



A cross discipline and cross border integrated project on coastal eutrophication offering information, education and science to stakeholders and the public at large in the Interreg 2 Seas Zone (Belgium, England, France and the Netherlands).

Editorial

Info Day in Boulogne sur mer 28-11-2012

This Info Day at Nausicaá was very successful. Participants were made aware of the impacts of eutrophication, not only on the environment but also on human activities at the seaside. They asked many questions to the experts present: Didier COCHE representative of the water sector, Jean-Louis DESMET an industrial from ECOVER, Alain LEFEBVRE a scientist from IFREMER and Bruno ROUSSEL a farmer.



By the end of the day, participants were invited to note down key messages they will take from this event and disseminate to other audiences. Here are the most recurrent:

- Everything reaches the sea, we can make sure that there is less pollution at the source
- Eutrophication is a natural phenomenon which can be amplified by human activities
- Responsible human activities are numerous. For instance: sewage facilities, agriculture, industry, climate change and individual consumers.
- Mistakes were made 30 years ago. We are only realizing its effects today
- However, efforts have been made and we are on the right way
- There is still considerable work to be done
- Anyone can help to reduce eutrophication thanks to their behavior. Each of our actions matter.
- What are the possible individual initiatives? To be properly connected to the water network, reduce our water consumption, be more careful with the use and composition of the products we buy.



Science

The atmospheric contribution to eutrophication

Part of the nutrients responsible of algal blooms in coastal waters is due to the atmospheric inputs from human activities.

Nitrogen oxides and ammonia are the main airborne nutrients which can cause excessive levels of eutrophication in the North Sea and the English Channel. Nitrogen oxides are formed when fuel is burnt (transport, industry, heating ...) while ammonia comes from agricultural areas. These emissions are estimated and recorded by the European Monitoring and Evaluation Program (EMEP) as part of the effort to control harmful ground-level ozone (pollutant gas which can form near the earth's surface) and eutrophication.

These pollutants are carried by the wind and deposited in the sea by the rain, months before algal blooms are detected. Meteorological data are key parameters for detecting and predicting this deposition. For several decades, these data have been recorded, stored and disseminated by the European Centre for Medium-Range Weather Forecasts (ECMWF) as well as other organizations.

Zoom

The University of Greenwich

The university is built over three campuses in England and conducts higher education and research.

As part of Iseca project, the university studies in detail the atmospheric inputs into the English Channel and the North Sea using numerical models. These can combine pollutants emissions into the air and meteorological data to show the atmospheric transport effects on nutrients deposited in coastal waters.

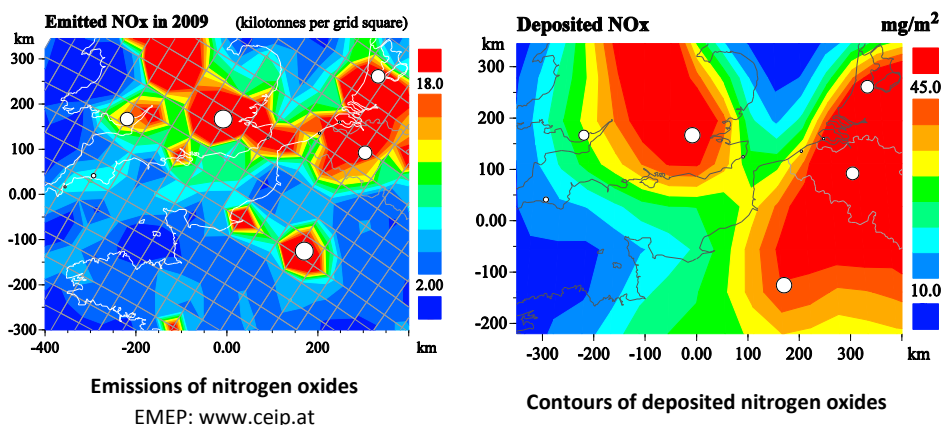
Thus, this study can help explain why we see foam on the sea shore in some places and not in others.

See below an illustration of this type of study on the English Channel and the North Sea areas.

Quantities represented by the color levels correspond to the deposits and emissions of nitrogen in the English Channel and the North Sea. The circles represent large cities.

Areas where we can find the largest deposits are located along the Belgium and the Netherlands coasts, which also receive the highest contribution from rivers and the Pas-De-Calais strait.

This area is the receptacle, not only of neighboring countries, but also of maritime traffic in the strait.



Agenda

Annual Event of the the INTERREG IV A 2 Seas Programme in Rotterdam, Netherlands – 14 & 15 March 2013

At this event, the results of the cross-border cooperation program between France, Belgium, Netherlands and UK, will be underlined. An Iseca stand will highlight the main project's results and problems associated with eutrophication. These outreach events will also enhance our project and insert it into the broader context of INTERREG projects related to the environment and management of coastal waters.

Information days in Oostende, Belgium - Spring 2013

The Info Days will be organized by two Belgian partners: VLIZ, which manages the website www.iseca.eu, and VITO which is working on the modeling of eutrophication.

The event will be conducted in two stages:

- One day dedicated to the information multipliers (guides, teachers, educators ...)

VLIZ and VITO will organize an information day on climate change and other environmental issues. During the day, Iseca project will be presented as well as the eutrophication phenomenon, how it appears and its existing measurement tools.

- Half a day dedicated to scientists and authorities

This Info Day will attract experts in the field who will chair specialist topics such as the latest statistics from eutrophication or the collection and analysis of data on the subject. The event will conclude with a debate

If you wish to attend one of these days, please contact Annelies Goffin of VLIZ:

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With the participation of :

