

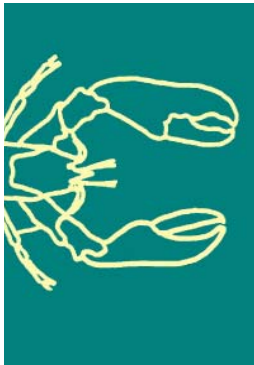
# Flagship project to ensure sustainable fishing of Salmon in the Baltic Sea Region

*Laura Píriz*

*3rd meeting of Priority Area 9 - Fisheries*

*18 November 2010*





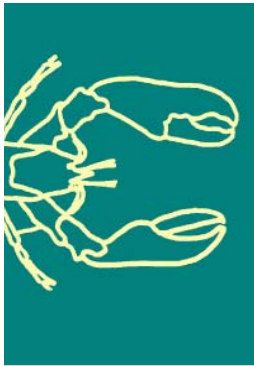
## Preliminary project idea

To contribute to ensure a sustainable fishing on salmon by safeguarding the biological diversity of salmon populations.

***What is putting the biological diversity  
of Baltic Salmon at risk?***



Skriv din avdelnings/enhets namn här



# What has been done so far in the planning process?

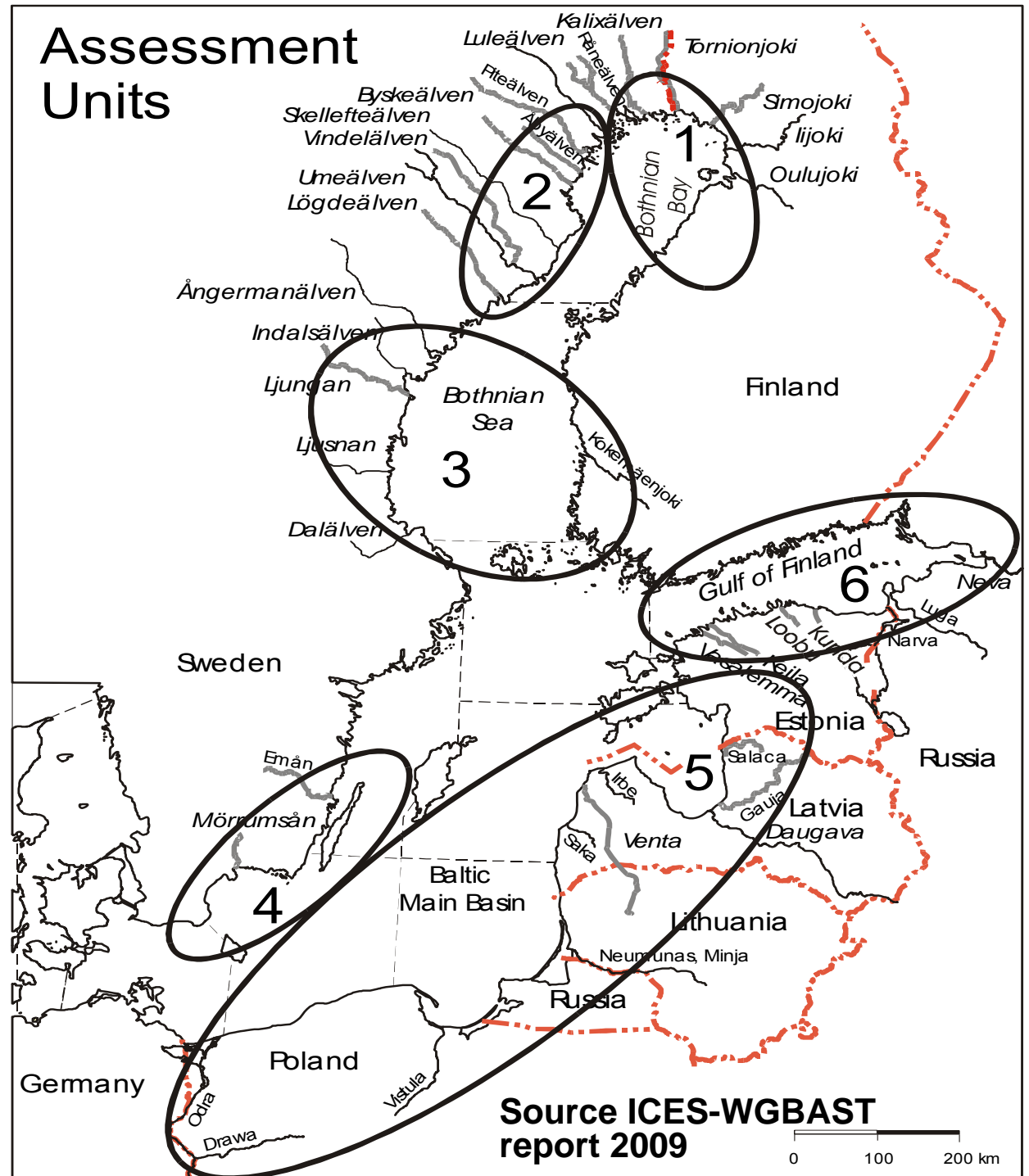
After deciding for salmon “as our case” the idea has been presented and discussed at various levels. To support the discussion we elaborated a concept paper which highlights biological, social and institutional diversity aspects of the case of Salmon fisheries in the Baltic.

We have presented our ideas and collected feed back from :

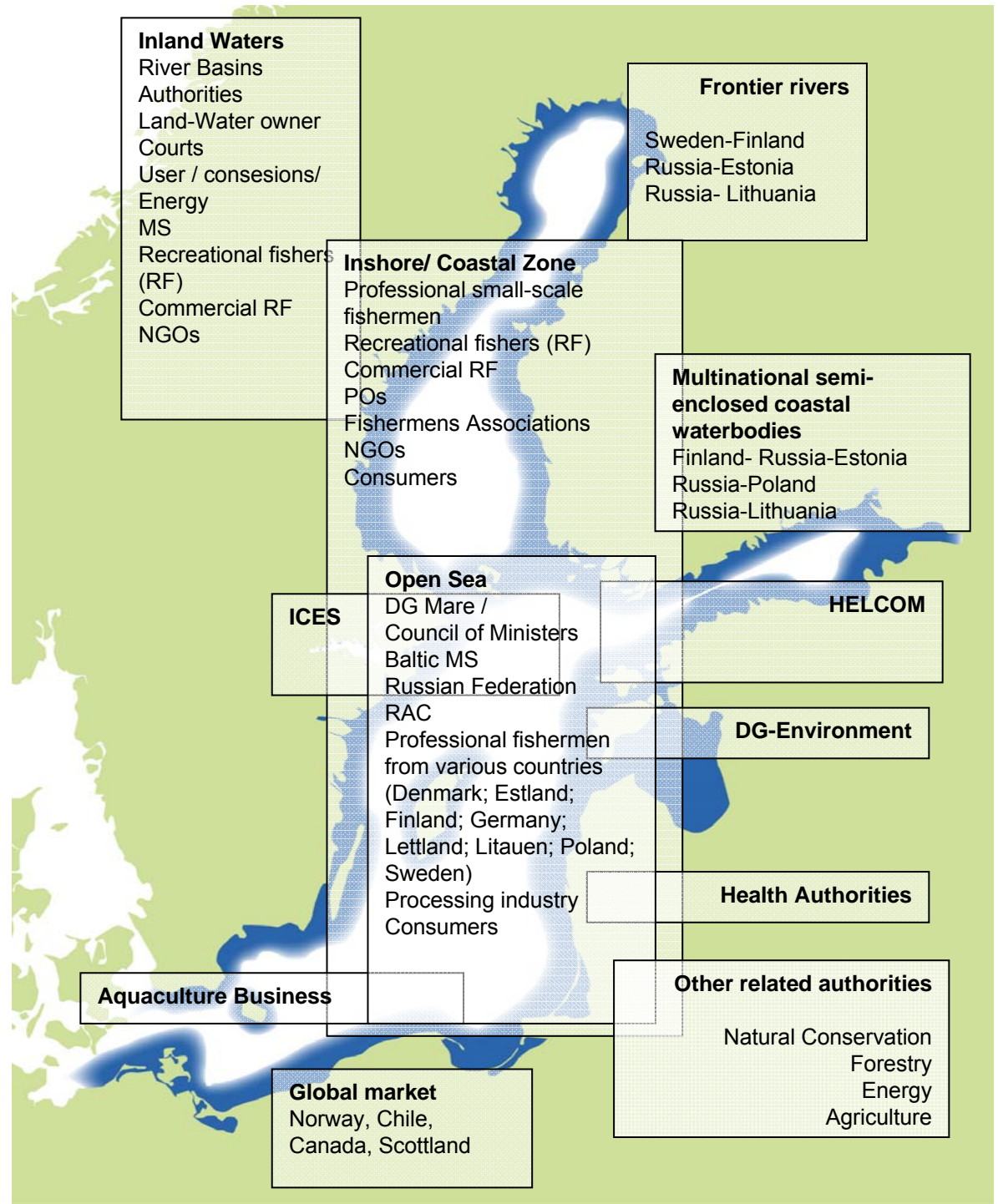
- Swedish Board of Fisheries
- Swedish Ministry of Agriculture
- Bilaterally with a few MS
- EU COM
- Baltfish Forum
- BSRAC
- Coalition Clean Baltic
- HELCOM’s Baltic Fish and Environmental Forum
- Scientific Workshop (including Russian Federation)



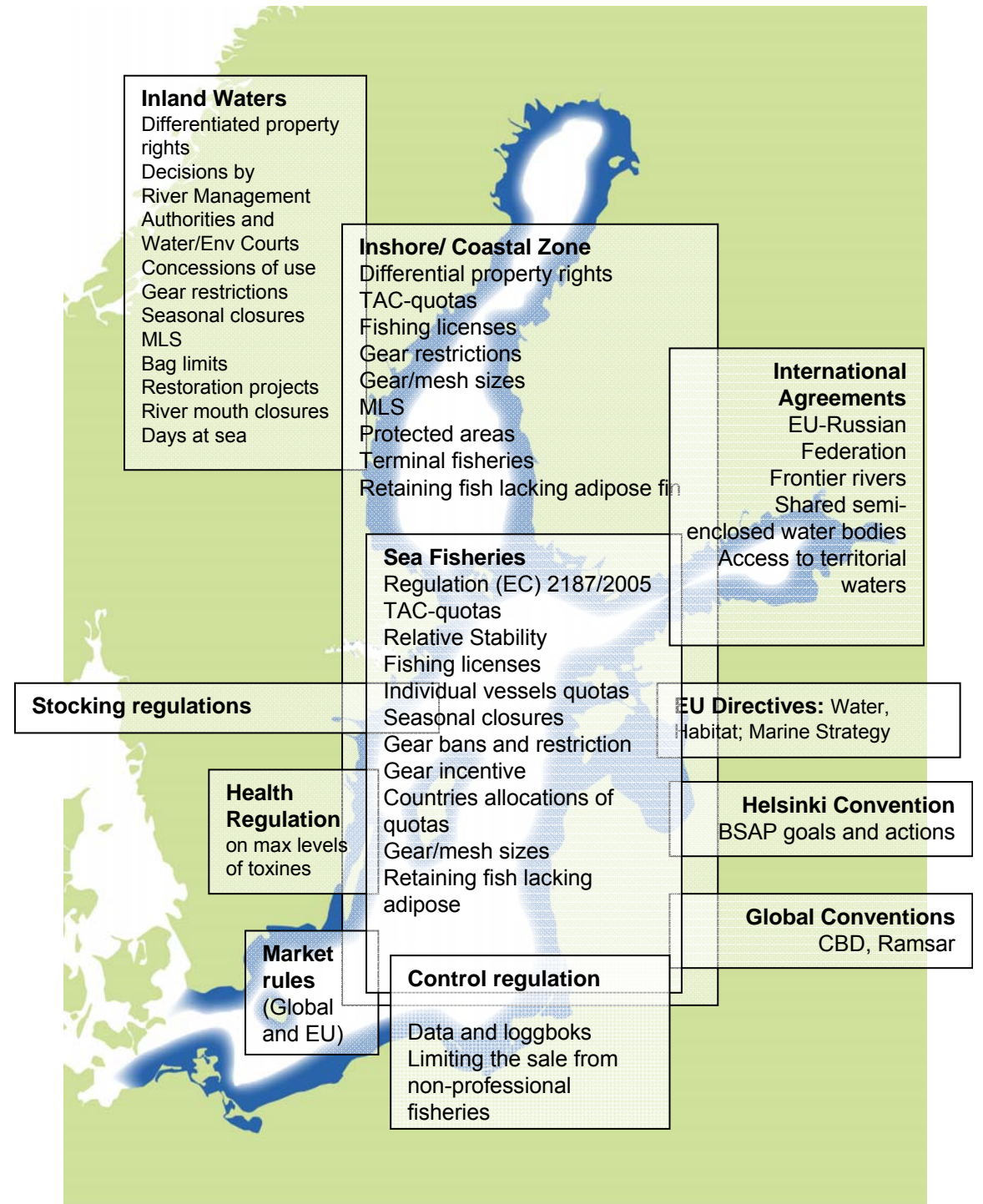
The biological diversity influencing the governance of Salmon fisheries in the Baltic Sea region



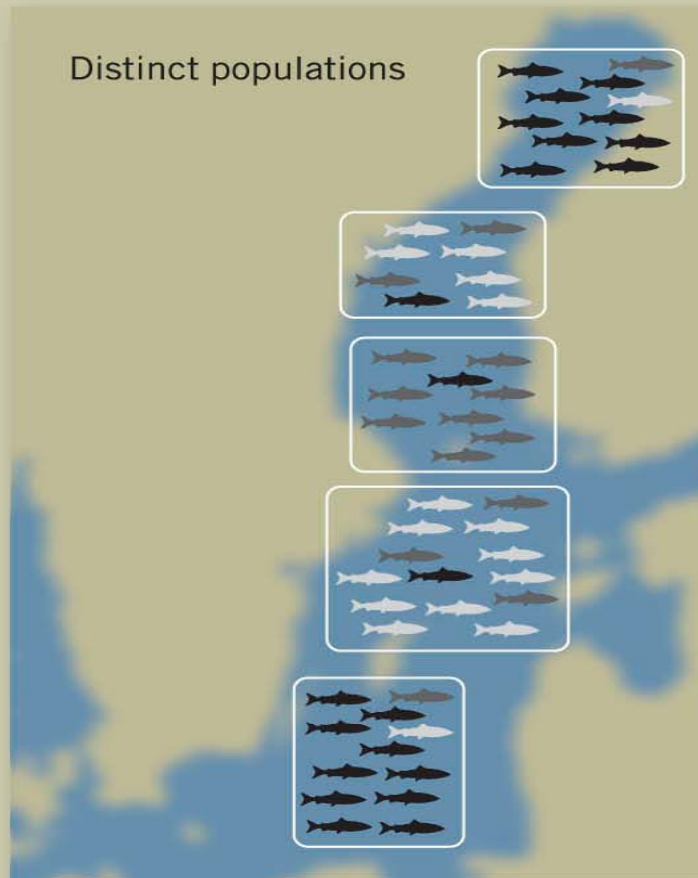
**The social diversity  
and complexity  
influencing the  
governance of  
Salmon fisheries in  
the Baltic Sea  
region**



**The institutional diversity and complexity influencing the Governance of Salmon fisheries in the Baltic Sea region**



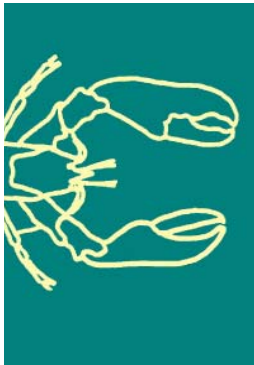
# THE BALTIC SALMON STOCK IS A COMPOSITE OF GENETICALLY DIFFERENT POPULATIONS WITH A PARTICULAR SPATIAL GENETIC STRUCTURE



Source Laikre et al. 2005

THIS PROJECT WILL ADDRESS ISSUES PUTTING AT RISK BIOLOGICAL DIVERSITY SUSTAINING FISHERIES IN THE BALTIC SEA. THE RISKS IN FISHERIES ARE

1. STOCKING OF REARED SALMON FOR COMPENSATION
2. FISHING ON MIXED POPULATIONS AT SEA
3. POOR REPORTING
4. LACK OF RIVER SPECIFIC MANAGEMENT



**Scientific Workshop on  
Ensuring biological diversity  
of Baltic Salmon  
Helsinki 6-7 November 2010**

Skiv din avdelnings/enhets namn här





## SOME IMPORTANT STATEMENTS

- The salmon is well studied biologically compared to most other fish species and closes its live cycle in the Baltic
- Each river has its own genetically distinct, demographically independent populations that are most likely locally adapted
- Several of the most genetically distinct populations are small and threatened
- Most (or all) stocks admixed during the feeding migration to the Main Basin
- A sustainable fisheries and management must ensure these populations can reproduce
- Current management is based largely on releases of reared salmon

TAC TOGETHER WITH  
FIXED NATIONAL SHARES  
DO NOT ALLOW SHIFT  
FROM MIXED-STOCK HAR-  
VESTING (equal  $F$  for all stocks)  
TOWARDS STOCK-SPECIFIC  
HARVESTING, UNLESS  
CREATING MECHANISMS FOR, E.G.,

BARGAINING  
WITH  
NATIONAL  
SHARES

NOT  
HOW TO HARVEST  
WEAK STOCKS?  
(MIXED FISHERY IN THE SEA)

## MIXED FISHERIES AT SEA



Economic regulation  
of quota re-allocation  
between countries to  
support stock-specific  
harvesting  
quota trading mechanisms

Q. Could offshore  
fishery be  
reduced in favour  
of more  
local fishing?

Genetic consequences  
of a 80% MSY goal?  
≠ POPS

SMOLT SURVIVAL  
HOW TO IMPROVE THE ESTIMATE?

Decreasing  
Survival and  
underlying  
reasons

Reasons for  
decreased post-  
smolt survival.  
Natural mortality

DIFFERENT STOCKS  
TOLERATE DIFFERENT  
LEVEL OF  
HARVESTING

LACK OF  
RIVER SPECIFIC  
TARGETS/TAC  
&  
HARVEST



CURRENTLY TAC IS  
GIVEN TO MIXED-SPEC  
FISHERIES (=SEA FISHING)  
→ ALL STOCKS ARE PUT  
UNDER NEQUAL FISHING  
PRESSURE

Biodiv  
Target/  
95% / 100 years / River

STOCK SPECIFIC HARVEST

INVOLVE FISHERMAN <sup>and anglers</sup>  
IN STOCK MANAGEMENT

(fishing license is given out, there is  
made some activities - protection  
of spawning places, etc., whatever  
they can imagine)

- define conservation  
limits for each  
river. 15 number  
of mill can see the number  
of spawning time.

By-catches of  
post smolt in  
sprat & herring fisheries?

- poaching in the rivers and river mouths have to be managed much more better

# Illegal Unreported Unregulated Fisheries



Unreported catches - ~~MORE CONTROL~~  
- HOW TO IMPROVE THE ESTIMATE

- all salmon caught commercially should <sup>have</sup> ~~be~~ a tagged chip / tag

Ensure accurate fishing statistics (catch)

UNKNOWN Mortality  
(F)

IUU & lack of a reliable info on unreported catch  
improvement of data

Additional concerns  
to what extent of  
different options  
including releasing  
reared salmon to wild

Ensure optimal  
conditions in rivers  
wild  
for spawning and rearing  
RED

Stop releases of  
reared salmon?

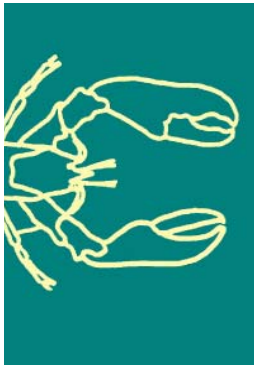
# REARING & STOCKING



Release of  
reared salmon  
is it necessary  
or  
might be  
counterproductive?

FOCUS (where possible)  
ON STOCKED  
SALMON

(EXPECTED)  
EVEN IF DIRECT EFFECTS ARE  
DEPARTICULARLY REDUCED THE  
NUMBER OF RELEASED SALMON  
FISH



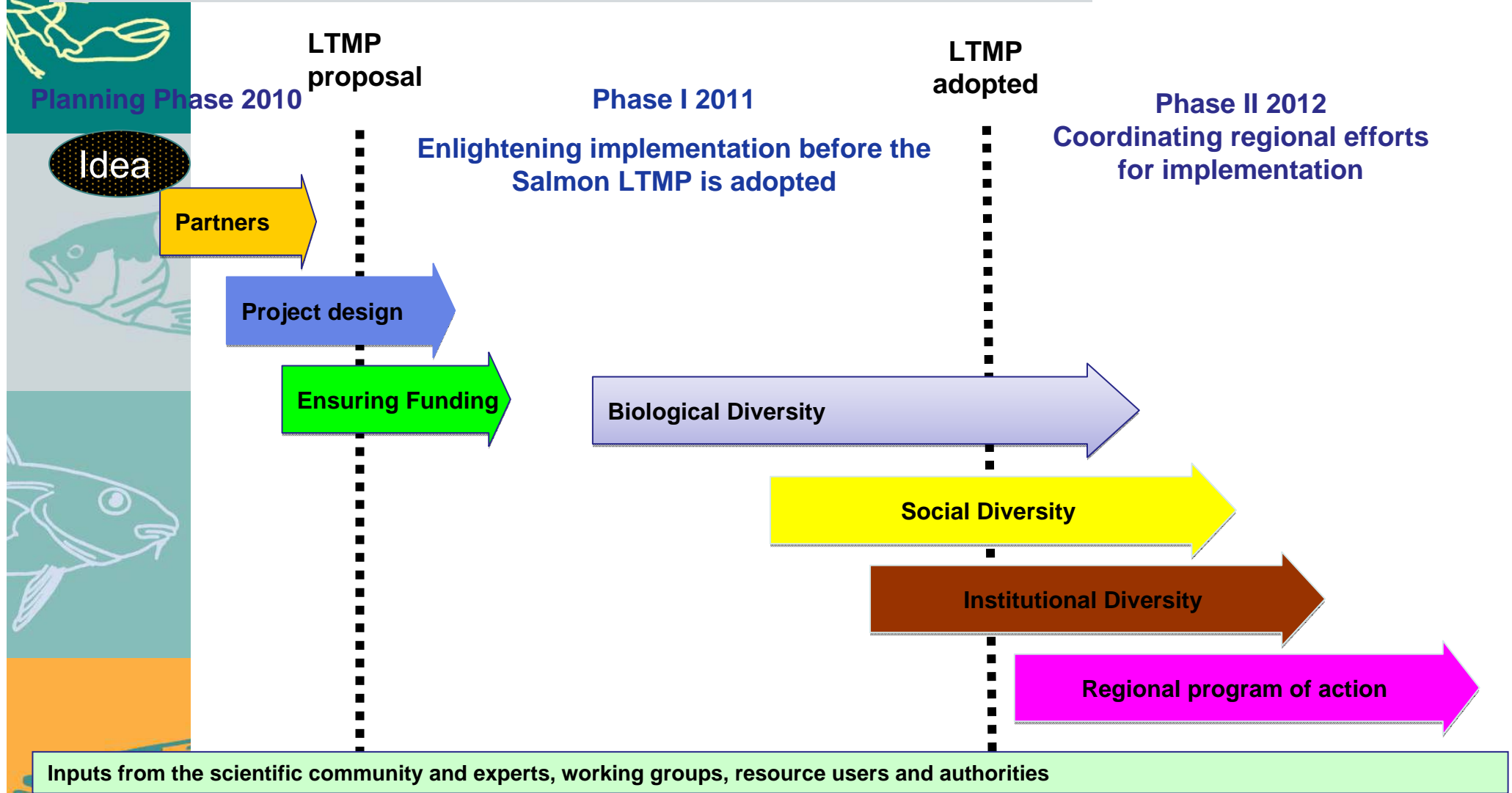
# This project should be linked to the implementation of Salmon LTMP

The delay of the EU Baltic Salmon LTMP has created hesitation and hindered the progress of the planning. However there are some work that could be started.



Skriv din avdelnings/enhets namn här

# Flagship project possible phases



Skriv din avdelnings/enhets namn här

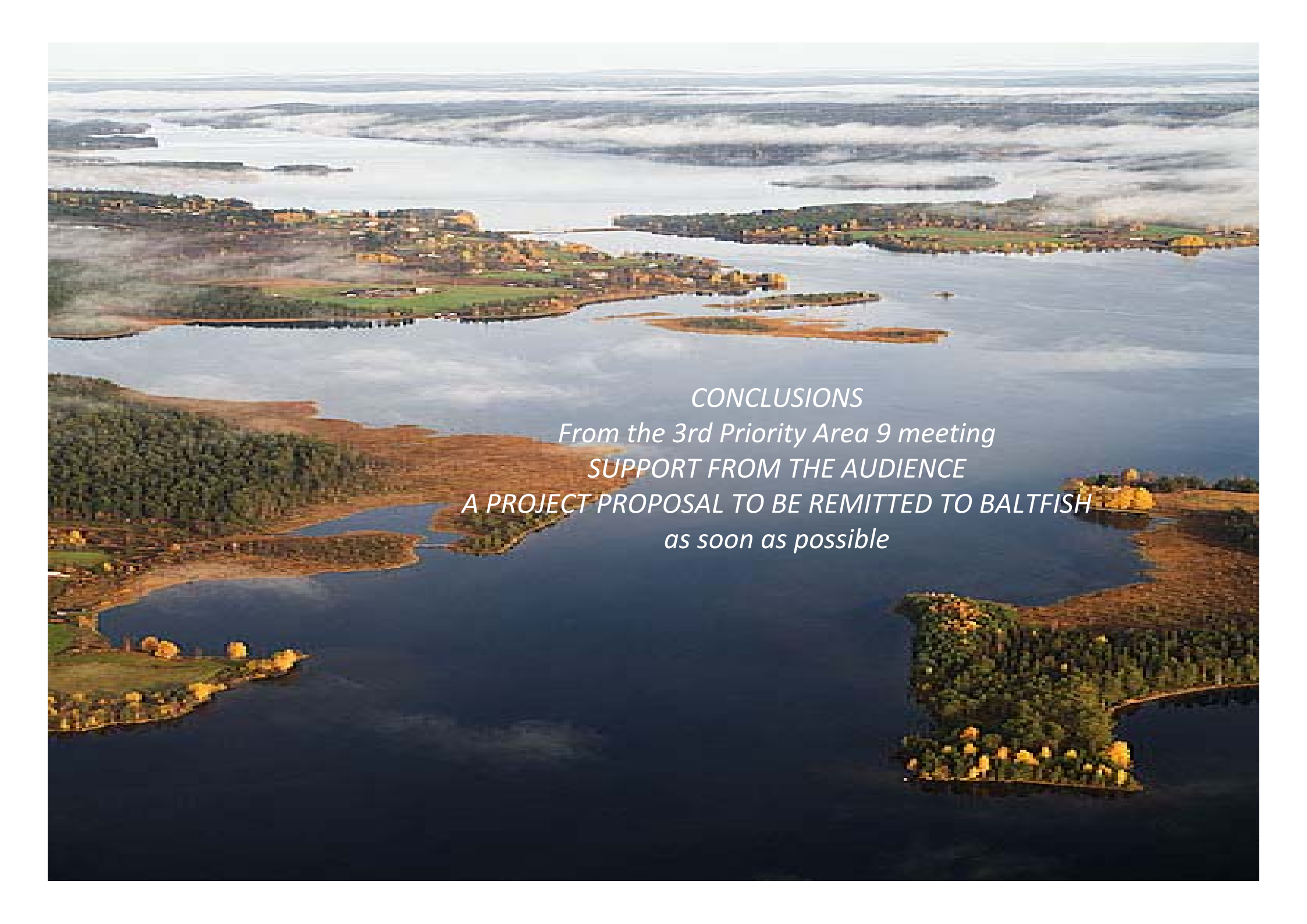


# We think there is a scope to start a regional project to:

1. Evaluate the pros and cons and cost-benefit of a progressive reduction/facing out of stocking of Salmon for compensation;
2. Prepared roadmaps on how to go about it on a national case by case basis;
3. Prepare roadmaps for alternative investments of the funds that are used at present for rearing and stocking.





An aerial photograph of a large, interconnected lake system with numerous islands and peninsulas. The water is a deep blue, and the surrounding land is a mix of green forest and brownish-yellow fields. The sky is overcast and grey. The text is centered over the middle of the image.

*CONCLUSIONS*  
*From the 3rd Priority Area 9 meeting*  
*SUPPORT FROM THE AUDIENCE*  
*A PROJECT PROPOSAL TO BE REMITTED TO BALTFISH*  
*as soon as possible*