

The Koster-Väderö Fiord

*Experience of nature conservation in a
marine Natura 2000 area*

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LÄNSSTYRELSEN
VÄSTRA GÖTALANDS LÄN
County Administrative Board



This presentation

Orientation

Biological values to protect

Stakeholder involvement part 1:

Fishery in the area

The Natura 2000 geographic story

The National Park Story

Stakeholder involvement part 2

-The Koster islander and all the others...

What have we learned? – some advice for the future

Structure (Authority) for Nature conservation in Sweden

Swedish Government –
Minister for the Environment
Ministry of Environment



Swedish Environmental
Protection Agency
(SEPA)

NATUR
VÅRDS
VERKET



SEPA coordinates
the national work
of environmental
and nature protection

Länsstyrelserna

County Administration Board (CAB)

*Department of
Nature conservation and protection*



LÄNSSTYRELSEN
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Sweden is regionally divided
into 21 County (Län).
The CAB is the regional
authority for national
common issues like protection
of nature.

Nature's Year - the celebration of 100 Years of National Parks and Conservation!

The long tradition of working with Nature protection in Sweden have 100 years anniversary this year - 2009

The Swedish Society for Nature Conservation (SSNC) was established in 1909. SSNC very soon became, and still is, a very important force in natur protecting issues in Sweden.

(SEPA was established in 1967 after proposal from SSNC to the Swedish Government)

The first Swedish national Law of Nature Conservation came in force 1909...
...and Governmental decisions of Swedens first 9 National Parks
(also the first National Parks in Europe) was made.



Nature events in Sweden during the Anniversary Year

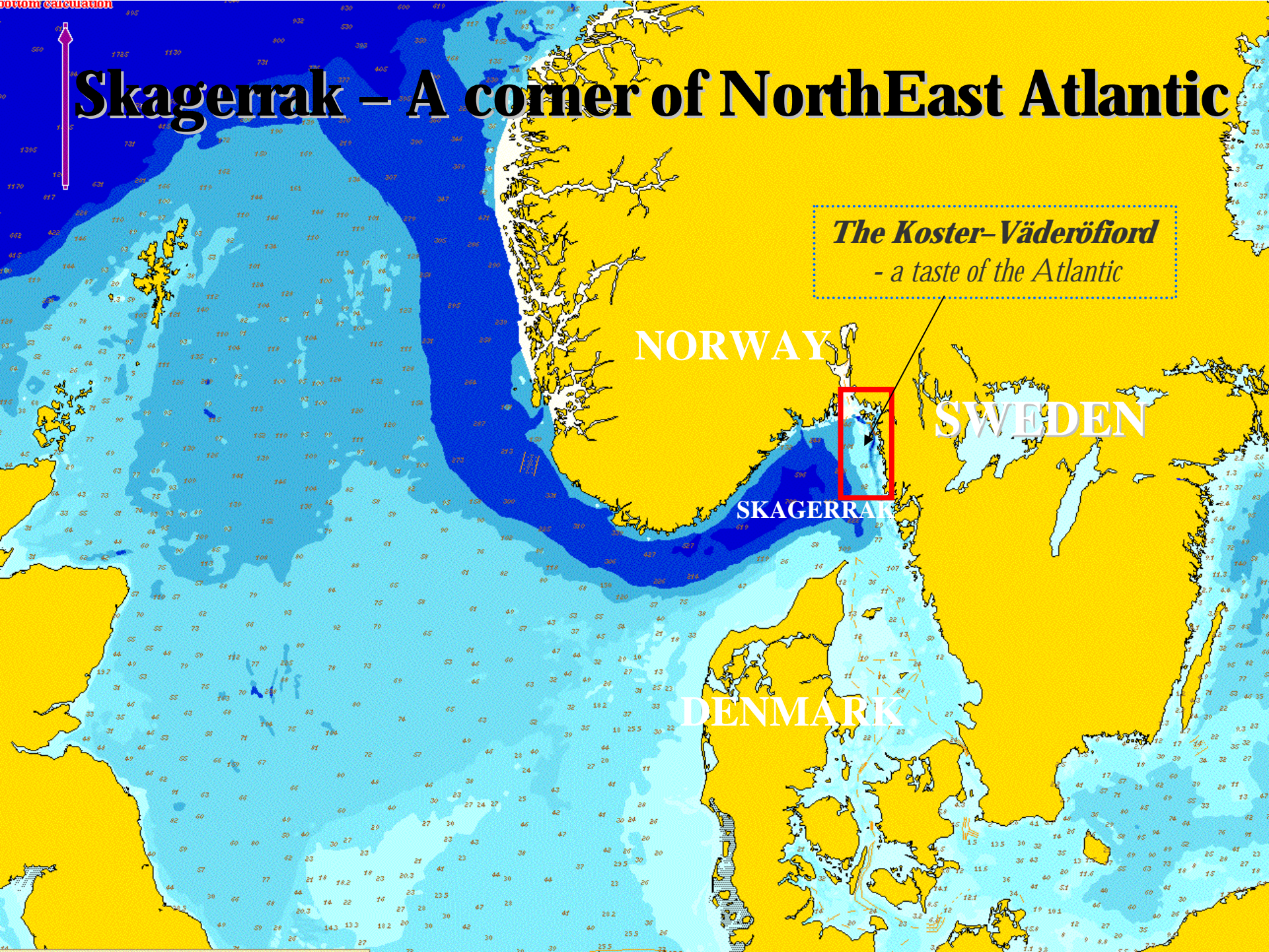
- The first marine National Park in Sweden: Kosterhavet will be inaugurated th 9 th september (2009-09-09). This is Swedens 29th National Park.
- EUROPARC yearly conference is held in Strömstad 9-13 th September

Theme of Conference:

*100 years of National Parks in Europe –
a Shared Inheritance; a Common Future*



Skagerrak – A corner of NorthEast Atlantic



*The Koster-Väderöfjord
- a taste of the Atlantic*

NORWAY

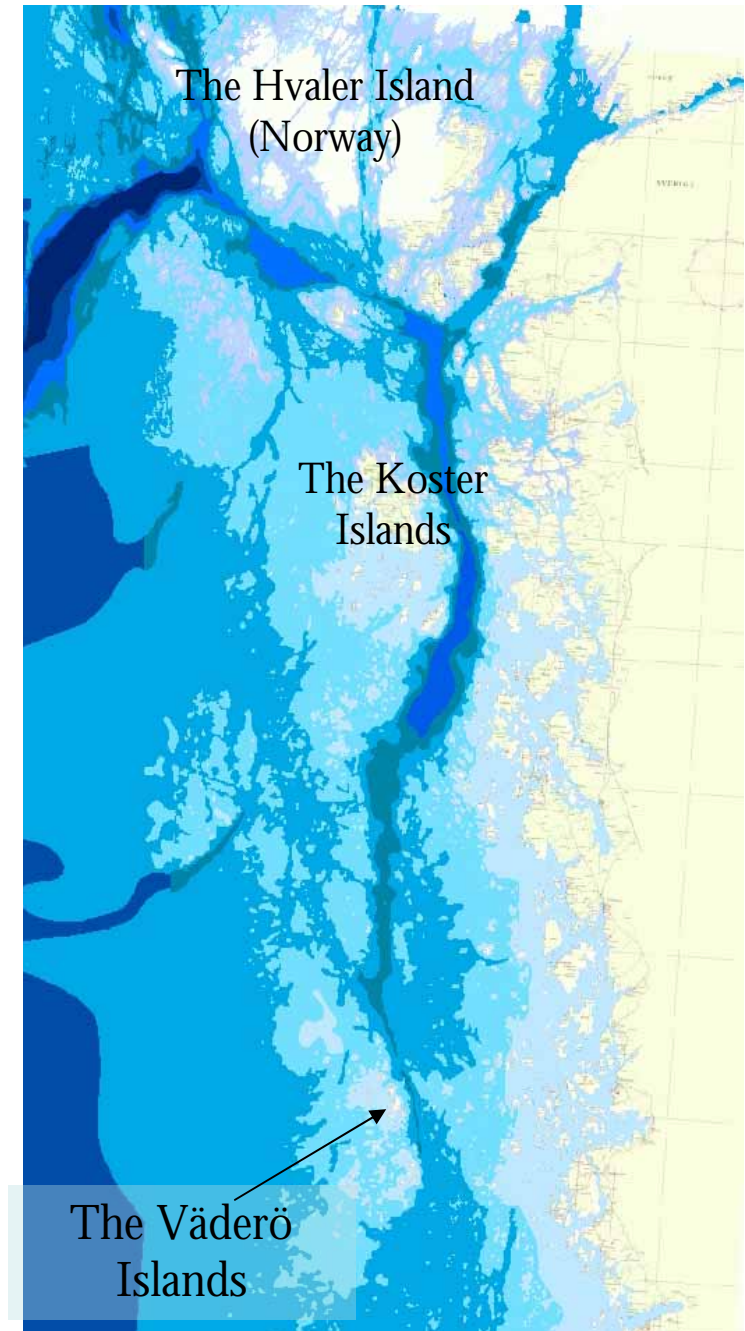
SWEDEN

SKAGERRAK

DENMARK

Values to protect – what´s so special with the Koster-Väderö Fiord?

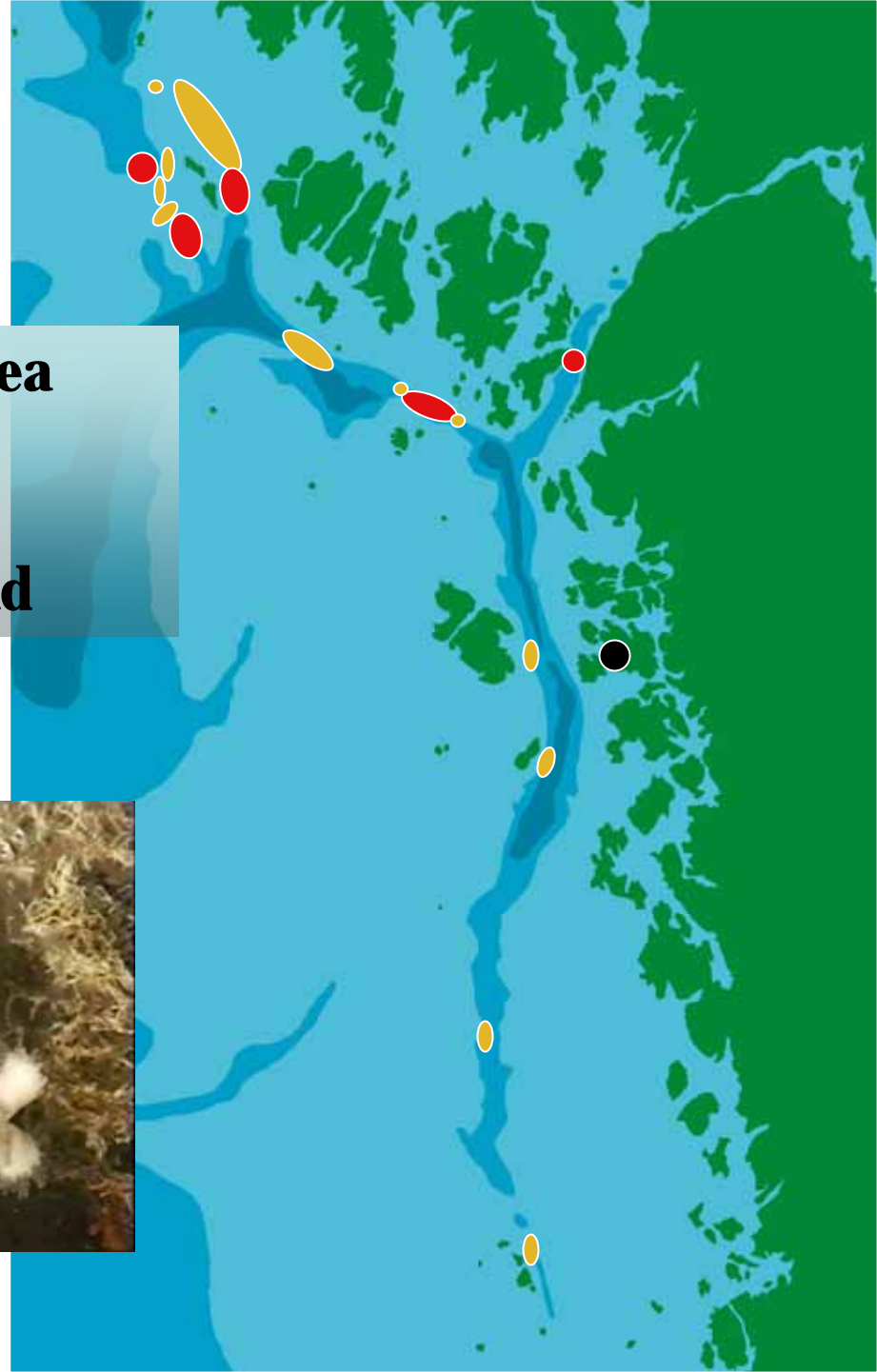
- The highest diversity of marine species in Sweden with approx 5000-6000 marine species
- More than 200 unique species of animal & 9 unique species of algae
- Unique biotopes – rocky deep bottoms, Lohelia reefs, exposed shallow sediments, maerl, sea-pen soft bottom (i e untrawled deep soft bottom)
- Many different marine biotopes
- Large marine area: Inner sheltered bays to outer skerries

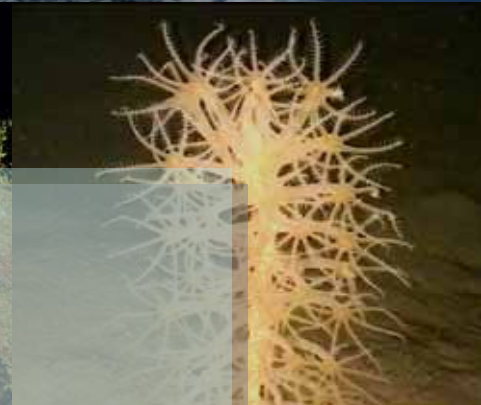


Lophelia reefs

extinct and **present** distribution

In 1980 the Ytre Hvaler - Koster area
had 2 known living sites of
Lophelia pertusa -reefs
Today: Aprox. 14 living and 14 dead





**Stakeholder involvement part 1:
Fishery in the area**



Fisheries and Nature conservation work in Koster-Väderöfjord

- Focus on marine conservation from 1979.
Several proposals on marine protected areas (nature reserves) from both authorities and nature protecting NGO's
- Strong conflicts (in the beginning). Demonstrations and arguments in media.
Trawlers feared they would be excluded from their fishing areas.
- Participatory process started 1998 (initiated by the provincial government).
- An agreement was reached between fishermen, their organisations, the fishery authority, the provincial government and the local communities in 2000.
- A Co-Management project was initiated and worked out from 2005-2008.
- Fishermen involved, positive but questioning in the process with the National park

Some features of the local fishery

- **Occupies around 50 fishermen in 30 boats (10 – 26 meter)**
- **Turnover estimates 80 milj SEK**
- **Long tradition of local management and informal rules**
- **Rules not only helps to manage the resource along the local fishermen it also excludes outsiders for example larger trawler**
- **The shellfish fishery is within biological limits – sustainable regarding the resource**



The participatory process...

- **Stakeholder identification**
- **Overall principles where laid down between authorities.**
 - **MPA instead of reserves – sustainable fishery.**
 - **Use of fishery legislation (not other laws i e nature protection laws)**
- **A steering group was set up**
- **Goals where set up and agreed upon.**
- **Methods and roles**
- **Inventory fase**
- **Dialog, negotiating and agreement fase**
- **Follow up fase including education and inititating a fishery**
- **Co-management initiative**

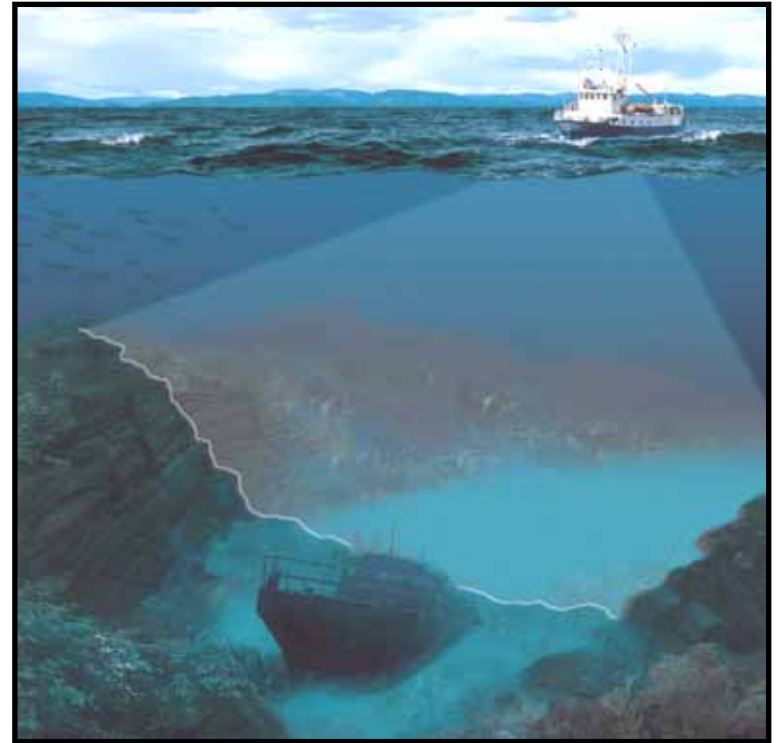


The first Kosterfiord inventory

An inventory of the area was executed 1998-2000 to meet the fisheries demand of knowledge of their impact

Project included:

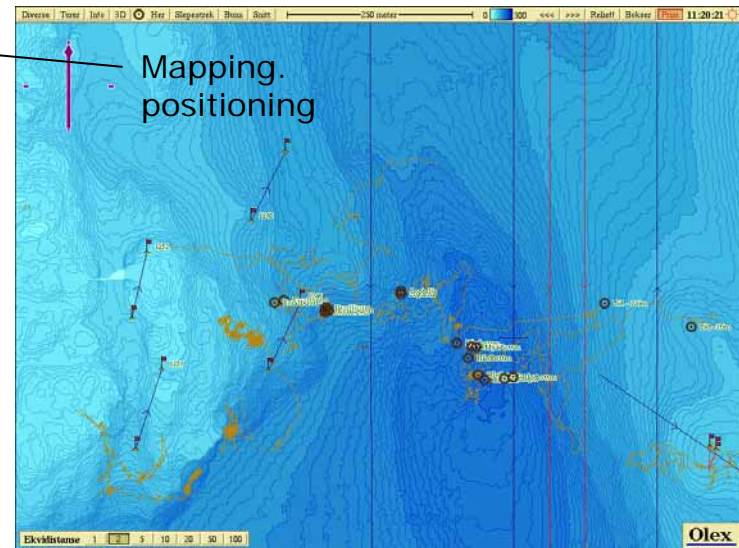
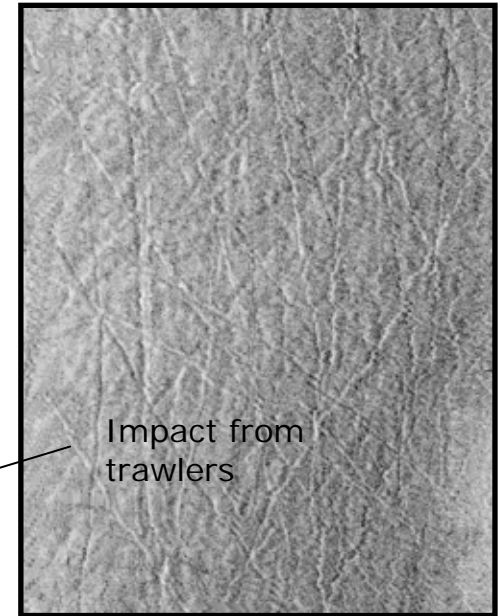
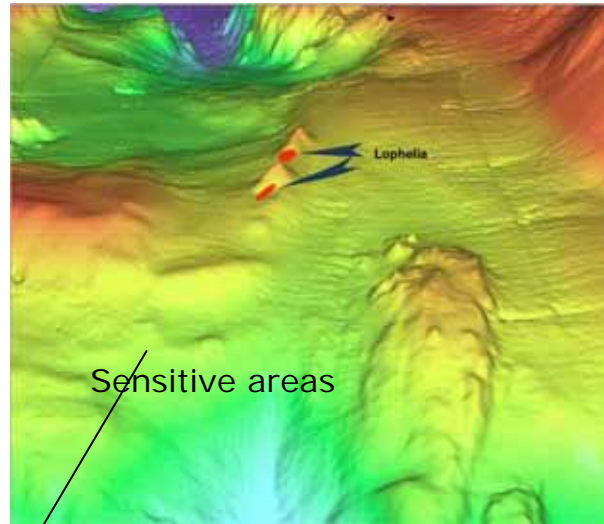
- Bathymetric mapping of the Kosterfiord
- Processing of logging from fishingvessels
- Inventory of sensitive habitats with ROV technic



Bathymetri mapping:

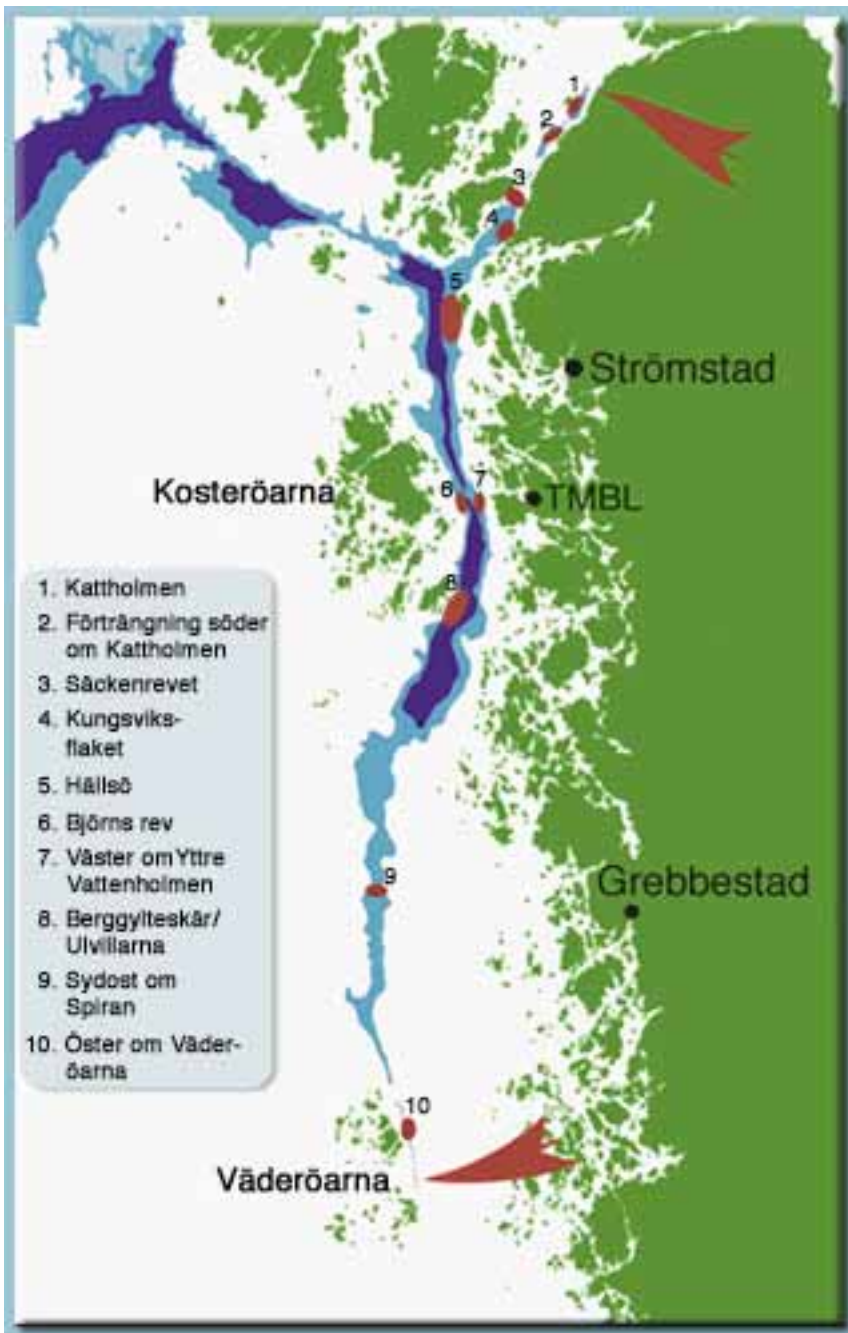
- Multibeam scanning
- Sidescan sonar

ROV-inventory of sensitive habitats



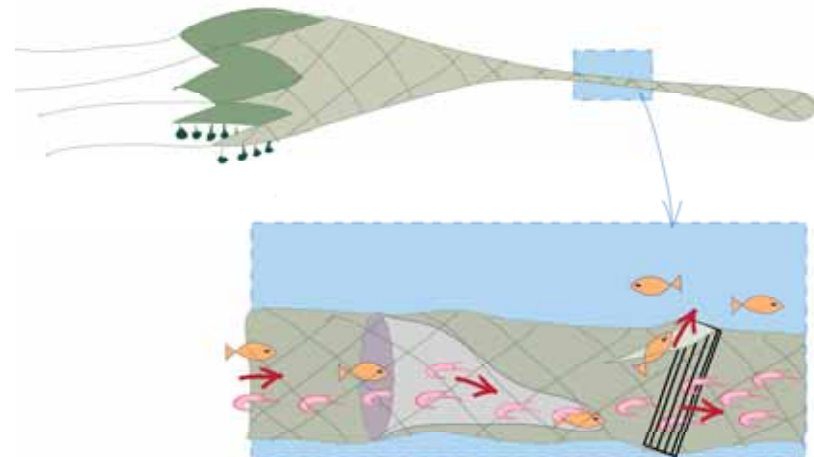
The Koster-Väderfjord agreement

A major step toward mutual understanding of nature protection and fishery regulations



The agreement

- **Size and weight of trawl doors reduced to 2.7 m² and 350 kg**
- **Selection panel to sort out bycatch**
- **Trawling ban in sensitive areas**
- **Shallowest trawling depth allowed moved from 50 to 60 meter**
- **Continued development of environment friendly fishing gear**
- **Education in marine ecology for all fishermen in the area**



The Co-management Initiative

- **Full integration of resource management, economic development and environment into a sustainable fishery within the 4 nm zone**
 - **Further development of selection (shrimp size)**
 - **Selfcontrol**
 - **Marketing, Branding**
 - **Labelling**
 - **Improved navigation of trawls in the area through better charts and plotters**
- **Creating a management plan**



Result of fishermen's work in the Co-Management initiative

- **NJORD – a local brand**
- **Eco-label on 2-3 shrimp-trawling boats**
- **Academy for shrimps in Strömstad (www.rakakademien.se)**

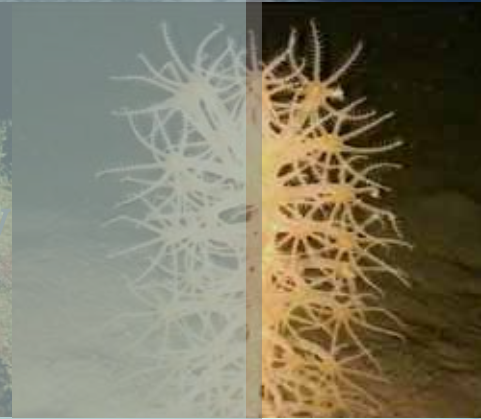


Njord
NÄRVAROR
Norra Bohuslän

Main fishery today

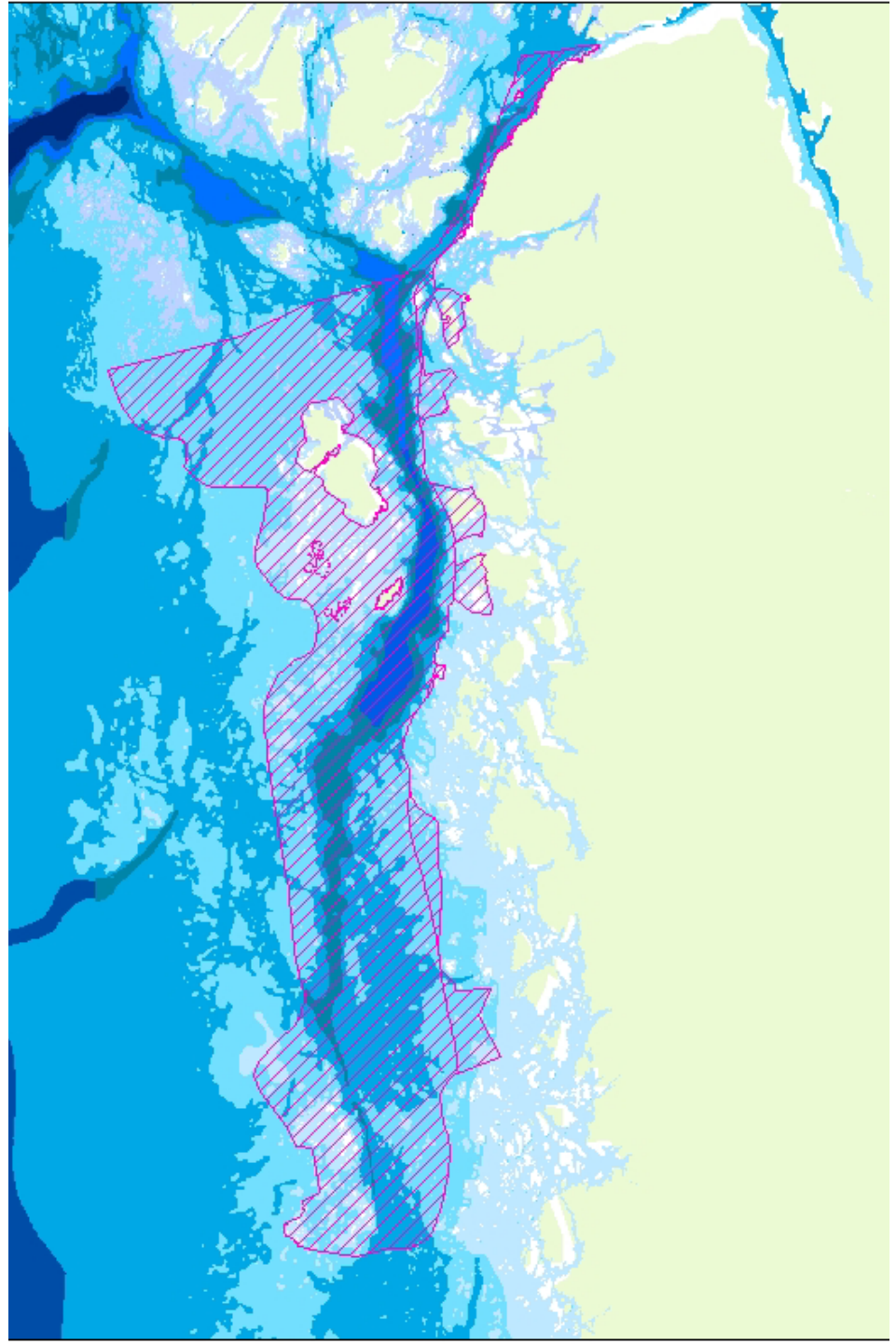
- **Northern shrimp** (*Pandalus borealis*)
- **Norway lobster** (*Nephrops norvegicus*)
- **Lobster** (*Homarus gammarus*)





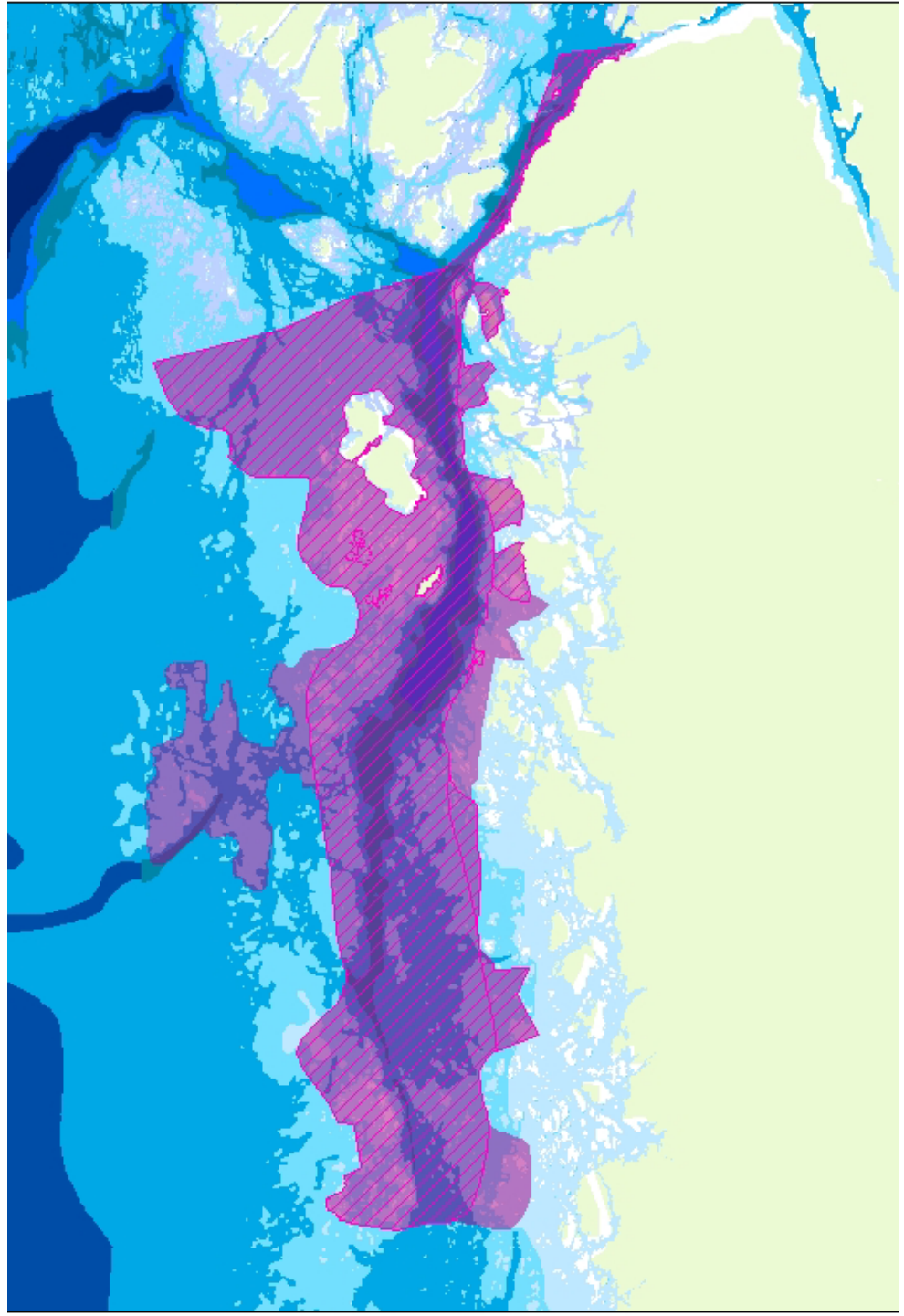
**The Natura 2000 (geographic) story
and more specific protection
by national legislation in the end**

**The Kosterfjorden –
Väderöfjorden
Natura 2000 area
in year 2000...**

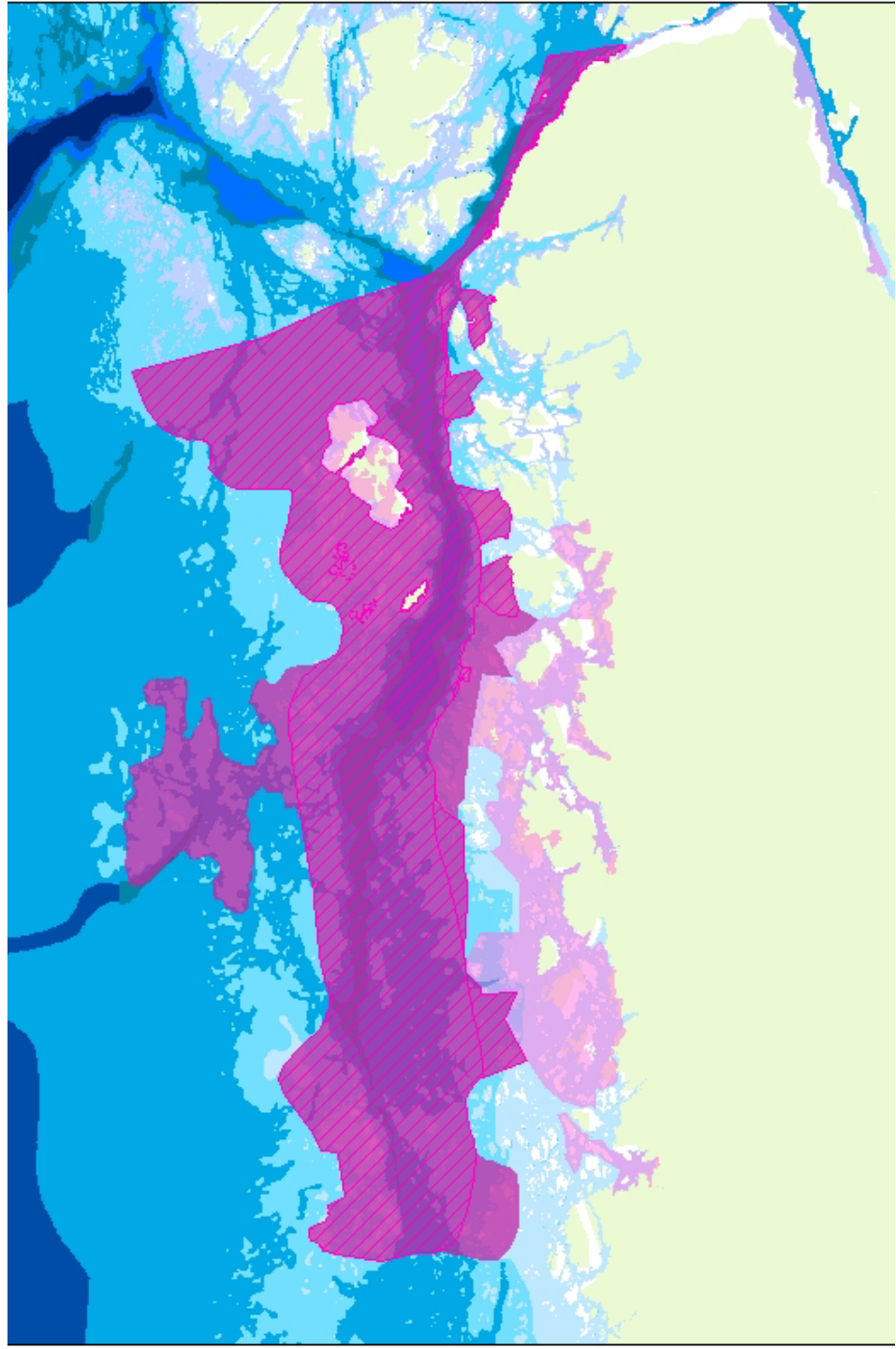


**The Kosterfjorden
– Väderöfjorden
Natura 2000 area
in year 2000...**

**...and extended in
2008**

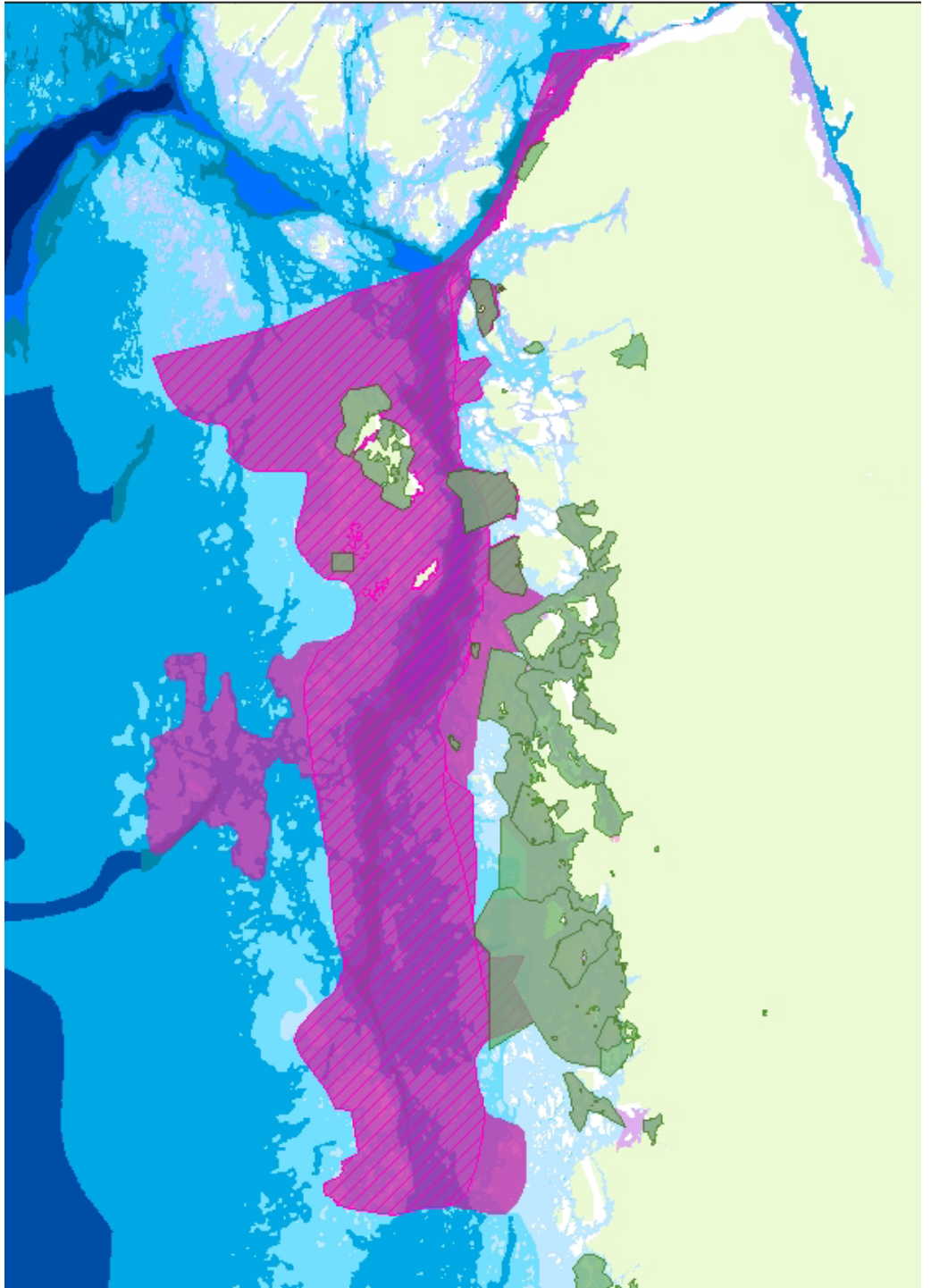


Adjacent (Coastal)
Natura 2000 areas
to Kosterfjorden-
Väderöfjorden



Protection by national legislation

(i.e. Natur reserves and similar)



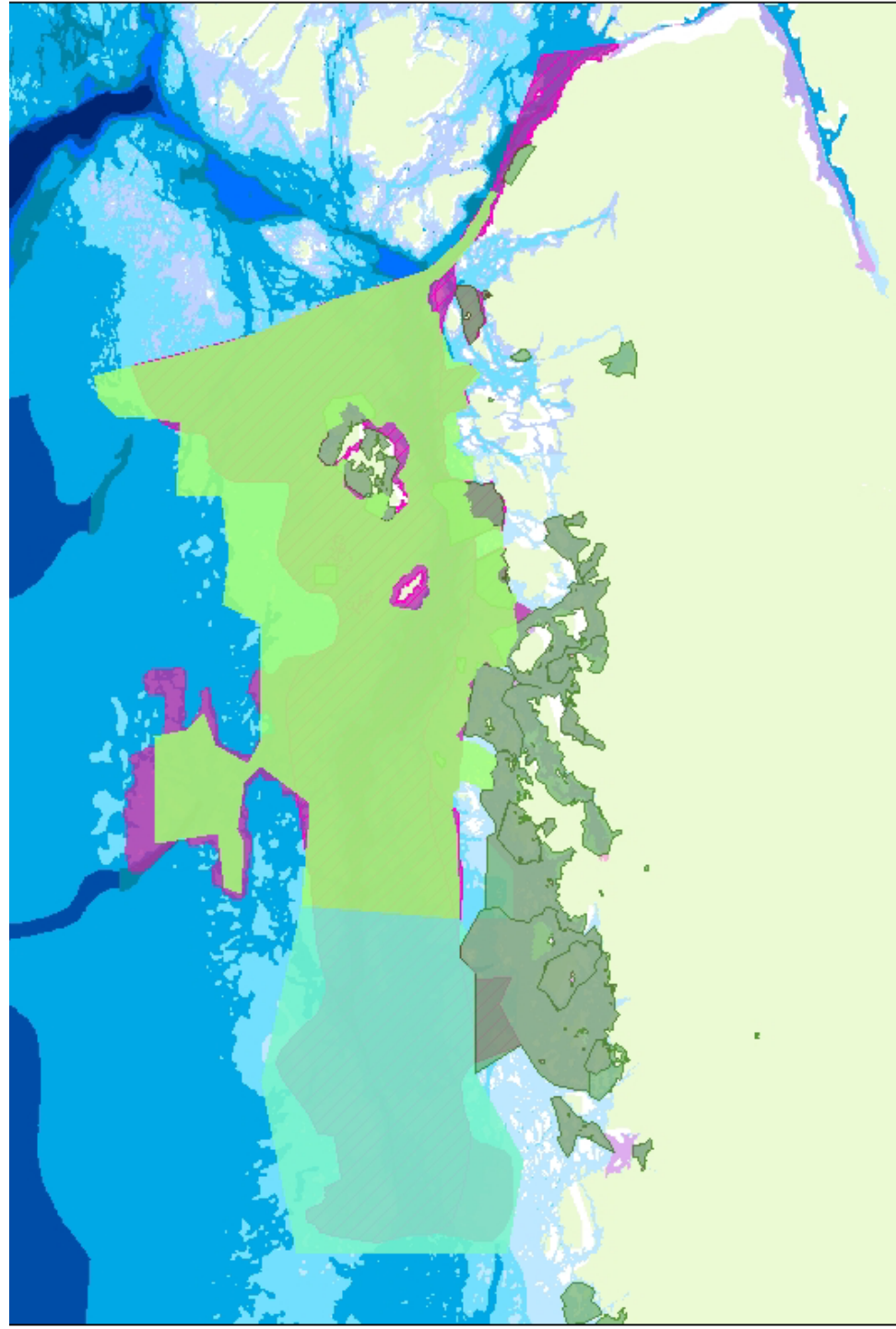
Protection by national legislation

*The Kosterhavet
National Park*

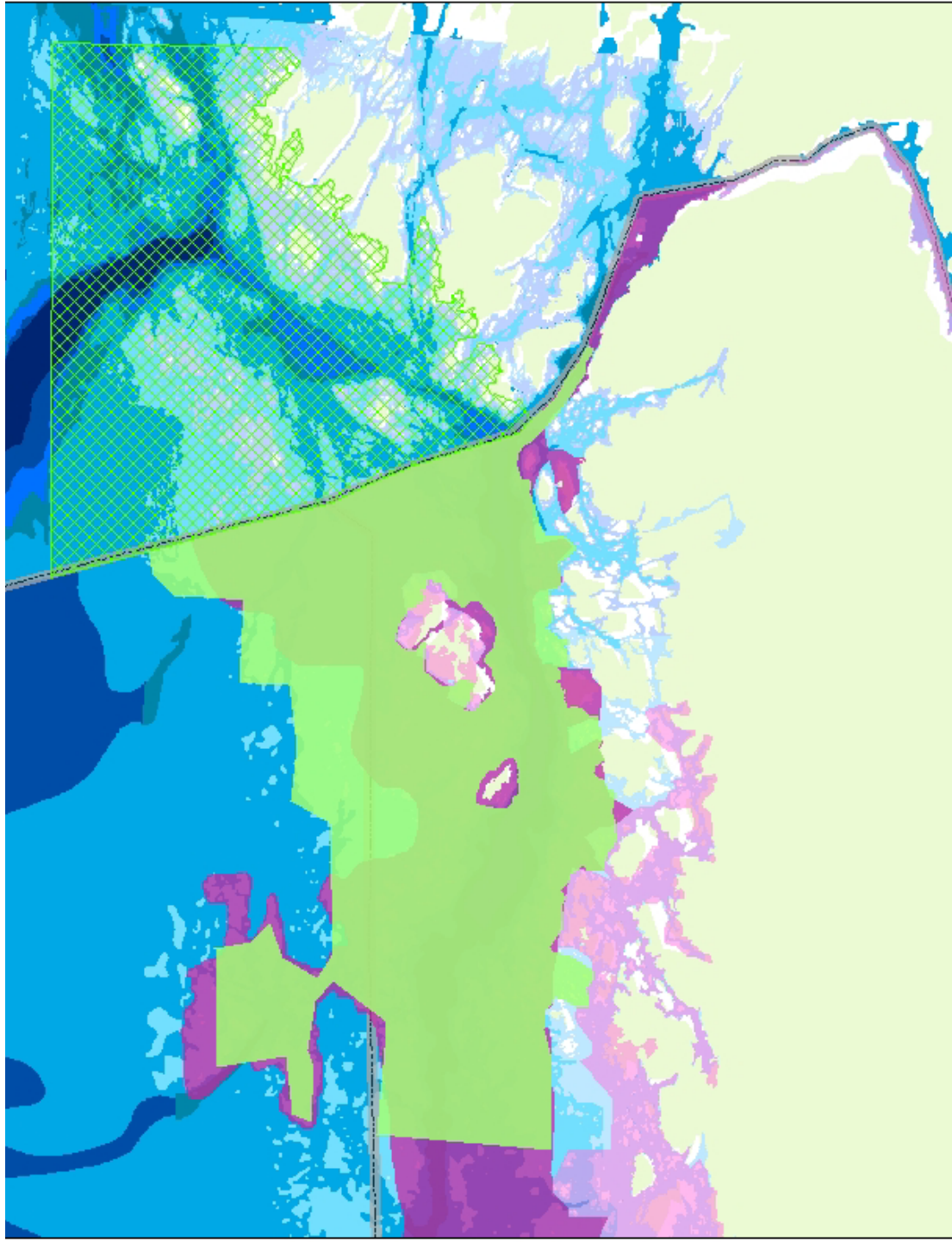
Inaugurated in
2009-09-09



Väderöarna
(Marine)Nature
Reserve
(resolution planned
to end of year 2010)



**Kosterhavet
transboundary
national park
with
Ytre Hvaler
in Norway**

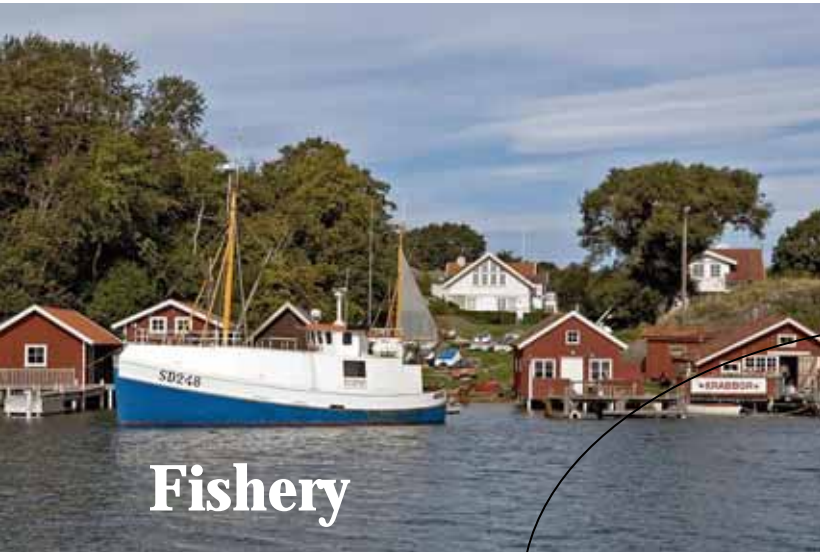




Stakeholder involvement part 2
The National Park Story
-Working with Koster islander and others...



Marine protection and use of land and water



Fishery



Recreation



Nature conservation



Local business



Farming

Ongoing activities in Koster

- Recreation / Tourism – attractive destination
 - kayaking, diving, trolling/fishing
- Leisure boats – Sweden's largest destination, over 170 000 guestharbour-nights per summer
- Fishery
- Aquaculture - oysters and blueshell
- Housings
- Shipping
- Living community in the middle of the park
- ...cattle farming and more....

History of the road to the Koster Sea National Park

- 1979 discussion of protection starts
- 1983 the Koster islands becomes Nature reserves
- 1979-1987 The area is pointed out for protection in several different documents
- 1987 The Swedish Nature protection society states that "Ranrike" (most of NE Skagerrak) should be a (transboundary) National park
- 1989 SEPA presents a plan for 20 future national parks in Sweden, Kosterarea is one of them
- 1997 analysis of biological values and report on criteria for selection of marine protected areas
- 2000 ROV survey of part of the area.
The Kosterfiord-Väderöfiord is proposed as Natura 2000 and the agreement on fishery is made
- 2001 SEPA publish a report on protection strategy,
The KV area is proposed as nature reserve or alternatively national park
- 2004 The Koster local forum gets positive to a NP
- 2005 A prestudie and later a plan for a NP is outlined by
Count Adm Board and SEPA
- 2006-2009 Intensive preparation work for the NP
- seabed mapping, biological inventory, local planning,
workshops, managementplan, decisions
- 2009-09-09 The Koster Sea National Park will be inaugurated



Key issues – at local level

- Protection and development
- Fishery
- Mangement x2 (Land and Sea)
- Infrastructure
- Living community's – 365 days per year
- Local involvement in governance (delegation)

Some other step stones in the work

- The Local Board of Koster (Kosternämnden) presents a program for local development. Conservation of the nature (i.e. a National Park) plays an important role (2004).
 - The local population on Koster feels that they in the future will have a harder and harder time handling a decreasing (and unregulated) flow of tourists to and around the islands.
- Local Board of Koster supports a delegation model with local involvement in their governance

Local engagement



- **Area planning**
- **Sustainable destination**
- **Support living all year around**
- **Working places**



CREST



- Agree about the definitions
- Environmental/Social/Economy
- Implement a modell / the toolkit
- Naturens Bästa ("Natures Best"), Gröna Nyckeln (Green Key), Blue flag
- Give us a market 12 M
- Co-operation

EU Interreg IIIB North Sea Programme project

Tool's of success for a National Park...

- The agreement with fisheries in the Koster-Väderöfjord
- Areaplanning and guidelines for NP – bottom-up approach
- Local participation in all issues
- More than 10 diff. workinggroups (external) and even more internal...
- Fruitful cooperation: research – governance – local people
- Interreg. project cooperation (Crest, Norway-Sweden)



What have we learned? – some advice for the future



Positive exempel - how to work

To work out major parts of the marine management plan we arranged a strategic planning workshop in cooperation with "Foundation of success" (FOS).

The workshop followed "Open Standard for the Practice of Conservation" made by the Conservation Measures Partnership (CMP), where FOS is one member. During the workshop we worked with the FOS-made "Miradi Software" for Adaptive Management.

Participants came from: SEPA, CAB, Swedish Board of Fisheries, Tjärnö Marine Biol Lab (Gotheburg University).

Biggest benefit with *Open Standards* and *Miradi*:

To use same language and structure (tools) in conservation work (not "make up the wheel again"). Easier to translate internationally, easier to cover all values and all activities in your area and so on.

Webpages of FOS, CMP and Miradi

Foundation of Success:

www.fosonline.org

Standard protocol for protection and adaptive management:

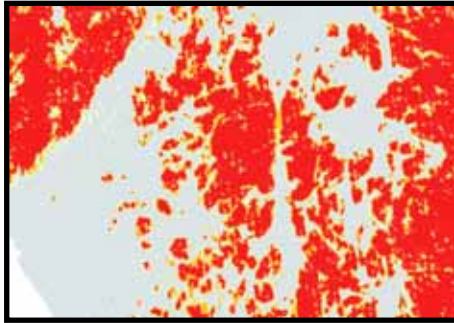
<http://conservationmeasures.org/CMP/>

Software for management planning)

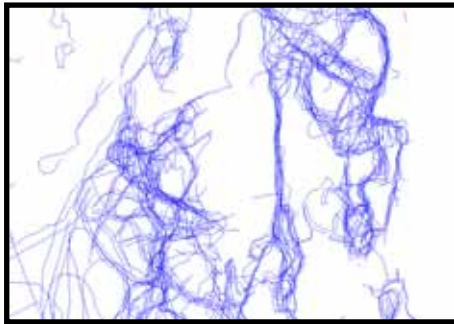
<https://miradi.org/>



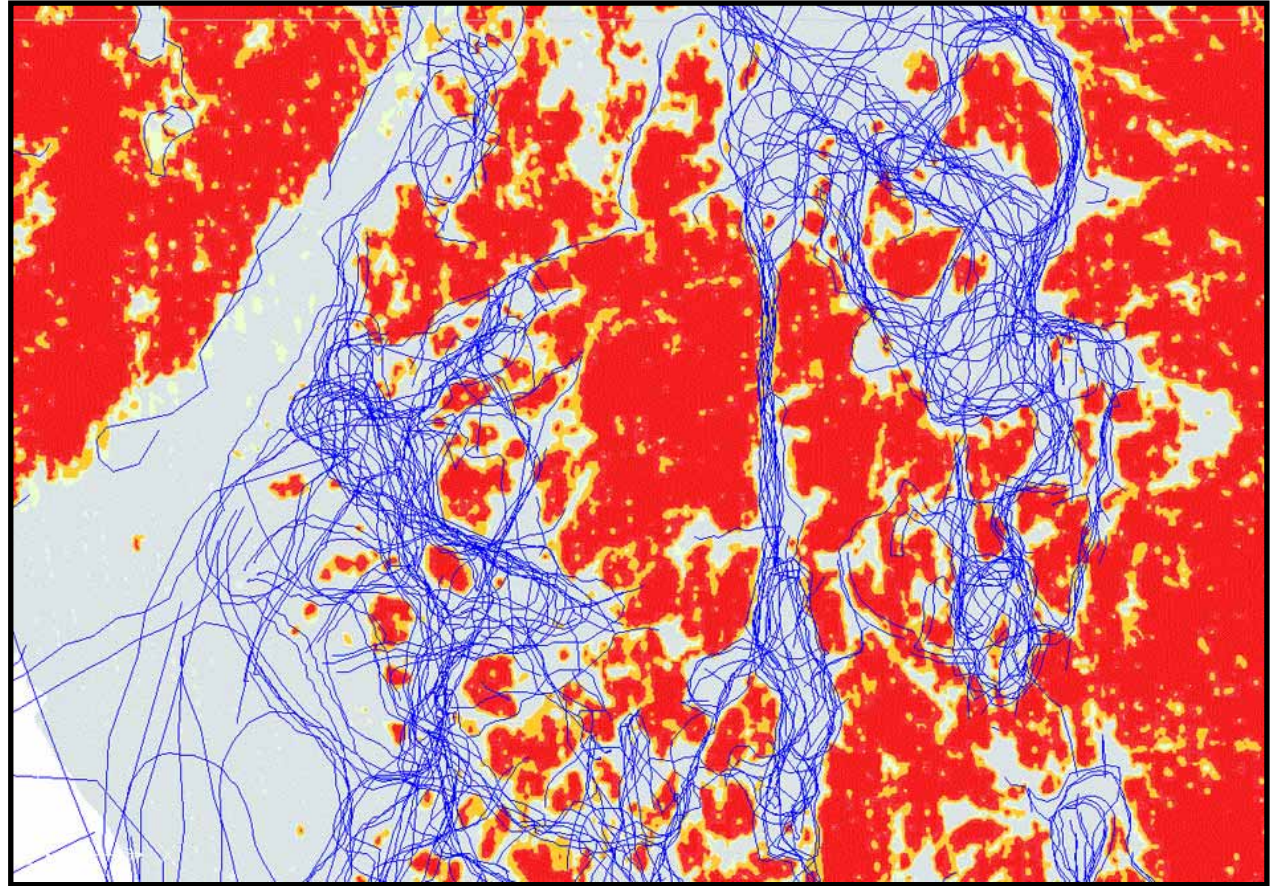
Example of using knowledge in communication



Backscatter



**Plotter tracks
from the
fishermen**



Combining data sets

What have we learned with Kosterfjorden – Väderöfjorden ?

Good knowledge (data, research etc) is tools in better understanding

Cooperation between authorities, research and local people is fruitful

Co-management and adaptive management is the Model of work!?

It's good and wise to have both time – and timing...

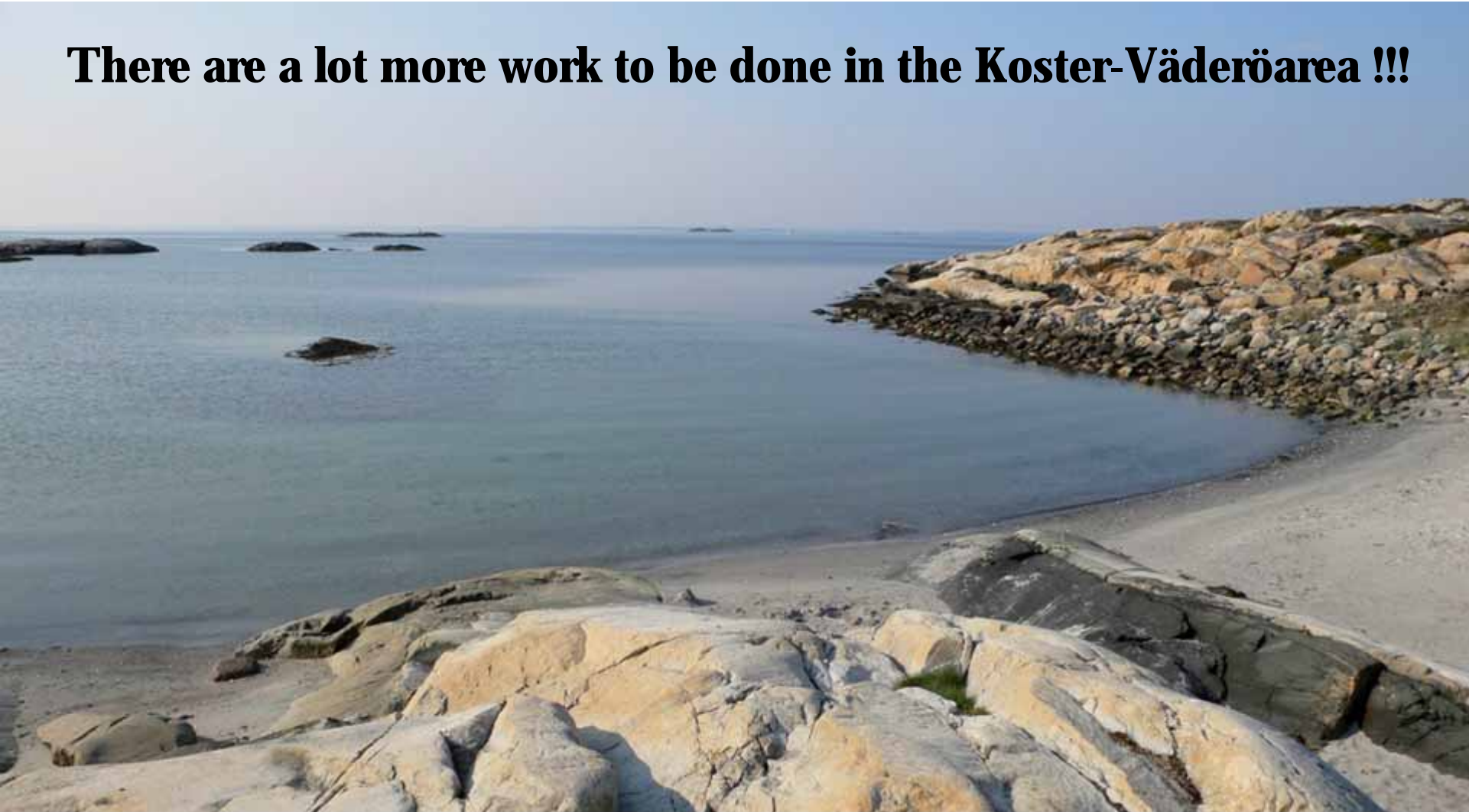
Also some patience with slow organizations (authorities) don't hurt

Never underestimate the importance of using media

Natura 2000 seems not to be a hot issue in Sweden (...yet)

But...

There are a lot more work to be done in the Koster-Väderöarea !!!



Management, monitoring and evaluation in coordination with...

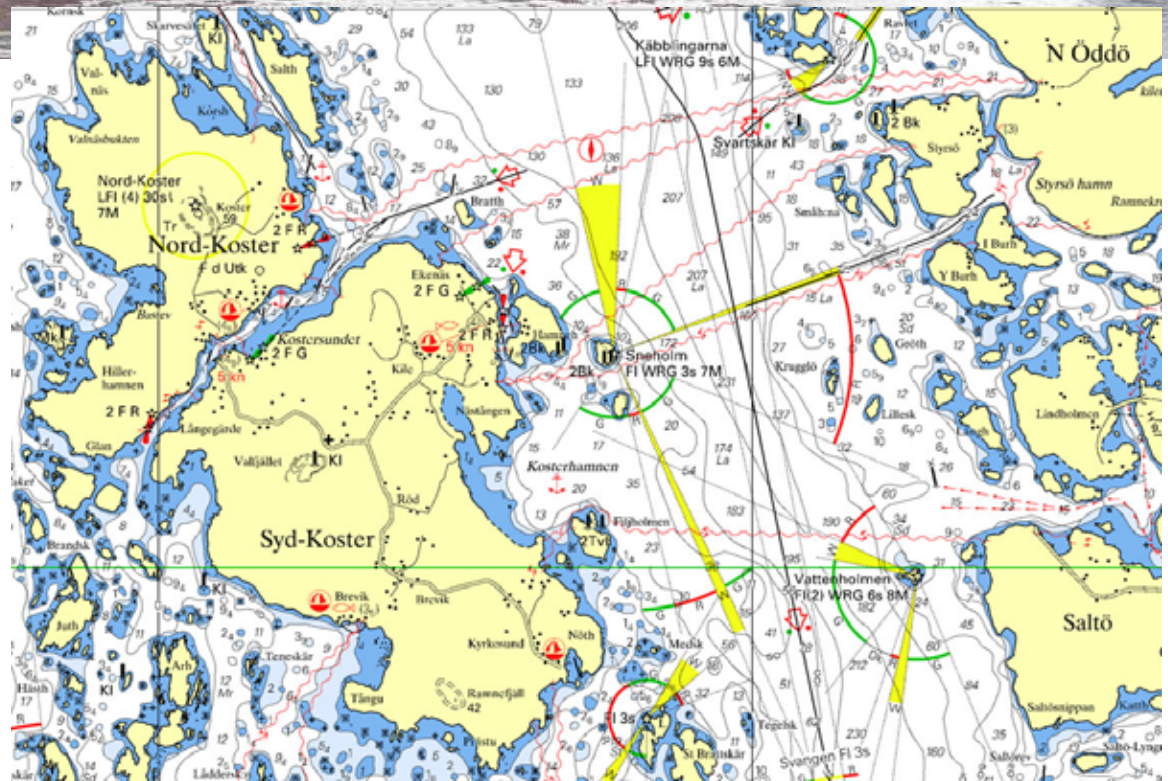
- Natura 2000
 - contribution to future management of Natura 2000 habitat
- OSPAR strategy for protection of species and habitats
- Water framework directive
- Marine directive



Visitor Center Kosterhavet - naturum



Will be built in 20??



Some more webpages to visit

- Projectweb KosterSea:
www.kosterhavet.se
- About the County in english:
www.lansstyrelsen.se/lst/en
- SEPA:
www.swedishepa.se/en/In-English/Menu/
- EuroParc federation:
www.europarc.org/home





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Thank you !
and
Good luck with your marine Natura 2000 sites!

