

IOW press release from May 12, 2014

The State of the Baltic Sea in 2013: Annual assessment of the physical and chemical data finalized

Even the hurricane "Xaver" did not end the stagnation period effecting the bottom water of the Baltic Proper.

Only a bit of a good news first: During 2013 specific meteorological conditions led to four salt water inflows bringing oxygen-rich saltwater from the North Sea across the Darss Sill into the Baltic. The consequences in form of an increase in the salt and oxygen content of the bottom water could be detected in the western Baltic and as far as to the Bornholm Basin.

However, these events did not improve the conditions in the central part of the Baltic Sea: In the bottom water of Gotland Deep the highest concentrations of hydrogen sulfide since the beginning of the stagnation period in 2005 were measured. Simultaneously, the salinity of the deep water layers in this region of the Baltic Sea decreased.

The results of the concentrations of the nutrients nitrate and phosphate, too, cannot be classified as "good news": the measurements in the central Baltic Sea did not confirm the decrease in nutrient concentrations observed in coastal waters. This shows that further efforts are needed to reduce nutrient inputs into the Baltic Sea. Since several decades, the Leibniz Institute for Baltic Sea Research Warnemuende carries out regular assessments on the state of the Baltic Sea. Each year, five cruises are conducted to measure hydrographic and chemical data on approximately 60 stations between Kiel Bight and Northern Gotland Basin. The results are summarized and published in annual assessments of the hydrographic and chemical conditions. At the same time, these data are provided to the Helsinki Commission, which uses them for further thematic and holistic assessments of the Baltic. Thus, they serve the compliance of the demands of the EU Marine Strategy Framework Directive and the implementation of HELCOM's the Baltic Sea Action Plan.

The complete report can be downloaded:

http://www.io-warnemuende.de/zustand-der-ostsee-2013.html http://www.io-warnemuende.de/meereswissenschaftliche-berichte.html

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