

Annex IV: Overview of coastal realignment sites and restoration projects in the Wadden Sea

Table IV: The degree of restoration success was based on expert judgement according to the extent and diversity of salt-marsh vegetation. In Lower Saxony three projects were systematically evaluated based on geomorphology, hydrology, vegetation and bird data (*). Tidal exchange is unrestricted (U), regulated (Rg) or unrestricted only above an elevated threshold (T). Nature management varies between minimum intervention (MI), livestock grazing (G) and mowing (M). NA = no information available or no long-term monitoring data available to evaluate restoration success.

Site	Restoration method	Total area (ha)	Year of restoration	Polder period (yr)	Tidal exchange	Nature management	Restoration success	Ref.
Netherlands								
Mainland								
Paezemerlannen (Fr.)	De-embankment	100	1973	40	U	MI	moderate	1, 2, 6, 21
Holwerd West (Fr.)	De-embankment	51	1992	NA	U	G	good	21
Holwerder zomerpolder (Fr.)	De-embankment	37	1989/1995	33	U	MI	good	2, 3, 5
Noarderleech (Fr.)	De-embankment	120	2001	91	U	G	good	11, 12
Noarderleech-Hallumeryt/De Heining (Fr.)	De-embankment + Top-soil removal (partial)	28	2019		U	MI	NA	
Biltpollen (Fr.)	De-embankment	48	2009	44	U	G	moderate	10
Polder Breebaart (Gr.)	De-embankment	63	2001	22	Rg	G	low	7
Total		447						
Island								
Vlieland Kroon's Polders (3+4)	De-embankment	85	1996	76	U	M	good	2, 3, 5
Vlieland Kroon's Polders (2)	De-embankment	42	2017	NA	U	NA		
Terschelling Groene Strand	De-embankment	23	1996	NA	T	G	low	2, 3, 5
Texel De Slufter	De-embankment	15	2002	NA	T	?	?	4
Total		165						
Lower Saxony								
Mainland								
Hauener Hooge	De-embankment	80	1994	50	U	MI	moderate	9, 13, 22
Lütetsburger Sommerpolder-West	De-embankment	15	1986	?	U	MI	low	13, 22
Cappel-Süd + Nord	De-embankment	70 + 64	2008	> 100	U	MI/G	NA	13, 22
Langwarden Groden	De-embankment + Top-soil removal (partial)	148	2014	81	U	MI/G	good*	13, 22
Dorum-Neufeld	De-embankment	10	2018		U	MI/G	NA	13
Pilsumer Heller	De-activation of artificial drainage	28	2005			MI	NA	13
Leybucht Mittelplate	De-activation of artificial drainage	100	2013			MI	moderate*	13
Elisabeth-Außengroden	Top-soil removal (29 ha)	29	2012- 2015			MI	NA	13
Neuwapeler-Außengroden	Top-soil removal (28 ha)	30	2016			MI/M	NA	13
Campen	Top-soil removal (18 ha)	18	2018			MI/M	good	13
Dyksterkruger-Heller	Top-soil removal (partial: 9 ha)	16	2021			MI	NA	13
Westerneßmerheller	Top-soil removal (partial: 16 ha)	30	2022			MI	NA	13
Hauener Hooge	Top-soil removal (40 ha)	40	2023				NA	13
Island								
Langeoog Summerpolder	De-embankment	160	2004	70	U	MI/G	moderate	8, 13, 22
Norderney Ostheller	De-activation of artificial drainage + Top-soil removal (partial: 23 ha)	66	2008/ 2015			MI	good*	13
Juist Billheller	De-activation of artificial drainage	8	2017			MI	NA	13
Borkum Ronde Plate	De-activation of artificial drainage	8	2018			MI	NA	13
Hamburg								
Island								
Neuwerk Ostvorland	De-embankment	40	2004	79	U	MI	good	23