Historical storm surge events

In the past century, a series of catastrophic storm surges in the North Sea are well-known not only for having claimed an immense number of lives but also for having changed the shape of the coast, in some parts significantly.

26 Dec. 838		Large areas of NW Netherlands under water, 2,500 dead
28 Sept. 1014		Almost the entire coast of the Netherlands flooded, thousands of fatalities
17 Feb. 1164	Julian Flood	20,000 dead between the Rhine and Elbe estuaries; formation of the Jade Bight bay
16 Jan. 1219	1st Marcellus Flood	Reportedly 36,000 dead
1228		In the Netherlands: 100,000 dead
14 Dec. 1287	St. Lucia's Flood	50,000 dead; beginning formation of Dollart Bay
16 Jan. 1362	2nd Marcellus Flood "Grote Mandränke“	100,000 dead, large-scale loss of land
1375		Netherlands: formation of the Zuiderzee
19 Nov. 1404	1st St. Elizabeth's Flood	Large parts of Flanders, Zeeland, Holland flooded
19 Nov. 1421	2nd St. Elizabeth's Flood	Zeeland, Southern Holland flooded
5 Nov. 1530	St. Felix Flood	Zeeland
1 Nov. 1570	All Saint's Flood	Water levels higher than in 1953; Friesland, Zeeland and Antwerp extremely badly hit, over 20,000 dead, tens of thousands homeless
11 Oct. 1634	Burchardi Flood	At least 8,000 dead
12 Nov. 1686	St Martin's Flood	
24 Dec. 1717	Christmas Flood	Entire North Sea coastline of Northern Netherlands from Germany to Scandinavia; greatest till then known storm tide; 14,000 dead
1 Jan. 1721	New Year's Flood	Higher than Christmas Flood of 1717
3/4 Feb. 1825	February Flood	Netherlands: enormous proportions, 3770 sq km around the Zuiderzee flooded; 800 dead in East Friesland
1/2 January 1855	January Flood	Widespread destruction on the East Frisian Islands
1894		Netherlands: impact greater than in 1825
13 March 1906	March Flood	Highest flood ever along the East Frisian coastline (Emden): 5.18 m.
14 Jan. 1916	Zuiderland Flood	Following this flood, between 1927 and 1932, a

		32 km long and 90 m wide tidal power dam was built which formed the Ijsselmeer from the Zuiderzee and shortened the coastline of the Netherlands by 300 km. The top of the dam is 6.8 to 7.5 m higher than the normal Amsterdam water level.
7 Jan. 1928	Thames Storm Surge	London and English East Coast, thousands homeless
1 Feb. 1953	North Sea Flood of Holland	2,167 dead, Force 9 winds and higher raged for 20 hours; Max. water level 4.55 m; dyke failures in 89 places; 200,000 farm animals killed; the Delta Works project in the Netherlands was initiated as a result of this storm surge.
16/17 Feb. 1962	Hamburg Storm Flood	61 dyke failures, 347 dead; 370 sq km flooded
1976	Hurricane Capella	Hundred-year storm surge, highest water levels ever measured in many places
24 Nov. 1981	November Flood	Highest water levels in North Friesland
26-28 Feb. 1990	Five storm surges	Greatest accumulation of storm surges.
28 Jan. 1994		Hamburg, Schleswig-Holstein
10 Jan. 1995		Hamburg
6 Feb. 1999		Entire North Sea coastline
3/4 Dec. 1999	Hurricane Anatol	Elbe, Hamburg, Schleswig-Holstein, Denmark
29/30 Jan. 2000		Schleswig-Holstein, Denmark, sand depletion on Sylt
1-2 Nov 2006	Hurricane Britta	Entire North Sea coastline
27 Feb 2010	Hurricane Xynthia	France, Bretagne, 47 dead

Over the past fifty years, coastal preservation in Europe has been brought up to a standard intended to contain damage caused even by heavy storm surges. However, in view of the enormous values and high population density along the North Sea coastline, an event with a statistic return period of 100 years and more still harbours an immense potential threat.