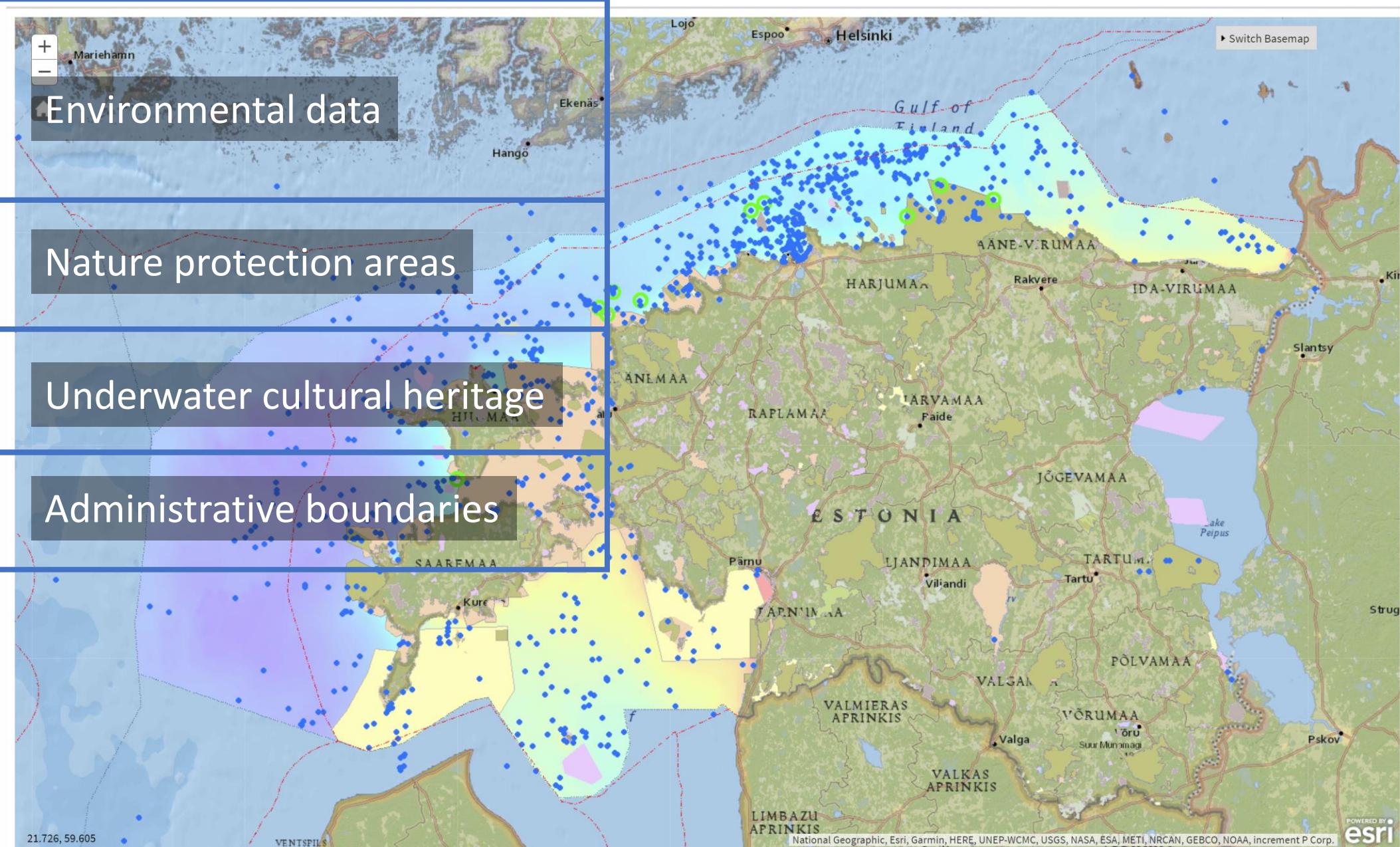
Nature protection areas

- Underwater Cultural Heritage
 - Estonian Maritime Museum
 - Cultural monuments (points)
 - Cultural monuments (polygons)

Underwater cultural heritage

- Administrative boundaries
 - Exclusive Economic Zone
 - Territorial Waters

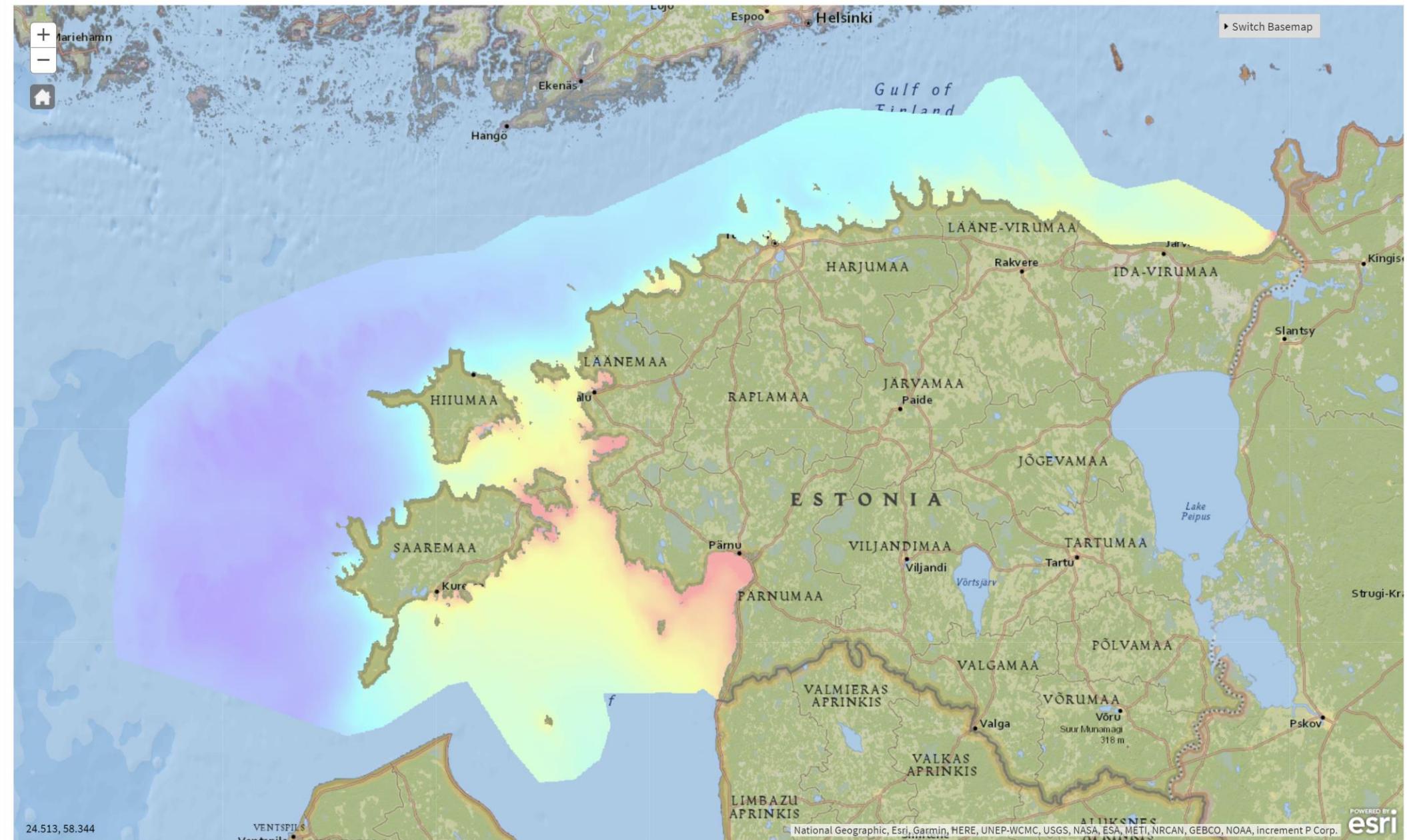
Administrative boundaries



Switch layers

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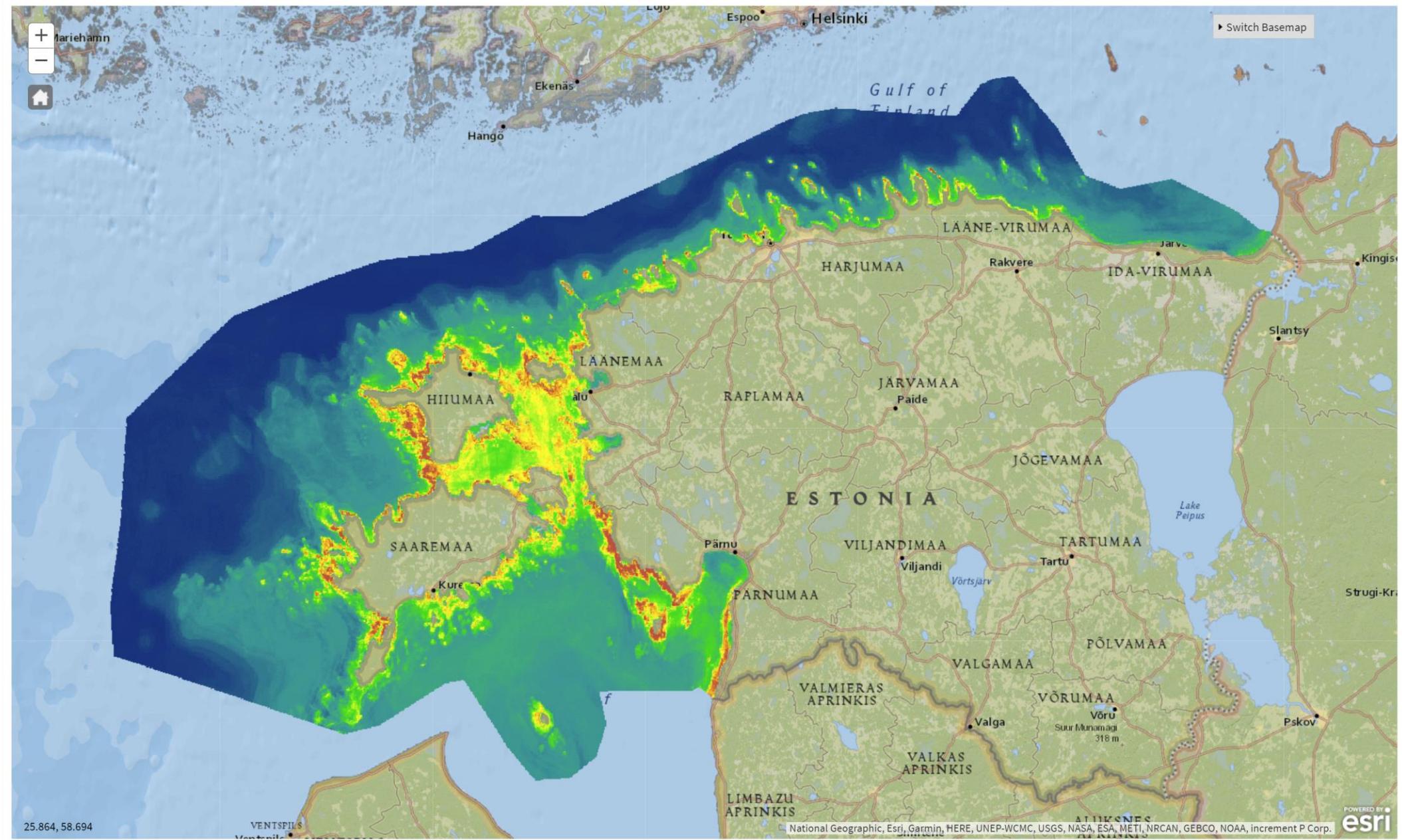
Map



Switch layers

- Environmental Data
 - Water transparency (Secchi depth index)
High : 22.7731
Low : 0.509197
 - Species richness of benthic fauna
- Species richness of benthic flora
- Environmental vulnerability profile
-
- Protected Areas
-
- Underwater Cultural Heritage
-
- Administrative boundaries

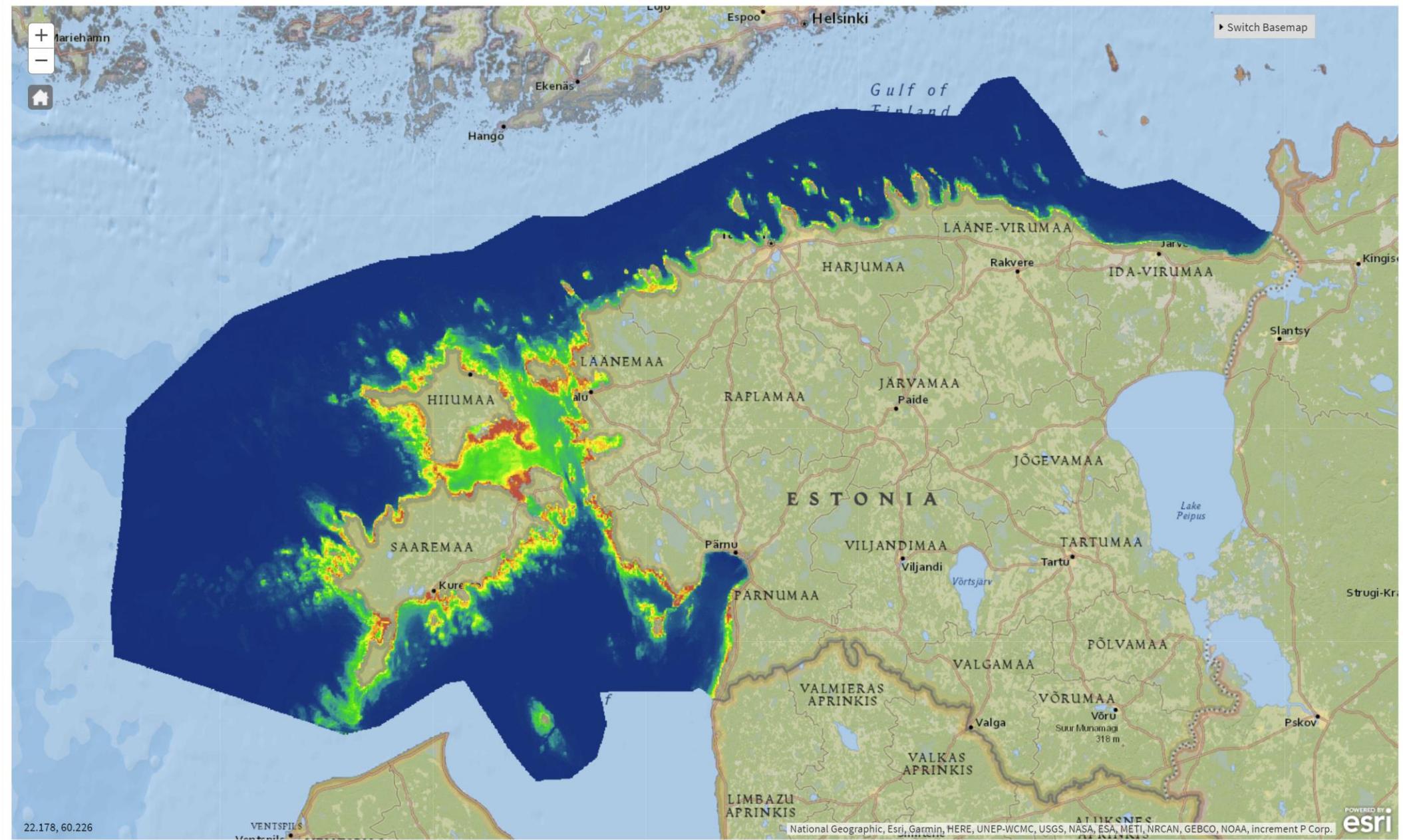
Map



Switch layers

- Environmental Data
 - Water transparency (Secchi depth) i
 - Species richness of benthic fauna
 - Species richness of benthic flora
 - High : 16.6938
 - Medium : 12.5415
 - Low : 0.125415
 - Environmental vulnerability profile
- Protected Areas
- Underwater Cultural Heritage
- Administrative boundaries

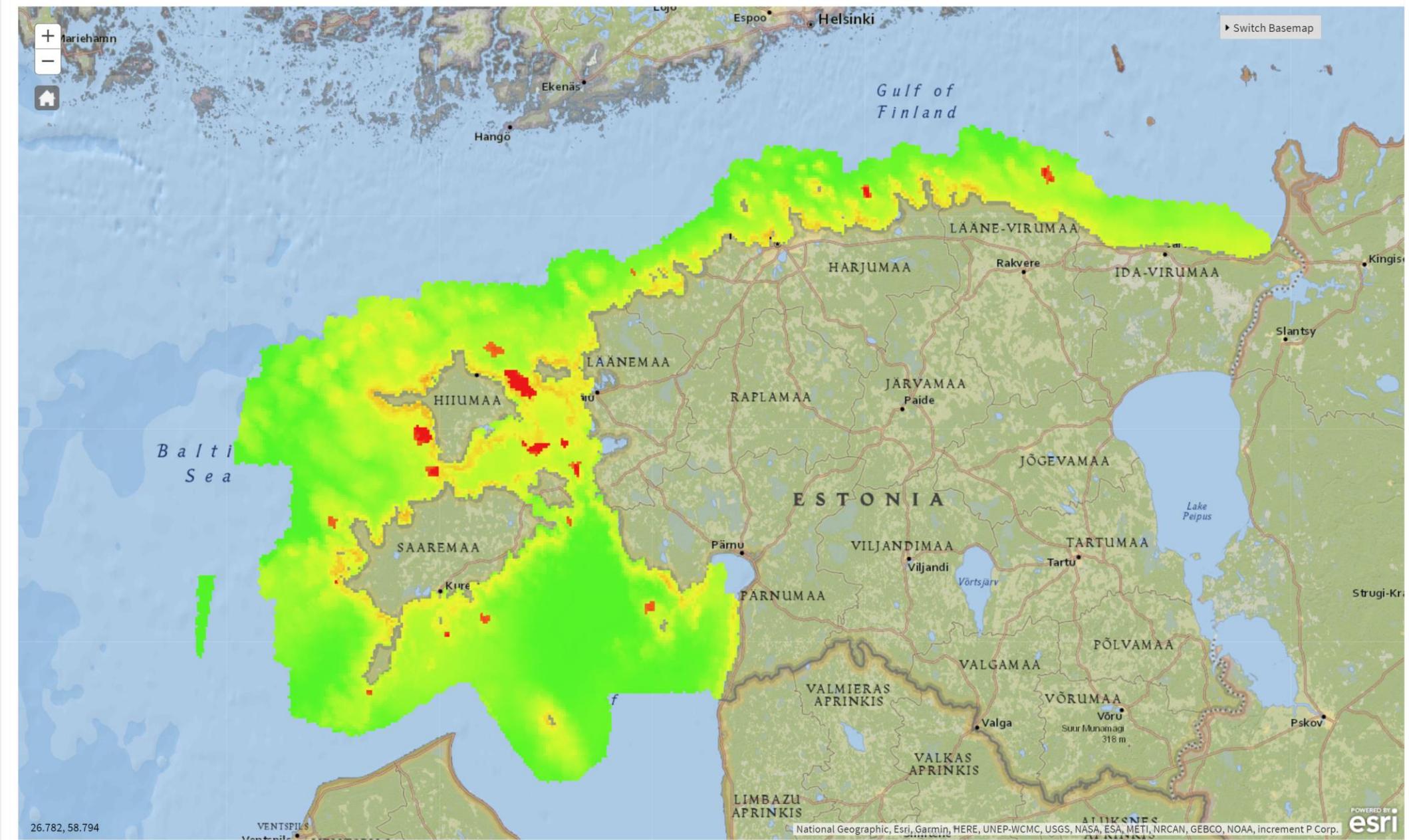
Map



Switch layers

- Environmental Data
 - Water transparency (Secchi depth)
 - Species richness of benthic fauna
 - Species richness of benthic flora
 - Environmental vulnerability profile
 - High : 0.971936
 - Yellow
 - Low : 0.000471679
- Protected Areas
- Underwater Cultural Heritage
- Administrative boundaries

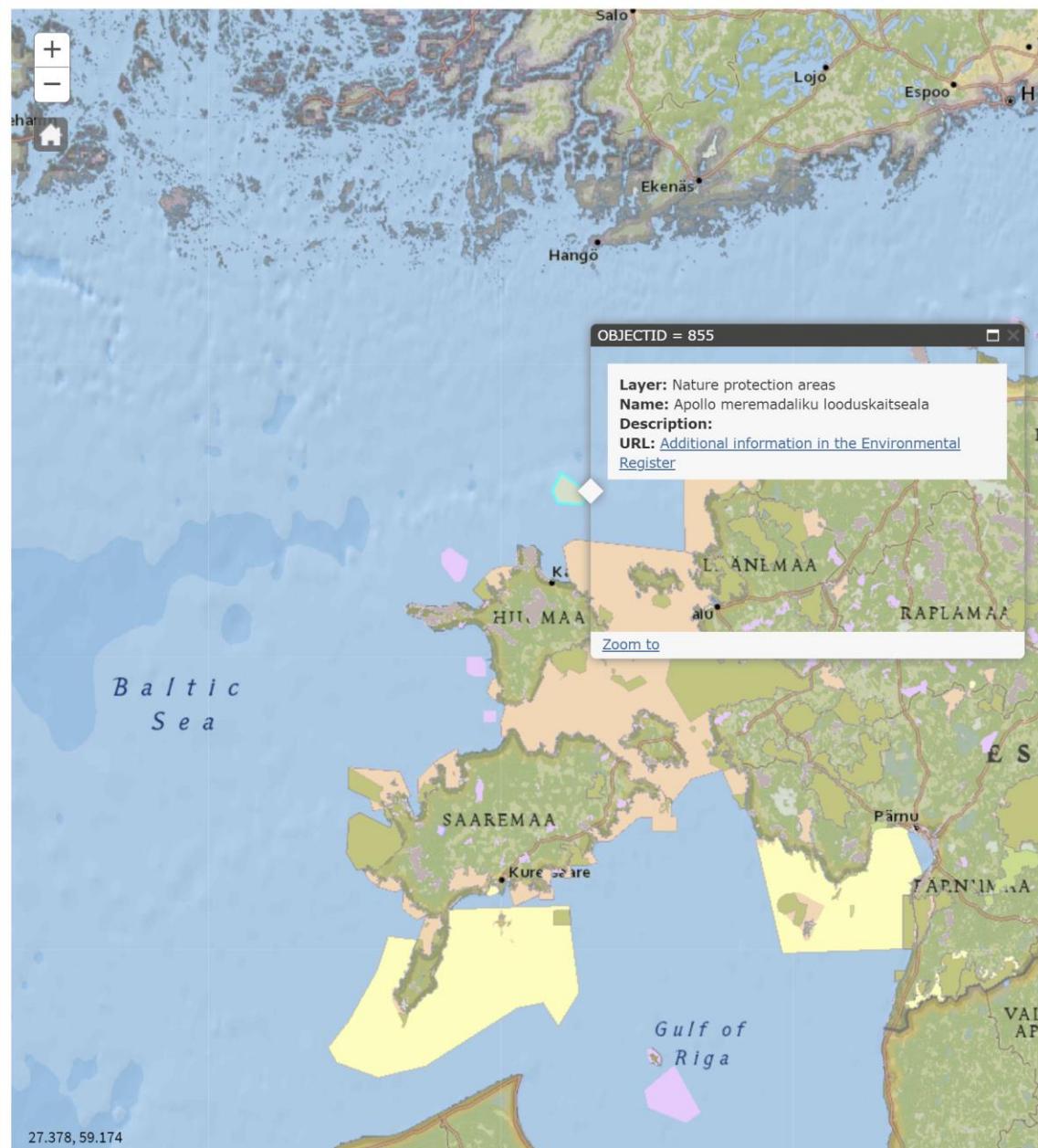
Map



Switch layers

 Environmental Data Protected Areas Nature protection areas Natura 2000 bird areas Natura 2000 nature areas Underwater Cultural Heritage Administrative boundaries

Map



Keskkonnaregistri avalik teenus

TEEMAD VALDKONNAPOHISELT **TEEMAD ÕIGUSAKTIPÖHISELT**

Elustik **Kaitstav loodus** **Loodusvarad** **Load** **Vesi** **Öhk** **Jäätmned ja ohuobjektid** **Seire**

Apollo meremadaliku looduskaitseala

Põhjandmed **Seotud objektid** **Seotud dokumentid** **Asukoht kaardil**

Objekti nimeetus:	Apollo meremadaliku looduskaitseala	Maismaa pindala, ha:
Tüüp:	kaitseala - looduskaitseala	Veeosa pindala, ha:
Registrikood:	KLO1000674	Pindala kokku:
Valitseja(d):	Keskonnaameti Lääne regioon	
Kaitse staatust:	kaitsealune	
Asukoht:	Läänemaa, Lääne-Nigula vald, Einbi küla; Hiiumaa, Hiiumaa vald, Lehtma küla	

Maamaks

On maamaksusoodustus: Ja Maamaksu määär:

Lisainfo

Kirjeldus:

'Kaitse eesmärk:
 Kaitseala eesmärk on kaitsta:
 1) Apollo meremadaliku ja sealset elustikku;
 2) elupaigatüpe, mida nõukogu direktiiv 92/43/EMÜ looduslike elupaikade ning loodusliku loomastiku ja taimestiku kaitse kohta (ELT L 206, 22.07.1992, lk 7-50) nimetas I lisas. Need on veavalused liivamadalad (1110) ja karid (1170);
 3) kaitsealust liikl, keda Euroopa Parlamendi ja nõukogu direktiiv 2009/147/EÜ loodusliku linnustiku kaitse kohta (ELT L 20, 26.01.2010, lk 7-25) nimetas I lisas, ning I lisas nimetamata rändlinnuliike ja nende elupaik. Need liigid on aul (Clangula hyemalis), väikekajakas (Larus minutus), mustvaerjas (Melanitta nigra) ja hahk (Somateria mollissima).

Keskpunkt koordinaadid

Keskpunkt koordinaadid:

Ristkoordinaat	Kraad, minut, sekund	
X	6566131	59°13'42" N
Y	433599	22°50'12" E

Kandeotsused

Esmase kanne: 31.01.2019 Viimane kanne: 20.01.2020, Kaire Sirel
 Esmase kande alusdokument: [Vabariigi Valitsuse 31. jaanuari 2019. a määrus nr 6 "Apollo meremadaliku looduskaitseala moodustamine ja kaitse-eeskiri"](#)

Võöndid

Võöndi nimetus	Pindala	Tüüp	Võöndi kategooria	Asukoht kaardil
Apollo meremadaliku LKA, Apollo skv.	5 216,8	sihtkaitsevõond	Ib - Könnumaa	Vaata kaardil

mch4blue - ParticipatoryGIS

Switch layers

Environmental Data

Protected Areas

Underwater Cultural Heritage

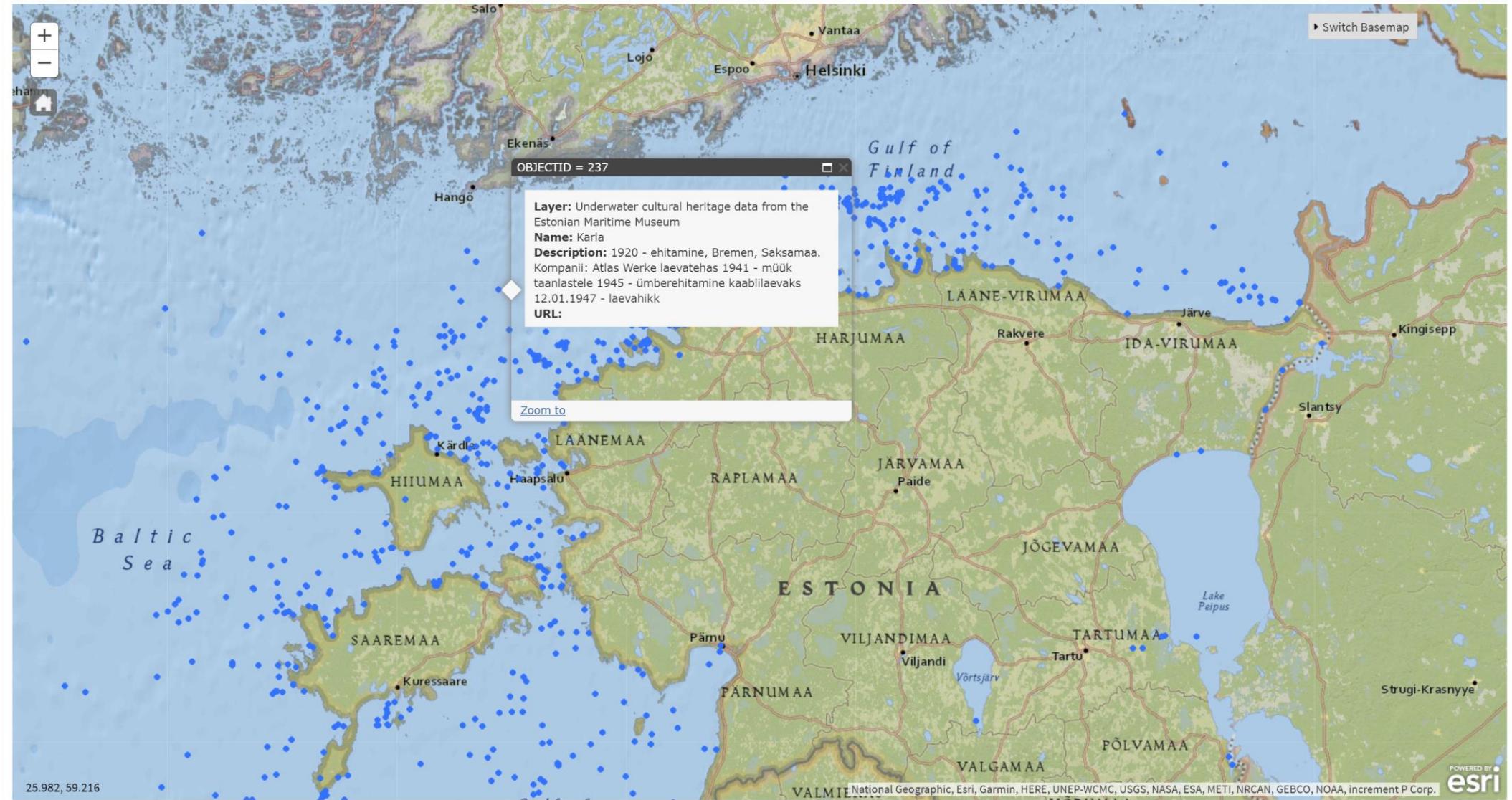
Estonian Maritime Museum

Cultural monuments (points)

Cultural monuments (polygons)

Administrative boundaries

Map



Switch layers

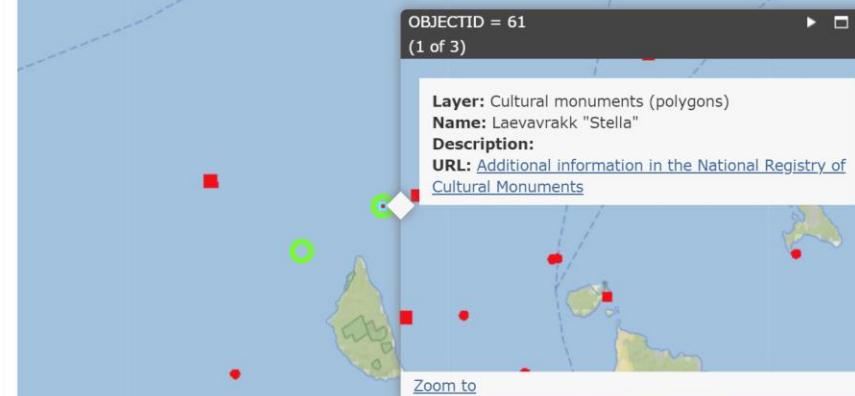
 Environmental Data Protected Areas

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25.566, 59.706

GULF OF FINLAND

Na

Kultuurimälestiste register

EST

ENG

Logi sisse

Mälestised

29966 Laevavrakk "Stella"

[Abi ?](#) [Navigeerி](#) [Prindi](#)
[Põhiandmed](#) [Menetlused](#) [Ava kaardil](#) [Otsing](#)

Koondavaade

Mälestise nimi

Laevavrakk "Stella"

Mälestise registri number

29966

Mälestise tüüp

Kinnismälestis

Arvel

02.04.2009

Registreeritud

15.02.2010

Mälestise liik

arheoloogiamälestis, veealune mälestis



Määrused ja käskkirjad (1)

"Kultuurimälestiseks tunnistamine" Kultuuriministri käskkiri 15. veebruar 2010 nr 85 Kuupäev: 15.02.2010

Paikvaatlused (3)

Seisund: hea
Inspektoerimise kuupäev: 10.05.14
Meneteja: Aliveearheoloogia nõunik, Maili Roio

Aadress (1)

Soome laht (Mälestisel)

Vrakiregister (1)

Stella

Märksõna (1)

Veealune mälestis.

Kirjeldused (4)

Mälestise tunnus (25.11.2009) Mälestise kirjeldus (25.11.2009) Mälestise asukoha kirjeldus (25.11.2009) Mälestise ajalugu (25.11.2009)

Sisestatud: 25.11.2009.

Mälestise asukoha kirjeldus

Laevavrakk paikneb Naissaarest põhjas umbes 60 meetri sügavusel.

Sisestatud: 25.11.2009.

Mälestise ajalugu

Aurik ja kaubalaev „Stella“ ehitati 1889. aastal Saksamaal „Flensburger Schiffbau-Gesellschaft“ poolt. Laeva pikkus 47,22 meetrit, laius 7,79 meetrit, veeväljasurve 700 t.

Alates 1915. aasta maist Tsaari-Venemaa miinitraaler nr 6. Hukkus miinikaitse lõhkelaengutel Naissaarest põhja pool 22.08.1915 (Eesti Meremuuseumi vrakiregister).

Kaubalaev „Stella“ vraki leidis Rootsli merevääe uurimislaev Ocean Surveyor 1994. aastal. Vrakk identifitseeriti Eesti Meremuuseumi poolt 1996. aastal.

Switch layers

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Low : 0.45

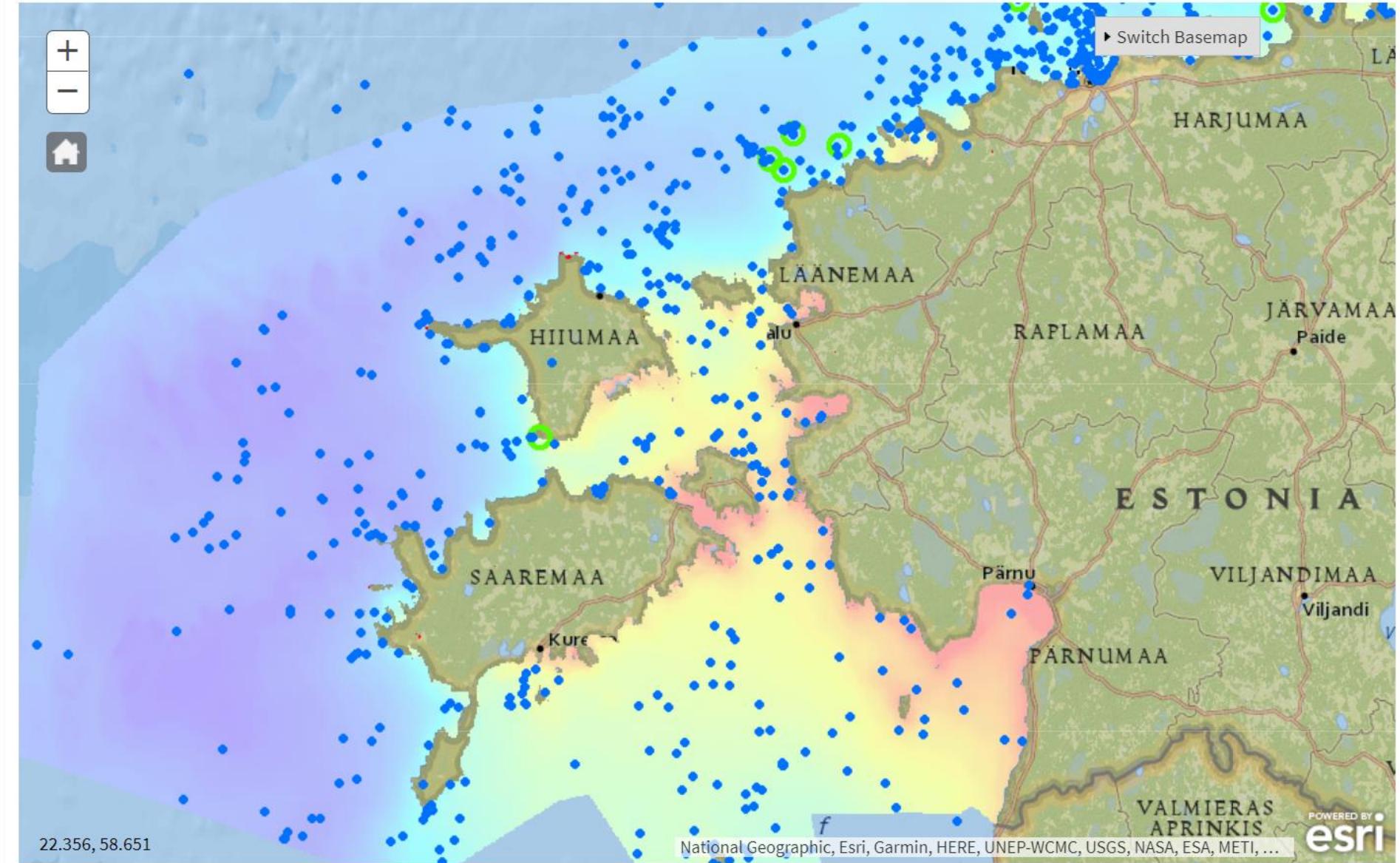
 Species richness of benthic fauna Species richness of benthic flora Environmental vulnerability profile

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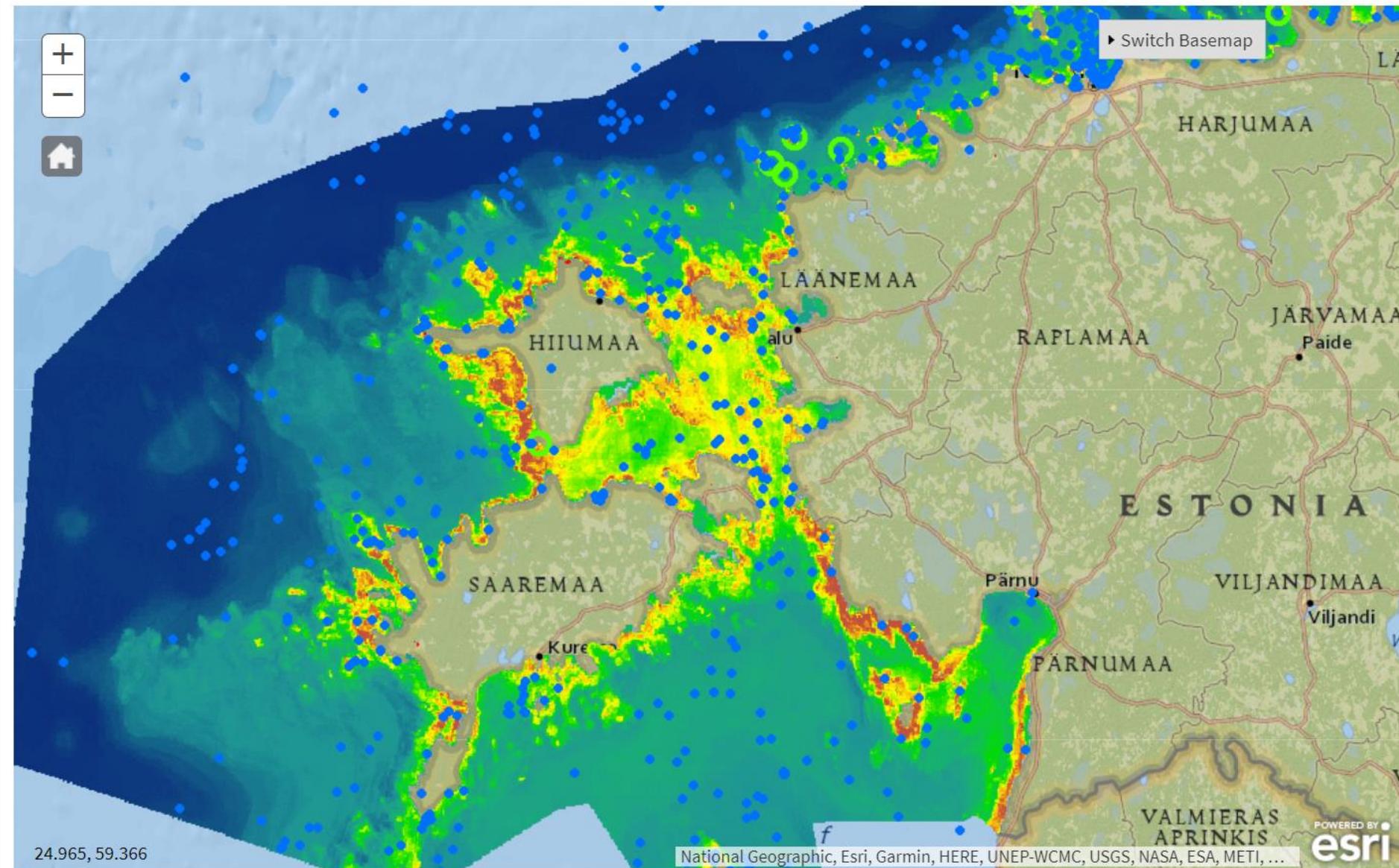
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Map



Acknowledgements

- This study is supported by European Regional Development Fund, INTERREG Baltic Sea Region project BalticRIM “Baltic Sea Region Integrated Maritime Cultural Heritage Management”
- The Environmental vulnerability profile method was developed in European Regional Development Fund, INTERREG Central Baltic project Plan4Blue “Maritime Spatial Planning for Sustainable Blue Economies”



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