



ATTI  
DELLA  
SOCIETÀ TOSCANA  
DI  
SCIENZE NATURALI

MEMORIE • SERIE A • VOLUME CXXV • ANNO 2018



Edizioni ETS



Con il contributo del Museo di Storia Naturale dell'Università di Pisa



e della Fondazione Cassa di Risparmio di Lucca

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*Electronic Appendix to*

FOUR DIFFERENT COASTAL SETTINGS WITHIN  
THE NORTHERN TUSCANY LITTORAL CELL:  
HOW DID WE GET HERE?

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id	Type	Size	Construction Year	Modifications	Source	Notes
1	Jetty at Magra River's left side	L: 270 m	1930-31	1982: decrease of 22 m 1987-90: restoration of 22 m 1997: maintenance	Regione Toscana database	-
2	Groyne	L: 30 m	1987-90	Dismantled	Regione Toscana database	-
3	Boulder circular island	D: 25 m	1954-71	1986-87: 10 m wide opening in the associated groyne	Regione Toscana database	-
4	Boulder circular island	D: 95 m	1971-75	-	Regione Toscana database	Buried by sand
5	Boulder circular island	D: 12 m	1954-71	1971-75: groyne construction 1986-87: 10 m wide opening in the groyne	Regione Toscana database	-
6	Boulder circular island	D: 15 m	1954-71	1971-75: groyne construction 1986-87: 10 m wide opening in the groyne	Regione Toscana database	-
7	Submerged breakwater	L: 110 m	1985	-	Regione Toscana database	-
8	Submerged breakwater	L: 100 m	1985	-	Regione Toscana database	-
9	Pennello emerso	L: 35 m	1984-87	-	Regione Toscana database	Dismantled
10	Boulder circular island	D: 10 m	1954-71	1975-86: groyne construction 1986-87: 10 m wide opening in the groyne 1987: connection restored	Regione Toscana database	-
11	Boulder circular island	D: 15 m	1971-75	1975-86: groyne construction 1986-87: 10 m wide opening in the groyne 1993: connection restored	Regione Toscana database	-
12	Submerged breakwater	L: 105 m	1993-97	-	Regione Toscana database	-
13	Semi-submerged breakwater	Le: 55 m Ls: 105 m D: 17 m	1971-75	1975-86: groyne construction 1986-87: 10 m wide opening in the groyne 1993: connection restored, island replacement with circular boulders 1997: maintenance	Regione Toscana database	-
14	Semi-submerged groyne	Le: 75 m Ls: 35 m	1989	-	Regione Toscana database Personal Communication	-
15	Breakwater	L: 150 m	1928	1989: merging with structures 14 and 16 to connect to the coastline	Regione Toscana database Personal Communication	Protection to water pump system
16	Semi-submerged groyne	Le: 80 m Ls: 110 m	1989	2003-07: demolition of the Y-shape	Regione Toscana database Personal Communication	-
17	T-shaped groyne	L: 37 m	1989	-	Regione Toscana database Personal Communication	Wore down due to lack of maintenance
18	Semi-submerged groyne with circular head	Le: 65 m Ls: 15 m D: 15 m	1999	-	Regione Toscana database	Head partially visible
19	Semi-submerged groyne with circular head	Le: 65 m Ls: 15 m D: 15 m	1999	-	Regione Toscana database	Head partially visible
20	Semi-submerged groyne with circular head	Le: 70 m Ls: 115 m D: 15 m	1999	2007: demolition of the head, construction of the submerged portion	Regione Toscana database Personal Communication	-

21	Semi-submerged groyne with circular head	Le: 65 m Ls: 15 m D: 15 m	1999	-	Regione Toscana database	Head partially visible
22	Semi-submerged groyne with circular head	Le: 85 m Ls: 15 m D: 15 m	1990-95	1998: 30 m extension	Regione Toscana database	Head partially visible
23	Semi-submerged groyne	Le: 90 m Ls: 105 m	1990-95	2003-07: demolition of the head, construction of the submerged portion	Regione Toscana database Aerial images	-
24	Parmignola Creek mouth armoring	L: 80 m	1990-95	2005-06: made orthogonal to the coastline	Regione Toscana database Aerial images	-
25	Parmignola Creek mouth armoring	Le: 75 m Ls: 20 m	1990-95	2005-06: made orthogonal to the coastline; 20 m extension (Ls)	Regione Toscana database Ferri <i>et al.</i> , 2008 (length of the submerged portion)	-
26	Maestra Ditch mouth armoring	L: 90 m	1990-98	2003-07: made orthogonal to the coastline, 30 m extension (Lc)	Regione Toscana database Aerial images	-
27	Maestra Ditch mouth armoring	Le: 95 m Ls: 5 m	1990-98	2003-07: made orthogonal to the coastline, about 30 m extension (Le); about 5 m extension (Ls)	Regione Toscana database Aerial images	-
28	Seawall	L: 1250 m	1921	1927-28: 270 m extension 1930-32: 170 m extension 1938-40: 310 m extension 1977-84: 250 m extension	Regione Toscana database Aerial images	Each extension to SE
29	Seawall	-	1921	1984: replaced by dock areas	Regione Toscana database	-
30	Seawall	L: 500 m	1921	-	Regione Toscana database	Protection to harbour dock
31	Seawall	L: 490 m	1921-31	1996-2003: dismantled	Regione Toscana database	-
32	Seawall	L: 590 m	1996-2003	-	Regione Toscana database Aerial images	-
33	Seawall	L: 700 m	1921-31	1931-41: 460 m extension 1984: merged with structure 34	Regione Toscana database	-
34	Seawall	L: 700 m	1931-41	1984: merged with structure 33	Regione Toscana database	Originally a detached breakwater
35	Lavello Ditch mouth armoring	Le: 65 m Ll: 60 m	before 1954	1978-88: about 35 m extension (Ll)	Regione Toscana database Aerial images	-
36	Groyne	L: 50 m	1978-88	-	Regione Toscana database Aerial images	Protection to a small private harbour
37	Groyne	L: 30 m	1978-88	-	Regione Toscana database Aerial images	Protection to a small private harbour
38	Seawall	L of each fragment, from the north: 200/57/33/50/ 44/70 m	1931-41	-	Regione Toscana database	Originally a unique piece, later subdivided into 6 fragments
39	Seawall	L: 350 m	1931-41	1954: 250 m extension to SE	Regione Toscana database	-
40	Breakwater	L: 200 m	1948-54	-	Regione Toscana database	It should have been the extension of structure 39
41	Breakwater	L: 200 m	1948-54	-	Regione Toscana database	-
42	Breakwater	L: 220 m	tra 1948-54	-	Regione Toscana database	-

43	Breakwater	L: 210 m	tra 1948-54	-	Regione Toscana database
44	Breakwater	L: 160 m	tra 1948-54	-	Regione Toscana database
45	Seawall	L: 140 m	tra 1987-90	-	Regione Toscana database
46	Breakwater	L: 200 m	tra 1948-55	-	Regione Toscana database
47	Seawall	L: 180/30/80 m	tra 1931-41	1990-99; 120 m extension to SE. It is not connected to structure 48	Protection to a Yacht Club. Openings for small boat traffic
48	Groyne	L: 100 m	tra 1931-41	-	Regione Toscana database
49	Breakwater	L: 240/120 m	tra 1931-41	-	Regione Toscana database
50	Seawall	L SE: about 170 m L NW: about 360 m	1948-54	1984; 200 m SE extension 1990; 120 m SE extension	Regione Toscana database Two small groynes are present at the mouth of the creek
51	Breakwater	L: 165 m	1948-54	-	Regione Toscana database
52	Breakwater	L: 100 m	1954-71	-	Regione Toscana database
53	Breakwater	L: 290 m	1954-71	-	Regione Toscana database
54	Breakwater	L: 175 m	1954-61	-	Regione Toscana database
55	Breakwater	L: 340 m	1954-61	2003-04; 155 m extension	Regione Toscana database
56	Groyne	L: 100 m	1971-77	1984; connection to structures 54 and 55	Regione Toscana database
57	Seawall	L: 210 m	1941-61	1996; 40 m restoration	Regione Toscana database
58	Breakwater	-	1971-75	1990-84; 60 m long connection to the coastline 1990: dismantled	Regione Toscana database
59	Groyne	L: 125 m	1954-78	-	Regione Toscana database Aerial images
60	Submerged breakwater	L: 180 m	2003-04	-	Regione Toscana database Aerial images
61	Submerged breakwater	L: 170 m	1980-81	-	Regione Toscana database
62	Groyne	L: 120 m	1971-75	1980-84; connection to the coastline with boulders 1990-96; integration to the breakwater 2003-05: demolition of the island	Originally a boulder island connected to the coastline
63	Submerged breakwater	L: 190 m	1980-81	2003-05; dismantled	Regione Toscana database Aerial images
64	Submerged breakwater	L: 190 m	1990-96	1980-84; 70 m connection to the coastline with boulders 1990-96; integration to the breakwater 2003-05: demolition of the island	Regione Toscana database
65	Groyne	L: 110 m	1971-75	-	Originally a boulder island connected to the coastline
66	Submerged breakwater	L: 190 m	1980-81	2003-05; dismantled	Regione Toscana database Aerial images
					Still visible

67	Submerged breakwater	L: 190 m	1990-96	-	-	Regione Toscana database	-
68	Groyne	L: 100 m	1971-75	1980-84; 50 m connection to the coastline with boulders 1990-96; integration to the breakwater 2003-05: demolition of the island	Regione Toscana database	Originally a boulder island connected to the coastline	
69	Submerged breakwater	L: 115 m	1980-81	-	Regione Toscana database	-	
70	Brugiano Ditch mouth armoring	L: 120 m	1991	1991-95; extension of the head	Regione Toscana database	Small port inside the jetties	
71	Brugiano Ditch mouth armoring	L: 120 m	1980-81	1991-95; extension of the head	Regione Toscana database	Small port inside the jetties	
72	Submerged breakwater	L: 140 m	1980-81	-	Regione Toscana database	-	
73	Boulder island connected to the coastline	L: 130 m	1980-81	-	Regione Toscana database	-	
74	Submerged breakwater	L: 60/65 m	1980-81	-	Regione Toscana database	It is subdivided into two parts by the pier	
75	Boulder island connected to the coastline	L: 140 m	1980-81	-	Regione Toscana database	-	
76	Submerged breakwater	L: 150 m	1980-81	-	Regione Toscana database	-	
77	Boulder island connected to the coastline	L: 130 m	1980-81	-	Regione Toscana database	-	
78	Submerged breakwater	L: 140 m	1980-81	-	Regione Toscana database	-	
79	Boulder island connected to the coastline	L: 120 m	1980-81	-	Regione Toscana database	-	
80	Submerged breakwater	L: 140 m	1980-81	-	Regione Toscana database	-	
81	Boulder island connected to the coastline	L: 140 m	1980-81	-	Regione Toscana database	-	
82	Frigido River mouth armoring	L: 30 m	1988-90	-	Regione Toscana database	-	
83	Frigido River mouth armoring	L: 20 m	1988-90	2007-10; dismantled	Aerial images	-	
84	Submerged breakwater	L: 100 m	1980-81	2007-10; demolition of the NW portion; connection to structure 87	Regione Toscana database	-	
85	Groyne	L: about 130 m	tra 2007-2010	-	Aerial images	-	
86	Boulder Island connected to the coastline	L: 120 m	1980-81	1987 and 1989: restoration 2007-10: demolition	Regione Toscana database	-	
87	Submerged breakwater	L: 140 m	1980-81	1987; restoration	Regione Toscana database	Aerial images	
88	Boulder island connected to the coastline	L: 30 m	1980-81	1989; restoration 2009-10; reduction to 50 m from the original 105 m	Regione Toscana database	-	
89	Submerged breakwater	L: 180 m	1980-81	-	Regione Toscana database	-	
90	Boulder island connected to the coastline	L: 30 m	1980-81	The connection to the coastline was converted into a concrete boardwalk	Regione Toscana database	-	
91	Submerged breakwater	L: 520 m	1980-81	1989; converted into submerged breakwater of about 440 m 1992: 120 m extension to build a boulder island 2010-16; demolition of the southern part	Regione Toscana database	Aerial images	

92	Boulder island connected to the coastline	L: 120 m 1989	2010-13: the island was offset of about 10 m offshore 2015-16: maintenance	Regione Toscana database Aerial images
93	Submerged breakwater	L: about 240 m 2010-13	2016: temporally emerged	Aerial images
94	Magliano Ditch mouth armoring	Ler: 80 m Lel: 100 m Lsr: 100 m Lsl: 120 m 1989	2010-11: demolition of the right island 2011-13: demolition of the left island	Originally a boulder island connected to the coastline
95	Groyne	L: 60 m 1988-96	1996-2003: modifications to reach the present configuration	Regione Toscana database Aerial images
96	Geotextile sandbag	Ls: 260 m 1999	-	Regione Toscana database Aerial images
97	Semi-submerged groyne	Le: 60 m Ls: 130 m 2010-13	-	Regione Toscana database Aerial images
98	Semi-submerged groyne	Le: 50 m Ls: 105 m 2010-13	2015-16: construction of the submerged part	No more operational
99	Geotextile sandbag	Ls: 250 m 1999-02	-	Regione Toscana database Aninii <i>et al.</i> , 2004
100	Semi-submerged groyne	Le: 60 m Ls: 100 m 2010-13	2015-16: construction of the submerged part	No more operational
101	Semi-submerged groyne	Le: 35 m Ls: 110 m 2010-13	2015-16: construction of the submerged part	Aerial images
102	Semi-submerged groyne	Le: 45 m Ls: 85 m 2010-13	2015-16: construction of the submerged part	Aerial images
103	Geotextile sandbag	Ls: 125 m 1999-2002	-	Regione Toscana database No more operational
104	Semi-submerged groyne at the Poveromo Ditch mouth	Le: 40 m Ls: 60 m 2015	-	Aerial images
105	Semi-submerged groyne	Le: 25 m Ls: 40 m 2015	-	Aerial images
106	Cinquale Ditch mouth armoring	L: 170 m 1954-78	1996-2004: modifications to reach the present configuration	Regione Toscana database Aerial images
107	Cinquale Ditch mouth armoring	L: 90 m 1954-78	-	Aerial images
108	Port dock	L: about 500 m 1898	1909, 1924, 1928, 1938: extensions to reach the present configuration	Aerial images
109	Port dock	Le: about 460 m Ls: 30 m 1914	1915, 1923: construction of the yellow part 1925, 1928, 1938: extensions to the maximum size 1954-78: demolition of the yellow part, present configuration achieved	Autorità Portuale Regionale Porto di Viareggio, 2015
110	Port dock	L: about 850 m 1969-73	-	Aerial images
111	Morto Nuovo River mouth armoring	L: 300 m 1939	1988-96: maintenance 2010-11: 75 m extension to N	Autorità Portuale Regionale Porto di Viareggio, 2015
112	Morto Nuovo River mouth armoring	L: 140 m 1939	-	Regione Toscana database 25 m branch to S from the central part

113	Submerged breakwater	L: 65 m	1968	2009; converted to submerged breakwater; merging with structure 114	Regione Toscana database Aerial images Rapetti & Vittorini, 1974 Casarosa, 2016
114	Breakwater	L: 120 m	1966	1984: 15 m extension, ensuing opening width reduction 2009: connected to the coastline by means of submerged geotubes	Regione Toscana database Aerial images Rapetti & Vittorini, 1974 Casarosa, 2016
115	Breakwater	L: 140 m	1966	1984: 25 m extension, ensuing opening width reduction	Regione Toscana database Aerial images Rapetti & Vittorini, 1974
116	Breakwater	L: 135 m	1962	1984: 10 m extension, ensuing opening width reduction	Regione Toscana database Aerial images Rapetti & Vittorini, 1974
117	Breakwater	L: 105 m	1962	1984: 30 m extension, ensuing opening width reduction	Regione Toscana database Aerial images Rapetti & Vittorini, 1974
118	Semi-submerged groyne	Le: 45 m Ls: 160 m	2003	-	Regione Toscana database Aerial images
119	Semi-submerged groyne	Le: 100 m Ls: 135 m	2001-02	-	Regione Toscana database Aerial images
120	Semi-submerged groyne	Le: 45 m Ls: 115 m	2001-02	-	Regione Toscana database Aerial images
121	Semi-submerged groyne	Le: 100 m Ls: 135 m	2001-02	-	Regione Toscana database Aerial images
122	Semi-submerged groyne	Le: 70 m Ls: 45 m	2001-02	-	Regione Toscana database Aerial images
123	Semi-submerged groyne	Le: 75 m Ls: 115 m	2001-02	-	Regione Toscana database Aerial images
124	Semi-submerged groyne	Le: 60 m Ls: 60 m	2001-02	-	Regione Toscana database Aerial images
125	Semi-submerged groyne	Le: 100 m Ls: 135 m	2001-02	-	Regione Toscana database Aerial images
126	Semi-submerged groyne	Le: 70 m Ls: 125 m	2001-02	-	Regione Toscana database Aerial images
127	Groyne	L: 30 m	2001-02	-	Regione Toscana database Aerial images
128	Seawall	L: 125 m	1978-88	-	Regione Toscana database Aerial images
129	Arno River mouth armouring	L: 350 m	1926	-	Regione Toscana database Aerial images
130	Boulder islands	L: about 50/10/50 m	1926	1954-78: cumulative length reduction from 330 m to 110 m; decoupling from structure 129	Regione Toscana database Aerial images
131	Arno River mouth armouring	L: about 780 m	1926	2013; present configuration	Aerial images
132	Seawall at port entrance	L: about 220 m	2013	-	Aerial images

133	Seawall	-	Before 1954	Small shape modifications due to nearby interventions 2013-15: construction of small artificial gravel beaches	Regione Toscana database Aerial images	-
134	Breakwater	L: 155 m	Before 1954	1954-78: the yellow portion was there; the small basin was closed 1978-88: south opening 1988-96: north opening, it becomes a breakwater 2013: the yellow portion is dismantled; the remaining part is restored	Regione Toscana database Aerial images	A 35 m groyne connected to the coast is separated from the rest of the structure to enable boat traffic
135	Breakwater	L: 160 m	Before 1954	1978-88: decoupling from structure 135; maintenance	Regione Toscana database Aerial images	-
136	Groyne	L: 25 m	Before 1954	1978-88: decoupling from structure 135; maintenance	Regione Toscana database Aerial images	-
137	Seawall	L: 215 m	Before 1954	-	Regione Toscana database Aerial images	-
138	Breakwater	L: 235 m	1954-78	1978-88: maintenance to breakwater edge	Regione Toscana database Aerial images	The structure is connected to the coastline with a 30 m long groyne
139	Seawall	L: 1365 m	-	1978-88: construction of a 15 m long groyne	Regione Toscana database Aerial images	Originally separated, structures 138, 141, 143, 146 and 147 are now merged
140	Artificial pebble beach	L: 485 m	2013-15	-	Aerial images	There are some openings to allow for access to the beach
141	Submerged breakwater	L: 240 m	1954-78	2013-15: converted to submerged breakwater	Regione Toscana database Aerial images	Two cells separated by a groyne structure 142
142	Groyne	L: 50 m	2015-16	-	Aerial images	Originally separated, structures 138, 141, 143, 146 and 147 are now merged
143	Submerged breakwater	L: 190 m	1954-78	2013-15: converted to submerged breakwater	Regione Toscana database Aerial images	Originally separated, structures 138, 141, 143, 146 and 147 are now merged
144	Groyne	L: 50 m	1996-2004	2004-07: 20 m extension	Regione Toscana database Aerial images	-
145	Groyne	L: 70 m	1978-88	1996-03: demolition	Regione Toscana database Aerial images	Before 1978: 20 m bulge Now submerged, no more operational
146	Submerged breakwater	L: 190 m	1954-78	2007-10: converted to submerged breakwater; merging with structure 147	Regione Toscana database Aerial images	Originally separated, structures 138, 141, 143, 146 and 147 are now merged

147	Submerged breakwater	L: 280 m	1954-78	2007-10: converted to submerged breakwater; merging with structure 146	Regione Toscana database Aerial images	Originally separated, structures 138, 141, 143, 146 and 147 are now merged
148	Artificial pebble beach	L: 490 m	2001	2006: integration with pebbles of 30-90 mm diameter	Aerial images Cannelli <i>et al.</i> , 2006	Grain size of the 2001 replenishment: 8-16 mm
149	Submerged groyne	L: 55 m	2002-05	-	Regione Toscana database Aerial images	No more operational
150	Groyne	L: 50 m	1996-2004	2004-07: about 30 m extension	Regione Toscana database Aerial images	-
151	Groyne	L: 95 m	2007	-	Regione Toscana database Aerial images	-
152	Breakwater	L: 250 m	1954-78	-	Regione Toscana database Aerial images	-
153	Breakwater	L: 180 m	1954-78	-	Regione Toscana database Aerial images	-
154	Breakwater	L: 240 m	1954-78	-	Regione Toscana database Aerial images	-
155	Boulder island connected to the coastline	L: 12 m D: 7 m	1978-88	-	Regione Toscana database Aerial images	-
156	Groyne	L: 70 m	1954-78	-	Regione Toscana database Aerial images	-
157	Groyne	L: 70 m	1988-96	-	Regione Toscana database Aerial images	-
158	Seawall	L: 380 m	1978-88	-	Regione Toscana database Aerial images	-
159	Groyne	L: 30 m	1996-2004	2010-11: construction of the breakwater 2013: converted into submerged breakwater	Regione Toscana database Aerial images	There is a 80 m long submerged breakwater connected to the head of the groyne
160	Artificial pebble beach	L: 65 m	2001-02	-	Aerial images	Grain size of the replenishment: 40-200 mm
161	Groyne	Le: 45 m Ls: 25 m	1954-78	1978-88: boulder island at the head of the groyne is dismantled	Regione Toscana database Aerial images	-
162	Artificial pebble beach	L: 30/130m	2001-02	2004-07: construction of the present-day groyne 2014-16: identification of two sectors due to coastline retreat	Aerial images	Structures of a beach resort separates the two sectors
163	Groyne with boulder island at the head	-	1954-78	1978-88: demolition	Aerial images	-
164	Semi-submerged groyne	Le: 50 m Ls: 30 m	1996-2004	2007-10: 30 m extension (Le and Ls)	Regione Toscana database Aerial images	-
165	Groyne	L: 30 m	1978-88	1988-96: 20 m extension	Regione Toscana database Aerial images	Parallel to the coastline
166	Breakwater	L: 50 m	1978-88	1988-96: 30 m extension	Regione Toscana database Aerial images	-

167	Breakwater	L: 100 m	1978-88	1988-96; about 20 m extension	Regione Toscana database Aerial images
168	Breakwater	L: 115 m	1978-88	1988-96; about 10 m extension	Regione Toscana database Aerial images
169	Breakwater	L: 60 m	1978-88	-	Regione Toscana database Aerial images
170	Breakwater	L: 85 m	1978-88	1996-04; about 10 m extension	Regione Toscana database Aerial images
171	Breakwater	L: 75 m	1978-88	1996-04; 10 m extension	Regione Toscana database Aerial images
172	Breakwater	L: 40 m	1978-88	1988-96; 20 m extension; connected to the coastline	Regione Toscana database Aerial images
173	Breakwater	L: 55 m	1978-88	1988-96; 15 m extension; connected to the coastline	Regione Toscana database Aerial images
174	Breakwater	L: 95 m	1978-88	1988-96; 15 m extension	Regione Toscana database Aerial images
175	Breakwater	L: 45 m	1988-96	1996-02; about 15 m extension	Regione Toscana database Aerial images
176	Breakwater	L: 80 m	1988-96	1996-02; about 15 m extension	Regione Toscana database Aerial images
177	Breakwater	L: 70 m	1988-96	1996-02; maintenance	Regione Toscana database Aerial images
178	Breakwater	L: 75 m	1988-96	1996-02; maintenance	Regione Toscana database Aerial images
179	Breakwater	L: 135 m	1996-02	1996-02; about 15 m extension	Regione Toscana database Aerial images
180	Breakwater	L: 20 m	1988-96	-	Regione Toscana database Aerial images
181	Seawall	L: 35m	1988-96	-	Regione Toscana database Aerial images
182	Submerged breakwater	L: 640 m	2001	2014; maintenance; integration with boulders; sealing of the south entrance	Regione Toscana database Aerial images Bini <i>et al.</i> , 2008 Casarosa, 2016
183	Groyne	L: 40	1996-07	-	Regione Toscana database Aerial images

184	Scolmatore Canal mouth armoring	L: 615 m	2017-18	-	Aerial images	-
185	Scolmatore Canal mouth armoring	L: 580 m	2017-18	-	Aerial images	-
186	Breakwater connected to the coastline	L: 1260 m	2013	-	Aerial images	-
187	Breakwater connected to the coastline	L: 1345 m	1992-2001	-	Aerial images	-
188	Seawall	L: 280 m	1954-88	Originally 1600 m	Aerial images	Some portions have been removed during later interventions
189	Port dock (Diga del Marzocco)	L: about 1250 m	1881-1934	-	Aerial images	Offshore part: 700 m
190	Breakwater (Diga curvilinea)	L: about 1850 m	1855-60	1908: construction of the straight part of the breakwater (Diga della Meloria, about 700 m)	Aerial images	-
191	Breakwater (Diga della Veggiaia)	L: 510 m	1888-90	-	Aerial images	-



Edizioni ETS

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Finito di stampare nel mese di febbraio 2019

