

## Recovery of water quality in European estuaries

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Estuaries have always attracted many human activities, and hence pollution. The Scheldt estuary was one of the most impacted estuaries in the world, both in terms of organic and chemical pollution as in terms of morphologic alterations. Especially in the oligohaline and freshwater part of the Schelde, most of the year anoxic conditions prevailed.

Gradually, waste water treatment plants were build. Despite these investments in water purification, water quality improvements were limited in the Schelde and a clear oxygen sag remained every summer. At the change of the millennium however, a rapid increase in water quality was observed. Driver of this positive and rapid evolution was a change from a heterotrophic to an autotrophic system.

Although nutrient input has decreased, algal blooms have dramatically increased. Oxygenation of the water enhances auto purification and enables restoration of the estuarine ecosystem.

Still receiving high nutrient loads, the Zeeschelde estuary is however far from healthy. A new concern for the pelagic ecosystem might be an increase in turbidity.