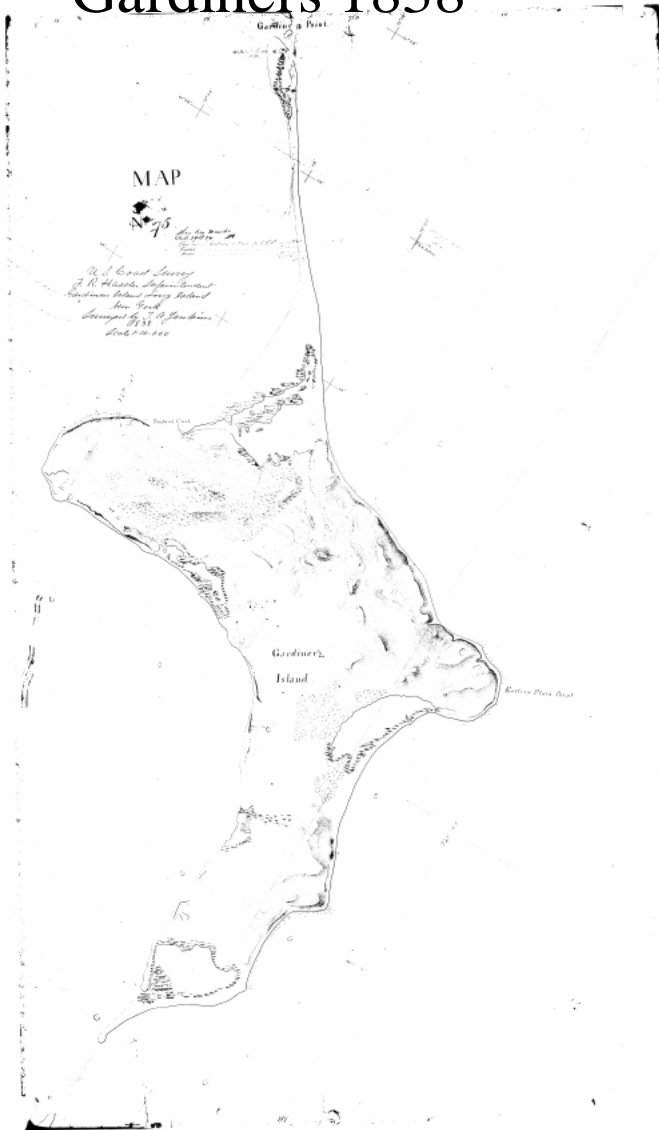




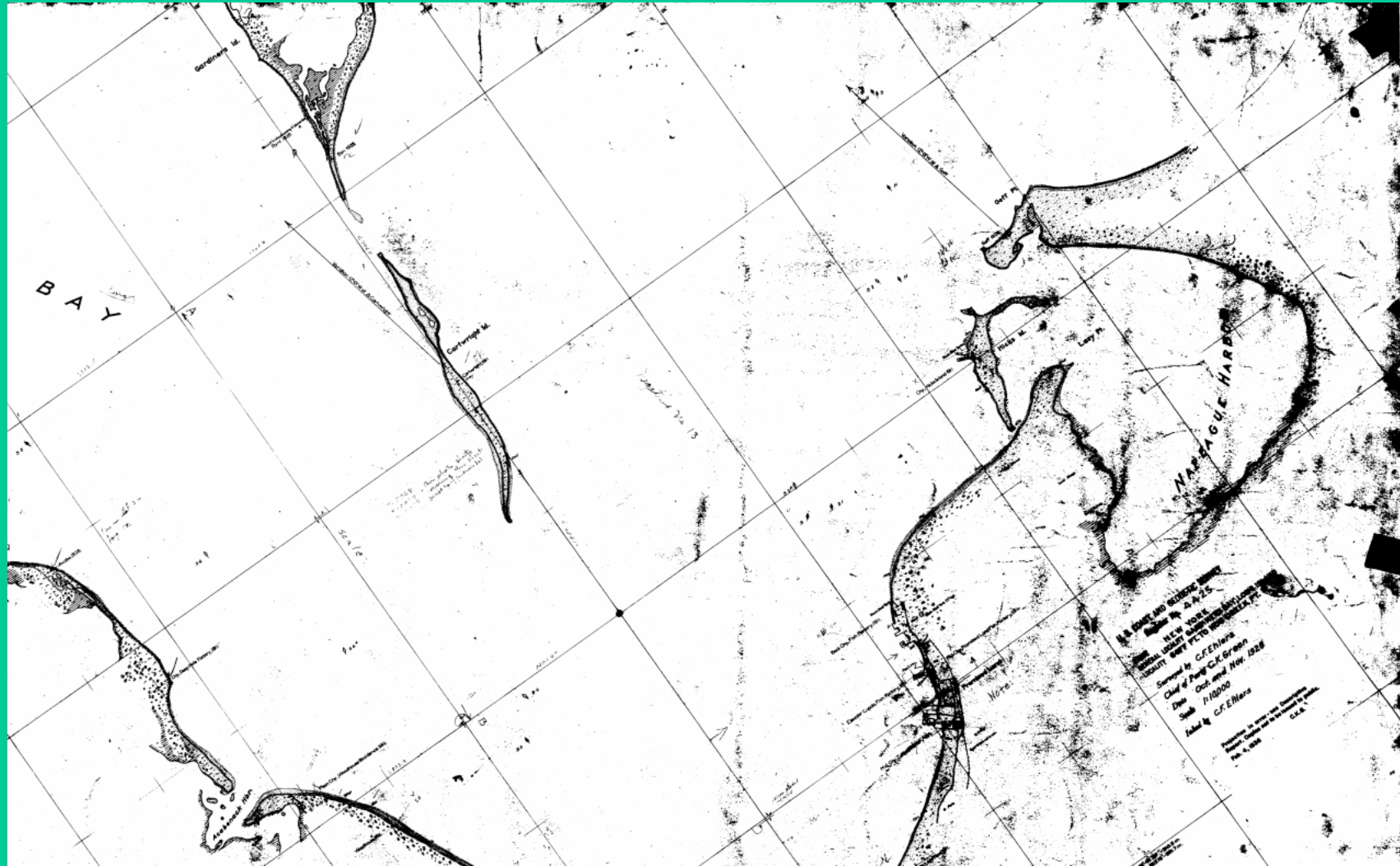
SHORT COASTAL STORM HISTORY—East Hampton Town

Year	Month	Type of Storm	Severity (1-5)
1938	September	T	5
1944	September	T	3
1954	August	T	4
1955	August	T	3
1962	November	NE	4
1976	July	T	3
1984	March	NE	4
1985	September	T	4
1991	August	T	3
1991	October	T-NE	4
1992	December	NE	4
1993	March	NE	4
1995	July	T	2
1997	July	T	2
2000	April	NE	2
2001	October	T	2
2005	February	NE	2
2005	March	NE	3
2005	May	NE	3
2005	October	NE	4
2005	October	NE	4

Gardiners 1838



1928

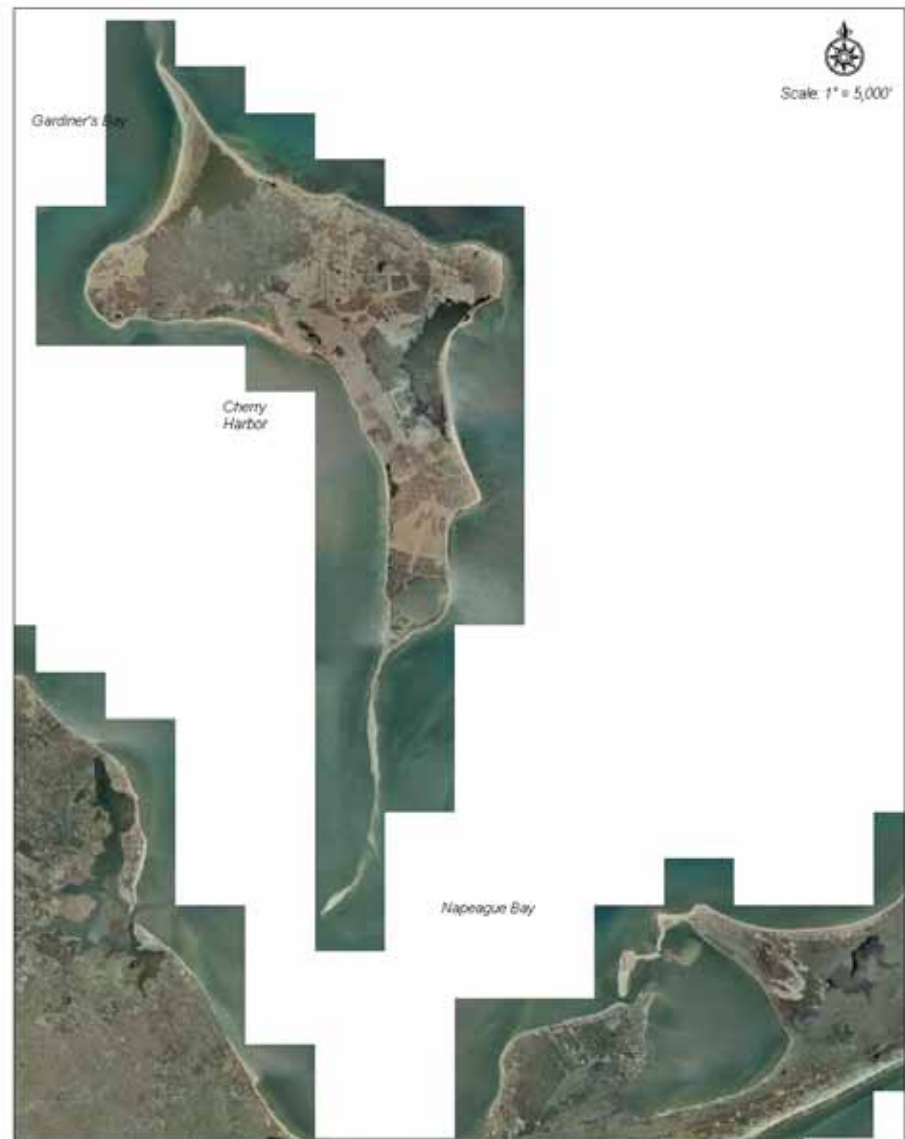




1933



1904



2004 Ortho Vertical Photograph

2004



2001 Ortho Vertical Photograph

2001



2004 Ortho Vertical Photograph

2004

10/24/05

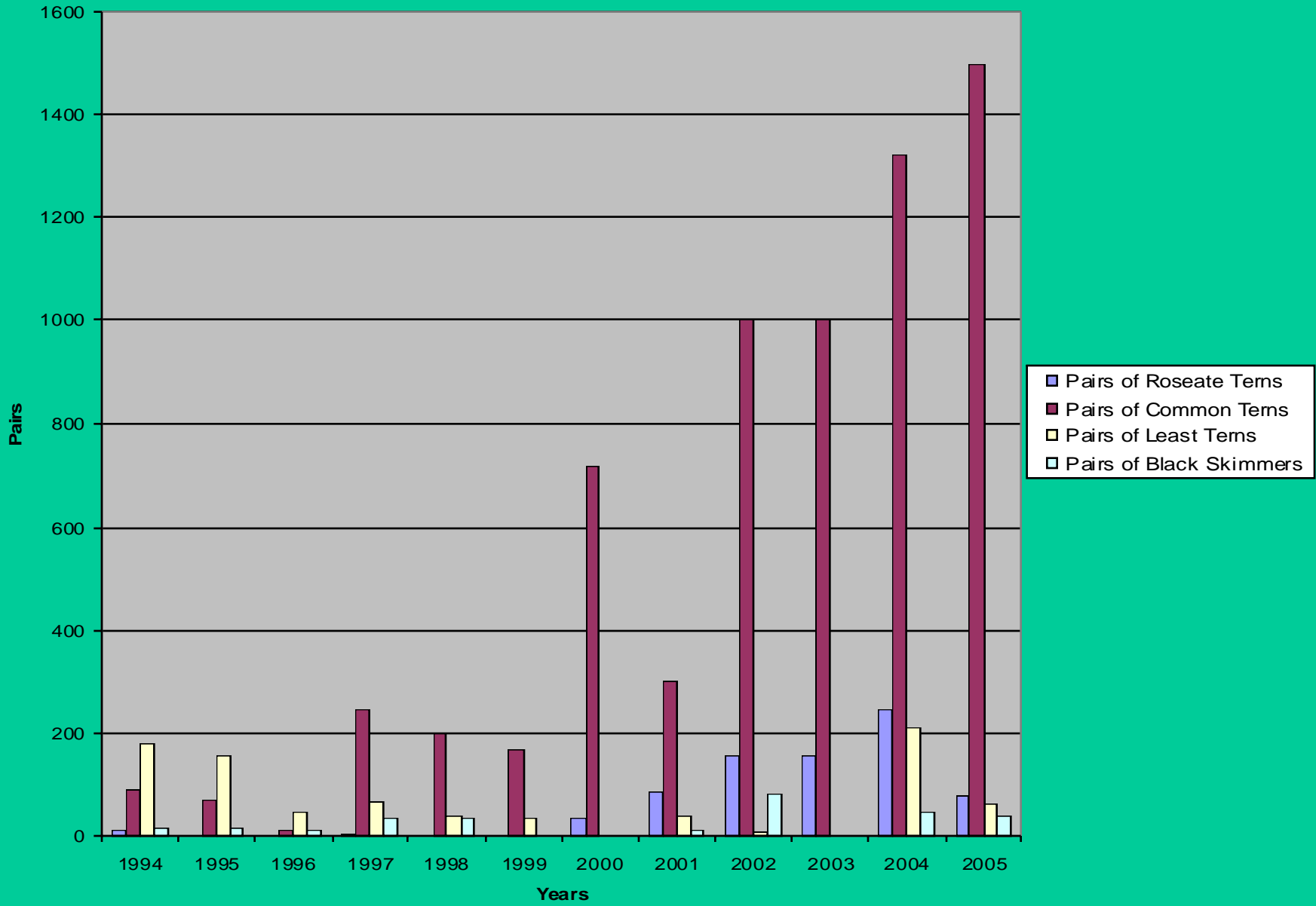








Estimates of Breeding Terns and Black Skimmers on Cartwright Shoals



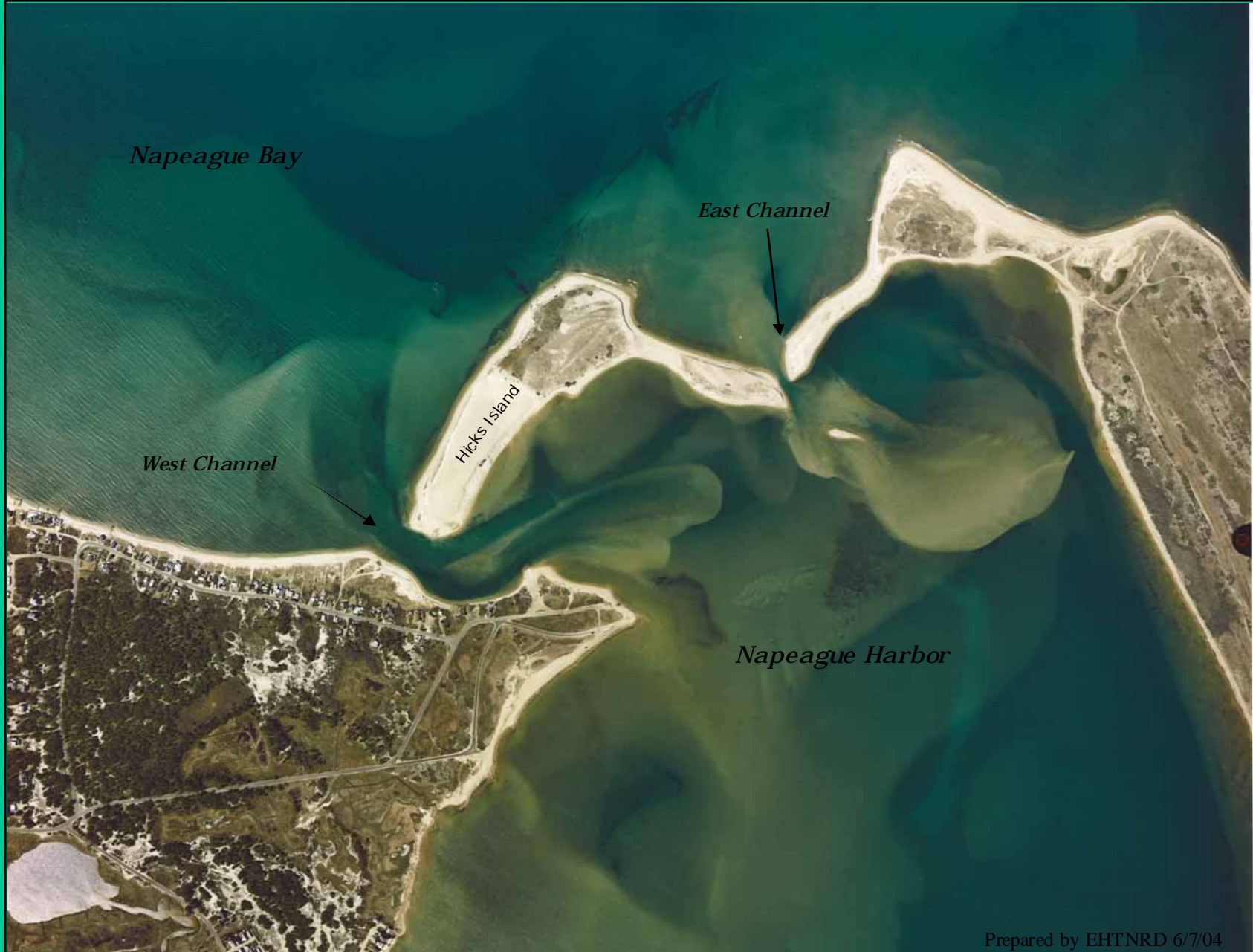
Spring 1989



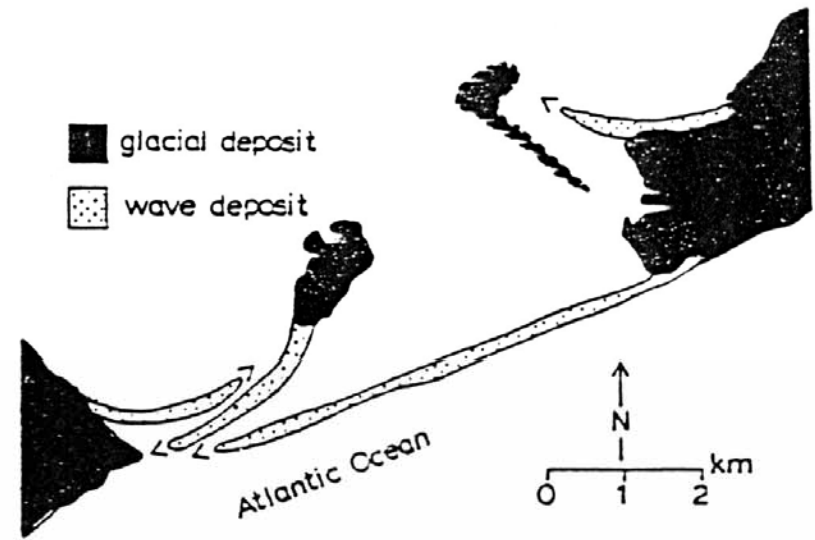
1994



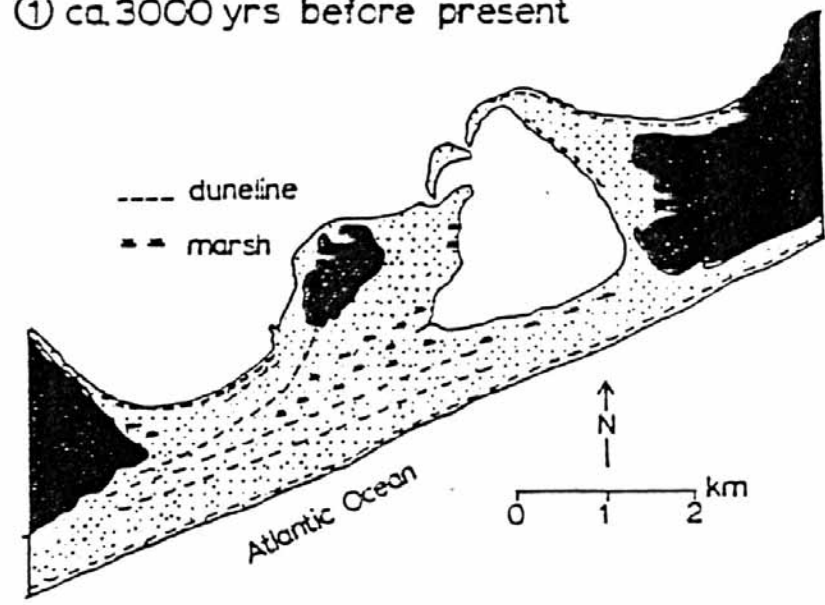
Napeague Harbor Inlets (Aerial Photo from March 2004)



FORMATION OF THE NAPEAGUE ISTHMUS



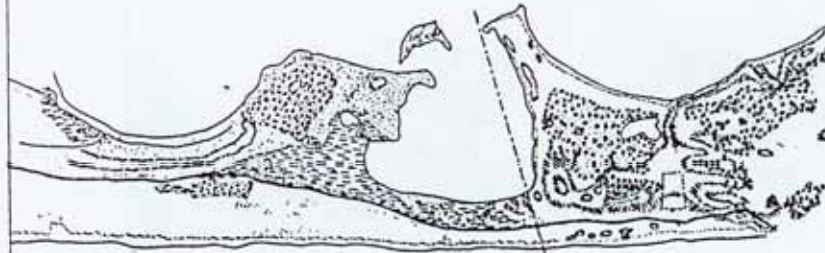
① ca. 3000 yrs before present



② present

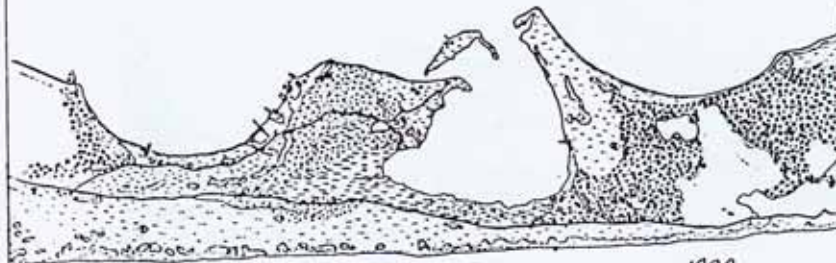
Ann Johnson
Larry McCormick

HISTORICAL MAPS
OF THE NAPEAGUE DUNES
(re-drawn to same scale)



1845

U.S. Coast Survey



1892

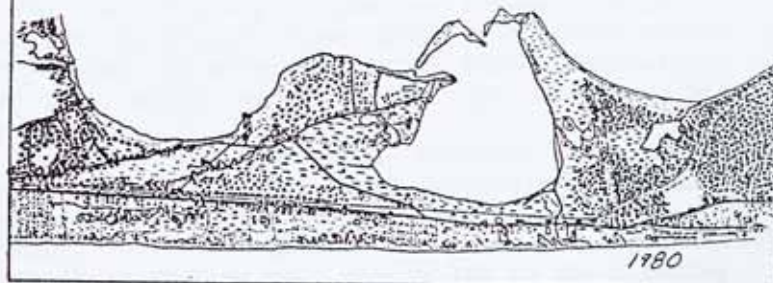
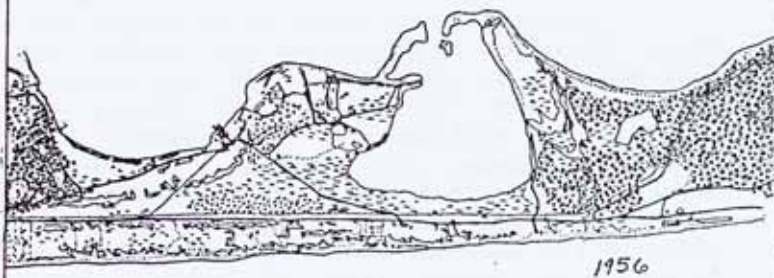
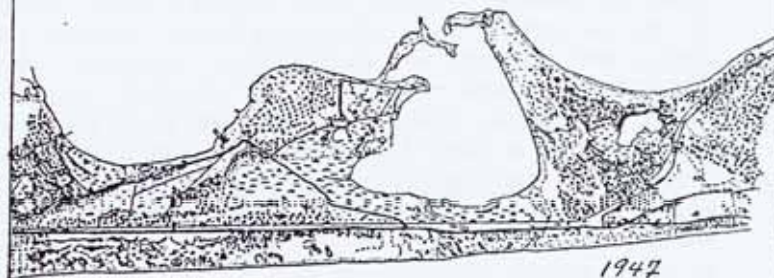
same



1904

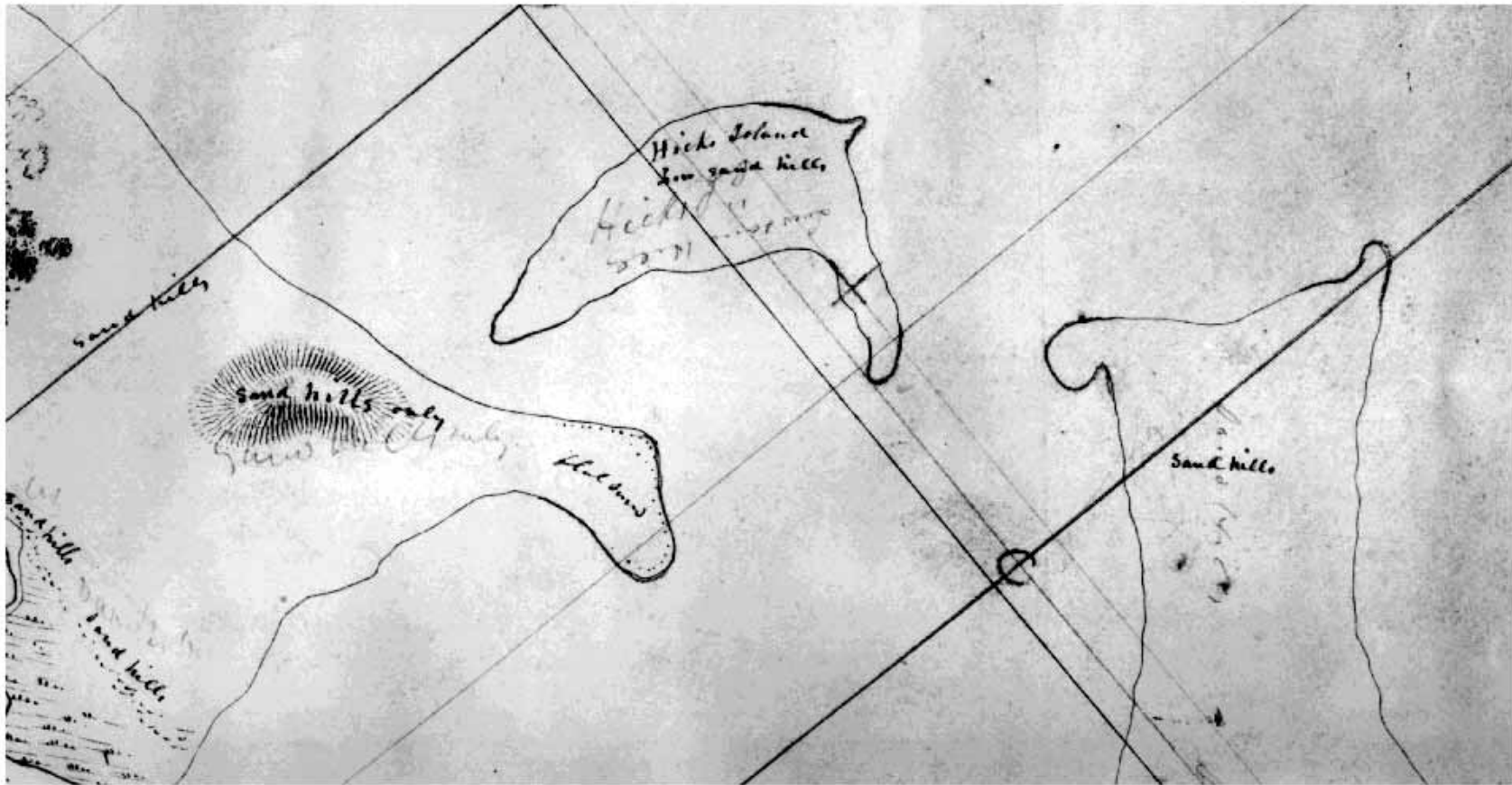
U.S. Geological Survey

MAPS OF THE NAPEAGUE DUNES
(drawn from aerial photographs)



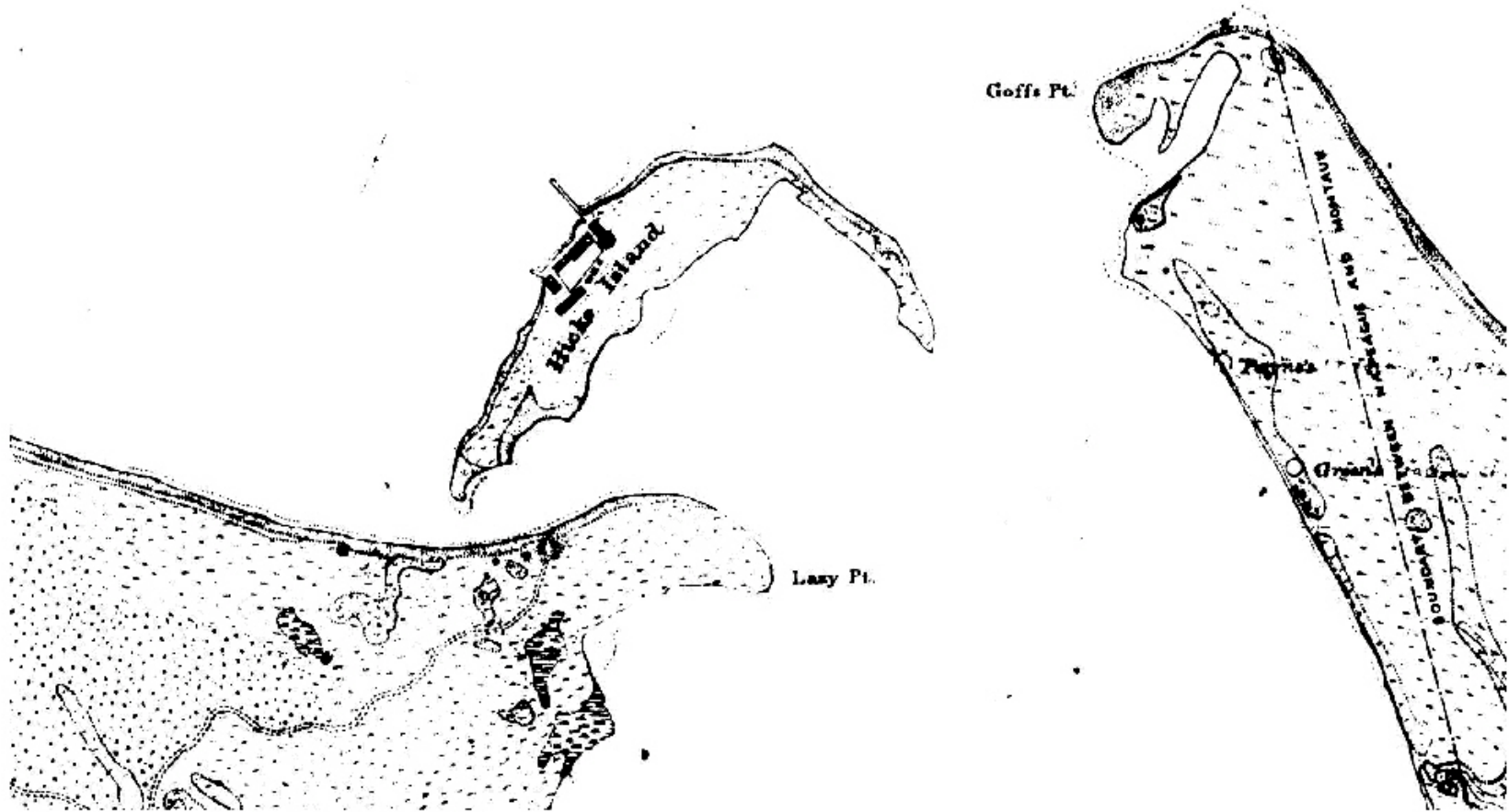
Napeague Harbor Baymouth Barrier System

USCS 1845



Napeague Harbor Baymouth Barrier System

USCS 1892



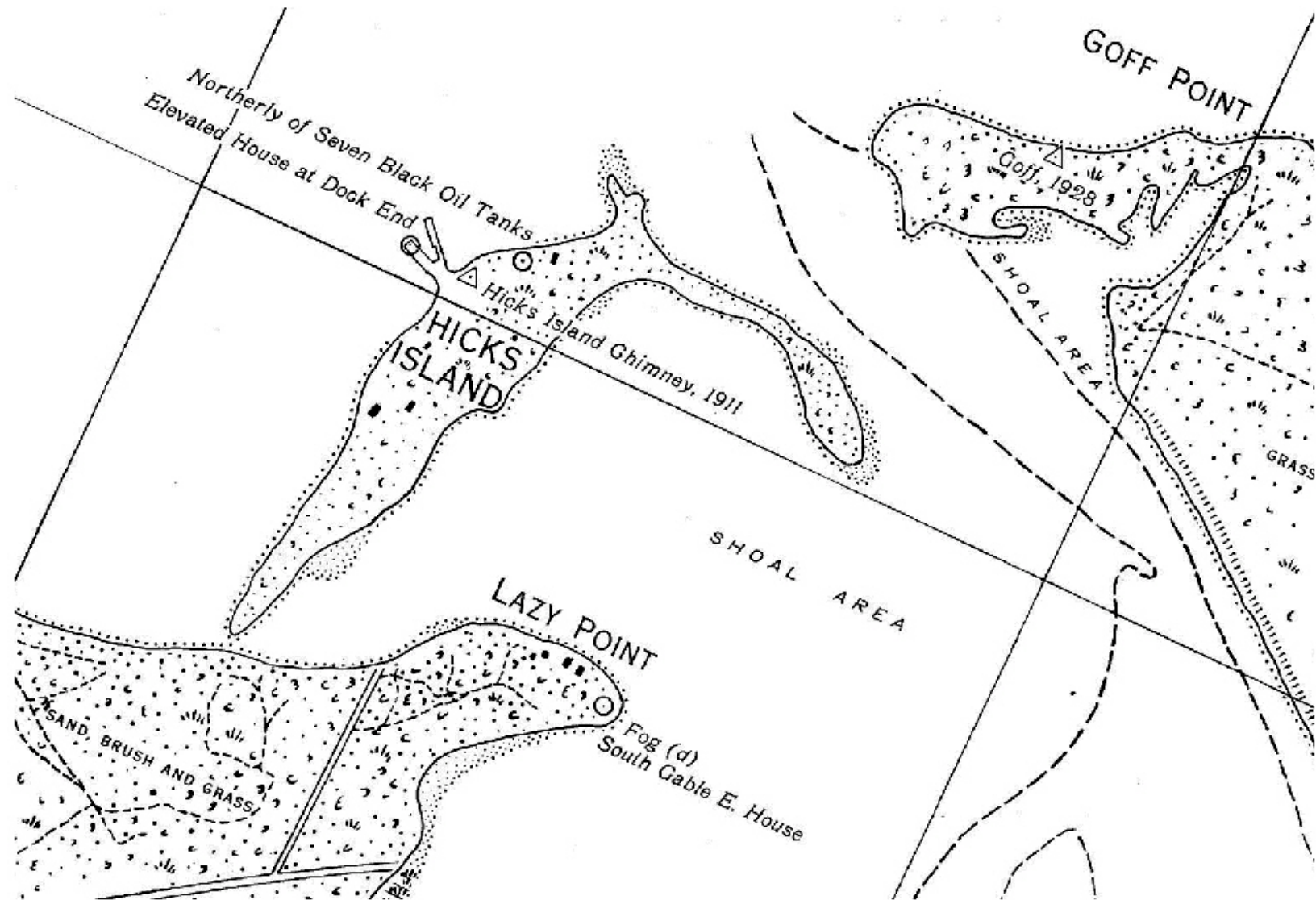
Napeague Harbor Baymouth Barrier System

USCGS 1928



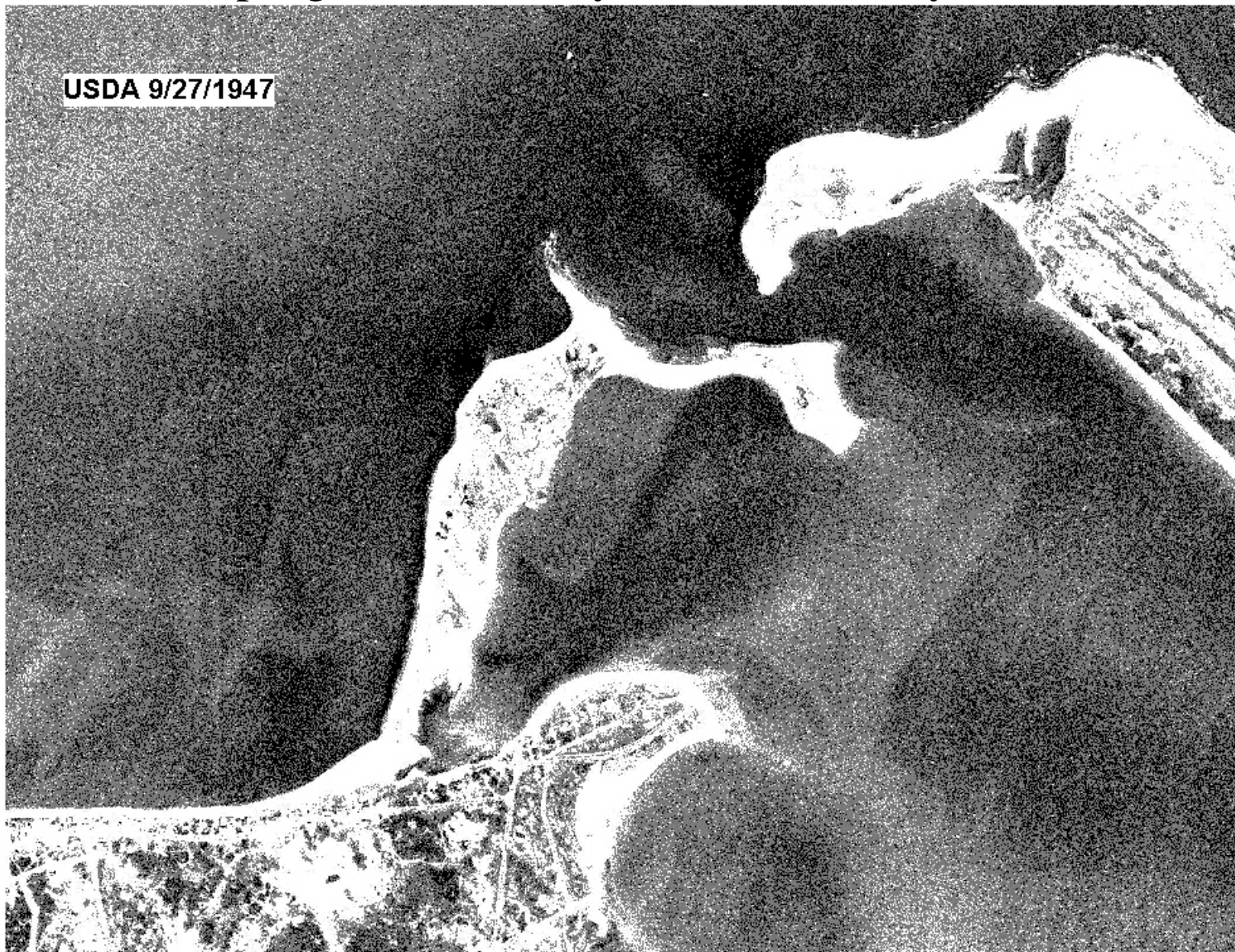
Napeague Harbor Baymouth Barrier System

USCGS 1933



Napeague Harbor Baymouth Barrier System

USDA 9/27/1947

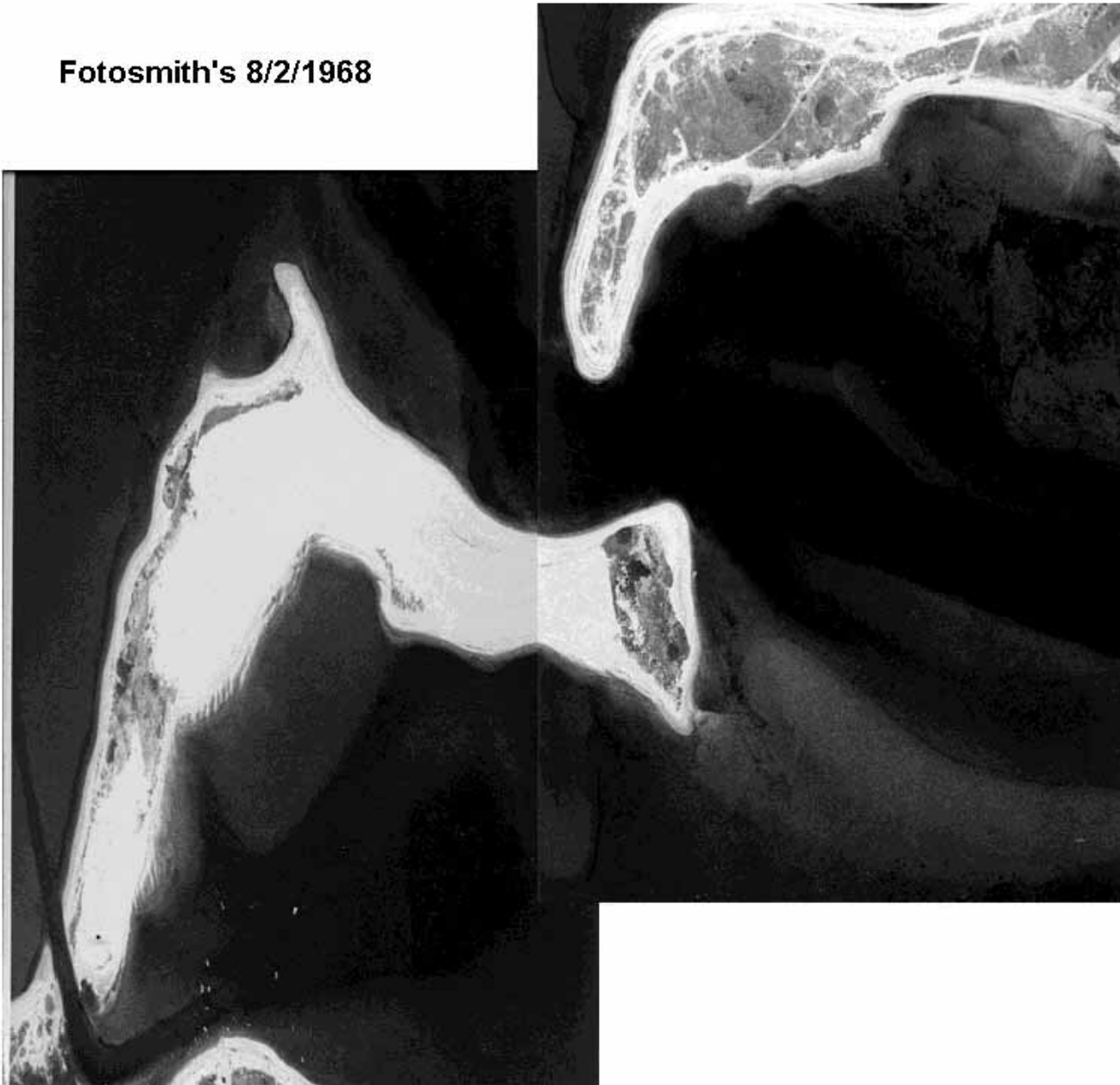


Napeague Harbor Baymouth Barrier System

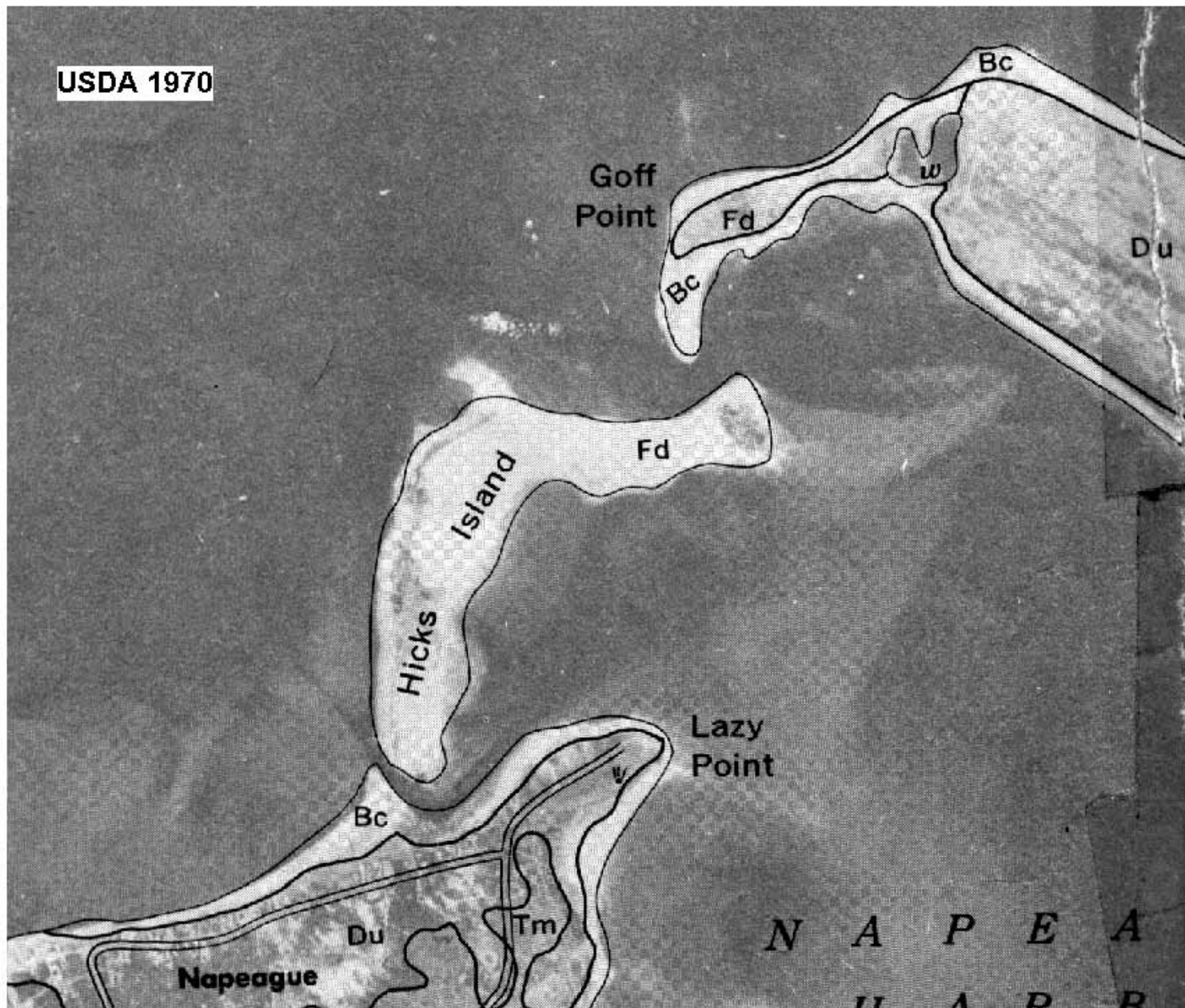


Napeague Harbor Baymouth Barrier System

Fotosmith's 8/2/1968

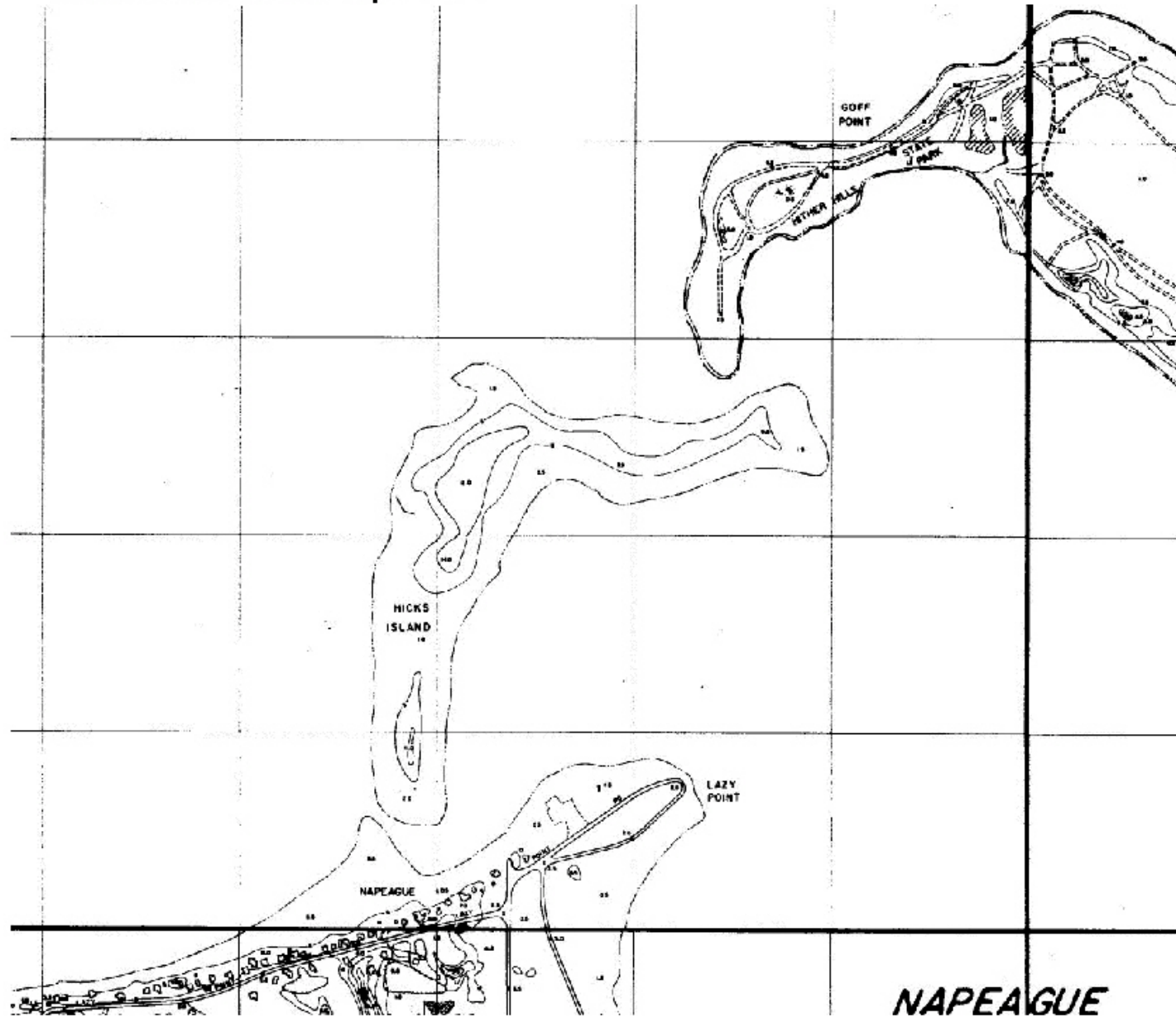


Napeague Harbor Baymouth Barrier System

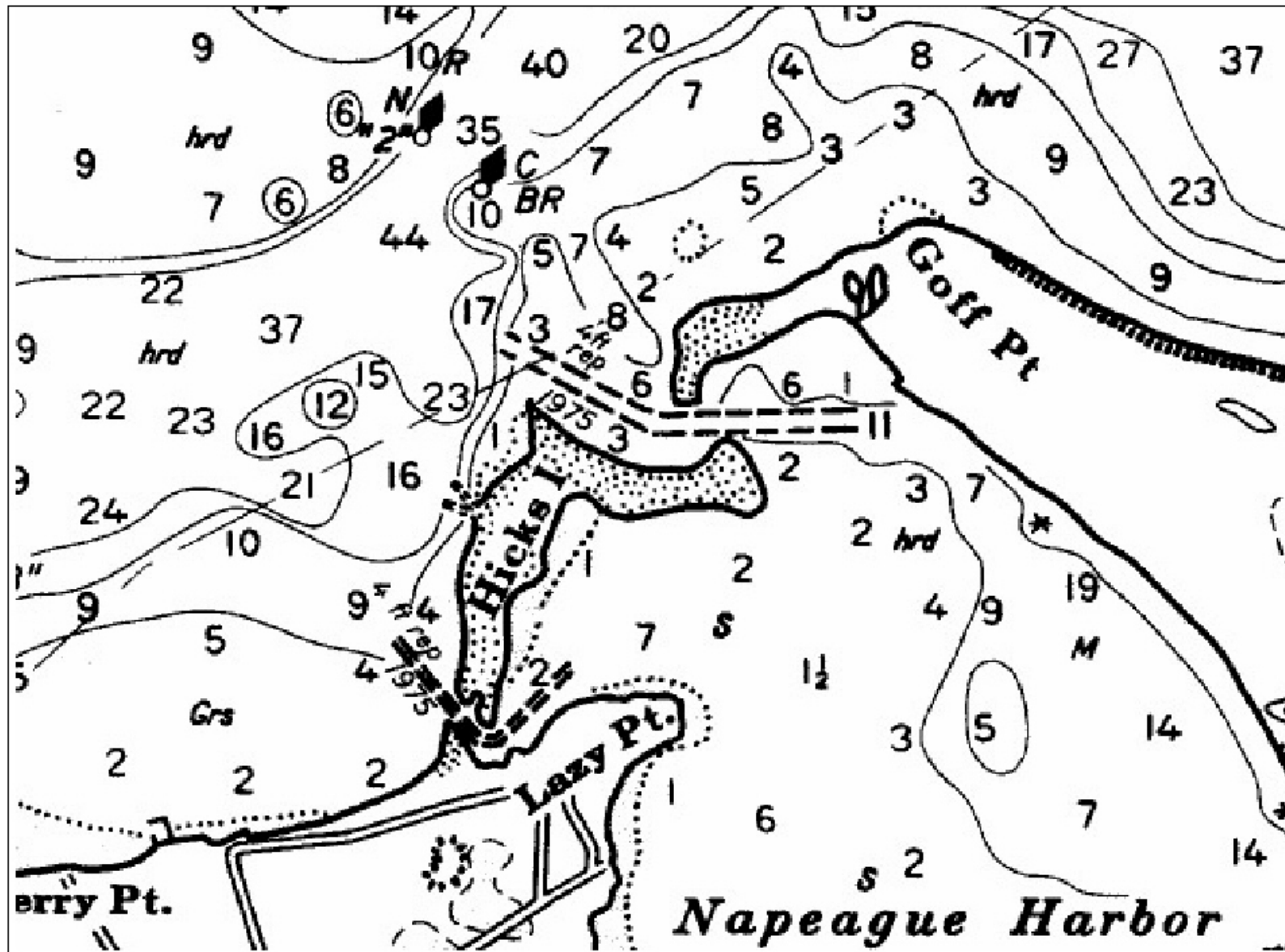


Napeague Harbor Baymouth Barrier System

Five Eastern Towns Topo 1974



NOAA 1979 Nautical Chart



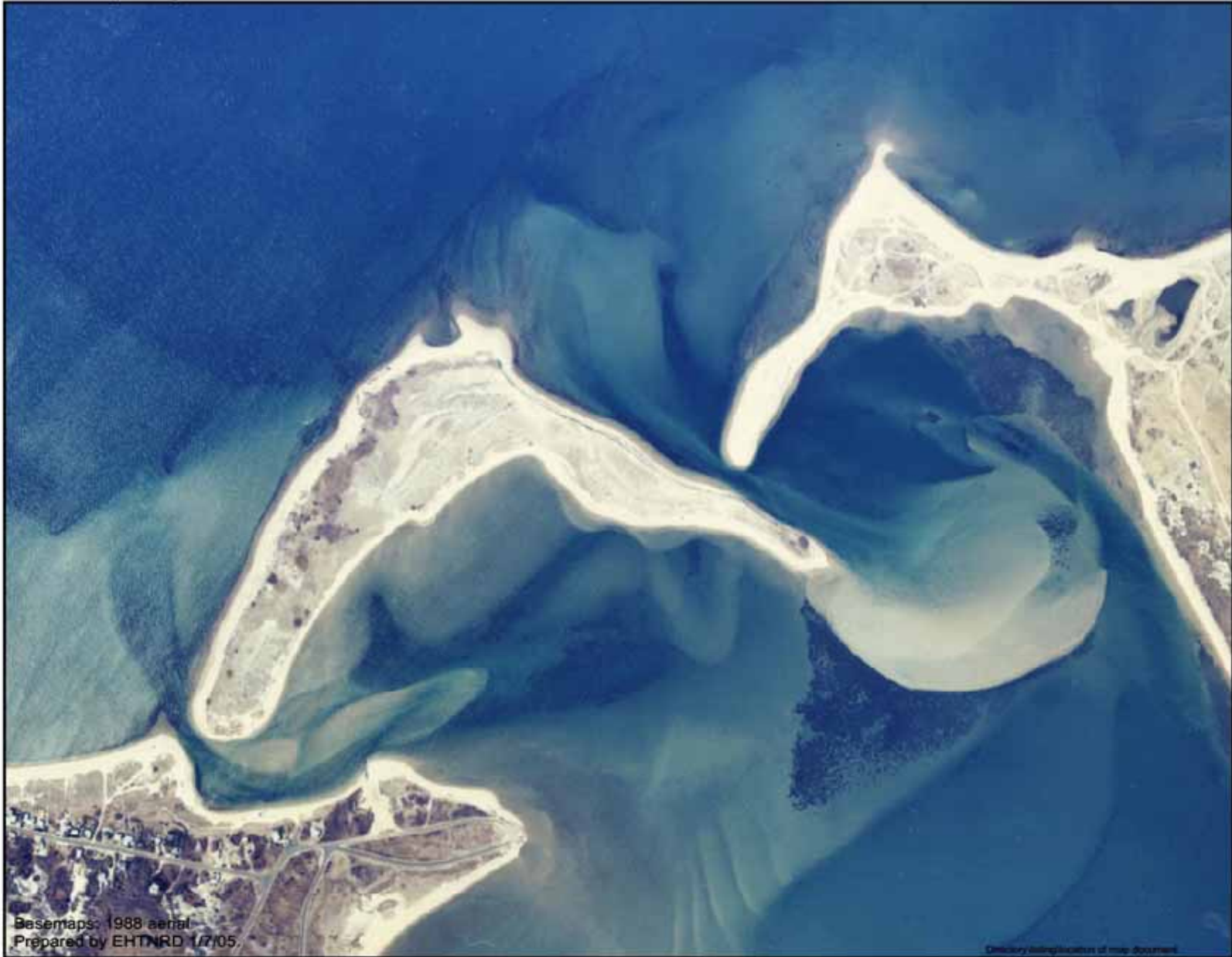
History of Existing Ecological Communities and Rare Species on Hicks Island

Year	Piping Plover	Least Tern	Common Tern	Roseate Tern	Black Skimmer	American Oyster Catcher	Great Black-backed Gull	Herring Gull
1982		0a						
1983	2a	45a,42n	yes	yes				
1984	2a,2y	46a,33n,60-80n	600a,100-160n	80a,40-50n			50a	100a
1985	1a	0	0	0	0	0	30a	70a
1986	0	0	0	0	0	0	0	0
1987	3a	10-44a, 27a, 22n	18a	0	0	2a	0	0
1988	2a, 1p	0	360a	18a,0f	0	2a	0	20a
1989	4a, 3p	47a,42p	476a,419-436p	40a,33-38p,0f	32a,15-17p	11a,5-6p	0	0
1990	6a, 3p	0	125a,104-120p	4a,4p,0f	0	9a,3-5p	0	0
1991	4a, 2p	77-32p,60a	85a,108-45p	5a,0-8p,0f	0	6a,3p	0	0
1992	4a,2p,0f	59a	71a	8a,0f	0	7a	0	0
1993	2a	0	42a	0	0	6a,3p	2a	0
1994	1p	80a,80p	6a,5p	0	0			
1995	3p	0	0	0	0	0	0	0
1996	2p	0	0	0	0		0	0
1997	2p	36p,0f	2p	0	0	1p	0	0
1998	1 or 2 p	7p,0f	0	0	0	0	0	0
1999	1p,0f	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0
2001	4p,7f	0	0	0	0	0	0	0
2002	1p,0f	0	0	0	0	1p	0	0
2003	1p,0f	0	0	0	0	0	0	0
2004	3p,7f	0	0	0	0	0	0	0
2005	6p,12f	0	0	0	0	0	1p	0

a=adult, p=pair, f=fledge, n=nest, y=young

Data collected from Long Island Colonial Waterbird and Piping Plover Surveys 1983-1997 and East Hampton Town Piping Plover and Least Tern Breeding Reports 1998-2004

1988 Napeague Harbor



Basemaps: 1988 aerial
Prepared by EHTNRD 1/7/05

Directory/digitalization of map document

2001 Aerial of Napeague Harbor



Basemaps: 2001 ortho photos
Prepared by EHTNRD 1/5/05.

Directory/Listing/Location of map documents

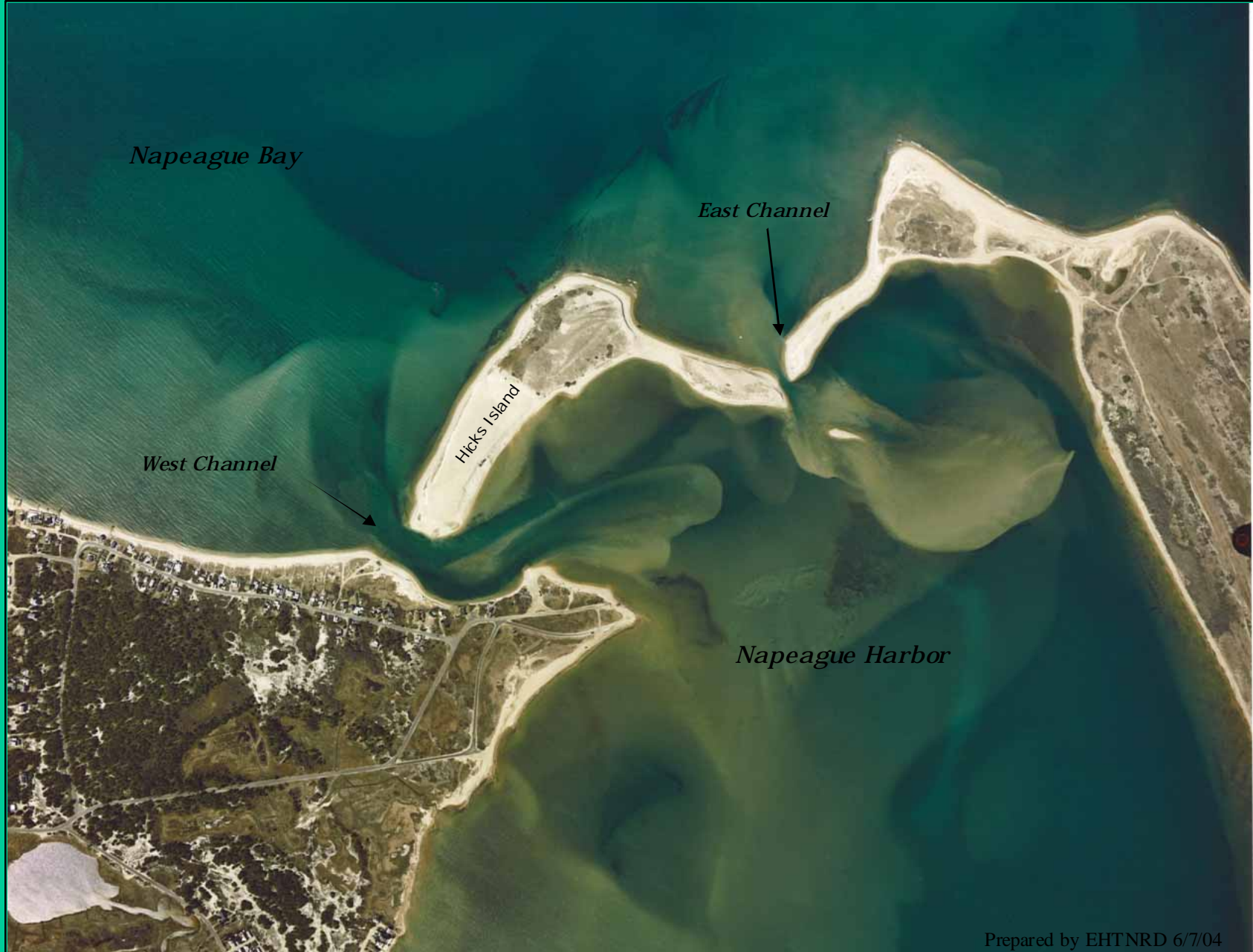
March 2004 West Channel Dredging



March 2004 West Channel Dredging



Napeague Harbor Inlets (Aerial Photo from March 2004)



Piping Plover and Least Tern Breeding on Hicks Island

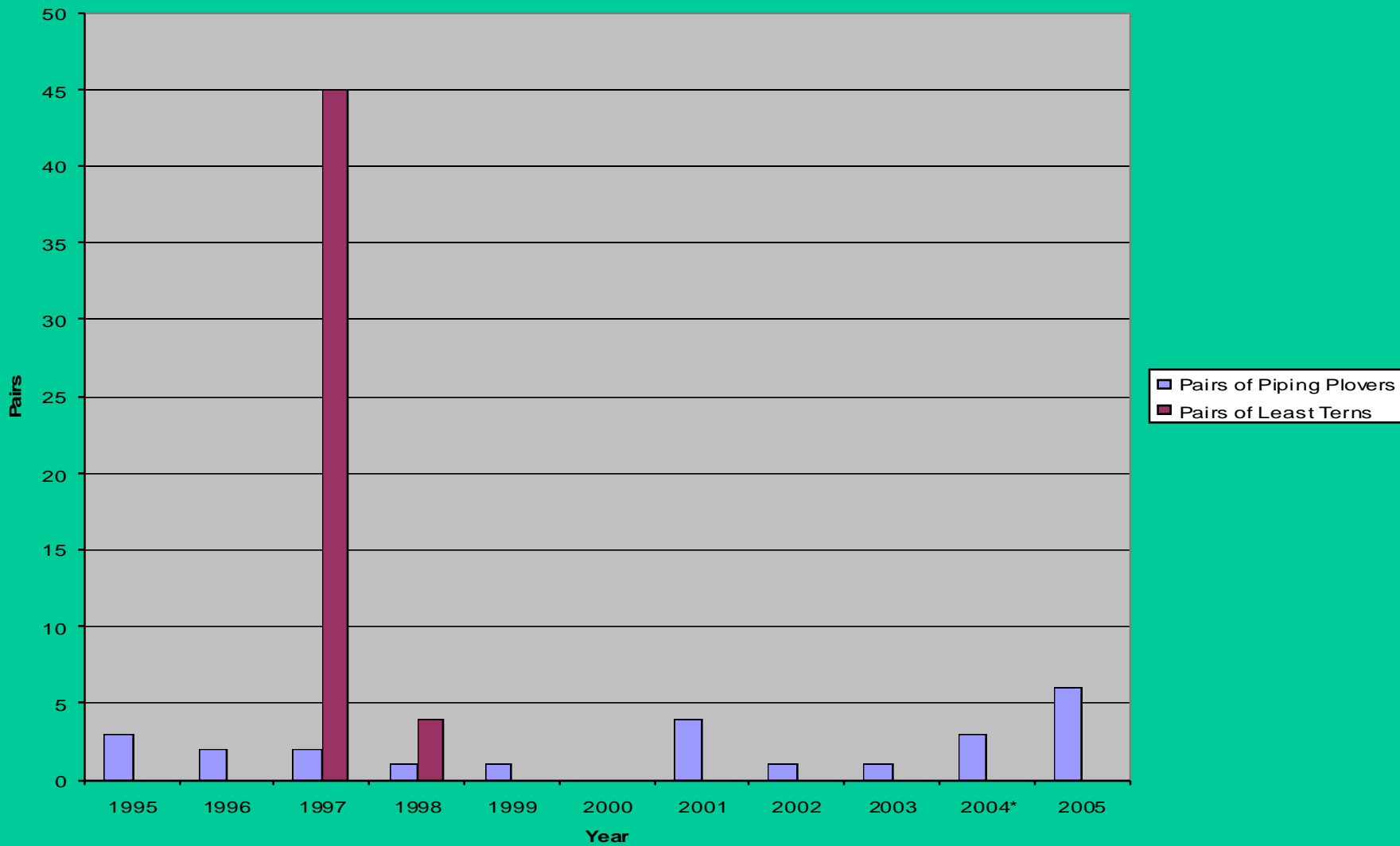


Table . Ten Years of Piping Plover Breeding Statistics for Hicks Island and Sammy's Beach

Hicks Island				Sammy's Beach			
Year	Pairs	Fledges	Productivity	Year	Pairs	Fledges	Productivity
1995	3	5	1.67	1995	2	2	1
1996	2	2	1	1996	1	3	3
1997	2	1	0.5	1997	2	0	0
1998	1	1	1	1998	1	0	0
1999	1	0	0	1999*	1	3	3
2000				2000	5	5	1
2001	4	7	1.75	2001	6	10	1.67
2002	1	0	0	2002	6	6	1
2003	1	0	0	2003	4	0	0
2004*	3	7	2.33	2004	2	6	3
2005	6	12	2	2005	3	8	2.67

Table . Ten Years of Least Tern Breeding Statistics for Hicks Island and Sammy's Beach

Hicks Island				Sammy's Beach			
Year	Pairs	Fledges	Productivity	Year	Pairs	Fledges	Productivity
1995	?	0	0	1995	0	0	0
1996	?	0	0	1996	15	0	0
1997	45	0	0	1997	0	0	0
1998	4	0	0	1998	0	0	0
1999	0	0	0	1999*	5	0	0
2000	0	0	0	2000	50+	50+	1
2001	0	0	0	2001	100	50	0.5
2002	0	0	0	2002	35	5	0.2-0.14
2003	0	0	0	2003	16	0	0
2004*	0	0	0	2004	3	0	0
2005	0	0	0	2005	5	0	0

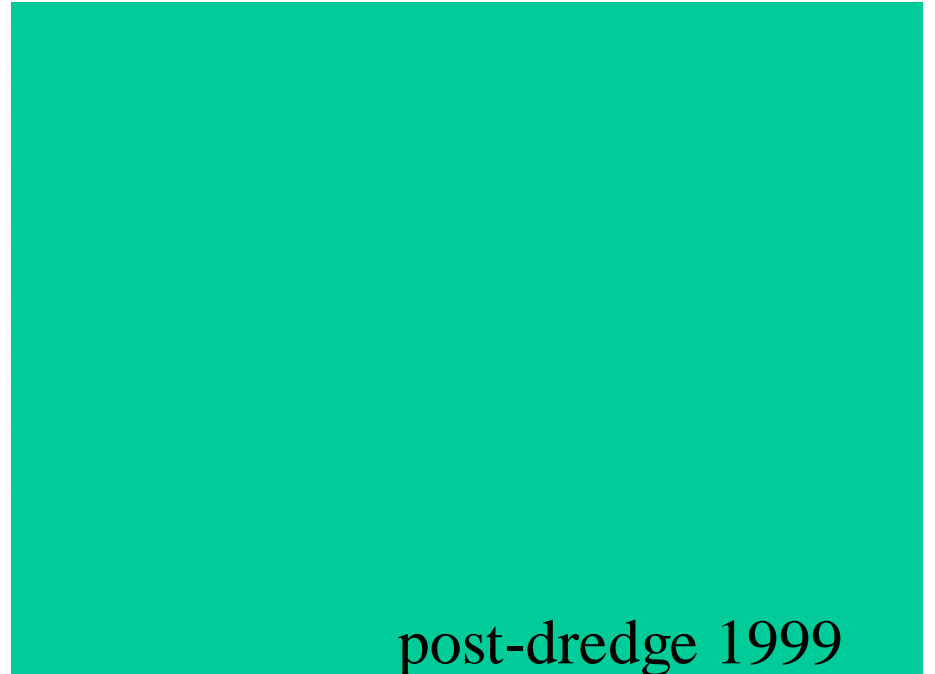
* Dredge Years



2004 Ortho Vertical Photograph



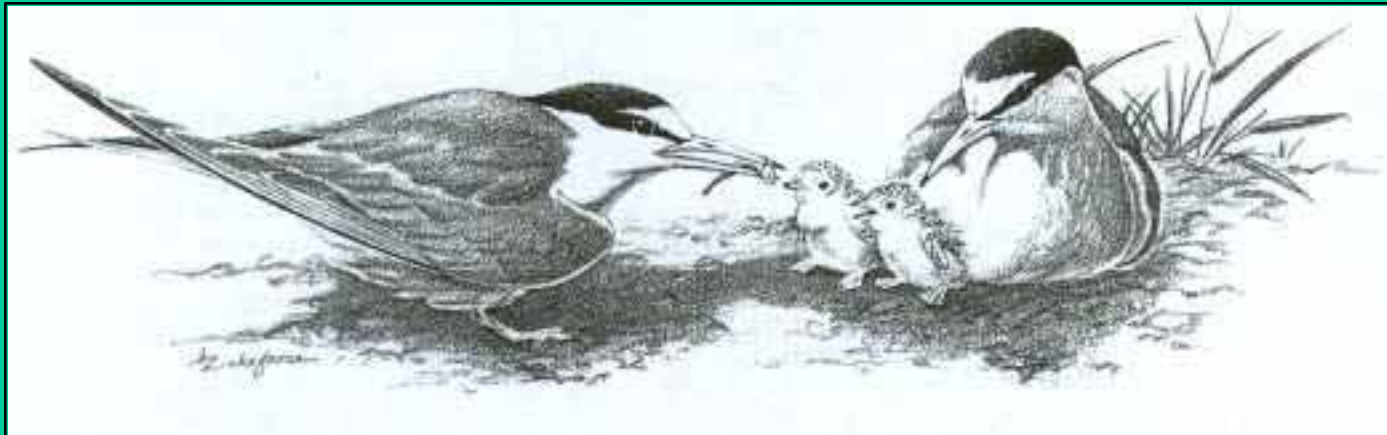
pre-dredge 1996



post-dredge 1999

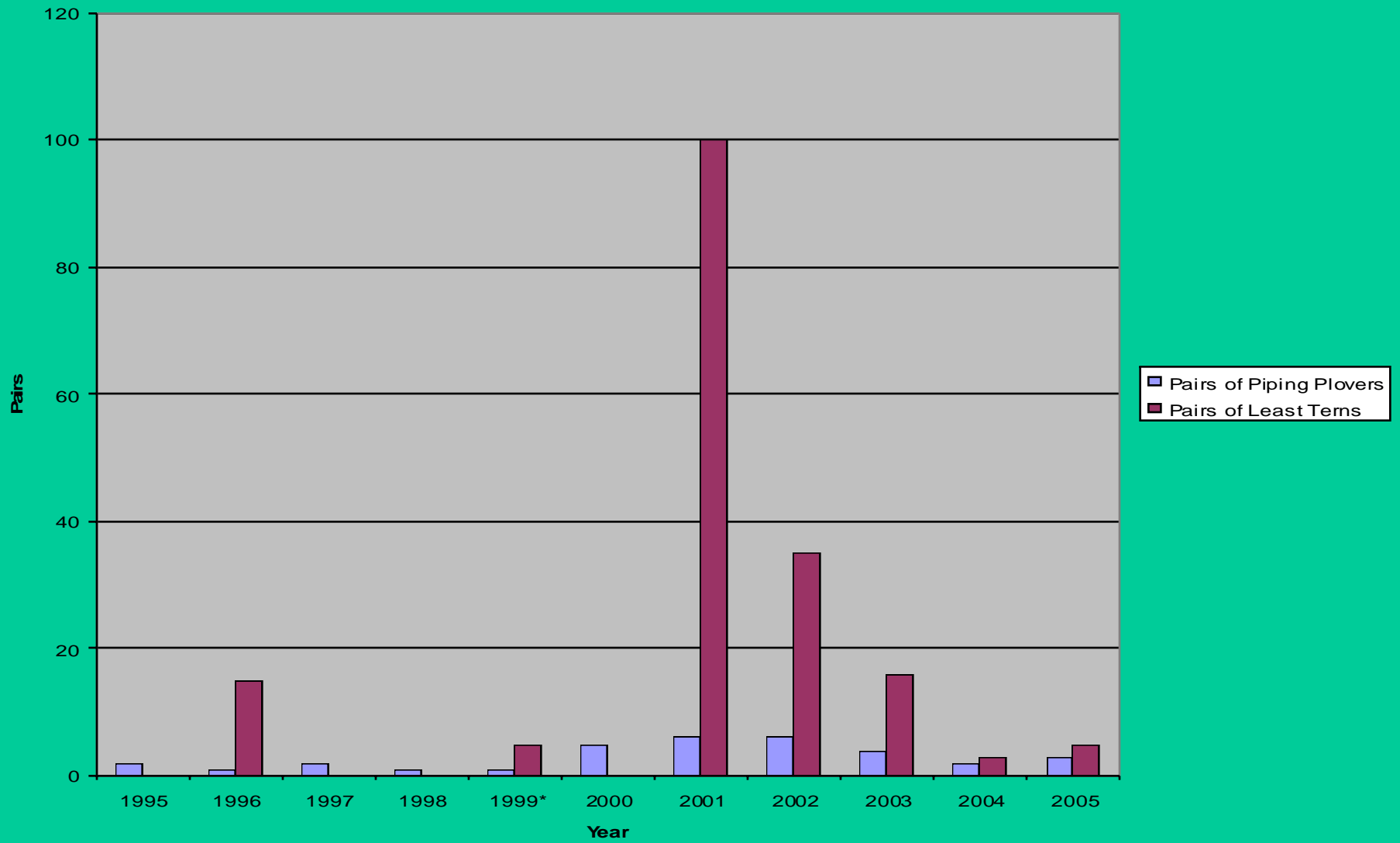








Piping Plover and Least Tern Breeding on Sammys Beach

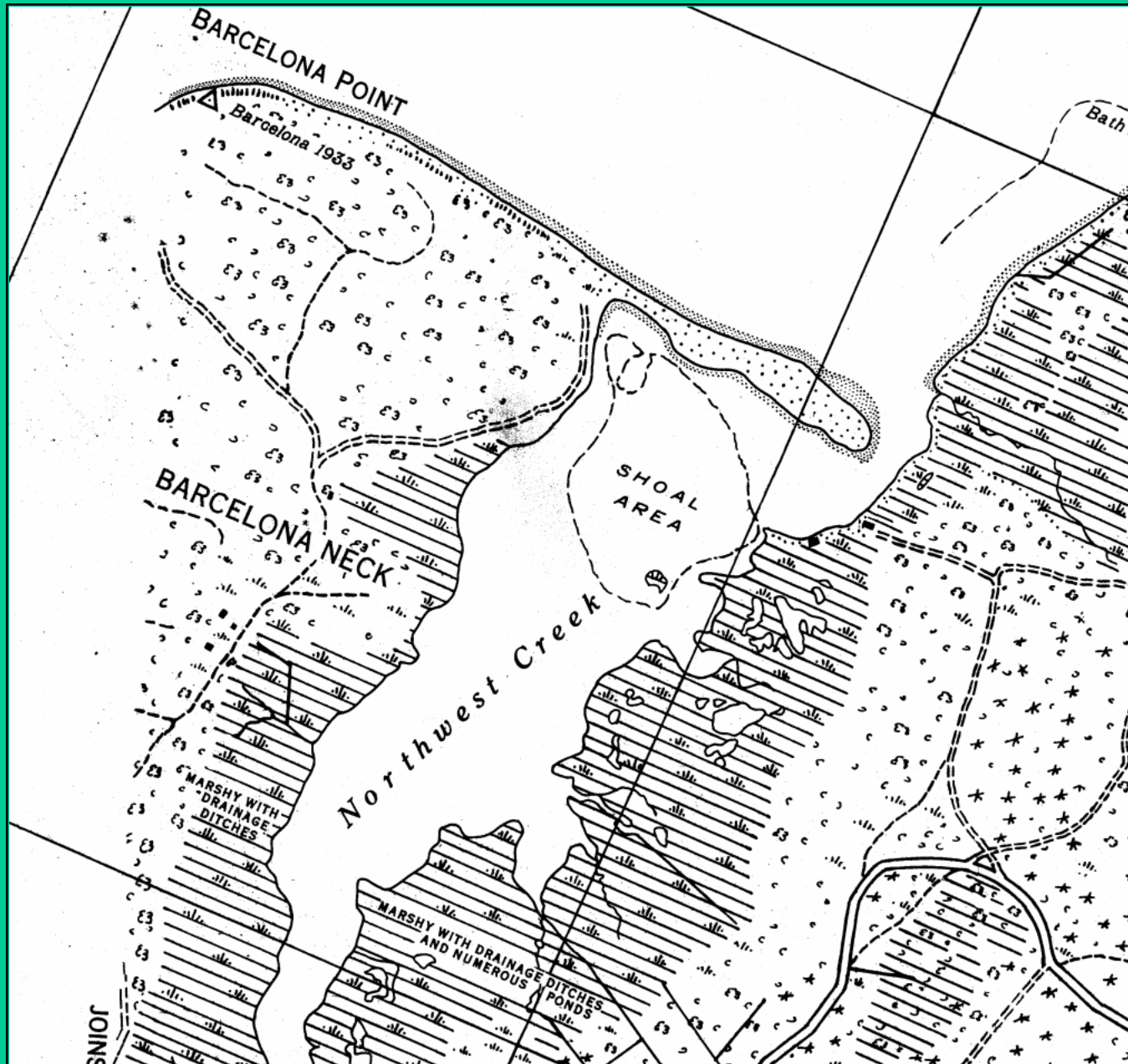




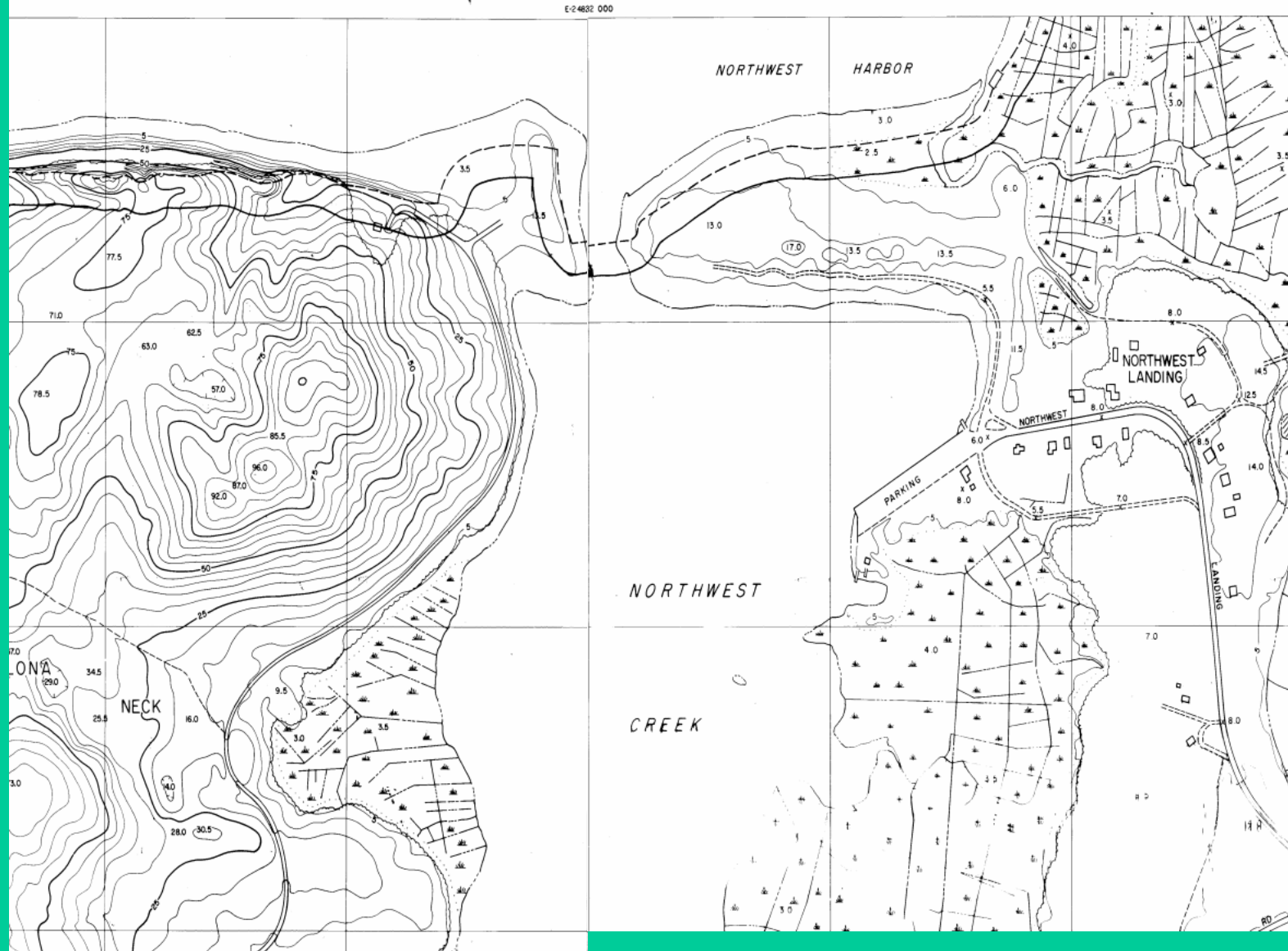
USCS 1838

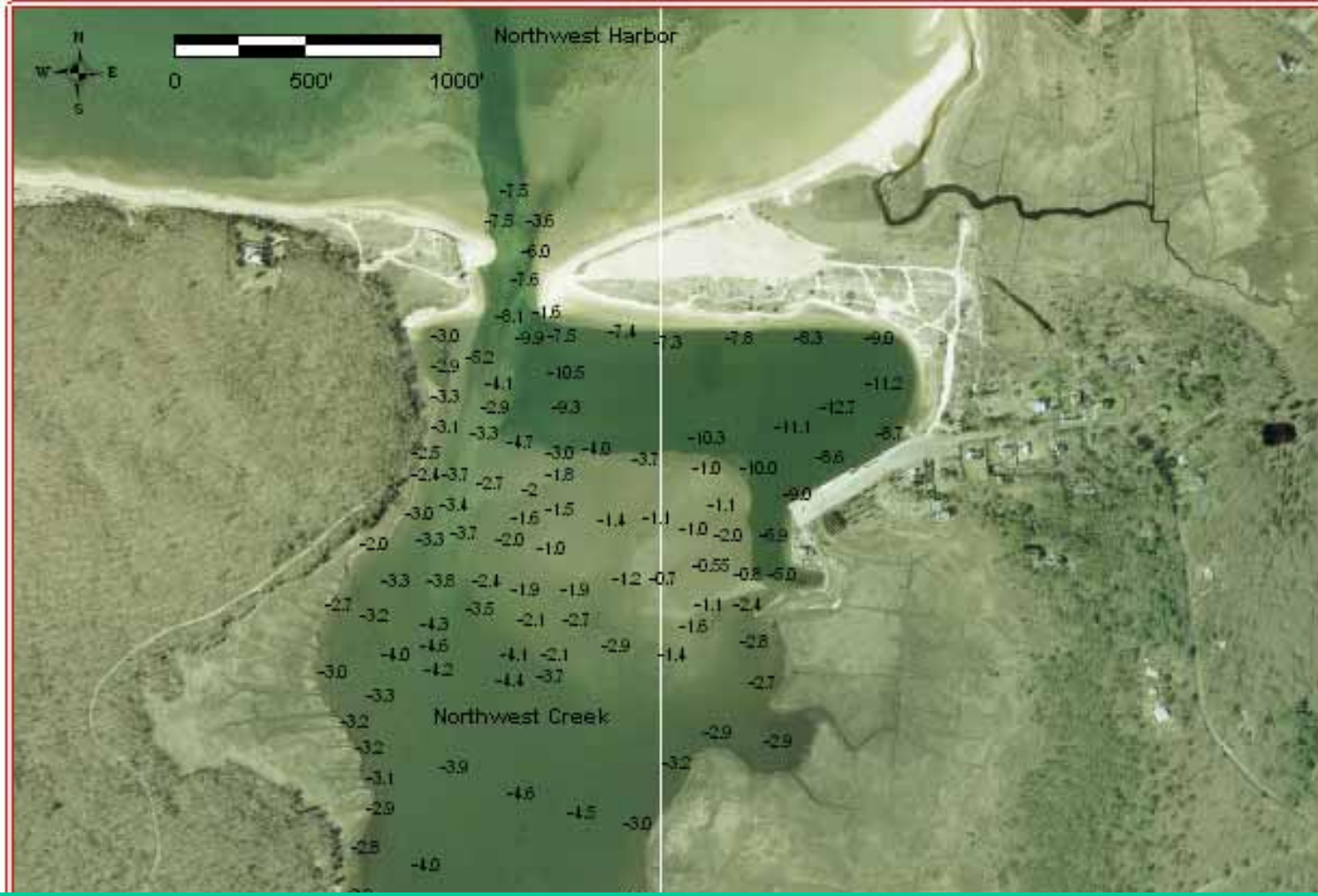


USCGS 1933



1974 topo





SHORT COASTAL STORM HISTORY—East Hampton Town

Year	Month	Type of Storm	Severity (1-5)
1938	September	T	5
1944	September	T	3
1954	August	T	4
1955	August	T	3
1962	November	NE	4
1976	July	T	3
1984	March	NE	4
1985	September	T	4
1991	August	T	3
1991	October	T-NE	4
1992	December	NE	4
1993	March	NE	4
1995	July	T	2
1997	July	T	2
2000	April	NE	2
2001	October	T	2
2005	February	NE	2
2005	March	NE	3
2005	May	NE	3
2005	October	NE	4
2005	October	NE	4