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Schleswig-Holsteins Wadden Sea Strategy 2100

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Accelerated sea-level rise constitutes one of the main consequences of anthropogenic climate change. This may have serious implications for structures and functions of Wadden Sea tidal basins. If the rate of sea-level rise becomes higher than sediment accumulation rates on intertidal flats and salt marshes, they start to submerge. One main criterion for the establishment of the World Natural Heritage Site Wadden Sea was the world-wide unique scale of coherent intertidal flats. Further, intertidal flats and salt marshes function as wave energy dissipation zones in front of coastal flood defence schemes. Hence, drowning of these flats may result in increased wave attack on the flood defences during storm surges. In this context, semi-natural evolution of the present Wadden Sea towards an open coastal lagoon system constitutes a negative development. Anticipation measures may become expedient from a nature protection viewpoint as well as for coastal flood risk management.

In acknowledgement of these challenges, Schleswig-Holsteins State Government has adopted a Strategy for the Wadden Sea, aiming at preservation of present structures and functions. For this, a common vision and development goals are defined in the strategy. Further, for two IPCC-scenarios, possible hydrological, morphological and biological developments in the Schleswig-Holstein sector of the Wadden Sea are established for the time horizons 2050 and 2100. Based upon an evaluation of the consequences for nature protection and coastal risk management, options for adaptation are developed. It is stated that sediment management in order to avoid or reduce future sediment deficits is the main option, together with sustainable flood risk management measures. The strategy concludes with a listing of actions. In this presentation, the Governmental Strategy Wadden Sea 2100 will be presented.