

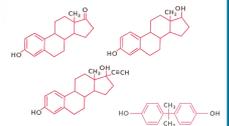
# ENDIS-RISKS

## Endocrine Disruption in the Scheldt Estuary: distribution, exposure, and effects



There is growing concern about the potential of various chemical substances to produce changes in the functioning of the endocrine system of humans and animals. Known natural hormones as well as related environmental pollutants seem to have the ability to disrupt the endocrine system of man and animals in such a way that harmful effects on their development and reproduction can occur. During recent decades, reproductive and developmental problems in a wider range of species have been reported.

Various chemical substances, some of which are relatively unknown, potentially disrupt the endocrine system, which can lead to harmful effects.



The ENDIS-RISKS project aims to assess the distribution and the possible effects of endocrine-disrupting substances in the Scheldt estuary. Priority substances, their physico-chemical properties, their geographic distribution, their current status, and their distribution in biota (mysid shrimp and gobies) will be assessed. The study will describe the Scheldt estuary in relation to the issue of endocrine disruption. This will result in a fundamental, ecotoxicological risk assessment of endocrine-disrupting substances in the Scheldt estuary.



The major research objectives within the project are:



- Analyses of endocrine disruptors in water, suspended solids, sediment and biota (mysids, gobies)
- In vitro evaluation of the estrogenic and androgenic potential of samples of water, suspended solids and sediment
- Ecotoxicological and in situ evaluation of the effects on the resident mysid populations (short, intermediate and long-term)
- Risk assessment of endocrine disruptors in the Scheldt estuary



ENDIS-RISKS is a four-year project (2002-2006) that is carried out by a consortium of one Dutch and five Belgian research groups. This project is financed within the framework of the "Second Plan For Scientific Support for a Policy of Sustainable Development" (SPSD-II), a research action of the Belgian Federal Science Policy Office.



Project partners are:



- Ghent University, Laboratory of Environmental Toxicology and Aquatic Ecology
- Ghent University, Marine Biology Section
- Ghent University, Laboratory of Chemical Analysis
- Management Unit of the North Sea Mathematical Models
- National Institute for Coastal and Marine Management (NL)
- Flanders Marine Institute

More info can be found on the project website: <http://www.vliz.be/projects/endis>