

Scheldt Quays, Antwerpen, Flanders - Belgium.

Source: Journal of Coastal Research, 35(5)

Published By: Coastal Education and Research Foundation

URL: https://doi.org/10.2112/0749-0208-35.5.i

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at <u>www.bioone.org/terms-of-use</u>.

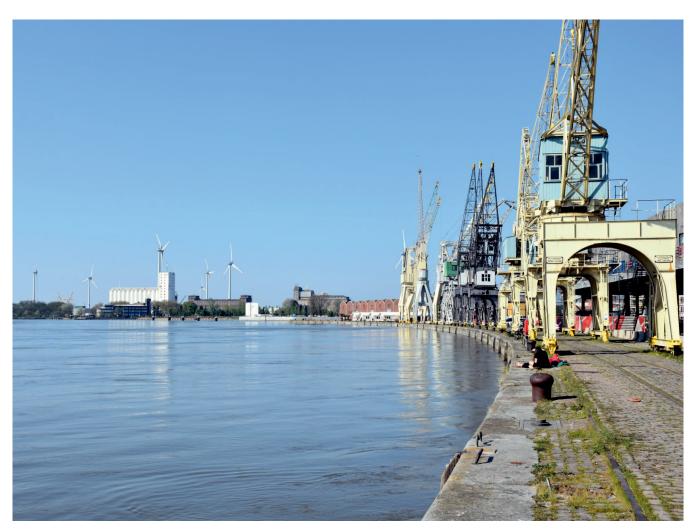
Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.



COVER PHOTOGRAPH





Scheldt Quays, Antwerpen, Flanders - Belgium. Antwerp's potential as a great seaport, though 80 km inland, was previously recognized by Napoleon Bonaparte, who ordered the construction of Antwerp's first lock and dock in 1811. After that, the port expanded relentlessly, resulting in the modern quaysides outside the eity where each year over 14,000 seagoing vessels moor up. In the now historic waterfront, shown as the Rijn Quay in the picture above, no less than two million passengers have embarked to North America with the Red Star Line. After the storm tide of January 1976, which created a strong (yet possibly altogether too short-lived) public awareness of the risk of inundation along the tidal reach of the Scheldt, a water barrier consisting of a 5.5 km long and 1.35 m high concrete wall was built next to the historic waterfront. Now, climate change and rising sea levels have made it necessary to improve on these protection measures. Therefore, in order to protect the City of Antwerp, the *Flemish Waterways plc*, who with the *Sigma Plan* protects Flanders from flooding, will implement a structural stabilization of the 19th century quay walls and replace the existing concrete wall with a water barrier that is 90 cm higher. It will also be easier on the eye and be more integrated with the surroundings. More ports and cities around the globe will have to make similar changes to their coastal infrastructure as more threats become imminent. (Photograph taken March 2019 by Erik Van Wellen, Maverick Enterprise, Antwerpen, Belgium.)