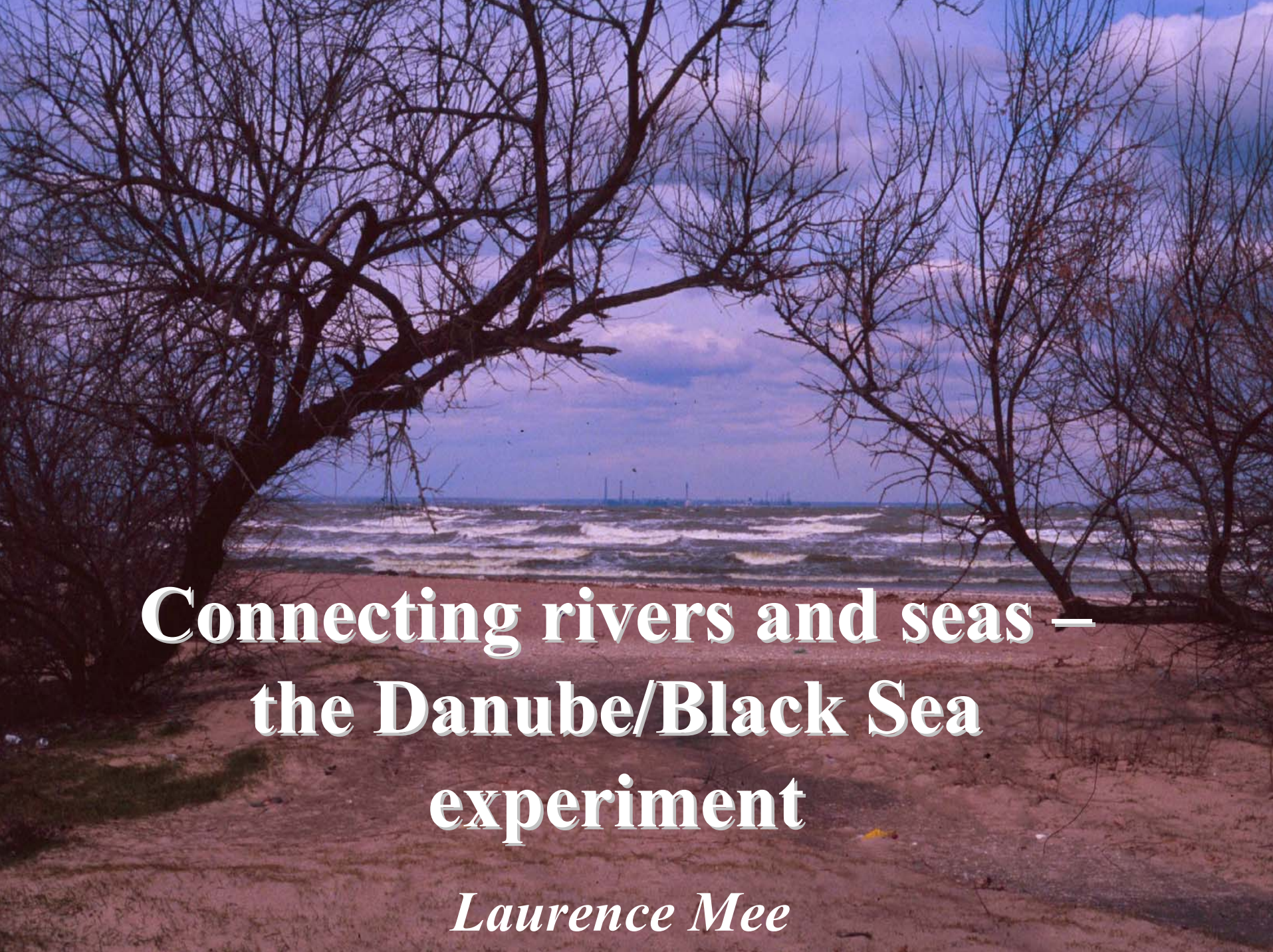
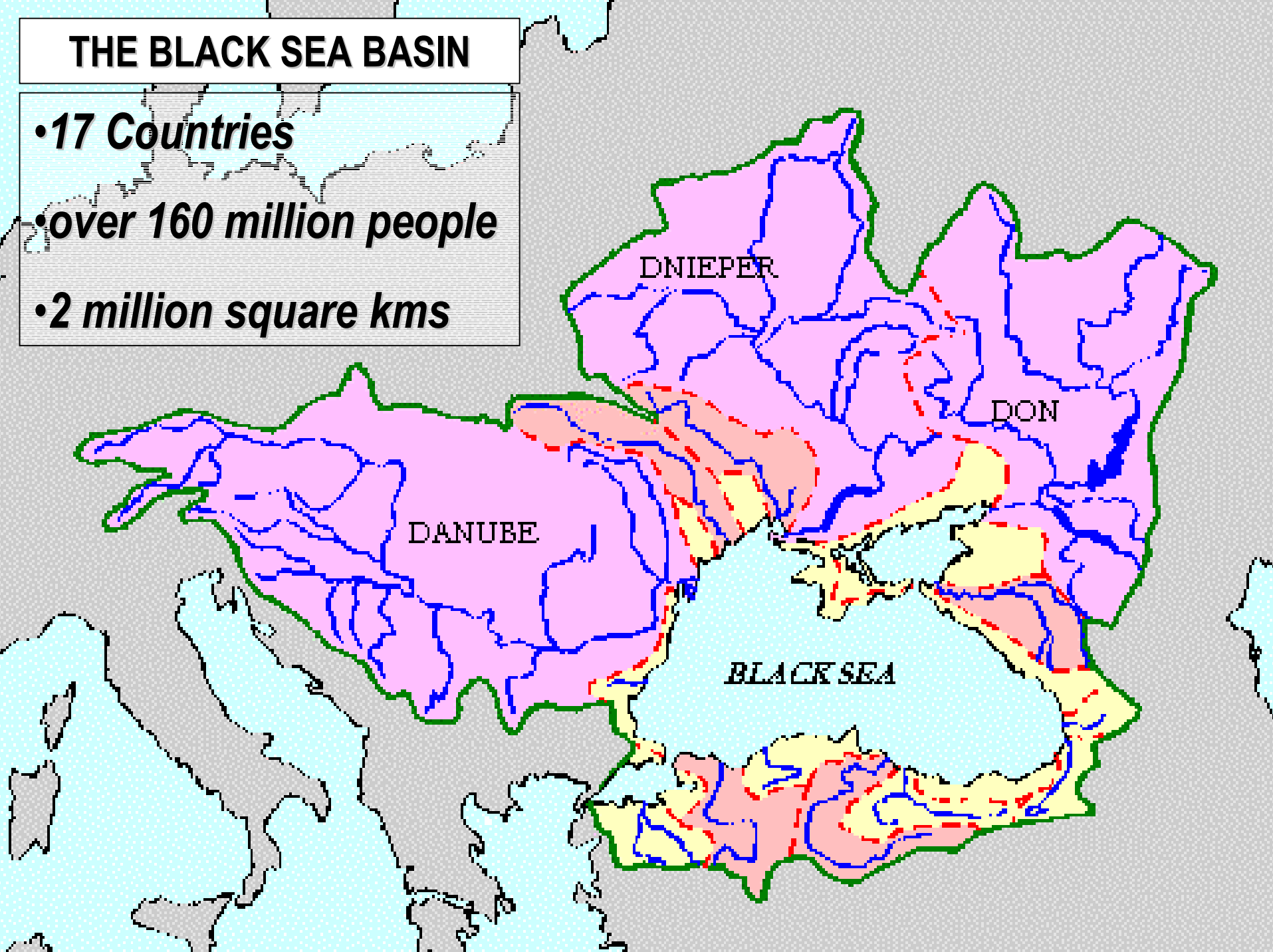


Connecting rivers and seas – the Danube/Black Sea experiment

Laurence Mee

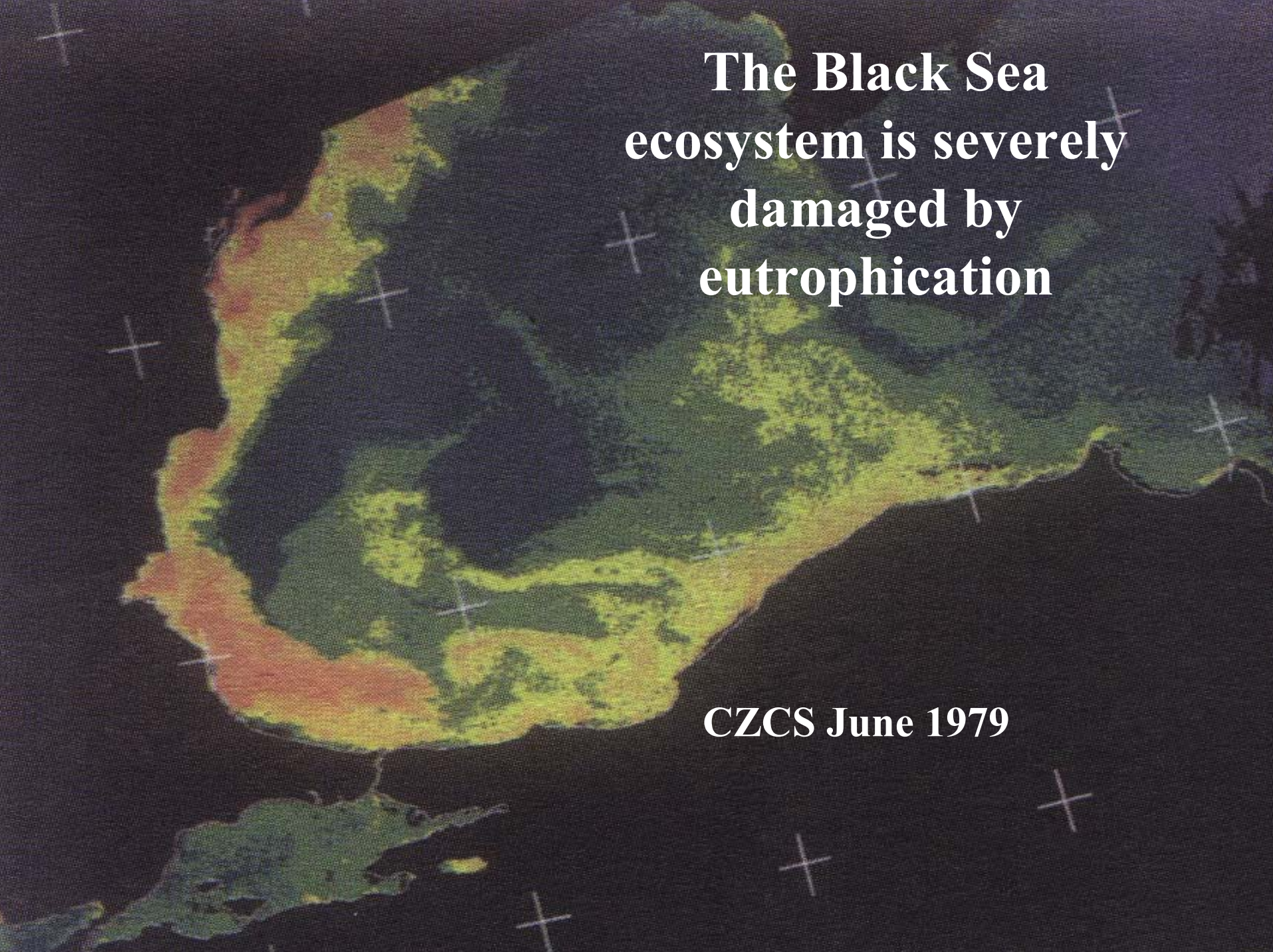
THE BLACK SEA BASIN

- *17 Countries*
- *over 160 million people*
- *2 million square kms*

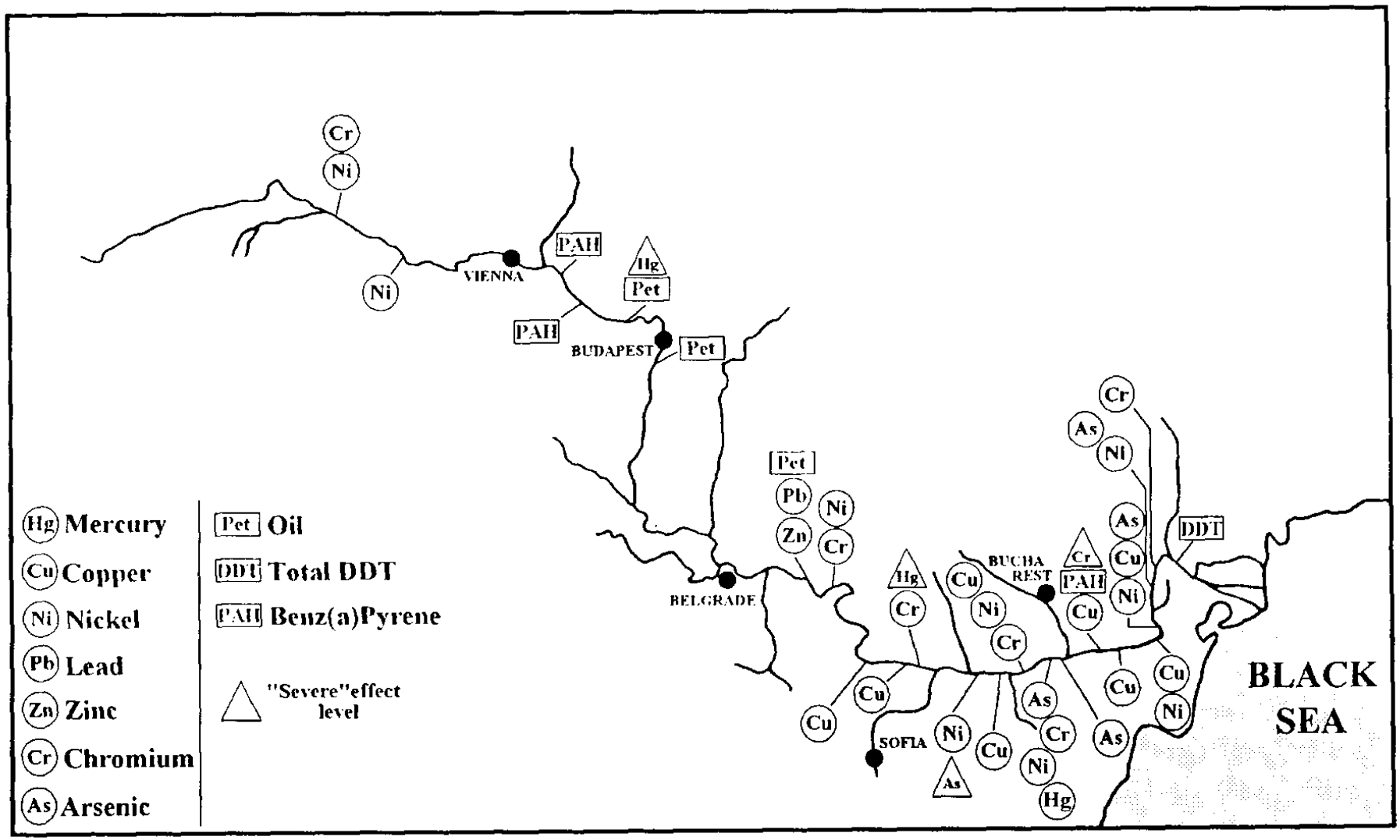


Transboundary issues

Examples of sub-regional and basin wide problems


The Black Sea
ecosystem is severely
damaged by
eutrophication
CZCS June 1979

There are pollution hot spots in the Danube

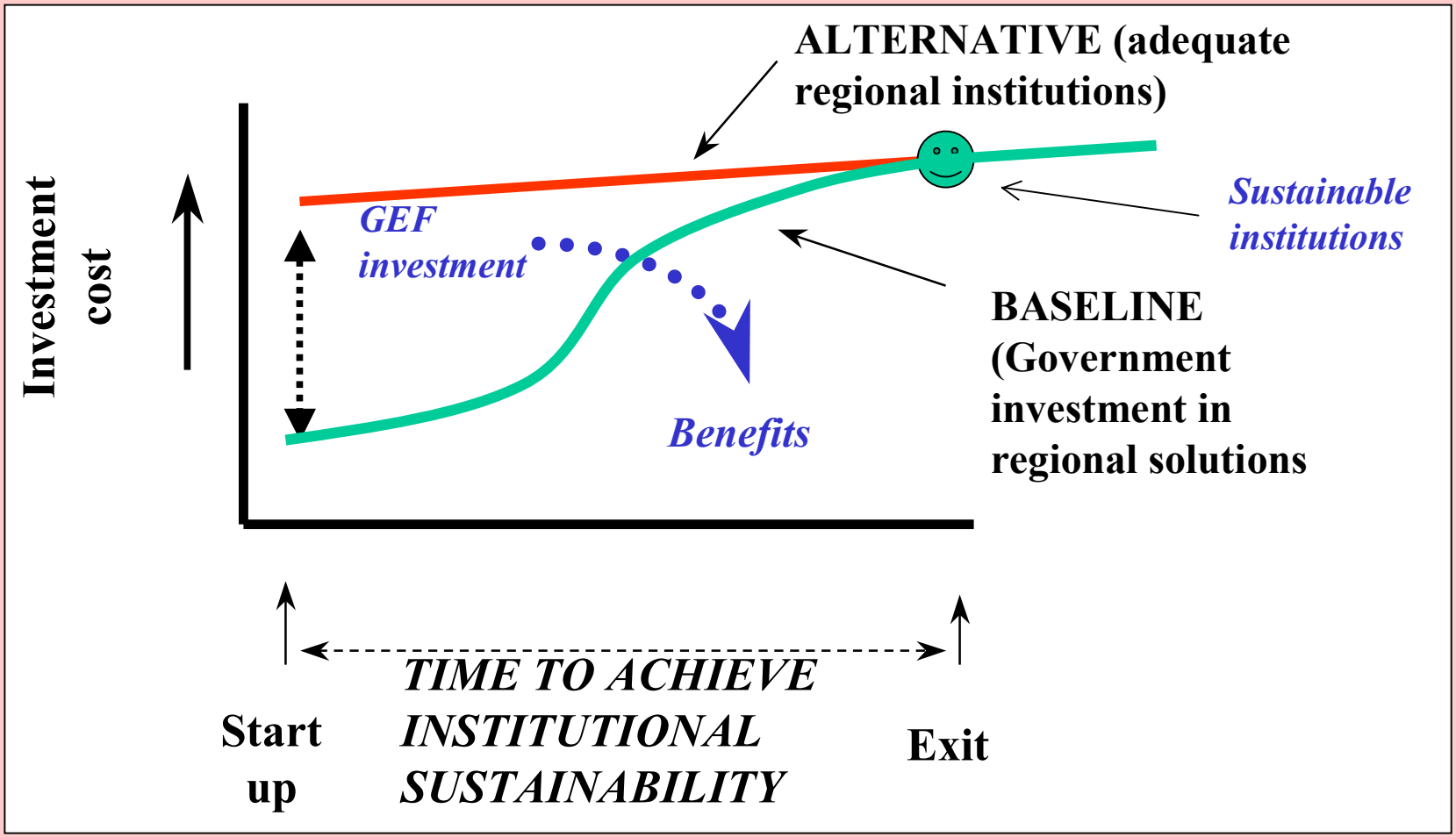



Black Sea habitats are being destroyed

Institutional development success stories

9 years of partnerships with GEF and European Community support

Sustainable institution building to address regional issues



The Black Sea Commission Secretariat

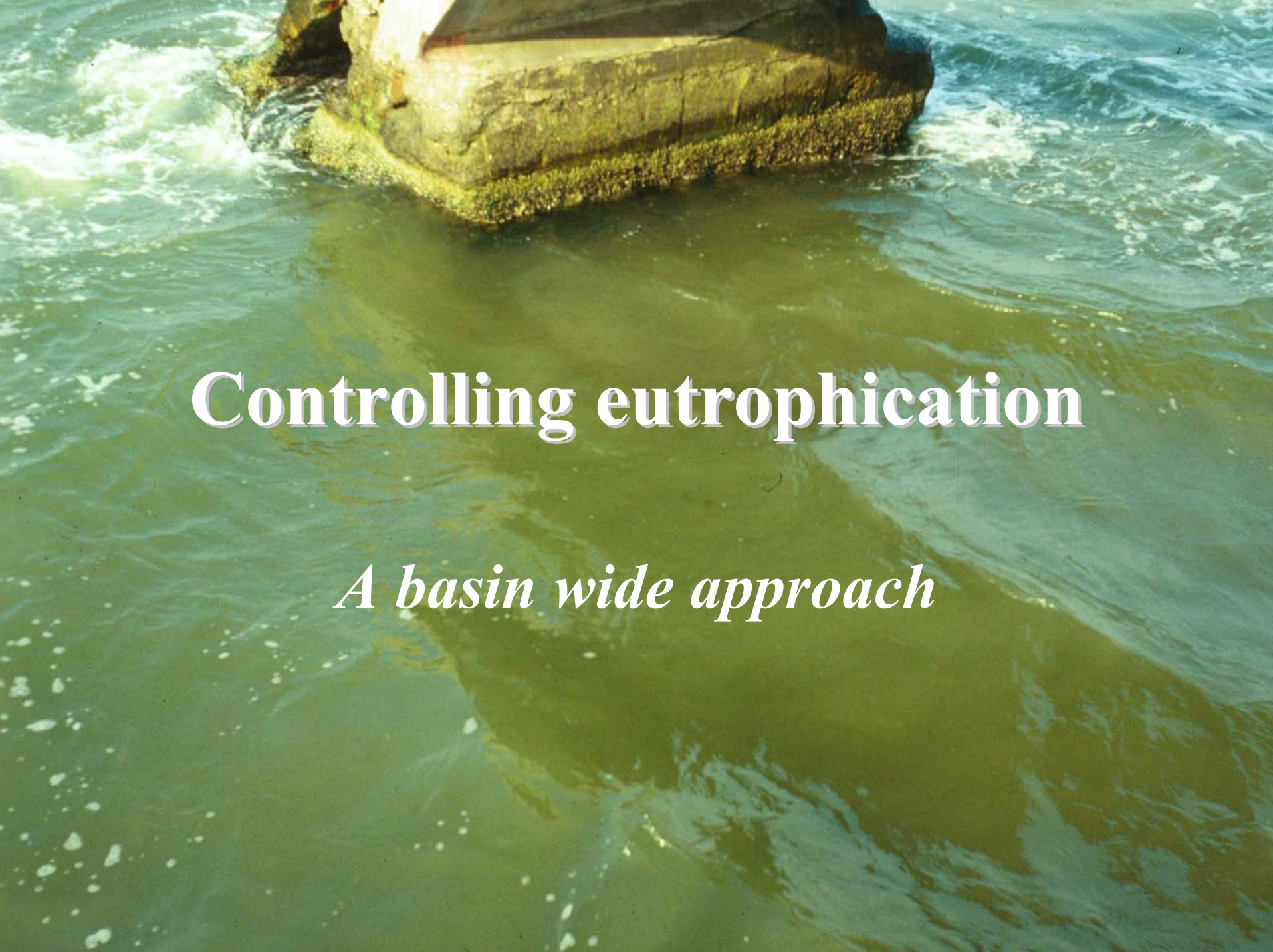
- 1993 - Bucharest Convention
- 1993 - Odessa Ministerial Declaration
- 1993 Black Sea Environmental Programme
- 1996 Black Sea Strategic Action Plan

The Bucharest Convention is in force!

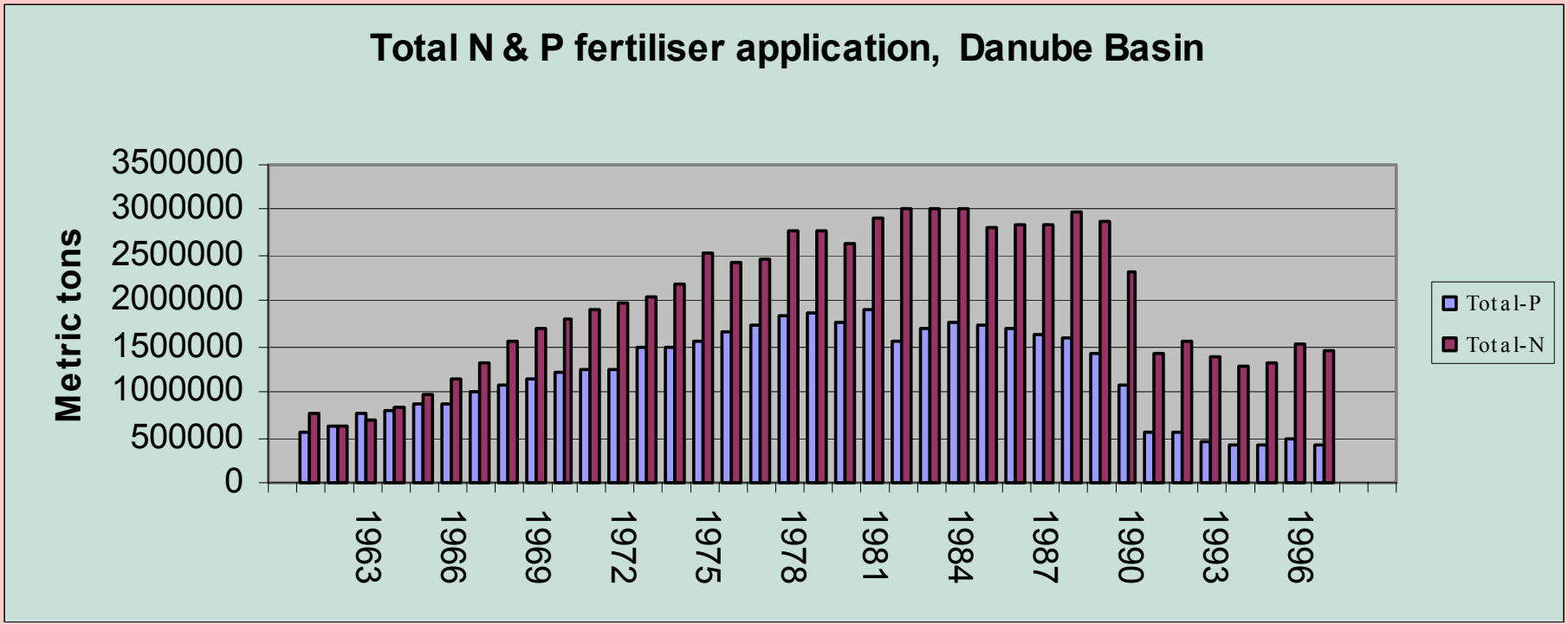
The International Commission for the Protection of the Danube River

- 1992 GEF/EC Environmental Prog.
- 1994 Strategic Action Plan
- 1994 Danube River Protection Conv.
- 1997 Danube Pollution Reduction Prog.
- 1998 International Commission for Protection of the Danube River
- 2001 DANBLAS Danube-Black Sea Task Force

The Danube Convention is fully in force


Controlling eutrophication
A basin wide approach

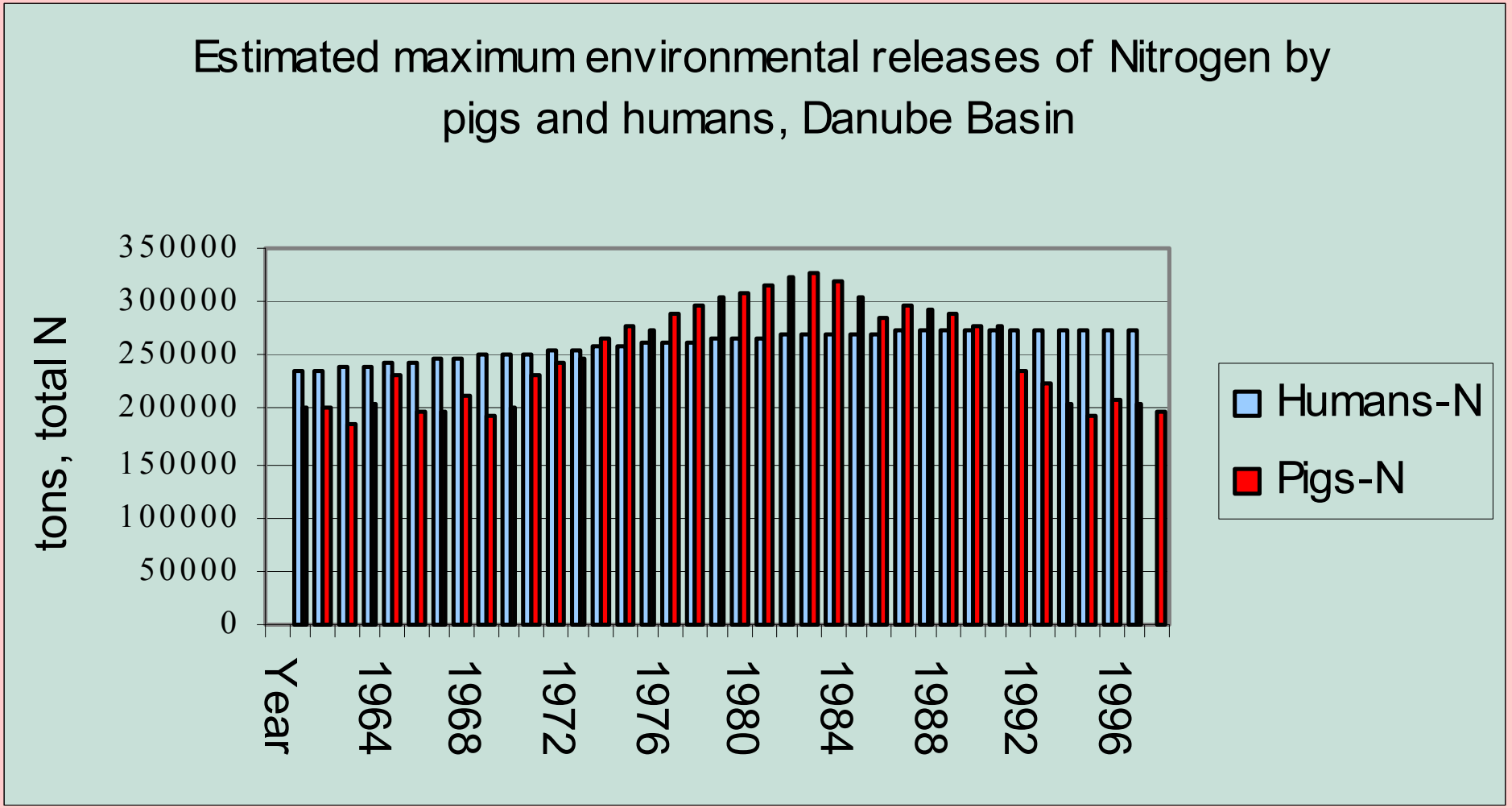
At least 50% of the nutrients reaching the Black Sea come from agriculture



The green revolution

End of centrally planned economy

Animals release nutrients to rivers and the atmosphere



The experiment

- An adaptive management programme by the Danube - Black Sea Joint Working Group
- An investment of more than $100 million international funds
- A strategic partnership with 17 countries

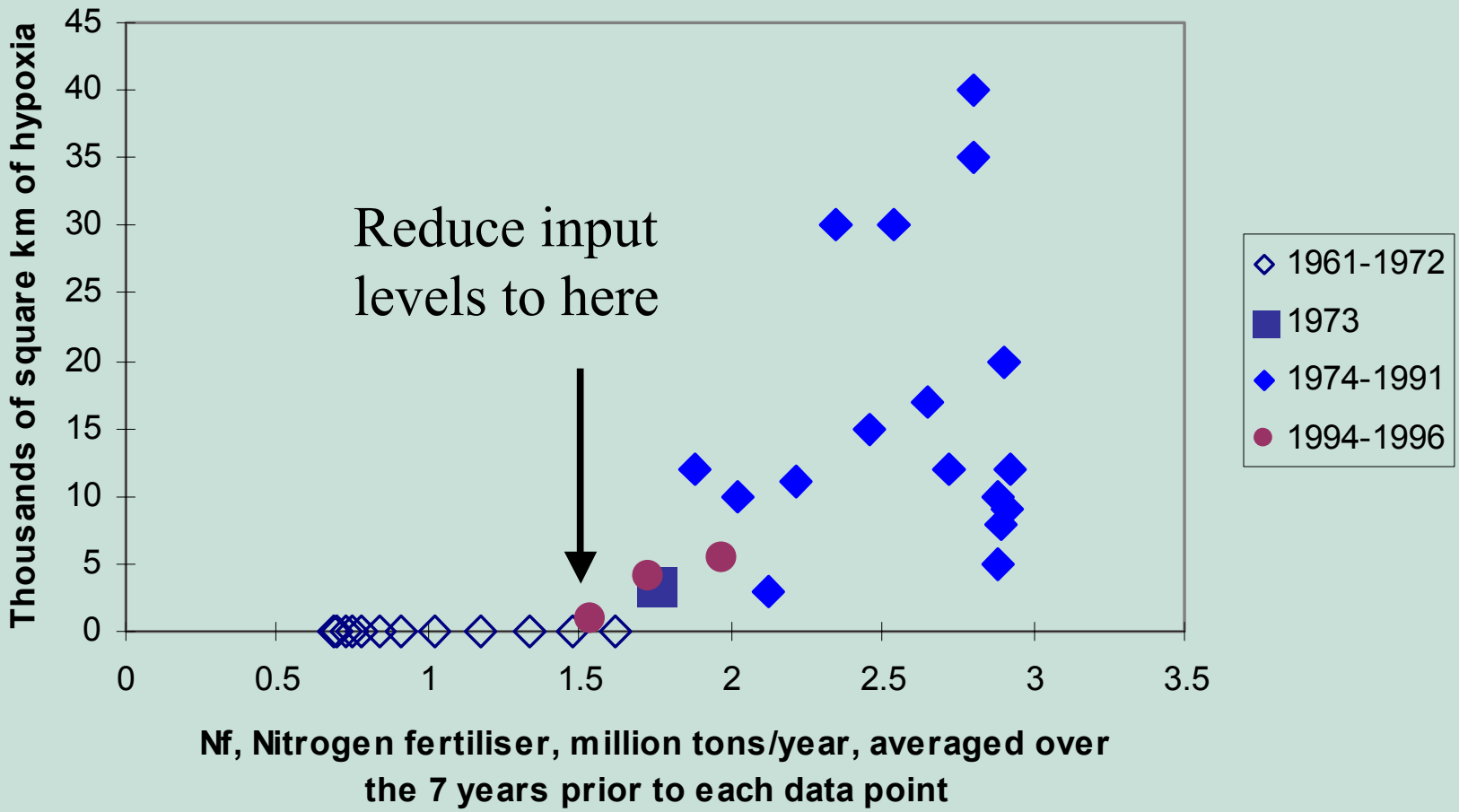
The Long-Term Goal

"The long-term goal in the wider Black Sea Basin is to take measures to reduce the loads of nutrients and hazardous substances discharged to such levels necessary to permit Black Sea ecosystems to recover to conditions similar to those observed in the 1960s."

First adaptive management goal

As an intermediate goal, urgent measures should be taken in the wider Black Sea Basin in order to avoid that the loads of nutrients and hazardous substances discharged into the Seas exceed those that existed in the mid 1990s. (These discharges are only incompletely known.)

Variation in observed area of NW shelf summer hypoxia with increasing loading of nitrogen fertiliser in the Danube basin



- ***The inputs of nutrients and hazardous substances into both receiving Seas (Black Sea proper and Sea of Azov) have to be assessed in a comparable way. To this very end a common Analytical Quality Assurance (AQA) system and a thorough discussion about the necessary monitoring approach, including the sampling procedures, has to be set up and agreed upon between the ICPBS and the ICPDR.***

- ***The ecological status of the Black Sea and the Sea of Azov has to be further assessed, and the comparability of the data basis has to be further increased.***

- ***Both the reported input loads as well as the assessed ecological status will have to be reported annually to both the ICPBS and the ICPDR.***

“Strategies for economic development have to be adopted to ensure appropriate practices and measures to limit the discharge of nutrients and hazardous substances, and to rehabilitate ecosystems, which assimilate nutrients”

The Black Sea Basin Strategic Partnership

- **Over US$70 millions grant funding committed**
- **Incremental cost funding - helping to pay the extra costs of nutrient reduction on new projects in the basin**
- **Typical grant size $5 millions**
- **Project examples: Agricultural reform, wetlands restoration, WWTPs, product substitution**

The task ahead: Reviewing compliance and setting new targets

"Based on the annual reports and on the adopted strategies for the limitation of the discharge of nutrients and hazardous substances, a review shall be undertaken in 2007. It will have to focus on the further measures that may be required for meeting the long-term objective"