APPENDIX A
DATA BIBLIOGRAPHY

APPENDIX A-DATA BIBLIOGRAPHY

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APPENDIX B
BEACH NOURISHMENT DATABASE

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Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 1	Bald Head Island	1991	2.16	350,000	$393,750	$691,010	$1.13	Local/Private	
Region 1	Bald Head Island	1992	2.33	800,000	$900,000	$1,532,501	$1.13	Federal	
Region 1	Bald Head Island	1996	2.46	650,000	$3,363,684	$5,145,509	$5.17	Local/Private	
Region 1	Bald Head Island	1997	1.97	455,789	$2,358,662	$3,492,073	$5.17	Local/Private	
Region 1	Bald Head Island	2001	3.10	1,849,000	$15,979,058	$21,563,661	$8.64	Federal	Initial Construction New 44' Channel
Region 1	Bald Head Island	2005	1.59	1,217,500	$10,913,062	$13,465,662	$8.96	Federal	1st Maintenance
Region 1	Bald Head Island	2006	0.34	47,800	$428,455	$511,211	$8.96	Local/Private	Shore Protection
Region 1	Bald Head Island	2007	2.03	978,500	$8,770,785	$10,205,586	$8.96	Federal	2nd Maintenance
Region 1	Bald Head Island	2010	3.30	1,850,000	$18,075,792	$19,654,636	$9.77	Local/Private	Shore Protection
Region 1	Bald Head Island	2012	0.26	137,990	$1,705,124	$1,774,178	$12.36	Federal/Local	Post-Irene Mitigation Project (FEMA)
Region 1	Bald Head Island	2013	2.37	1,519,611	$16,074,288	$16,439,096	$10.58	Federal	
Region 1	Bald Head Island	2015	2.13	1,330,000	$12,700,000	$12,700,000	$9.55	Federal	
Region 1	Caswell Beach	2001	0.38	133,200	$2,019,286	$2,725,017	$15.16	Federal	Initial Construction New 44' Channel
Region 1	Caswell Beach	2009	0.66	123,400	$1,152,598	$1,287,384	$9.34	Federal	Navigation
Region 1	Holden Beach	1971	0.21	108,802	$70,259	$414,520	$0.65	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1973	0.21	108,627	$103,998	$574,585	$0.96	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1974	0.18	92,774	$103,276	$524,914	$1.11	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1975	0.12	62,303	$79,063	$357,710	$1.27	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1977	0.14	76,149	$120,364	$485,621	$1.58	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1981	0.05	24,320	$53,599	$145,838	$2.20	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1982	0.26	135,581	$305,392	$762,875	$2.25	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1982	0.08	42,025	$17,559	$43,863	$0.42	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1983	0.39	203,555	$341,988	$822,775	$1.68	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1983	0.07	37,980	$112,386	$270,385	$2.96	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1984	0.15	76,867	$211,334	$489,868	$2.75	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1984	0.23	122,519	$336,847	$780,804	$2.75	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1985	0.17	92,236	$143,028	$318,943	$1.55	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1986	0.18	95,927	$177,041	$380,341	$1.85	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1986	0.10	54,830	$101,193	$217,396	$1.85	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1987	0.33	173,963	$272,639	$579,357	$1.57	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1987	0.10	51,613	$80,889	$171,889	$1.57	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1988	0.11	59,411	$121,091	$246,392	$2.04	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1990	0.02	8,615	$73,853	$137,522	$8.57	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1992	0.11	55,665	$132,000	$224,767	$2.37	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1993	0.26	135,555	$318,993	$527,858	$2.35	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1994	0.15	80,505	$229,379	$369,418	$2.85	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1995	0.05	26,265	$87,859	$137,811	$3.35	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1996	0.01	4,370	$24,175	$36,981	$5.53	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1997	0.18	93,200	$282,000	$417,510	$3.03	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1998	0.68	444,699	$1,345,746	$1,959,061	$3.03	Federal	Storm and Erosion
Region 1	Holden Beach	1998	0.07	39,125	$118,400	$172,360	$3.03	Federal	USACE Navigation Dredging
Region 1	Holden Beach	1999	0.04	23,690	$79,700	$114,182	$3.36	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2000	0.09	45,535	$144,400	$201,466	$3.17	Federal	USACE Navigation Dredging

*Values in red are estimated

Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 1	Holden Beach	2001	2.10	501,400	$1,741,980	$2,350,794	$3.47	Federal	Initial Construction New 44' Channel
Region 1	Holden Beach	2001	0.07	34,540	$120,000	$161,939	$3.47	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2002	1.25	141,700	$506,571	$673,167	$3.57	Local	
Region 1	Holden Beach	2002	0.04	19,245	$68,800	$91,426	$3.57	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2003	1.61	27,994	$409,600	$531,668	$14.63	Local	
Region 1	Holden Beach	2003	0.00	820	$7,650	$9,930	$9.33	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2004	0.21	113,230	$834,566	$1,063,302	$7.37	Federal	
Region 1	Holden Beach	2004	0.85	123,000	$1,014,750	$1,292,869	$8.25	Local	
Region 1	Holden Beach	2005	0.04	22,670	$65,075	$80,296	$2.87	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2006	0.57	45,200	$372,900	$444,925	$8.25	Local	
Region 1	Holden Beach	2006	0.47	62,853	$490,899	$585,715	$7.81	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2008	1.14	201,000	$1,658,250	$1,853,858	$8.25	Local	
Region 1	Holden Beach	2009	0.38	163,798	$1,405,377	$1,569,722	$8.58	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2009	1.89	190,000	$1,567,500	$1,750,804	$8.25	Local	
Region 1	Holden Beach	2010	0.66	155,289	$1,400,655	$1,522,997	$9.02	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2011	0.38	56,251	$678,513	$726,907	$12.06	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2012	0.19	15,493	$160,844	$167,358	$10.38	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2014	0.61	90,856	$1,169,425	$1,178,269	$12.87	Federal	USACE Navigation Dredging
Region 1	Holden Beach	2014	0.44	95,000	$1,222,763	$1,232,011	$12.87	Local	
Region 1	Holden Beach	2015	0.57	24,000	$308,908	$308,908	$12.87	Local	USACE Navigation Dredging
Region 1	Oak Island	1986	0.25	130,000	$215,000	$461,890	$1.65	Federal	Navigation
Region 1	Oak Island	1989	0.20	104,803	$489,023	$952,934	$4.67	Federal	Navigation
Region 1	Oak Island	1993	0.30	160,091	$1,389,987	$2,300,102	$8.68	Federal	Navigation
Region 1	Oak Island	2001	3.28	1,048,600	$9,062,001	$12,229,126	$8.64	Federal	Initial Construction New 44' Channel
Region 1	Oak Island	2001	4.74	1,269,800	$10,973,612	$14,808,835	$8.64	Federal	Initial Construction New 44' Channel
Region 1	Oak Island	2001	2.29	2,650,000	$8,509,669	$11,483,757	$3.21	Federal	Sea Turtle Habitat Restoration
Region 1	Oak Island	2009	2.65	941,000	$9,147,032	$10,216,689	$9.72	Federal	
Region 1	Oak Island	2009	0.04	19,220	$186,829	$208,677	$9.72	Federal	Navigation
Region 1	Oak Island	2015	0.55	221,773	$3,750,000	$3,750,000	$16.91	Local	Eastern Channel
Region 1	Ocean Isle Beach	1974	0.16	82,831	$92,207	$468,656	$1.11	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	1976	0.06	30,925	$44,063	$186,426	$1.42	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	1980	0.07	37,325	$82,261	$251,838	$2.20	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	1983	0.10	54,905	$162,468	$390,876	$2.96	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	1984	0.07	38,880	$106,895	$247,779	$2.75	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	1986	0.06	30,630	$56,530	$121,445	$1.85	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	1989	0.09	48,614	$99,085	$193,081	$2.04	Federal	Navigation
Region 1	Ocean Isle Beach	2001	3.25	1,866,159	$6,380,069	$8,609,872	$3.42	Federal	CSDR/Initial Construction
Region 1	Ocean Isle Beach	2006	0.15	48,000	$500,000	$596,574	$10.42	Federal	Navigation
Region 1	Ocean Isle Beach	2006	1.17	449,367	$2,851,490	$3,402,250	$6.35	Federal	CSDR/Renourishment 1
Region 1	Ocean Isle Beach	2007	0.38	155,000	$720,000	$837,784	$4.65	Local	Supplimental to CSDR
Region 1	Ocean Isle Beach	2009	0.27	144,907	$1,408,575	$1,573,294	$9.72	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	2010	0.12	65,840	$593,855	$645,726	$9.02	Federal	Navigation
Region 1	Ocean Isle Beach	2010	2.18	509,200	$4,572,489	$4,971,876	$8.98	Federal	CSDR/Renourishment/Maintenance Dredging

*Values in red are estimated

Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 1	Ocean Isle Beach	2011	0.09	48,083	$579,989	$621,355	$12.06	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	2012	0.08	41,961	$435,627	$453,269	$10.38	Federal	USACE Navigation Dredging
Region 1	Ocean Isle Beach	2014	0.11	59,751	$769,066	$774,883	$12.87	Federal	Navigation
Region 1	Ocean Isle Beach	2014	1.52	767,412	$8,569,514	$8,634,327	$11.17	Federal	CSDR
Region 2a	Carolina Beach	1955	0.48	252,000	$50,000	$439,730	$0.20	Federal	
Region 2a	Carolina Beach	1956	0.38	200,000	$39,683	$347,698	$0.20	State/Local	
Region 2a	Carolina Beach	1965	2.65	3,597,362	$925,506	$6,965,570	$0.26	Federal	CSDR/Initial Construction
Region 2a	Carolina Beach	1967	0.80	389,959	$186,308	$1,329,757	$0.48	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1968	0.18	97,000	$46,343	$321,002	$0.48	Federal	
Region 2a	Carolina Beach	1970	1.14	282,423	$291,159	$1,813,494	$1.03	Federal	CSDR/Emergency
Region 2a	Carolina Beach	1971	2.20	734,140	$517,897	$3,055,534	$0.71	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1972	0.03	18,816	$19,489	$111,344	$1.04	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1973	0.06	30,547	$40,088	$221,488	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1974	0.13	66,687	$87,517	$444,817	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1975	0.08	40,804	$53,549	$242,275	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1976	0.23	119,971	$157,444	$666,134	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1977	0.12	62,066	$81,453	$328,628	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1979	0.44	230,866	$302,978	$1,050,852	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1980	0.07	38,075	$49,968	$152,975	$1.31	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1981	0.21	109,176	$174,002	$473,443	$1.59	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1981	1.14	406,352	$1,051,774	$2,861,777	$2.59	Federal	CSDR/Emergency
Region 2a	Carolina Beach	1982	2.70	3,662,181	$8,384,406	$20,944,407	$2.29	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1983	0.23	119,244	$190,048	$457,229	$1.59	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1985	0.05	28,267	$45,051	$100,461	$1.59	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	1985	1.14	764,162	$1,652,004	$3,683,854	$2.16	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1988	1.08	950,913	$1,890,535	$3,846,803	$1.99	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1989	0.19	98,843	$240,096	$467,863	$2.43	Federal	
Region 2a	Carolina Beach	1991	2.20	1,008,736	$2,450,286	$4,300,121	$2.43	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1995	2.20	1,157,742	$3,185,642	$4,996,841	$2.75	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	1998	2.28	1,204,646	$3,061,390	$4,456,598	$2.54	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	2001	1.07	567,345	$2,096,174	$2,828,777	$3.69	Federal	CSDR/Renourishment
Region 2a	Carolina Beach	2004	1.52	800,400	$2,909,500	$3,706,926	$3.64	Federal	CSDR
Region 2a	Carolina Beach	2007	1.00	632,143	$3,000,000	$3,490,766	$4.75	Federal	CSDR
Region 2a	Carolina Beach	2008	0.22	115,269	$1,043,999	$1,167,150	$9.06	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	2010	0.28	146,616	$1,322,428	$1,437,936	$9.02	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	2010	1.48	689,600	$6,192,436	$6,733,319	$8.98	Federal	CSDR/Renourishment/Maintenance Dredging
Region 2a	Carolina Beach	2011	0.08	40,739	$491,404	$526,452	$12.06	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	2012	0.10	54,530	$566,115	$589,041	$10.38	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	2013	0.18	96,228	$1,130,324	$1,155,977	$11.75	Federal	USACE Navigation Dredging
Region 2a	Carolina Beach	2013	1.89	989,200	$10,463,655	$10,701,129	$10.58	Federal	CSDR/Renourishment
Region 2a	Figure Eight Island	1977	0.02	13,000	$33,297	$134,340	$2.56	Private	
Region 2a	Figure Eight Island	1979	0.34	181,949	$405,760	$1,407,342	$2.23	Federal	USACE Navigation Dredging
Region 2a	Figure Eight Island	1983	0.38	90,000	$266,318	$640,722	$2.96	Local/Private	Beach Nourishment

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Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 2a	Figure Eight Island	1985	0.38	46,300	$71,796	$160,101	$1.55	Local/Private	Beach Nourishment
Region 2a	Figure Eight Island	1985	0.38	120,000	$186,081	$414,948	$1.55	Local/Private	Beach Nourishment
Region 2a	Figure Eight Island	1986	0.38	250,000	$344,657	$740,436	$1.38	Local/Private	
Region 2a	Figure Eight Island	1992	1.84	550,000	$618,750	$1,053,594	$1.13	Local/Private	Beach Nourishment
Region 2a	Figure Eight Island	1992	0.85	153,000	$820,435	$1,397,020	$5.36	Local/Private	Beach Nourishment
Region 2a	Figure Eight Island	1993	0.57	275,000	$429,812	$711,238	$1.56	Local/Private	
Region 2a	Figure Eight Island	1997	0.47	250,000	$990,053	$1,465,804	$3.96	Local/Private	Shore Protection
Region 2a	Figure Eight Island	1998	0.85	450,000	$1,702,834	$2,478,890	$3.78	Local/Private	
Region 2a	Figure Eight Island	1999	1.70	400,000	$1,604,659	$2,298,917	$4.01	Local/Private	
Region 2a	Figure Eight Island	2002	0.95	500,572	$2,753,146	$3,658,573	$5.50	Local/Private	Mason Inlet Relocation
Region 2a	Figure Eight Island	2003	0.17	90,000	$495,000	$642,519	$5.50	Local/Private	
Region 2a	Figure Eight Island	2005	0.35	183,000	$1,006,500	$1,241,924	$5.50	Local/Private	Mason Inlet Relocation
Region 2a	Figure Eight Island	2005	0.49	261,235	$1,436,793	$1,772,863	$5.50	Local/Private	Shore Protection
Region 2a	Figure Eight Island	2006	0.34	180,000	$990,000	$1,181,216	$5.50	Local/Private	Navigation
Region 2a	Figure Eight Island	2006	0.28	148,969	$819,330	$977,581	$5.50	Local/Private	Navigation
Region 2a	Figure Eight Island	2008	0.60	314,943	$1,732,187	$1,936,516	$5.50	Local/Private	Mason Inlet Relocation
Region 2a	Figure Eight Island	2008	0.09	47,946	$263,703	$294,809	$5.50	Local/Private	Navigation
Region 2a	Figure Eight Island	2009	0.59	311,006	$1,710,533	$1,910,563	$5.50	Local/Private	Mason Inlet Relocation
Region 2a	Figure Eight Island	2009	0.56	295,000	$1,622,500	$1,812,236	$5.50	Local/Private	Shore Protection
Region 2a	Figure Eight Island	2011	0.52	275,000	$1,512,500	$1,620,376	$5.50	Local/Private	Shore Protection
Region 2a	Figure Eight Island	2011	0.65	344,832	$1,896,576	$2,031,845	$5.50	Local/Private	Mason Inlet Relocation
Region 2a	Figure Eight Island	2013	0.60	317,100	$1,744,050	$1,783,631	$5.50	Local/Private	Mason Inlet Relocation
Region 2a	Figure Eight Island	2013	0.12	65,000	$357,500	$365,614	$5.50	Local/Private	
Region 2a	Kure Beach	1998	3.41	3,384,854	$9,293,200	$13,528,513	$2.75	Federal	CSDR/Initial Construction
Region 2a	Kure Beach	2001	3.41	1,034,458	$5,356,654	$7,228,778	$5.18	Federal	CSDR/Renourishment
Region 2a	Kure Beach	2004	1.14	278,161	$2,380,000	$3,032,302	$8.56	Federal	CSDR
Region 2a	Kure Beach	2007	0.80	262,790	$3,100,000	$3,607,125	$11.80	Federal	CSDR/Renourishment
Region 2a	Kure Beach	2010	1.55	446,967	$4,013,652	$4,364,228	$8.98	Federal	CSDR
Region 2a	Kure Beach	2013	3.13	557,702	$5,899,314	$6,033,200	$10.58	Federal	CSDR/Renourishment
Region 2a	Masonboro Island	1986	0.95	1,098,928	$1,629,013	$3,499,652	$1.48	Federal	
Region 2a	Masonboro Island	1994	0.45	362,009	$892,995	$1,438,180	$2.47	Federal	Navigation
Region 2a	Masonboro Island	1998	1.04	555,654	$1,328,131	$1,933,418	$2.39	Federal	
Region 2a	Masonboro Island	2002	1.14	518,826	$1,473,802	$1,958,491	$2.84	Federal	
Region 2a	Masonboro Island	2006	0.76	120,000	$2,258,189	$2,694,354	$18.82	Federal	
Region 2a	Masonboro Island	2010	1.61	579,269	$5,201,691	$5,656,037	$8.98	Federal	Renourishment/Maintenance Dredging
Region 2a	Wrightsville Beach	1939	2.60	700,000	$98,000	$1,643,676	$0.14	State/Local	
Region 2a	Wrightsville Beach	1955	0.07	38,000	$18,084	$159,039	$0.48	State/Local	
Region 2a	Wrightsville Beach	1956	0.07	35,000	$17,391	$152,378	$0.50	State/Local	
Region 2a	Wrightsville Beach	1957	0.58	304,000	$157,433	$1,339,404	$0.52	State/Local	
Region 2a	Wrightsville Beach	1959	1.50	100,000	$55,986	$454,900	$0.56	State/Local	
Region 2a	Wrightsville Beach	1965	2.65	2,993,100	$739,339	$5,564,434	$0.25	Federal	CSDR/Initial Construction
Region 2a	Wrightsville Beach	1966	2.27	362,108	$255,941	$1,889,889	$0.71	Federal	CSDR/Deposotion Basin/Nourishment
Region 2a	Wrightsville Beach	1970	1.52	1,436,533	$578,545	$3,603,488	$0.40	Federal	CSDR/PL99,O&M,CG

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Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 2a	Wrightsville Beach	1980	0.07	36,108	$68,831	$210,722	$1.91	Federal	USACE Navigation Dredging
Region 2a	Wrightsville Beach	1980	1.52	540,715	$1,030,736	$3,155,555	$1.91	Federal	CSDR/PL99
Region 2a	Wrightsville Beach	1981	1.52	1,249,699	$4,427,792	$12,047,600	$3.54	Federal	CSDR/PL99,O&M,CG,Sec 111
Region 2a	Wrightsville Beach	1982	0.24	124,533	$166,270	$415,345	$1.34	Federal	USACE Navigation Dredging
Region 2a	Wrightsville Beach	1983	0.18	93,755	$277,429	$667,455	$2.96	Federal	USACE Navigation Dredging
Region 2a	Wrightsville Beach	1985	0.04	19,399	$30,082	$67,080	$1.55	Federal	USACE Navigation Dredging
Region 2a	Wrightsville Beach	1986	1.30	898,593	$1,331,715	$2,860,959	$1.48	Federal	CSDR/Sand Bypassing
Region 2a	Wrightsville Beach	1987	0.14	76,556	$119,980	$254,958	$1.57	Federal	USACE Navigation Dredging
Region 2a	Wrightsville Beach	1989	0.18	96,771	$476,749	$929,015	$4.93	Federal	
Region 2a	Wrightsville Beach	1991	1.30	1,016,684	$2,682,412	$4,707,490	$2.64	Federal	CSDR/Sch'ld Nourishment & Bypassing
Region 2a	Wrightsville Beach	1994	1.21	619,031	$1,973,591	$3,178,493	$3.19	Federal	CSDR/Sch'ld Nourishment & Bypassing
Region 2a	Wrightsville Beach	1998	1.89	1,116,573	$2,890,256	$4,207,471	$2.59	Federal	CSDR/Sch'ld Nourishment & Bypassing (CG,O&M)
Region 2a	Wrightsville Beach	2002	0.60	319,428	$1,756,854	$2,334,631	$5.50	State/Local	Mason Inlet Relocation
Region 2a	Wrightsville Beach	2002	1.72	783,690	$2,382,924	$3,166,596	$3.04	Federal	CSDR
Region 2a	Wrightsville Beach	2005	0.02	10,000	$100,000	$123,390	$10.00	Federal	
Region 2a	Wrightsville Beach	2006	1.61	531,717	$5,004,977	$5,971,678	$9.41	Federal	CSDR
Region 2a	Wrightsville Beach	2010	1.31	451,000	$4,049,867	$4,403,606	$8.98	Federal	CSDR/Renouishment/Maintenance Dredging
Region 2a	Wrightsville Beach	2014	1.61	756,164	$8,443,910	$8,507,773	$11.17	Federal	CSDR
Region 2b	Onslow	1990	0.76	101,653	$417,984	$778,332	$4.11	Federal	USACE Navigation Dredging
Region 2b	Onslow	2008	0.23	123,382	$1,117,479	$1,249,297	$9.06	Federal	USACE Navigation Dredging
Region 2b	Onslow	2010	0.19	101,576	$916,182	$996,206	$9.02	Federal	USACE Navigation Dredging
Region 2b	Onslow	2012	0.15	79,218	$930,520	$968,204	$11.75	Federal	USACE Navigation Dredging
Region 2b	Topsail Island	1982	0.10	51,715	$69,047	$172,481	$1.34	Federal	USACE Navigation Dredging
Region 2b	Topsail Island	1988	0.29	151,017	$423,256	$861,229	$2.80	Federal	USACE Navigation Dredging
Region 2b	Topsail Island	1992	0.14	75,519	$177,830	$302,805	$2.35	Federal	
Region 2b	Topsail Island	1993	0.15	80,162	$269,659	$446,222	$3.36	Federal	
Region 2b	Topsail Island	1995	0.07	38,883	$269,659	$422,974	$6.94	Federal	
Region 2b	Topsail Island	2002	0.53	280,000	$1,970,863	$2,619,021	$7.04	Federal	USACE Navigation Dredging/NTB
Region 2b	Topsail Island	2004	0.15	77,004	$985,230	$1,255,258	$12.79	Federal	USACE Navigation Dredging/NTB
Region 2b	Topsail Island	2005	0.11	58,000	$1,500,000	$1,850,855	$25.86	Federal	
Region 2b	Topsail Island	2006	0.19	100,530	$1,047,188	$1,249,450	$10.42	Federal	USACE Navigation Dredging
Region 2b	Topsail Island	2007	0.76	160,000	$770,370	$896,394	$4.81	Federal	
Region 2b	Topsail Island	2008	0.16	85,402	$773,492	$864,733	$9.06	Federal	NTB
Region 2b	Topsail Island	2010	0.34	181,356	$1,635,771	$1,778,649	$9.02	Federal	NTB
Region 2b	Topsail Island	2011	4.73	979,000	$8,245,000	$8,833,056	$8.42	Local	TI
Region 2b	Topsail Island	2011	0.10	54,722	$660,070	$707,148	$12.06	Federal	USACE Navigation Dredging/NTB
Region 2b	Topsail Island	2011	0.13	68,564	$827,036	$886,022	$12.06	Federal	USACE Navigation Dredging/SC
Region 2b	Topsail Island	2012	0.35	184,078	$3,041,920	$3,165,111	$16.53	Federal	TB
Region 2b	Topsail Island	2013	0.22	117,404	$1,379,064	$1,410,362	$11.75	Federal	USACE Navigation Dredging
Region 2b	Topsail Island	2013	1.46	566,000	$5,711,260	$5,840,878	$10.09	Local	NTB
Region 2b	Topsail Island	2015	1.58	835,123	$10,347,748	$10,347,748	$12.39	Local	TB
Region 2b	Topsail Island	2015	3.50	1,250,000	$16,815,000	$16,815,000	$13.45	Local	NTB
Region 2c	Atlantic Beach/Ft. Macon	1958	0.19	100,000	$36,597	$302,596	$0.37	Federal	

*Values in red are estimated

Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 2c	Atlantic Beach/Ft. Macon	1961	1.45	765,600	$952,000	$7,501,590	$1.24	Federal	
Region 2c	Atlantic Beach/Ft. Macon	1965	0.18	92,800	$23,399	$176,106	$0.25	Federal	
Region 2c	Atlantic Beach/Ft. Macon	1969	0.20	105,000	$66,900	$442,506	$0.64	Federal	
Region 2c	Atlantic Beach/Ft. Macon	1973	0.96	504,266	$414,807	$2,291,803	$0.82	Federal	
Region 2c	Atlantic Beach/Ft. Macon	1978	2.23	1,179,600	$1,565,177	$5,918,223	$1.33	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	1986	7.41	4,168,600	$5,316,038	$11,420,585	$1.28	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	1994	4.69	4,664,000	$3,794,727	$6,111,456	$0.81	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	2002	0.40	209,348	$2,800,000	$3,720,836	$13.37	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	2005	4.30	2,920,729	$10,600,000	$13,079,374	$3.63	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	2007	0.40	211,000	$1,184,500	$1,378,271	$5.61	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	2011	3.15	1,346,700	$12,762,429	$13,672,680	$9.48	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	2014	1.80	1,107,585	$9,415,774	$9,486,987	$8.50	Federal	Dredge Disposal to Eastern Bogue Banks
Region 2c	Atlantic Beach/Ft. Macon	2015	0.45	150,000	$1,275,176	$1,275,176	$8.50	Federal	
Region 2c	Cape Lookout	2006	0.49	75,700	$926,000	$1,104,855	$12.23	Federal	
Region 2c	Emerald Isle	1984	0.03	15,000	$59,563	$138,065	$3.97	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1987	0.06	30,000	$47,017	$99,910	$1.57	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1989	0.09	45,399	$223,661	$435,837	$4.93	Federal	USACE Navigation Dredging
Region 2c	Emerald Isle	1990	0.11	56,000	$355,165	$661,357	$6.34	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1993	0.03	17,000	$81,598	$135,025	$4.80	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1995	0.06	33,000	$149,117	$233,897	$4.52	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1996	0.13	71,000	$392,775	$600,837	$5.53	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1997	0.07	39,000	$193,546	$286,551	$4.96	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	1999	0.09	48,000	$266,548	$381,871	$5.55	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	2000	0.03	16,000	$93,986	$131,129	$5.87	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	2003	0.11	59,000	$579,399	$752,070	$9.82	Federal	Bogue Inlet Dredging
Region 2c	Emerald Isle	2003	5.89	1,867,726	$11,711,630	$15,201,898	$6.27	Local/Private	Bogue Banks Restoration-Phase II
Region 2c	Emerald Isle	2004	2.37	156,000	$2,000,000	$2,548,153	$12.82	FEMA	Isabel Sand Replenishment
Region 2c	Emerald Isle	2005	4.50	710,000	$9,800,000	$12,092,252	$13.80	Local/State	Bogue Banks Restoration-Phase III
Region 2c	Emerald Isle	2006	0.15	76,732	$799,292	$953,673	$10.42	Federal	USACE Navigation Dredging
Region 2c	Emerald Isle	2007	5.24	569,160	$6,568,992	$7,643,605	$11.54	FEMA	Ophelia Sand Replenishment-Reach 1&2
Region 2c	Emerald Isle	2010	0.12	63,953	$621,658	$675,957	$9.72	Federal	Maintenance Dredging AIWW
Region 2c	Emerald Isle	2013	4.16	649,790	$10,067,903	$10,296,395	$15.49	FEMA/Local	Post-Irene Nourishment
Region 2c	Emerald Isle	2014	0.09	48,454	$623,660	$628,377	$12.87	Federal	Maintenance Dredging AIWW
Region 2c	Indian Beach/Salter Path	2002	1.86	456,994	$4,585,001	$6,092,870	$10.03	State/Local	Bogue Banks Restoration-Phase I
Region 2c	Indian Beach/Salter Path	2004	2.54	630,094	$5,734,619	$7,306,344	$9.10	Federal/State/Local	Section 933-Phase I
Region 2c	Indian Beach/Salter Path	2007	2.54	298,604	$3,893,194	$4,530,076	$13.04	FEMA	Ophelia Sand Replenishment-Reach 3
Region 2c	Pine Knoll Shores	2002	4.82	1,276,586	$7,999,999	$10,630,959	$6.27	State/Local	Bogue Banks Restoration-Phase I
Region 2c	Pine Knoll Shores	2004	0.42	69,189	$660,181	$841,122	$9.54	Federal/State/Local	Section 933-Phase I
Region 2c	Pine Knoll Shores	2007	4.00	920,000	$10,326,000	$12,015,217	$11.22	Federal/Local/State	Section 933-Phase II
Region 2c	Pine Knoll Shores	2007	2.58	239,796	$3,311,582	$3,853,320	$13.81	FEMA	Ophelia Sand Replenishment-Reach 4&5
Region 2c	Pine Knoll Shores	2008	0.28	148,393	$1,344,005	$1,502,545	$9.06	Federal	
Region 2c	Pine Knoll Shores	2013	2.44	315,221	$4,884,062	$4,994,906	$15.49	FEMA/Local	Post-Irene Nourishment
Region 3b	Hatteras Island	1974	0.26	135,293	$164,818	$837,710	$1.22	Federal	USACE Navigation Dredging

*Values in red are estimated

Region	Location	Year	Total Dist (mi)	Volume (cy)	Total Cost	Total Cost (2015)	Unit Cost	Funding	Type
Region 3b	Hatteras Island	1977	0.18	97,029	$248,521	$1,002,681	$2.56	Federal	USACE Navigation Dredging
Region 3b	Hatteras Island	1984	0.06	29,972	$155,625	$360,735	$5.19	Federal	USACE Navigation Dredging
Region 3b	Hatteras Island	1986	0.17	90,114	$303,195	$651,362	$3.36	Federal	USACE Navigation Dredging
Region 3b	Hatteras Island	1988	0.14	74,646	$359,861	$732,234	$4.82	Federal	USACE Navigation Dredging
Region 3b	Hatteras Island	1992	0.03	18,147	$184,840	$314,742	$10.19	Federal	USACE Navigation Dredging
Region 3b	Hatteras Island	2003	0.28	442,600	$6,200,000	$8,047,707	$14.01	Federal	
Region 3b	Ocracoke Island	1986	0.32	167,755	$471,410	$1,012,743	$2.81	Federal	USACE Navigation Dredging
Region 3b	Ocracoke Island	1988	0.17	90,773	$420,821	$856,274	$4.64	Federal	USACE Navigation Dredging
Region 3b	Ocracoke Island	1989	0.21	113,229	$557,830	$1,087,014	$4.93	Federal	USACE Navigation Dredging
Region 3b	Ocracoke Island	1992	0.19	100,000	$653,748	$1,113,188	$6.54	Federal	USACE Navigation Dredging
Region 3b	Ocracoke Island	1995	0.08	44,305	$145,135	$227,652	$3.28	Federal	USACE Navigation Dredging
Region 4a	Cape Hatteras	1966	0.59	312,000	$220,524	$1,628,369	$0.71	Federal	
Region 4a	Cape Hatteras	1972	0.38	200,000	$615,385	$3,515,807	$3.08	Federal	
Region 4a	Cape Hatteras	1973	1.50	1,300,000	$4,000,000	$22,099,944	$3.08	Federal	
Region 4a	Rodanthe	2014	2.03	1,618,083	$19,404,840	$19,551,603	$11.99	Federal	
Region 4b	Pea Island	1990	0.38	254,955	$599,619	$1,116,556	$2.35	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1991	0.47	282,600	$716,032	$1,256,598	$2.53	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1992	0.76	184,300	$988,276	$1,682,815	$5.36	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1992	1.02	1,078,000	$1,212,750	$2,065,045	$1.13	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1993	0.47	433,235	$677,126	$1,120,485	$1.56	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1995	0.12	65,231	$415,522	$651,767	$6.37	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1995	0.38	203,191	$1,294,327	$2,030,218	$6.37	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1996	0.51	271,004	$909,464	$1,391,229	$3.36	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1997	0.51	271,703	$1,076,001	$1,593,054	$3.96	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1998	0.49	260,183	$637,448	$927,961	$2.45	Federal	USACE Navigation Dredging
Region 4b	Pea Island	1999	0.62	328,919	$545,515	$781,533	$1.66	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2000	0.79	419,305	$1,228,564	$1,714,087	$2.93	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2001	0.97	513,706	$2,568,530	$3,466,219	$5.00	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2002	1.34	732,852	$2,822,329	$3,750,508	$3.85	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2003	2.31	1,029,543	$3,860,786	$5,011,367	$3.75	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2004	0.95	616,448	$2,510,229	$3,198,224	$4.07	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2005	0.33	172,155	$2,222,670	$2,742,560	$12.91	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2008	1.50	791,829	$6,659,192	$7,444,713	$8.41	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2009	2.37	1,183,144	$14,422,163	$16,108,696	$12.19	Federal	USACE Navigation Dredging
Region 4b	Pea Island	2013	1.10	580,925	$7,222,368	$7,386,280	$12.43	Federal	
Region 4b	Nags Head	2001	0.19	100,000	$621,369	$838,535	$6.21	Federal	
Region 4b	Nags Head	2002	0.19	100,000	$657,290	$873,453	$6.57	Federal	
Region 4b	Nags Head	2011	10.00	4,600,000	$36,000,000	$38,567,618	$7.83	Local	
Region 4b	Kitty Hawk	2004	0.27	143,000	$1,829,617	$2,331,073	$12.79	Federal	
Region 4b	Kill Devil Hills	2004	0.07	38,016	$486,397	$619,707	$12.79	Federal	

*Values in red are estimated

APPENDIX C
DREDGE DATABASE

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
ATLANTIC INTRACOASTAL WATERWAY									
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1975	Currituck, Merritt	N		106,757	106,757	$175,247	$1.64
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1975	Marion, Northwood II	P		231,548	231,548	$380,097	$1.64
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1975	Hampton Roads	P		120,373	120,373	$197,598	$1.64
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1975	Richmond, Marion	P		535,084	535,084	$878,366	$1.64
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1975	Richmond	P		38,240	38,240	$62,773	$1.64
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1976	Marion	P		290,590	290,590	$504,039	$1.73
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1976	Currituck, Merritt	N		281,294	281,294	$487,915	$1.73
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1976	Hampton Roads, Marion	P		180,836	180,836	$313,667	$1.73
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1976	Northwood II	P		377,177	377,177	$654,227	$1.73
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1977	Merritt	S		128,926	128,926	$236,294	$1.83
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1977	Marion	P		440,000	440,000	$806,428	$1.83
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1977	Clarendon	P		762,966	762,966	$1,398,357	$1.83
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1978	Marion, Richmond	P		527,318	527,318	$1,021,210	$1.94
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1978	Marion	P		431,070	431,070	$834,815	$1.94
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1978	Clarendon	P		221,997	221,997	$429,922	$1.94
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1978	Clarendon	P		327,712	327,712	$634,651	$1.94
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1979	Marion, Richmond	P		167,877	167,877	$343,529	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1979	Marion, Richmond	P		190,000	190,000	$388,800	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1979	Currituck	N		152,980	152,980	$313,045	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1979	Merritt	S		75,105	75,105	$153,688	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1979	Northwood	P		30,000	30,000	$61,389	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Channel between Alligator Pungo Land Cut and Camp Lejeune	1980	Arlington,Clarendon	P			344,227	$521,598	$1.52
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1980	Cherokee	P			160,487	$505,679	$3.15
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1980	Marion	P			278,715	$677,854	$2.43
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1980	Northwood	P		235,311	235,311	$556,765	$2.37
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1981	Marion	P			86,298	$240,434	$2.79
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1981	Marion	P			219,947	$797,739	$3.63
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1981	Clarendon	P		255,973	255,973	$820,784	$3.21
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1982	Marion,Clarendon	P			475,920	$810,858	$1.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet Crossing	1982	Talcott	P			61,352	$104,530	$1.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1982	Buxton	P		9,646	9,646	$16,435	$1.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1982	Northwood	P		42,069	42,069	$71,676	$1.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1982	Enterprise	P		124,533	124,533	$212,176	$1.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	through channel at camp lejeune	1983	Richmond	P			81,532	$176,540	$2.17

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1983	Marion	P		9,867	9,867	$21,365	$2.17
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1983	Cherokee	P		222,163	222,163	$481,046	$2.17
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1983	Richmond	P		276,564	276,564	$598,840	$2.17
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1983	Hampton Roads	P		229,800	229,800	$497,582	$2.17
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1984	Marion	P			26,126	$262,060	$10.03
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1984	Cherokee	P			232,030	$594,141	$2.56
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1984	Marion	P		373,209	373,209	$955,647	$2.56
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1984	Clinton	P		178,087	178,087	$456,013	$2.56
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	channel between neuse river and sc state line	1985	Marion,Clarendon	P			525,170	$1,916,574	$3.65
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	through channel in Alligator-Pungo Rivers	1985	Hampton Roads	P			176,224	$553,358	$3.14
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1985	XL	P		956,139	956,139	$3,245,862	$3.39
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1986	XL	P			921,871	$3,013,169	$3.27
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1987	Northwood II and Hampton Roads	P			389,283	$1,214,344	$3.12
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1987	Richmond	P			301,252	$1,269,675	$4.21
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1987	Cherokee	P		409,746	409,746	$1,502,559	$3.67
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1987	Clinton	P		114,995	114,995	$421,692	$3.67
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1987	Richmond	P		136,049	136,049	$498,898	$3.67
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Alligator-Pungo Cut	1988	Dan Allen	P			15,434	$154,176	$9.99
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Channel and Inlet Xings	1988	Clarendon	P			250,447	$697,090	$2.78
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Inlet Xings	1988	Richmond	P			1,136	$11,348	$9.99
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Inlet Xings	1988	Stewart	P			32,911	$136,482	$4.15
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Alligator-Pungo Cut	1989	Marion	P			190,435	$555,246	$2.92
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1989	Hampton Roads	P			149,952	$313,017	$2.09
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1989	Richmond	P			749,206	$2,429,161	$3.24
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Inlet Xings	1990	Enterprise	P			316,239	$1,429,318	$4.52
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1990	Arlington	P			312,522	$1,663,911	$5.32
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1990	Marion	P			101,653	$417,964	$4.11
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1990	Richmond	P			76,542	$335,221	$4.38
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1991	Stuart	P		389,576	389,576	$1,656,459	$4.25
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1991	Jekyll	P		231,268	231,268	$983,341	$4.25
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Inlet Crossings	1992	Jekyll Island	P			231,268	$1,577,626	$6.82
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Inlet Crossings	1992	Stuart	P			245,596	$949,058	$3.86
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1992	Marion	P			129,337	$410,613	$3.17
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla		1992	Juanita B	P			327,289	$595,603	$1.82
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Inlet Crossings	1993	Stuart,Hampton Roads,Richmond	P			714,338	$3,046,464	$4.26

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1994	Blue Ridge	P			20,000	$347,002	$17.35
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Inlet Crossings	1994	Richmond and Blue Ridge	P			441,925	$2,144,264	$4.85
AIWW INLET XINGS		1995		P			590,830	$3,895,972	$6.59
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Through Channel	1995	Enterprise	P			442,719	$1,680,174	$3.80
AIWW (INLET CROSSINGS)		1996		P			538,132	$2,492,028	$4.63
AIWW THRU CHANNEL		1996		P			1,030,846	$5,992,033	$5.81
AIWW INLET XINGS		1998		P			269,407	$1,071,142	$3.98
AIWW THRU CHANNEL		1998		P			350,860	$2,198,493	$6.27
AIWW-WILM/BEAR TO BROWN		1998		P			336,997	$1,521,005	$4.51
AIWW-INLET XINGS		1999		P			493,983	$2,591,575	$5.25
AIWW-THRU CHANNEL/ALLI PUNGO		1999		P			264,953	$1,589,236	$6.00
AIWW INLET CROSSINGS		2000		P			385,150	$2,669,327	$6.93
AIWW INLET XINGS		2000		P			242,926	$2,015,047	$8.29
AIWW THRU CHANNEL/PELTIER CR		2001		P			758,436	$4,036,049	$5.32
AIWW	Mason Creek/AIWW Crossing/Mason Inlet Relocation	2002	Hydraulic Dredge	P			49,801	$273,906	$5.50
AIWW-SWANSBORO/SC STATE LINE		2002		P			797,788	$5,375,698	$6.74
AIWW-Core Creek-Sec 2 (Opts)		2003		P			362,683	$3,052,088	$8.42
Intracoastal Waterway		2003	CURRITUCK	N			11,280	$107,100	$9.49
AIWW- INLET XINGS		2004		P			403,368	$2,261,342	$5.61
AIWW-INLET XINGS BEAR TO BRO		2005		P			24,747	$331,735	$13.41
AIWW INLET-LWF,SHAL.BOG,NR		2006		P			275,163	$2,983,117	$10.84
AIWW-INLET XINGS	Shinn Creek (Wrightsville Beach)	2008	Richmond	P			22,067	$199,862	$9.06
AIWW-INLET XINGS	Channel to Jacksonville	2008	Marion	P			80,905	$732,762	$9.06
AIWW-INLET XINGS	MC Aviation Fuel Terminal	2008	Richmond	P			16,836	$152,485	$9.06
AIWW-Maint Dredging	Southport Boat Basin	2009	Wilco	P			45,150	$438,883	$9.72
AIWW-Maint Dredging	Snows Cut	2009	Wilco	P			136,871	$1,330,461	$9.72
AIWW Bear to Shallotte Inlet	Lockwoods Folly River Xng	2009	Wilco	P			12,649	$114,090	$9.02
AIWW-Thru Channels	Hobucken Land Cut	2010	Lexington	P			44,150	$532,548	$12.06
AIWW-Thru Channels	Core Creek Land Cut	2010		P			16,504	$199,075	$12.06
AIWW-Thru Channels	Oak Island Coast Guard Entrance Channel	2010	Marion	P			8,499	$102,517	$12.06
AIWW		2011	Currituck	N			4,625	$57,660	$0.00
AIWW-NR Inlet to Shallow Inl	Shallotte River Crossing Tangent 17	2011	Wilco	P			42,685	$443,144	$10.38
AIWW, Inlet Xings	White Oak River Crossing	2012	Wllko	P			26,317	$309,128	$11.75
AIWW, Inlet Xings	Sander Creek Crossing	2012	Wllko	P			32,141	$377,538	$11.75
AIWW, Inlet Xings	Bear Creek Crossing	2012	Wllko	P			11,354	$133,368	$11.75
AIWW, Inlet Xings	Shin Creek Crossing	2012	Wllko	P			24,064	$282,663	$11.75
AIWW, Inlet Xings	Howard's Creek Crossing	2012	Wllko	P			47,071	$552,911	$11.75
AIWW Inlet Crossing	USCG Station Wrightsville Beach	2013	Wilco	P			5,157	$66,377	$12.87
AIWW	Mason Creek/AIWW Crossing/Mason Inlet Relocation	2014	Hydraulic Dredge	P			27,200	$149,600	$5.50
							26,633,823		
ATLANTIC BEACH CHANNELS, NC									
Atlantic Beach Channels, NC		1976	Richmond	P		20,972	20,972	$12,924	$0.62
Atlantic Beach Channels, NC		1988	Richmond	P			76,961	$256,950	$3.34
Atlantic Beach Channels		1990	Eagle	P			32,365	$144,327	$4.46
							130,298		
AVON HARBOR									
Avon Harbor		1986	Blue Ridge and Richmond	P			12,541	$264,426	$21.08
AVON HARBOR (RFP)		1999		P			114,336	$1,267,237	$11.08
							126,877		
BEAUFORT HARBOR									
Beaufort Harbor, NC		1975	Richmond	P		80,379	80,379	$96,451	$1.20
Beaufort Harbor, NC		1976	Richmond	P		28,290	28,290	$35,759	$1.26
Beaufort Harbor, NC		1977	Clarendon	P		31,649	31,649	$42,140	$1.33
Beaufort Harbor, NC		1978	Marion	P		159,435	159,435	$223,614	$1.40
Beaufort Harbor, NC		1979	Richmond	P		107,416	107,416	$158,696	$1.48
Beaufort Harbor, NC		1980	Hampton Roads	P			40,176	$91,625	$2.28
Beaufort Harbor, NC		1982	Enterprise	P		20,581	20,581	$35,540	$1.73
Beaufort Harbor, NC		1982	Enterprise	P		67,195	67,195	$116,034	$1.73
Beaufort Harbor, NC	Gallants Channel	1983	Hampton Roads	P			27,187	$62,911	$2.31
Beaufort Harbor, NC		1984	Marion	P			61,433	$168,771	$2.75
Beaufort Harbor, NC	Bulkhead Channel	1985	Clinton	P			25,697	$64,081	$2.49
Beaufort Harbor		1987	Clinton	P			33,195	$38,592	$1.16
Beaufort Harbor		1987	Richmond	P			147,573	$380,490	$2.58
Beaufort Harbor, NC		1988	Richmond	P		17,335	17,335	$40,895	$2.36
Beaufort Harbor		1989	Cherokee	P			30,117	$90,047	$2.99
Beaufort Harbor		1990	Enterprise	P			56,130	$169,375	$3.02
Beaufort Harbor, NC		1991	Pullen	P			26,233	$54,124	$2.06
Beaufort Harbor		1994	California	P			28,266	$85,089	$3.01

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
BULKHEAD CHANNEL		2006	CURRITUCK	N			40,900	$178,100	$4.35
Beaufort Harbor,NC		2008	Currituck	N			24,595	$132,800	$5.40
Beaufort Harbor		2011	CURRITUCK	N			20,000	$107,880	$5.39
Beaufort Harbor	Bulkhead Channel	2013	Currituck	N			16,300	$142,800	$8.76
Beaufort Harbor	Bulkhead Channel	2014	Currituck	N			9,735	$156,250	$16.05
Beaufort Harbor	Bulkhead Channel/Taylor's Creek	2015	Currituck	N			12,150	$195,000	$16.05
							1,111,967		
BOGUE INLET AND CHANNELS									
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1980	Merritt	S			21,707	$35,200	$1.62
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1981	Currituck	N			29,650	$30,300	$1.02
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1981	Merritt	S			71,564	$137,529	$1.92
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1983	Currituck	N			6,435	$17,000	$2.64
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1984	Currituck	N			74,790	$156,204	$2.09
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1984	Merritt	S			79,289	$143,397	$1.81
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1985	Currituck	N			54,500	$107,265	$1.97
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1985	Merritt	S			2,240	$23,961	$10.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1985	Fry	S			71,891	$184,608	$2.57
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1986	Fry	S			80,900	$292,857	$3.62
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1986	Merritt	S			56,067	$190,335	$3.39
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1987	Currituck	N			96,983	$174,116	$1.80
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1987	Merritt	S			163,639	$331,535	$2.03
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1988	Merritt	S			124,362	$385,605	$3.10
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1989	Merritt	S			75,502	$273,347	$3.62
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1990	Fry	S			72,894	$176,334	$2.42
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1990	Merritt	S			56,828	$279,732	$4.92
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1991	Merritt	S			72,873	$367,231	$5.04
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1992	Merritt	S			119,042	$480,892	$4.04
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1993	Fry	S			164,850	$354,424	$2.15
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1993	Merritt	S			10,231	$89,600	$8.76
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1994	Fry	S			32,377	$89,700	$2.77
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Bogue Inlet	1994	Merritt	S			27,353	$139,819	$5.11
BOGUE INLET & CHANNEL, NC		1995	FRY	S			15,750	$45,530	$2.89
BOGUE INLET & CHANNEL, NC		1995	FRY	S			46,970	$135,781	$2.89
BOGUE INLET & CHANNEL, NC		1995	MERRITT	S			24,038	$69,489	$2.89
BOGUE INLET & CHANNEL, NC		1995	MERRITT	S			58,028	$167,747	$2.89
BOGUE INLET		1996	FRY	S			54,520	$158,190	$2.90
BOGUE INLET & CHANNEL, NC		1996	FRY	S			89,740	$260,382	$2.90
BOGUE INLET & CHANNEL, NC		1996	MERRITT	S			184,476	$535,259	$2.90
BOGUE INLET & CHANNEL, NC		1996	MERRITT	S			74,786	$216,992	$2.90
BOGUE INLET		1997	FRY	S			79,790	$232,370	$2.91
BOGUE INLET & CHANNEL, NC		1997	FRY	S			53,630	$156,185	$2.91
BOGUE INLET & CHANNEL, NC		1997	MERRITT	S			18,486	$53,836	$2.91
BOGUE INLET & CHANNEL,NC		1997	MERRITT	S			70,612	$205,641	$2.91
BOGUE INLET		1998	MERRITT	S			36,968	$108,060	$2.92
BOGUE INLET & CHANNEL, NC		1998	FRY	S			53,630	$156,764	$2.92
BOGUE INLET & CHANNEL,NC		1998	MERRITT	S			14,798	$43,255	$2.92
BOGUE INLET		1999	FRY	S			2,510	$7,364	$2.93

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
BOGUE INLET		1999	FRY	S			20,500	$60,145	$2.93
BOGUE INLET		1999	FRY	S			12,510	$36,703	$2.93
BOGUE INLET		1999	FRY	S			43,950	$128,945	$2.93
BOGUE INLET		1999	FRY	S			70,100	$205,666	$2.93
BOGUE INLET		1999	FRY	S			19,650	$57,651	$2.93
BOGUE INLET & CHNLS, NC		1999	FRY	S			105,140	$308,470	$2.93
BOGUE INLET		2000	MERRITT	S			165,150	$486,329	$2.94
BOGUE INLET		2000	MERRITT	S			23,420	$68,967	$2.94
BOGUE INLET		2000	MERRITT	S			78,080	$229,928	$2.94
BOGUE INLET		2000	MERRITT	S			195,255	$574,981	$2.94
BOGUE INLET & CHANNEL, NC		2000	CURRITUCK	N			17,160	$50,532	$2.94
BOGUE INLET & CHANNEL, NC		2000	FRY	S			54,360	$160,078	$2.94
BOGUE INLET & CHANNELS, NC		2000	MERRITT	S			95,294	$280,619	$2.94
BOGUE INLET & CHANNELS, NC		2000	MERRITT	S			30,360	$89,403	$2.94
BOGUE INLET		2001	FRY	S			52,040	$153,814	$2.96
BOGUE INLET		2001	MERRITT	S			158,530	$468,565	$2.96
BOGUE INLET & CHANNEL, NC		2001	FRY	S			44,650	$131,971	$2.96
BOGUE INLET & CHANNEL, NC		2001	MERRITT	S			84,900	$250,938	$2.96
BOGUE INLET & CHANNELS, NC		2001	MERRITT	S			151,799	$448,670	$2.96
BOGUE INLET		2002	FRY	S			62,940	$146,200	$2.32
BOGUE INLET & CHANNEL, NC		2002	FRY	S			164,230	$395,600	$2.41
BOGUE INLET & CHNL, NC		2002	MERRITT	S			97,130	$204,204	$2.10
BOGUE INLET CHNL		2002	MERRITT	S			84,420	$133,000	$1.58
Bogue Inlet		2003	FRY	S			74,300	$172,000	$2.31
Bogue Inlet		2003	MERRITT	S			117,530	$225,000	$1.91
Bogue Inlet		2003	MERRITT	S			29,840	$81,000	$2.71
BOGUE INLET		2004	FRY	S			34,780	$154,000	$4.43
BOGUE INLET		2004	MERRITT	S			36,100	$53,550	$1.48
BOGUE INLET		2005	MERRITT	S			21,345	$43,544	$2.04
BOGUE INLET		2005	MERRITT	S			40,950	$83,538	$2.04
BOGUE INLET		2005	MERRITT	S			106,880	$218,500	$2.04
BOGUE INLET		2006	MERRITT	S			105,480	$317,587	$3.01
Bogue Inlet	Bogue Inlet	2007	MERRITT	S			19,190	$38,000	$1.98
Bogue Inlet	Bogue Inlet	2007	MERRITT	S			79,590	$157,604	$1.98
Bogue Inlet		2008	Currituck	N			7,180	$70,400	$9.81
Bogue Inlet		2008	FRY	S			51,850	$97,971	$1.89
Bogue Inlet		2008	MERRITT	S			135,750	$256,500	$1.89
Bogue Inlet		2009	FRY	S			46,010	$114,000	$2.48
Bogue Inlet		2010	FRY	S			47,090	$140,000	$2.97
Bogue Inlet		2010	MERRITT	S			47,690	$152,000	$3.19
Bogue Inlet		2010	MERRITT	S			167,264	$332,500	$1.99
Bogue Inlet		2011	FRY	S			47,090	$130,000	$2.76
Bogue Inlet		2011	MERRITT	S			84,130	$260,000	$3.09
Bogue Inlet		2012	MERRITT	S			14,190	$62,400	$4.40
Bogue Inlet		2012	MERRITT	S			47,580	$161,200	$3.39
Bogue Inlet		2012	MERRITT	S			66,870	$228,800	$3.42
Bogue Inlet	Emerald Isle Coast Guard Channel	2012	MERRITT	S			19,930	$72,800	$3.65
Bogue Inlet		2013	MERRITT	S			36,800	$117,000	$3.18
Bogue Inlet		2014	MERRITT	S			8,230	$54,000	$6.56
Bogue Inlet		2014	MERRITT	S			38,460	$125,000	$3.25
Bogue Inlet		2014	MERRITT	S			31,410	$100,000	$3.18
							5,839,776		
CAPE FEAR RIVER									
Cape Fear River, NC		1975	Merritt	S		4,264	4,264	$40,977	$9.61
Cape Fear River, NC		1975	Merritt	S		7,155	7,155	$68,760	$9.61
Cape Fear River, NC		1976	Marion	P		281,797	281,797	$983,874	$3.49
Cape Fear River, NC		1978	Marion	P		80,315	80,315	$287,858	$3.58
Cape Fear River Above Wilmington		1983	Buxton	P			20,786	$118,116	$5.68
Cape Fear River Above Wilmington		1985	Marion	P			44,069	$167,694	$3.81
Cape Fear River, NC		1986	Buxton	P		79,492	79,492	$287,857	$3.62
Cape Fear River Above Wilmington	River Channel	1987	Buxton	P			79,492	$273,227	$3.44
Cape Fear River Above Wilmington	River Channel	1988	Buxton	P			73,484	$223,911	$3.05
Cape Fear River Above Wilmington		1991	Long Bay	P			9,660	$92,833	$9.61
Cape Fear River Above Wilmington		1992	Long Bay	P			54,900	$123,910	$2.26
UPPER CAPE FEAR RIVER		1999	FRY	S			38,170	$180,127	$4.72
LOCK & DAM 1		2002	FRY	S			6,800	$43,000	$6.32
							780,384		
CAPE FEAR RIVER INLET									
Cape Fear River Inlet	MOTSU	2009		B			920,000	$3,990,450	$4.34
Cape Fear River Inlet	MOTSU	2010		B			785,000	$3,172,660	$4.04

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Cape Fear River Inlet	MOTSU	2011		B			585,000	$3,013,250	$5.15
Cape Fear River Inlet	MOTSU	2012		B			1,700,000	$8,189,100	$4.82
Cape Fear River Inlet	MOTSU	2015		B			860,000	$6,159,000	$7.16
							4,850,000		
CAPE LOOKOUT NATIONAL SEASHORE									
CAPE LOOKOUT NATIONAL SEASHORE		2006		P			73,727	$932,865	$12.65
CAROLINA BEACH INLET & CHANNELS									
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1982	Merritt	S			11,200	$38,633	$3.45
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1983	Currituck	N			12,900	$75,606	$5.86
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1983	Currituck	N			5,300	$23,250	$4.39
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1983	Merritt	S			45,483	$196,853	$4.33
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1983	Merritt	S			107,908	$295,286	$2.74
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1984	Merritt	S			114,190	$342,128	$3.00
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1984	Fry	S			33,140	$164,864	$4.97
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1985	Currituck	N			152,768	$247,339	$1.62
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1985	Merritt	S			62,664	$130,211	$2.08
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1986	Currituck	N			126,015	$320,777	$2.55
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1986	Fry	S			29,733	$70,613	$2.37
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1986	Merritt	S			2,898	$32,441	$11.19
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1987	Currituck	N			240,275	$379,315	$1.58
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1987	Fry	S			1,036	$8,100	$7.82
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1987	Merritt	S			28,917	$45,089	$1.56
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1988	Currituck	N			272,881	$427,821	$1.57
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1988	Fry	S			40,446	$74,953	$1.85
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1989	Currituck	N			68,665	$237,140	$3.45
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1989	Fry	S			13,389	$56,010	$4.18
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1989	Merritt	S			44,422	$110,522	$2.49
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1990	Currituck	N			4,110	$103,007	$25.06
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1990	Fry	S			163,149	$565,255	$3.46
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1990	Merritt	S			9,961	$44,805	$4.50
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1991	Currituck	N			25,090	$204,998	$8.17
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1991	Merritt	S			51,947	$208,598	$4.02
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1991	Fry	S			56,777	$171,998	$3.03
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1992	Currituck	N			110,937	$290,252	$2.62
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina beach Inlet	1992	Merritt	S			57,956	$264,587	$4.57
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1992	Fry	S			74,081	$267,994	$3.62
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1993	Currituck	N			57,620	$145,681	$2.53

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1993	Merritt	S			73,338	$552,963	$7.54
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1993	Fry	S			72,143	$160,452	$2.22
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1994	Currituck	N			104,673	$250,346	$2.39
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1994	Fry	S			55,377	$186,300	$3.36
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Carolina Beach Inlet	1994	Merrittt	S			84,990	$313,200	$3.69
CAROLINA BEACH		1995	MERRITT	S			5,603	$15,395	$2.75
CAROLINA BEACH INLET, NC		1995	CURRITUCK	N			12,720	$34,949	$2.75
CAROLINA BEACH INLET, NC		1995	CURRITUCK	N			39,965	$109,807	$2.75
CAROLINA BEACH INLET, NC		1995	CURRITUCK	N			12,195	$33,507	$2.75
CAROLINA BEACH INLET, NC		1995	CURRITUCK	N			21,595	$59,334	$2.75
CAROLINA BEACH INLET, NC		1995	FRY	S			19,320	$53,083	$2.75
CAROLINA BEACH INLET, NC		1995	FRY	S			37,380	$102,704	$2.75
CAROLINA BEACH INLET, NC		1995	FRY	S			37,320	$102,539	$2.75
CAROLINA BEACH INLET, NC		1995	FRY	S			2,450	$6,732	$2.75
CAROLINA BEACH INLET, NC		1995	MERRITT	S			40,275	$110,658	$2.75
CAROLINA BEACH INLET, NC		1995	MERRITT	S			31,913	$87,683	$2.75
CAROLINA BEACH INLET, NC		1995	MERRITT	S			1,402	$3,852	$2.75
CAROLINA BEACH INLET, NC		1995	MERRITT	S			7,485	$20,566	$2.75
CAROLINA BEACH INLET, NC		1996	CURRITUCK	N			19,370	$6,097	$2.73
CAROLINA BEACH INLET, NC		1996	CURRITUCK	N			2,230	$59,489	$2.73
CAROLINA BEACH INLET, NC		1996	CURRITUCK	N			21,760	$64,465	$2.73
CAROLINA BEACH INLET, NC		1996	FRY	S			23,580	$219,174	$2.73
CAROLINA BEACH INLET, NC		1996	FRY	S			80,170	$7,163	$2.73
CAROLINA BEACH INLET, NC		1996	FRY	S			2,620	$18,536	$2.73
CAROLINA BEACH INLET, NC		1996	FRY	S			6,780	$59,981	$2.73
CAROLINA BEACH INLET, NC		1996	MERRITT	S			21,940	$92,355	$2.73
CAROLINA BEACH INLET		1997	CURRITUCK	N			33,782	$51,276	$2.72
CAROLINA BEACH INLET		1997	FRY	S			18,850	$57,723	$2.72
CAROLINA BEACH INLET		1997	FRY	S			21,220	$40,028	$2.72
CAROLINA BEACH INLET		1997	MERRITT	S			14,715	$10,908	$2.72
CAROLINA BEACH INLET, NC		1997	CURRITUCK	N			4,010	$15,179	$2.72
CAROLINA BEACH INLET, NC		1997	FRY	S			5,580	$136,210	$2.72
CAROLINA BEACH INLET, NC		1997	MERRITT	S			50,073	$10,908	$2.72
CAROLINA BEACH, NC		1997	CURRITUCK	N			4,010	$94,242	$2.72
CAROLINA BEACH INLET		1998	CURRITUCK	N			34,645	$53,917	$2.71
CAROLINA BEACH INLET		1998	FRY	S			19,920	$108,727	$2.71
CAROLINA BEACH INLET		1998	FRY	S			40,170	$161,875	$2.71
CAROLINA BEACH INLET		1998	MERRITT	S			59,806	$96,585	$2.71
CAROLINA BEACH INLET, CHNLS		1998	MERRITT	S			35,684	$172,054	$2.71
CAROLINA BEACH INLET, CHNLS		1998	MERRITT	S			63,567	$89,252	$2.71
CAROLINA BEACH INLET, NC		1998	CURRITUCK	N			32,975	$77,776	$2.71
CAROLINA BEACH INLET,NC		1998	CURRITUCK	N			28,735	$97,074	$2.71
CAROLINA BEACH INLET		1999	CURRITUCK	N			35,865	$46,834	$2.69
CAROLINA BEACH INLET		1999	CURRITUCK	N			17,390	$133,729	$2.69
CAROLINA BEACH INLET		1999	MERRITT	S			49,655	$69,618	$2.69
CAROLINA BEACH INLET		1999	MERRITT	S			25,850	$69,295	$2.69
CAROLINA BEACH INLET, NC		1999	MERRITT	S			25,730	$30,918	$2.69
CAROLINA BEACH INLET, NC		1999	MERRITT	S			11,480	$285,933	$2.69
CAROLINA BEACH INLET,NC		1999	CURRITUCK	N			106,170	$11,688	$2.69
CAROLINA BEACH INLET		2000	MERRITT	S			4,340	$214,084	$2.68
CAROLINA BEACH INLET		2000	MERRITT	S			79,890	$14,832	$2.68
CAROLINA BEACH INLET, NC		2000	CURRITUCK	N			5,535	$12,166	$2.68
CAROLINA BEACH INLET, NC		2000	CURRITUCK	N			4,540	$355,252	$2.68
CAROLINA BEACH INLET, NC		2000	FRY	S			132,570	$173,137	$2.68
CAROLINA BEACH INLET, NC		2000	FRY	S			64,610	$82,964	$2.68
CAROLINA BEACH INLET, NC		2000	FRY	S			30,960	$117,989	$2.68
CAROLINA BEACH INLET, NC		2000	MERRITT	S			44,030	$11,978	$2.68
CAROLINA BEACH INLET		2001	CURRITUCK	N			4,470	$11,919	$2.67
CAROLINA BEACH INLET		2001	CURRITUCK	N			4,615	$12,305	$2.67
CAROLINA BEACH INLET		2001	CURRITUCK	N			24,760	$66,019	$2.67
CAROLINA BEACH INLET		2001	FRY	S			176,840	$471,520	$2.67
CAROLINA BEACH INLET		2001	MERRITT	S			82,230	$219,255	$2.67
CAROLINA BEACH INLET		2001	MERRITT	S			72,950	$194,511	$2.67
CAROLINA BEACH INLET		2001	MERRITT	S			31,266	$83,367	$2.67
CAROLINA BEACH INLET, NC		2001	MERRITT	S			38,800	$103,455	$2.67
CAROLINA BEACH INLET		2002	CURRITUCK	N			48,205	$232,200	$4.82

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
CAROLINA BEACH INLET		2002	FRY	S			73,560	$223,600	$3.04
CAROLINA BEACH INLET		2002	FRY	S			19,100	$51,600	$2.70
CAROLINA BEACH INLET		2002	FRY	S			48,610	$111,800	$2.30
CAROLINA BEACH INLET		2002	MERRITT	S			56,690	$108,000	$1.91
CAROLINA BEACH INLET		2002	MERRITT	S			43,530	$81,000	$1.86
Carolina Beach Inlet		2003	MERRITT	S			33,170	$90,000	$2.71
Carolina Beach Inlet		2003	MERRITT	S			41,986	$90,000	$2.14
Carolina Beach Inlet		2003	MERRITT	S			84,530	$189,200	$2.24
Carolina Beach Inlet		2003	MERRITT	S			52,690	$99,000	$1.88
Carolina Beach Inlet		2003	MERRITT	S			53,825	$120,757	$2.24
CAROLINA BEACH INLET		2004	FRY	S			10,130	$44,000	$4.34
CAROLINA BEACH INLET		2004	MERRITT	S			14,450	$45,000	$3.11
CAROLINA BEACH INLET		2004	MERRITT	S			59,680	$117,000	$1.96
CAROLINA BEACH INLET		2004	MERRITT	S			49,422	$108,000	$2.19
CAROLINA BEACH INLET		2004	MERRITT	S			10,300	$36,000	$3.50
CAROLINA BEACH INLET		2004	MERRITT	S			35,810	$81,000	$2.26
CAROLINA BEACH INLET		2004	MERRITT	S			69,660	$135,000	$1.94
CAROLINA BEACH INLET		2004	MERRITT	S			45,800	$81,000	$1.77
CAROLINA BEACH INLET		2004	MERRITT	S			151,280	$288,000	$1.90
CAROLINA BEACH INLET		2005	FRY	S			29,500	$88,000	$2.98
CAROLINA BEACH INLET		2005	MERRITT	S			79,620	$237,511	$2.98
CAROLINA BEACH INLET		2006	FRY	S			35,610	$92,186	$2.59
CAROLINA BEACH INLET		2006	FRY	S			5,740	$11,000	$1.92
CAROLINA BEACH INLET		2006	FRY	S			15,260	$55,000	$3.60
CAROLINA BEACH INLET		2006	FRY	S			14,100	$36,502	$2.59
CAROLINA BEACH INLET		2006	MERRITT	S			152,290	$342,000	$2.25
CAROLINA BEACH INLET		2006	MERRITT	S			89,940	$232,833	$2.59
Carolina Beach Inlet	Carolina Beach Inlet	2007	FRY	S			63,040	$133,000	$2.11
Carolina Beach Inlet	Carolina Beach Inlet	2007	MERRITT	S			38,850	$85,500	$2.20
Carolina Beach Inlet	Carolina Beach Inlet	2007	MERRITT	S			60,190	$129,726	$2.16
Carolina Beach Inlet		2008	FRY	S			41,680	$95,000	$2.28
Carolina Beach Inlet		2008	FRY	S			143,460	$313,500	$2.19
Carolina Beach Inlet		2008	FRY	S			24,330	$57,000	$2.34
Carolina Beach Inlet		2008	MERRITT	S			84,420	$199,500	$2.36
Carolina Beach Inlet		2009	FRY	S			60,770	$142,500	$2.34
Carolina Beach Inlet		2009	FRY	S			29,810	$95,000	$3.19
Carolina Beach Inlet		2009	MERRITT	S			4,620	$19,000	$4.11
Carolina Beach Inlet		2009	MERRITT	S			39,460	$85,500	$2.17
Carolina Beach Inlet		2009	MERRITT	S			148,570	$313,500	$2.11
Carolina Beach Inlet		2010	FRY	S			62,790	$199,500	$3.18
Carolina Beach Inlet		2010	FRY	S			36,970	$111,667	$3.02
Carolina Beach Inlet		2010	MERRITT	S			29,370	$57,000	$1.94
Carolina Beach Inlet		2011	FRY	S			29,610	$100,000	$3.38
Carolina Beach Inlet		2011	MERRITT	S			89,030	$260,000	$2.92
Carolina Beach Inlet		2011	MERRITT	S			58,020	$182,000	$3.14
Carolina Beach Inlet		2012	MERRITT	S			55,500	$223,600	$4.03
Carolina Beach Inlet		2012	MERRITT	S			57,110	$208,000	$3.64
Carolina Beach Inlet		2012	MERRITT	S			9,420	$41,600	$4.42
Carolina Beach Inlet		2013	MERRITT	S			88,010	$273,000	$3.10
Carolina Beach Inlet		2013	MERRITT	S			50,880	$169,000	$3.32
Carolina Beach Inlet		2013	MERRITT	S			8,490	$39,000	$4.59
Carolina Beach Inlet		2014	MERRITT	S			27,890	$81,000	$2.90
Carolina Beach Inlet		2014	MERRITT	S			62,370	$183,340	$2.94
Carolina Beach Inlet		2014	MERRITT	S			20,800	$62,500	$3.00
Carolina Beach Inlet		2015	CURRITUCK	N			4,535	$15,000	$3.31
Carolina Beach Inlet		2015	CURRITUCK	N			19,920	$165,000	$8.28
Carolina Beach Inlet		2015	MERRITT	S			21,590	$60,000	$2.78
							7,302,733		
CHANNEL FROM BACK SOUND TO LOOKOUT BIGHT									
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1975	Merritt	S		55,667	55,667	$55,033	$0.99
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1976	Currituck, Merritt	N		45,963	45,963	$51,120	$1.11
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1976	Richmond	P		34,530	34,530	$38,404	$1.11
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1977	Clarendon	P		26,403	26,403	$33,037	$1.25
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1980	Merritt	S			116,662	$137,035	$1.17
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1980	Marion	P			73,716	$291,969	$3.96
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1982	Currituck	N			94,520	$167,930	$1.78
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1984	Currituck	N			60,974	$107,765	$1.77
Channel from Back Sound to Lookout Bight, NC	Bardens Inlet	1985	Richmond	P			34,615	$137,701	$3.98
Channel from Back Sound to Lookout Bight	Bardens Inlet	1988	Blue Ridge	P			47,078	$260,366	$5.53
BARDEN'S INLET	Bardens Inlet	2001	CURRITUCK	N			11,860	$250,765	$21.14
							601,988		

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
DRUM INLET									
Drum Inlet, NC		1975	Richmond	P		103,772	103,772	$140,347	$1.35
Drum Inlet, NC		1975	Merritt	S		4,092	4,092	$5,534	$1.35
DRUM INLET		1997	CURRITUCK	N			33,765	$79,325	$2.35
DRUM INLET, NORTH CAROLINA		1997		B			460,882	$2,150,593	$4.67
DRUM INLET,NC		1997	FRY	S			163,570	$384,277	$2.35
DRUM INLET		1998	CURRITUCK	N			67,455	$162,501	$2.41
DRUM INLET		1998	MERRITT	S			30,413	$73,266	$2.41
							863,949		
EDENTON HARBOR									
Edenton Harbor, NC		1975	Richmond	P	17,066		17,066	$54,975	$3.22
FAR CREEK									
Far Creek		1985	Richmond	P			267,516	$636,140	$2.38
Far Creek, NC		1990	Richmond	P		36,879	36,879	$135,735	$3.68
Far Creek, NC		1990	Richmond	P		225,032	225,032	$828,242	$3.68
Far Creek		1991	Richmond	P			194,178	$360,300	$1.86
Manteo Interior	Far Creek	2008		P			854,300	$7,548,342	$8.84
							1,577,905		
HATTERAS INLET									
CAPE HATTERAS		1999	CURRITUCK	N			5,030	$4,801	$0.95
HATTERAS INLET		1999	MERRITT	S			63,750	$60,846	$0.95
HATTERAS INLET		1999	MERRITT	S			35,560	$33,940	$0.95
HATTERAS ISLAND		2000	FRY	S			108,680	$111,921	$1.03
HATTERAS FERRY CHNL		2002	FRY	S			52,720	$103,200	$1.96
HATTERAS INLET		2004	MERRITT	S			31,010	$45,000	$1.45
HATTERAS INLET		2008	MERRITT	S			49,040	$85,500	$1.74
Hatteras		2010	MERRITT	S			28,950	$60,000	$2.07
Hatteras		2010	MERRITT	S			46,140	$110,000	$2.38
Hatteras	Rollinson Channel	2011	MERRITT	S			22,890	$78,000	$3.41
Hatteras		2011	MERRITT	S			42,290	$130,000	$3.07
Hatteras Inlet	Ferry Channel	2012	MERRITT	S			20,350	$65,000	$3.19
Hatteras Inlet	Ferry Channel	2012	MERRITT	S			45,550	$208,000	$4.57
Hatteras Inlet	Ferry Channel	2012	MERRITT	S			62,920	$213,200	$3.39
Hatteras		2014	CURRITUCK	N			6,435	$148,750	$23.12
Hatteras		2014	CURRITUCK	N			6,400	$180,000	$28.13
Hatteras		2014	MERRITT	S			100,500	$312,000	$3.10
Hatteras Channel		2014	MERRITT	S			31,330	$150,000	$4.79
Hatteras		2015	CURRITUCK	N			13,418	$322,500	$24.03
							772,963		
LOCKWOODS FOLLY INLET									
Lockwoods Folly River	Lockwoods Folly Inlet	1980	Currituck	N			220,975	$193,519	$0.88
Lockwoods Folly River	Lockwoods Folly Inlet	1981	Currituck	N			24,320	$53,599	$2.20
Lockwoods Folly River	Lockwoods Folly Inlet	1981	Merritt	S			52,990	$103,592	$1.95
Lockwoods Folly River	Lockwoods Folly Inlet	1982	Currituck	N			42,025	$17,559	$0.42
Lockwoods Folly River	Lockwoods Folly Inlet	1982	Currituck	N			135,581	$305,392	$2.25
Lockwoods Folly River	Lockwoods Folly Inlet	1982	Merritt	S			110,152	$184,131	$1.67
Lockwoods Folly River	Lockwoods Folly Inlet	1983	Currituck	N			37,980	$112,386	$2.96
Lockwoods Folly River	Lockwoods Folly Inlet	1983	Currituck	N			203,555	$341,988	$1.68
Lockwoods Folly River	Lockwoods Folly Inlet	1984	Currituck	N			122,519	$336,847	$2.75
Lockwoods Folly River	Lockwoods Folly Inlet	1985	Currituck	N			92,236	$143,028	$1.55
Lockwoods Folly River	Lockwoods Folly Inlet	1985	Merritt	S			25,200	$58,012	$2.30
Lockwoods Folly River	Lockwoods Folly Inlet	1986	Currituck	N			54,830	$101,193	$1.85
Lockwoods Folly River	Lockwoods Folly Inlet	1986	Merritt	S			96,264	$465,971	$4.84
Lockwoods Folly River	Lockwoods Folly Inlet	1987	Currituck	N			51,613	$80,899	$1.57
Lockwoods Folly River	Lockwoods Folly Inlet	1987	Fry	S			67,710	$161,514	$2.39
Lockwoods Folly River	Lockwoods Folly Inlet	1988	Currituck	N			59,411	$121,091	$2.04
Lockwoods Folly River	Lockwoods Folly Inlet	1988	Fry	S			208,279	$426,889	$2.05
Lockwoods Folly River	Lockwoods Folly Inlet	1989	Fry	S			89,145	$229,404	$2.57
Lockwoods Folly River	Lockwoods Folly Inlet	1989	Merritt	S			43,610	$91,492	$2.10
Lockwoods Folly River	Lockwoods Folly Inlet	1990	Currituck	N			8,165	$115,853	$14.19
Lockwoods Folly River	Lockwoods Folly Inlet	1990	Fry	S			134,288	$387,941	$2.89
Lockwoods Folly River	Lockwoods Folly Inlet	1990	Merritt	S			12,376	$59,233	$4.79
Lockwoods Folly River	Lockwoods Folly Inlet	1994	Currituck	N			80,505	$229,379	$2.85
Lockwoods Folly River	Lockwoods Folly Inlet	1994	Fry	S			60,431	$181,184	$3.00
Lockwoods Folly River	Lockwoods Folly Inlet	1994	Merritt	S			37,810	$243,600	$6.44
LOCKWOODS FOLLY INLET		1995	FRY	S			18,680	$42,234	$2.26
LOCKWOODS FOLLY INLET		1995	FRY	S			48,720	$110,151	$2.26
LOCKWOODS FOLLY INLET, NC		1996	FRY	S			20,569	$47,038	$2.29
LOCKWOODS FOLLY INLET, NC		1996	FRY	S			53,380	$122,070	$2.29

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
LOCKWOODS FOLLY INLET, NC		1997	CURRITUCK	N			41,905	$96,928	$2.31
LOCKWOODS FOLLY INLET, NC		1997	MERRITT	S			40,846	$94,478	$2.31
LOCKWOODS FOLLY RIVER INLET		1997	CURRITUCK	N			51,295	$118,647	$2.31
LOCKWOODS FOLLY INLET		1999	CURRITUCK	N			23,690	$56,060	$2.37
LOCKWOODS FOLLY INLET		1999	FRY	S			72,840	$172,367	$2.37
LOCKWOODS FOLLY INLET		1999	MERRITT	S			61,100	$144,586	$2.37
LOCKWOODS FOLLY INLET, NC		1999	FRY	S			64,440	$152,490	$2.37
LOCKWOODS FOLLY INLET		2000	CURRITUCK	N			25,700	$61,513	$2.39
LOCKWOODS FOLLY INLET		2000	CURRITUCK	N			19,835	$47,475	$2.39
LOCKWOODS FOLLY INLET, NC		2001	FRY	S			83,760	$202,779	$2.42
LOCKWOODS FOLLY INLET		2002	CURRITUCK	N			19,245	$68,800	$3.57
LOCKWOODS FOLLY INLET		2002	MERRITT	S			165,390	$323,000	$1.95
LOCKWOODS FOLLY INLET		2002	MERRITT	S			76,190	$198,000	$2.60
Lockwoods Folly Inlet		2003	CURRITUCK	N			820	$7,650	$9.33
Lockwoods Folly Inlet		2003	FRY	S			70,090	$165,000	$2.35
Lockwoods Folly Inlet		2003	MERRITT	S			132,005	$261,000	$1.98
Lockwoods Folly Inlet		2003	MERRITT	S			116,740	$189,000	$1.62
LOCKWOODS FOLLY INLET		2004	FRY	S			81,970	$253,000	$3.09
LOCKWOODS FOLLY INLET		2004	FRY	S			20,130	$66,000	$3.28
LOCKWOODS FOLLY INLET		2004	MERRITT	S			49,300	$90,000	$1.83
LOCKWOODS FOLLY INLET		2004	MERRITT	S			3,310	$18,000	$5.44
LOCKWOODS FOLLY INLET		2004	MERRITT	S			83,920	$285,932	$3.41
LOCKWOODS FOLLY INLET		2005	CURRITUCK	N			22,670	$48,806	$2.15
LOCKWOODS FOLLY INLET		2005	FRY	S			71,270	$132,000	$1.85
LOCKWOODS FOLLY INLET		2005	FRY	S			58,280	$143,000	$2.45
LOCKWOODS FOLLY		2005	FRY	S			3,940	$8,482	$2.15
LOCKWOODS FOLLY INLET		2006	FRY	S			64,360	$154,000	$2.39
LOCKWOODS FOLLY INLET		2006	MERRITT	S			102,920	$265,500	$2.58
LOCKWOODS FOLLY INLET		2006	MERRITT	S			55,190	$123,500	$2.24
Lockwoods Folly Inlet	Lockwoods Folly Inlet	2007	FRY	S			54,010	$111,481	$2.06
Lockwoods Folly Inlet	Lockwoods Folly Inlet	2007	FRY	S			70,930	$146,405	$2.06
Lockwoods Folly Inlet	Lockwoods Folly Inlet	2007	FRY	S			126,590	$266,000	$2.10
Lockwoods Folly Inlet	Lockwoods Folly Inlet	2007	MERRITT	S			93,740	$190,000	$2.03
Lockwoods Folly Inlet		2008	Currituck	N			21,780	$110,840	$5.09
Lockwoods Folly Inlet		2008	MERRITT	S			114,310	$256,500	$2.24
Lockwoods Folly Inlet		2008	MERRITT	S			94,690	$178,600	$1.89
Lockwoods Folly Inlet		2008	MERRITT	S			30,300	$95,000	$3.14
Lockwoods Folly Inlet		2009	MERRITT	S			2,570	$9,500	$3.70
Lockwoods Folly Inlet		2009	MERRITT	S			65,620	$209,000	$3.19
Lockwoods Folly Inlet		2009	MERRITT	S			87,820	$133,000	$1.51
Lockwoods Folly Inlet		2009	MERRITT	S			102,930	$190,000	$1.85
Lockwoods Folly Inlet		2009	MERRITT	S			67,160	$142,500	$2.12
Lockwoods Folly Inlet		2010	FRY	S			34,070	$80,000	$2.35
Lockwoods Folly Inlet		2010	FRY	S			33,490	$110,000	$3.28
Lockwoods Folly Inlet		2010	MERRITT	S			61,420	$161,500	$2.63
Lockwoods Folly Inlet		2011	MERRITT	S			23,390	$78,000	$3.33
Lockwoods Folly Inlet		2012	MERRITT	S			52,170	$208,000	$3.99
Lockwoods Folly Inlet		2012	MERRITT	S			86,450	$270,400	$3.13
Lockwoods Folly Inlet		2012	MERRITT	S			11,030	$31,200	$2.83
Lockwoods Folly		2013	Merritt	S			63,570	$182,000	$2.86
Lockwoods Folly		2013	Merritt	S			89,190	$273,000	$3.06
Lockwoods Folly		2014	Merritt	S			27,660	$94,500	$3.42
Lockwoods Folly		2014	Merritt	S			10,410	$31,252	$3.00
Lockwoods Folly		2014	Merritt	S			15,640	$50,000	$3.20
Lockwoods Folly		2014	Merritt	S			29,510	$87,500	$2.97
Lockwoods Folly		2015	Currituck	N			6,335	$57,500	$9.08
Lockwoods Folly Inlet		2015	Merritt	S			50,780	$120,000	$2.36
							5,424,035		
LOCKWOODS FOLLY RIVER									
Lockwoods Folly River, NC		1976	Currituck, Merritt	N		337,303	337,303	$1,345,044	$3.99
Lockwoods Folly River, NC		1977	Merritt	S		42,164	42,164	$168,253	$3.99
Lockwoods Folly River, NC		1980	Marion	P		2,966	2,966	$11,861	$4.00
Lockwoods Folly River	Lockwoods Folly River	1981	Marion	P			2,966	$13,390	$4.51
Lockwoods Folly River	Lockwoods Folly River	1986	XL	P			34,898	$165,977	$4.76
Lockwoods Folly River	Lockwoods Folly River	1991	Fry	S			180,999	$564,248	$3.12
Lockwoods Folly River	Lockwoods Folly River	1992	Currituck	N			55,665	$132,000	$2.37
Lockwoods Folly River	Lockwoods Folly River	1992	Fry	S			116,058	$476,755	$4.11
Lockwoods Folly River	Lockwoods Folly River	1993	Currituck	N			135,535	$318,993	$2.35
Lockwoods Folly River	Lockwoods Folly River	1993	Hampton Roads	P			160,091	$1,389,967	$8.68
Lockwoods Folly River	Lockwoods Folly River	1993	Fry	S			1,155	$7,200	$6.23
Lockwoods Folly River	Lockwoods Folly River	1993	Merritt	S			40,454	$389,937	$9.64

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
LOCKWOODS FOLLY RIVER		1995	CURRITUCK	N			7,780	$31,111	$4.00
LOCKWOODS FOLLY RIVER		1995	CURRITUCK	N			9,995	$39,996	$4.00
LOCKWOODS FOLLY RIVER		1995	CURRITUCK	N			8,490	$34,069	$4.01
LOCKWOODS FOLLY RIVER		1995	MERRITT	S			23,198	$93,155	$4.02
LOCKWOODS FOLLY RIVER		1995	MERRITT	S			9,768	$39,362	$4.03
LOCKWOODS FOLLY RIVER		1996	CURRITUCK	N			4,370	$17,622	$4.03
LOCKWOODS FOLLY RIVER		1996	FRY	S			86,780	$349,945	$4.03
LOCKWOODS FOLLY RIVER		1996	FRY	S			54,580	$220,251	$4.04
LOCKWOODS FOLLY RIVER		1998	CURRITUCK	N			39,125	$157,884	$4.04
LOCKWOODS FOLLY RIVER		1998	FRY	S			37,760	$152,376	$4.04
LOCKWOODS FOLLY RIVER		1999	FRY	S			103,520	$417,742	$4.04
LOCKWOODS FOLLY RIVER		2000	CURRITUCK	N			840	$3,394	$4.04
LOCKWOODS FOLLY RIVER		2000	FRY	S			38,720	$156,469	$4.04
LOCKWOODS FOLLY RIVER		2000	FRY	S			34,810	$140,668	$4.04
LOCKWOODS FOLLY RIVER		2001	CURRITUCK	N			4,955	$20,023	$4.04
LOCKWOODS FOLLY RIVER		2001	MERRITT	S			54,090	$218,579	$4.04
LOCKWOODS FOLLY/SHALLOTTE		2001	CURRITUCK	N			32,225	$130,313	$4.04
LOCKWOODS FOLLY RIVER		2002	FRY	S			87,280	$232,200	$2.66
LOCKWOODS FOLLY RIVER		2002	FRY	S			155,226	$292,240	$1.88
LOCKWOODS FOLLY RIVER		2002		P			69,570	$598,762	$8.61
Lockwoods Folly Inlet	Lockwoods Folly River	2008	FRY	S			23,650	$57,000	$2.41
Lockwoods Folly Inlet	Lockwoods Folly River	2008	FRY	S			6,140	$39,584	$6.45
Lockwoods Folly Inlet	Lockwoods Folly River	2008	FRY	S			54,614	$87,400	$1.60
Lockwoods Folly Inlet	Lockwoods Folly River	2009	FRY	S			131,661	$285,000	$2.16
							2,189,401		
MANTEO (SHALLOWBAG BAY)/OREGON INLET									
Manteo (Shallowbag) Bay, NC		1975	Schweizer	S		182,068	182,068	$586,502	$3.22
Manteo (Shallowbag) Bay, NC		1975	Clarendon	P		748,947	748,947	$2,412,610	$3.22
Manteo (Shallowbag) Bay, NC		1975	Schweizer	S		164,672	164,672	$530,464	$3.22
Manteo (Shallowbag) Bay, NC		1976	Schweizer	S		372,463	372,463	$1,214,192	$3.26
Manteo (Shallowbag) Bay, NC		1976	Richmond	P		114,693	114,693	$373,888	$3.26
Manteo (Shallowbag) Bay, NC		1976	Clarendon	P		147,104	147,104	$479,544	$3.26
Manteo (Shallowbag) Bay, NC		1977	Marion	P		148,849	148,849	$491,041	$3.30
Manteo (Shallowbag) Bay, NC		1978	Merritt	S		9,045	9,045	$30,196	$3.34
Manteo (Shallowbag) Bay, NC		1978	Schweizer	S		312,485	312,485	$1,043,205	$3.34
Manteo (Shallowbag Bay), NC	Old House Channel and channel to wanchese	1980	Marion	P			228,933	$433,645	$1.89
Manteo (Shallowbag Bay), NC	Oregon Inlet	1980	Schweizer	S			438,000	$618,624	$1.41
Manteo (Shallowbag) Bay, NC		1980	Marion	P		15,180	15,180	$25,097	$1.65
Manteo (Shallowbag) Bay, NC		1980	Schweizer	S		349,082	349,082	$577,134	$1.65
Manteo (Shallowbag Bay), NC	Old House Channel	1981	Richmond	P			177,848	$710,152	$3.99
Manteo (Shallowbag Bay), NC	Oregon Inlet	1981	Currituck	N			27,225	$89,033	$3.27
Manteo (Shallowbag Bay), NC	Oregon Inlet	1981	Schweizer	S			550,250	$838,134	$1.52
Manteo (Shallowbag Bay), NC	Oregon Inlet	1981	Merritt	S			115,605	$151,699	$1.31
Manteo (Shallowbag Bay), NC	Oregon Inlet	1982	Schweizer	S			665,080	$1,200,107	$1.80
Manteo (Shallowbag Bay), NC	Oregon Inlet	1982	Merritt	S			279,265	$515,565	$1.85
Manteo (Shallowbag Bay), NC		1982	Richmond	P			77,420	$345,157	$4.46
Manteo (Shallowbag) Bay, NC		1982	Richmond	P		296,320	296,320	$934,058	$3.15
Manteo (Shallowbag Bay), NC	Old House Channel	1983	Richmond	P			255,734	$442,592	$1.73
Manteo (Shallowbag Bay), NC	Old House Channel	1983	Marion	P			278,855	$624,897	$2.24
Manteo (Shallowbag Bay), NC	Oregon Inlet	1983	Mermentau	H			146,251	$878,080	$6.00
Manteo (Shallowbag Bay), NC	Oregon Inlet	1983	Schweizer	S			514,160	$1,197,538	$2.33
Manteo (Shallowbag Bay), NC	Oregon Inlet	1983	Merritt	S			221,019	$314,697	$1.42
Manteo (Shallowbag Bay), NC	Oregon Inlet	1983	Fry	S			152,986	$535,578	$3.50
Manteo (Shallowbag) Bay, NC		1983	Mermentau	H		639,295	639,295	$1,835,771	$2.87
Manteo (Shallowbag Bay), NC	Oregon Inlet	1984	Mermentau	H			270,467	$1,679,568	$6.21
Manteo (Shallowbag Bay), NC	Oregon Inlet	1984	Mermentau	H			24,418	$580,131	$23.76
Manteo (Shallowbag Bay), NC	Oregon Inlet	1984	Schweizer	S			356,327	$804,955	$2.26
Manteo (Shallowbag Bay), NC	Oregon Inlet	1984	Merritt	S			85,498	$149,764	$1.75
Manteo (Shallowbag Bay), NC	Oregon Inlet	1984	Fry	S			162,835	$516,574	$3.17
Manteo (Shallowbag) Bay, NC		1984	Mermentau	H		480,739	480,739	$1,609,630	$3.35
Manteo (Shallowbag Bay), NC	channel from Manteo to Wanchese	1985	Marion	P			18,934	$138,845	$7.33
Manteo (Shallowbag Bay), NC	channel from Manteo to Wanchese	1985	Marion	P			166,358	$911,826	$5.48
Manteo (Shallowbag Bay), NC	Old House Channel	1985	Richmond	P			133,487	$384,949	$2.88
Manteo (Shallowbag Bay), NC	Oregon Inlet	1985	Mermentau	H			456,321	$2,637,837	$5.78
Manteo (Shallowbag Bay), NC	Oregon Inlet	1985	Northerly Island	H			283,507	$491,592	$1.73
Manteo (Shallowbag Bay), NC	Oregon Inlet	1985	Schweizer	S			377,790	$774,465	$2.05
Manteo (Shallowbag Bay), NC	Oregon Inlet	1985	Merritt	S			305,466	$540,806	$1.77
Manteo (Shallowbag) Bay, NC		1985	Northerly Island	H		521,442	521,442	$2,013,738	$3.86
Manteo (Shallowbag) Bay, NC		1985	Patricia Sanderson	P		9,421	9,421	$36,383	$3.86
Manteo (Shallowbag Bay)		1986	Northerly Island	H			219,322	$561,617	$2.56
Manteo (Shallowbag Bay)		1986	Northerly Island	H			258,750	$510,953	$1.97

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Manteo (Shallowbag Bay)		1986	Northerly Island	H			266,450	$887,252	$3.33
Manteo (Shallowbag Bay)		1986	Clinton	P			130,408	$290,813	$2.23
Manteo (Shallowbag Bay)		1986	Merritt	S			123,123	$450,395	$3.66
Manteo (Shallowbag Bay)		1986	Schweizer	S			248,320	$1,324,134	$5.33
Manteo (Shallowbag Bay)		1987	Atachafalya and Merementau	H			365,906	$679,094	$1.86
Manteo (Shallowbag Bay)		1987	Merementau	H			533,183	$814,874	$1.53
Manteo (Shallowbag Bay)		1987	Currituck	N			41,400	$127,189	$3.07
Manteo (Shallowbag Bay)		1987	Clinton	P			272,689	$594,938	$2.18
Manteo (Shallowbag Bay)		1987	Enterprise	P			249,093	$586,994	$2.36
Manteo (Shallowbag Bay)		1987	Fry	S			84,743	$313,577	$3.70
Manteo (Shallowbag Bay)		1987	Merritt	S			19,960	$39,584	$1.98
Manteo (Shallowbag Bay)		1987	Schweizer	S			340,253	$1,111,725	$3.27
Manteo (Shallowbag Bay)		1988	Merementau	H			274,166	$722,009	$2.63
Manteo (Shallowbag Bay)		1988	Northerly Island	H			213,791	$470,914	$2.20
Manteo (Shallowbag Bay)		1988	Hampton Roads	P			141,935	$365,065	$2.57
Manteo (Shallowbag Bay)		1988	Marion	P			122,855	$390,679	$3.18
Manteo (Shallowbag Bay)		1988	Merritt	S			116,718	$143,770	$1.23
Manteo (Shallowbag Bay)		1988	Schweizer	S			491,747	$849,896	$1.73
Manteo (Shallowbag Bay)		1989	Atachafalya	H			290,000	$687,056	$2.37
Manteo (Shallowbag Bay)		1989	Atachafalya and Merementau	H			159,000	$556,118	$3.50
Manteo (Shallowbag Bay)		1989	Currituck	N			77,638	$53,976	$0.70
Manteo (Shallowbag Bay)		1989	Hampton Roads	P			110,000	$156,099	$1.42
Manteo (Shallowbag Bay)		1989	Hampton Roads, Cherokee and Marion	P			546,901	$1,332,274	$2.44
Manteo (Shallowbag Bay)		1989	Merritt	S			91,987	$181,041	$1.97
Manteo (Shallowbag Bay)		1989	Schweizer	S			870,982	$1,748,231	$2.01
Manteo (Shallowbag) Bay, NC		1989	Cherokee	P		244,368	244,368	$502,435	$2.06
Manteo (Shallowbag Bay)		1990	Northerly Island	H			292,020	$905,967	$3.10
Manteo (Shallowbag Bay)		1990	Hampton Roads	P			359,213	$580,552	$1.62
Manteo (Shallowbag Bay)		1990	Richmond	P			224,090	$647,986	$2.89
Manteo (Shallowbag Bay)		1990	Fry	S			79,910	$241,500	$3.02
Manteo (Shallowbag Bay)		1990	Schweizer	S			705,152	$1,805,373	$2.56
Manteo (Shallowbag) Bay, NC		1990	Georgia	P		282,591	282,591	$745,624	$2.64
Manteo (Shallowbag Bay)	Old House Channel	1991	Stuart	P			137,000	$619,666	$4.52
Manteo (Shallowbag Bay), NC	Bonner Bridge	1991	Georgia	P			282,591	$1,879,038	$6.65
Manteo (Shallowbag Bay), NC	Old House Channel and channel to wanchese	1991	Richmond, Stuart	P			394,062	$1,316,266	$3.34
Manteo (Shallowbag Bay), NC	Oregon Inlet	1991	Northerly Island	H			182,894	$476,208	$2.60
Manteo (Shallowbag Bay), NC	Oregon Inlet	1991	Atchafalaya	H			230,779	$677,446	$2.94
Manteo (Shallowbag Bay), NC	Oregon Inlet	1991	Currituck	N			149,503	$736,251	$4.92
Manteo (Shallowbag Bay), NC	Oregon Inlet	1991	Schweizer	S			480,926	$1,294,092	$2.69
Manteo (Shallowbag Bay), NC	Oregon Inlet	1991	Merritt	S			61,243	$175,396	$2.86
Manteo (Shallowbag) Bay, NC		1991	ADCO	P		184,331	184,331	$1,338,935	$7.26
Manteo (Shallowbag Bay), NC	Oregon Inlet	1992	ADCO	P			94,331	$709,522	$7.52
Manteo (Shallowbag Bay), NC	Oregon Inlet	1992	Georgia	P			900,592	$3,042,914	$3.38
Manteo (Shallowbag Bay), NC	Oregon Inlet	1992	Schweizer	S			602,896	$1,447,036	$2.40
Manteo (Shallowbag Bay), NC	Oregon Inlet	1992	Merritt	S			88,802	$344,552	$3.88
Manteo (Shallowbag Bay), NC	Bonner Bridge	1993	Georgia	P			433,235	$3,286,204	$7.59
Manteo (Shallowbag Bay), NC	Old House Channel and channel to wanchese	1993	Richmond	P			404,888	$1,165,342	$2.88
Manteo (Shallowbag Bay), NC	Oregon Inlet	1993	Currituck	N			18,485	$173,242	$9.37
Manteo (Shallowbag Bay), NC	Oregon Inlet	1993	Schweizer	S			585,690	$1,145,406	$1.96
Manteo (Shallowbag Bay)		1994	Merritt	N			55,596	$96,939	$1.74
Manteo (Shallowbag Bay)		1994	Schweizer	S			846,221	$1,488,818	$1.76
Manteo (Shallowbag) Bay, NC		1994	Georgia	P		433,235	433,235	$758,812	$1.75
Manteo (Shallowbag Bay)	Old House Channel and Channel to Wanchese	1995	Cherokee	P			457,862	$1,623,008	$3.54
Manteo (Shallowbag Bay)	Oregon Inlet	1995	Schweizer	S			577,891	$948,770	$1.64
Manteo (Shallowbag Bay)	Oregon Inlet	1995	Atchafalaya	H			250,000	$1,674,992	$6.70
MANTEO OREGON INLET		1995		P			233,631	$2,364,677	$10.12
MANTEO-SHALLOWBAG-BAY		1995	FRY	S			170,310	$937,042	$5.50
MANTEO-SHALLOWBAG-BAY		1995	FRY	S			75,230	$413,914	$5.50
MAIN DRED MANTEO (OCEAN BAR)		1996		H			271,004	$871,793	$3.22
MANTEO-SHALLOWBAG-BAY		1996	CURRITUCK	N			13,110	$42,174	$3.22
MANTEO-SHALLOWBAG-BAY		1996	SCHWEIZER	S			480,416	$1,545,450	$3.22
MANTEO-SHALLOWBAG-BAY		1996	SCHWEIZER	S			159,682	$513,681	$3.22
MANTEO-SHALLOWBAG-BAY		1996	SCHWEIZER	S			10,060	$32,362	$3.22
MANTEO SHALLOWBAG B.(OCEAN		1997		H			271,703	$1,159,642	$4.27
MANTEO SHALLOWBAG BAY		1997		P			271,989	$1,149,481	$4.23
MANTEO-SHALLOWBAG-BAY		1997	SCHWEIZER	S			15,358	$65,227	$4.25
MANTEO-SHALLOWBAG-BAY		1997	SCHWEIZER	S			78,064	$331,548	$4.25
MANTEO-SHALLOWBAG-BAY		1997	SCHWEIZER	S			237,078	$1,006,900	$4.25
MANTEO SHALLOWBAG BAY (OCEAN		1998		H			260,183	$838,448	$3.22
MANTEO-SHALLOWBAG-BAY		1998	MERRITT	S			59,148	$190,606	$3.22
MANTEO-SHALLOWBAG-BAY		1998	SCHWEIZER	S			130,130	$419,348	$3.22

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
MANTEO-SHALLOWBAG-BAY		1998	SCHWEIZER	S			208,587	$672,178	$3.22
MANTEO - OCEAN BAR		1999		H			328,919	$1,183,306	$3.60
MANTEO S.BAG(OHC& WANCH/FARC		1999		P			518,676	$1,604,237	$3.09
MANTEO SHALLOWBAG BAY		1999	FRY	S			66,750	$223,296	$3.35
MANTEO SHALLOWBAG BAY		1999	SCHWEIZER	S			226,060	$756,228	$3.35
MANTEO-SHALLOWBAG BAY		1999	MERRITT	S			31,490	$105,342	$3.35
MANTEO-SHALLOWBAG BAY		1999	SCHWEIZER	S			37,954	$126,966	$3.35
MANTEO-SHALLOWBAG-BAY		1999	FRY	S			155,440	$519,986	$3.35
MANTEO-SHALLOWBAG-BAY		1999	MERRITT	S			124,390	$416,116	$3.35
MANTEO SHALLOWBAG BAY		2000	MERRITT	S			108,360	$566,560	$5.23
MANTEO SHALLOWBAG BAY (OB)		2000		H			419,305	$2,192,336	$5.23
MANTEO-SHALLOWBAG-BAY		2000	FRY	S			69,870	$365,315	$5.23
MANTEO-SHALLOWBAG-BAY		2000	FRY	S			50,340	$263,203	$5.23
MANTEO (OCEAN BAR)		2001		P			513,706	$3,773,056	$7.34
MANTEO (OH) SL/ROLLINSON		2001		P			545,000	$2,998,615	$5.50
MANTEO SHALLOWBAG BAY		2001	FRY	S			27,420	$176,130	$6.42
MANTEO (OB CHNL)/WIDENER		2002		H			732,829	$5,006,722	$6.83
MANTEO SHALLOWBAG BAY		2002	MERRITT	S			98,250	$313,500	$3.19
MANTEO SHALLOWBAG BAY		2002	MERRITT	S			192,395	$684,000	$3.56
MANTEO SHALLOWBAG BAY		2002	MERRITT	S			26,710	$139,516	$5.22
MANTEO/OHCHNL/SILV LK HBR		2002		P			290,466	$2,124,859	$7.32
MANTEO-SHALLOWBAG-BAY		2002	FRY	S			133,130	$335,400	$2.52
MANTEO - OREGON INL (O B)		2003		H			107,631	$433,799	$4.03
MANTEO (SPIT)		2003		P			220,024	$5,265,886	$23.93
Manteo -Oregon Inlet		2003	MERRITT	S			50,840	$171,000	$3.36
Manteo Shallowbag Bay		2003	FRY	S			14,670	$77,000	$5.25
Manteo Shallowbag Bay		2003	FRY	S			10,890	$44,000	$4.04
Manteo-Shallowbag Bay		2003	FRY	S			15,750	$66,000	$4.19
Manteo-Shallowbag-Bay		2003	FRY	S			23,270	$77,000	$3.31
MANTEO (OCEAN BAR)		2004		H			147,871	$781,725	$5.29
MANTEO SHALLOWBAG BAY		2004	CURRITUCK	N			37,775	$206,000	$5.45
MANTEO SHALLOWBAG BAY		2004	MERRITT	S			14,060	$54,000	$3.84
MANTEO SHALLOWBAG BAY		2004	MERRITT	S			59,501	$126,000	$2.12
MANTEO-OLD HOUSE		2004		P			708,320	$3,053,421	$4.31
MANTEO-SHALLOWBAG BAY		2004	CURRITUCK	N			15,660	$99,450	$6.35
MANTEO-SHALLOWBAG-BAY		2004	CURRITUCK	N			1,460	$15,300	$10.48
MANTEO-SHALLOWBAG-BAY		2004	MERRITT	S			69,040	$122,400	$1.77
MANTEO (SPIT)		2004		P			468,577	$3,446,809	$7.36
MANTEO SHALLOWBAG	WANCHESE	2004		P			394,769	$1,543,347	$3.91
MANTEO/OREGON INLET		2005	CURRITUCK	N			15,710	$42,005	$2.67
MANTEO SHALLOWBAG BAY		2005	FRY	S			235,330	$629,213	$2.67
MANTEO SHALLOWBAG BAY		2005	FRY	S			65,870	$176,120	$2.67
OREGON INLET		2005	FRY	S			242,930	$363,000	$1.49
MANTEO SHALLOWBAG BAY		2005	FRY	S			39,740	$110,000	$2.77
MANTEO SHALLOWBAG BAY		2005	FRY	S			111,200	$418,000	$3.76
MANTEO-OCEAN BAR		2005		P			30,850	$1,097,379	$35.57
OREGON INLET		2006	CURRITUCK	N			16,645	$61,650	$3.70
OREGON INLET		2006	CURRITUCK	N			21,625	$61,650	$2.85
OREGON INLET		2006	FRY	S			69,100	$242,000	$3.50
OREGON INLET		2006	FRY	S			18,640	$55,000	$2.95
OREGON INLET		2006	FRY	S			37,820	$107,603	$2.85
OREGON INLET		2006	FRY	S			74,920	$213,157	$2.85
OREGON INLET		2006	MERRITT	S			71,160	$171,000	$2.40
OREGON INLET		2006	MERRITT	S			184,380	$465,500	$2.52
Manteo Shallowbag Bay	Manteo Shallowbag Bay	2007	CURRITUCK	N			1,030	$27,400	$26.60
Manteo Shallowbag Bay	Manteo Shallowbag Bay	2007	CURRITUCK	N			17,080	$41,100	$2.41
Manteo Oregon Inlet	Manteo Oregon Inlet	2007	CURRITUCK	N			25,665	$116,450	$4.54
Manteo Shallowbag Bay	Manteo Shallowbag Bay	2007	CURRITUCK	N			7,150	$41,100	$5.75
Oregon Inlet	Oregon Inlet	2007	CURRITUCK	N			62,220	$219,200	$3.52
Oregon Inlet	Oregon Inlet	2007	FRY	S			182,780	$465,500	$2.55
Oregon Inlet	Oregon Inlet	2007	FRY	S			59,090	$152,000	$2.57
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			115,730	$313,500	$2.71
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			159,050	$133,000	$0.84
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			49,510	$123,500	$2.49
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			68,010	$216,795	$3.19
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			86,520	$209,000	$2.42
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			8,250	$19,000	$2.30
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			146,530	$361,000	$2.46
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			1,380	$9,500	$6.88
Oregon Inlet	Oregon Inlet	2007	MERRITT	S			67,486	$215,124	$3.19
Oregon Inlet		2008	Currituck	N			83,925	$392,000	$4.67

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Oregon Inlet		2008	Currituck	N			12,455	$59,200	$4.75
Oregon Inlet		2008	FRY	S			113,520	$313,500	$2.76
Oregon Inlet		2008	MERRITT	S			316,400	$760,000	$2.40
Oregon Inlet		2008	MERRITT	S			68,640	$218,500	$3.18
Oregon Inlet		2008	MERRITT	S			52,870	$144,100	$2.73
Oregon Inlet		2009	FRY	S			286,100	$828,876	$2.90
Oregon Inlet		2009	FRY	S			22,716	$95,000	$4.18
Oregon Inlet		2009	FRY	S			107,335	$256,500	$2.39
Oregon Inlet		2009	FRY	S			3,670	$28,500	$7.77
Oregon Inlet		2009	MERRITT	S			335,920	$1,007,000	$3.00
Oregon Inlet		2010	FRY	S			144,080	$380,000	$2.64
Oregon Inlet		2010	FRY	S			402,990	$1,218,000	$3.02
Oregon Inlet		2010	FRY	S			107,720	$380,000	$3.53
Oregon Inlet		2010	FRY	S			18,260	$90,000	$4.93
Oregon Inlet		2010	MERRITT	S			319,450	$750,000	$2.35
Oregon Inlet		2010	MERRITT	S			64,490	$190,000	$2.95
Oregon Inlet		2011	FRY	S			54,340	$160,000	$2.94
Oregon Inlet		2011	FRY	S			155,310	$540,000	$3.48
Oregon Inlet		2011	CURRITUCK	N			502,550	$1,515,715	$3.02
Oregon Inlet		2011	MERRITT	S			311,680	$1,105,000	$3.55
Oregon Inlet		2011	MERRITT	S			84,720	$312,000	$3.68
Oregon Inlet		2011	MERRITT	S			4,870	$39,000	$8.01
Manteo	Interior Chnls	2012		X			500,000	$4,617,080	$9.23
Oregon Inlet		2013	CURRITUCK	N			43,675	$247,200	$5.66
Oregon Inlet		2013	CURRITUCK	N			12,790	$93,600	$7.32
Oregon Inlet		2013	MERRITT	S			109,420	$470,167	$4.30
Oregon Inlet		2013	MERRITT	S			104,300	$460,417	$4.41
Oregon Inlet		2014	CURRITUCK	N			23,715	$288,750	$12.18
Oregon Inlet		2014	CURRITUCK	N			71,385	$435,000	$6.09
Oregon Inlet		2014	MERRITT	S			53,810	$310,500	$5.77
Oregon Inlet		2014	MERRITT	S			121,170	$524,000	$4.32
Oregon Inlet		2015	CURRITUCK	N			77,595	$540,000	$6.96
Oregon Inlet		2015	CURRITUCK	N			33,325	$243,750	$7.31
Oregon Inlet		2015	MERRITT	S			73,520	$252,000	$3.43
Oregon Inlet		2015	MERRITT	S			85,970	$196,000	$2.28
Oregon Inlet		2015	MERRITT	S			19,760	$80,000	$4.05
							45,184,659		
MASONBORO INLET									
MASONBORO INLET		1997	FRY	S			28,970	$78,805	$2.72
MILE HAMMOCK									
MILE HAMMOCK		2000		P			280,000	$1,978,068	$7.06
MOREHEAD CITY									
MOREHEAD CITY HARBOR		1975	GERIG	H		238,289	238,289	$275,017	$1.15
MOREHEAD CITY HARBOR		1976	GOETHALS	H		190,397	190,397	$226,708	$1.19
MOREHEAD CITY HARBOR		1976	DAVISON	H		74,685	74,685	$88,928	$1.19
MOREHEAD CITY HARBOR		1977	GERIG	H		583,929	583,929	$717,325	$1.23
MOREHEAD CITY HARBOR		1977	DAUNTLESS	P		475,453	475,453	$584,068	$1.23
MOREHEAD CITY HARBOR	40' Project	1977	SENSIBAR	H	63,796		63,796	$78,370	$1.23
MOREHEAD CITY HARBOR		1978	MCFARLAND	H		96,133	96,133	$121,837	$1.27
MOREHEAD CITY HARBOR		1978	LANGFITT	H	1,364,084		1,364,084	$1,728,809	$1.27
MOREHEAD CITY HARBOR		1979	SENSIBAR	H	1,608,131		1,608,131	$2,102,700	$1.31
MOREHEAD CITY HARBOR		1979	PULLEN,TALCAOTT	P	1,014,846	164,893	1,179,739	$1,542,559	$1.31
MOREHEAD CITY HARBOR		1981	LANGFITT	H		530,008	530,008	$737,630	$1.39
MOREHEAD CITY HARBOR	Ocean Bar	1981	DODGE ISLAND	H		824,052	824,052	$1,146,860	$1.39
MOREHEAD CITY HARBOR		1981	HAMPTON ROADS	P		621,805	621,805	$865,386	$1.39
MOREHEAD CITY HARBOR	Ocean Bar	1982	MANHATTAN ISLAND	H		977,040	977,040	$1,402,873	$1.44
MOREHEAD CITY HARBOR		1983	HAMPTON ROADS	P		263,609	263,609	$390,496	$1.48
MOREHEAD CITY HARBOR	Ocean Bar	1983	DODGE ISLAND	H		848,933	848,933	$1,257,562	$1.48
MOREHEAD CITY HARBOR		1985	CLINTON,CHEROKEE	P		421,111	421,111	$663,976	$1.58
MOREHEAD CITY HARBOR	Ocean Bar	1985	SUGAR ISLAND	H		583,181	583,181	$919,516	$1.58
MOREHEAD CITY HARBOR	LST Ramp	1985	CLINTON	P		60,732	60,732	$95,758	$1.58
MOREHEAD CITY HARBOR	Ocean Bar	1986	MERMENTAU,OUACHITA	H		507,593	507,593	$825,698	$1.63
MOREHEAD CITY HARBOR	Excavation of Brandt Island	1986	JIM BEAN	P	3,912,894		3,912,894	$6,365,081	$1.63
MOREHEAD CITY HARBOR	LST Ramp	1987	ENTERPRISE	P		375,115	375,115	$629,536	$1.68
MOREHEAD CITY HARBOR	Ocean Bar	1987	SUGAR ISLAND	H		534,555	534,555	$897,115	$1.68
MOREHEAD CITY HARBOR	Ocean Bar	1988	NORTHERLY ISLAND,DODGE ISLAND	H		691,190	691,190	$1,196,750	$1.73
MOREHEAD CITY HARBOR	Inner Harbor	1989	CHEROKEE	P		440,663	440,663	$787,159	$1.79
MOREHEAD CITY HARBOR		1989	ATCHAFALAYA,MERMENTAU	H		539,192	539,192	$963,162	$1.79
MOREHEAD CITY HARBOR		1989	CHEROKEE	P		49,321	49,321	$88,102	$1.79

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
MOREHEAD CITY HARBOR		1990	SUGAR ISLAND	H		592,232	592,232	$1,091,434	$1.84
MOREHEAD CITY HARBOR		1990	CHEROKEE	P		77,191	77,191	$142,257	$1.84
MOREHEAD CITY HARBOR	Inner Harbor & Bulkhead Channel	1991	PULLEN	P		336,763	336,763	$640,295	$1.90
MOREHEAD CITY HARBOR	Ocean Bar	1991	EAGLE	H		831,637	831,637	$1,581,210	$1.90
MORHEAD CITY INNER HARBOR		1993		P			4,664,416	$10,703,527	$2.29
MORHEAD CITY HARBOR		1994		H			2,606,922	$5,358,264	$2.06
MOREHEAD CITY		2000	MCFARLAND	H			110,000	$399,750	$3.63
MOREHEAD CITY BAR CHANNEL		2002	MCFARLAND	H			81,799	$454,966	$5.56
MOREHEAD (INNER HBR/BRANDT I)		2004		P			2,940,507	$13,904,957	$4.73
MOREHEAD CITY (OCEAN BAR)		2004		H			1,577,052	$4,917,213	$3.12
MOREHEAD & WILMINGTON HBR (OB)S		2005		H			906,716	$1,567,033	$1.73
WILM HBR-MHC HBR (OB)	Ocean Bar	2006		H			1,460,000	$2,146,200	$1.47
Morehead City	Ocean Bar	2008		H			501,781	$2,081,000	$4.15
Morehead City	Inner Harbor	2009	Dredge 551	B			780,000	$2,725,750	$3.49
Morehead City	Inner Harbor	2011	Virginian	B			445,229	$9,391,252	$21.09
Morehead City Harbor		2011	Currituck	N			37,020	$191,580	$5.18
MHC Hbr OB	& Wilmington Hbr	2012		H			200,000	$930,714	$4.65
Morehead City Harbor	IOB	2013		X			500,000	$4,849,000	$9.70
MHC HBR	OB CUTOFF AND RANG A	2015		P			725,000	$7,875,150	$10.86
							37,429,895		
NEW RIVER INLET									
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1980	Merritt	S			120,997	$147,446	$1.22
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1981	Merritt	S			152,957	$228,121	$1.49
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1982	Currituck	N			18,755	$26,391	$1.41
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1982	Merritt	S			66,631	$103,902	$1.56
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1983	Merritt	S			97,307	$203,716	$2.09
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1984	Currituck	N			60,225	$123,190	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1985	Currituck	N			96,877	$130,593	$1.35
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1985	Merritt	S			50,960	$88,654	$1.74
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1986	Currituck	N			87,875	$168,977	$1.92
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1986	Fry	S			51,194	$125,228	$2.45
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1986	Merritt	S			72,284	$222,851	$3.08
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1987	Currituck	N			28,955	$44,751	$1.55
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1987	Fry	S			94,785	$256,249	$2.70
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1987	Merritt	S			100,839	$254,898	$2.53
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1988	Arlington	P			124,912	$203,606	$1.63
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1988	Fry	S			41,755	$90,000	$2.16
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1988	Merritt	S			111,202	$173,504	$1.56
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1989	Fry	S			105,538	$293,039	$2.78
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1989	Merritt	S			99,736	$242,189	$2.43
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1990	Fry	S			158,816	$454,859	$2.86
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1990	Merritt	S			108,904	$363,014	$3.33
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1991	Merritt	S			124,026	$614,691	$4.96
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1991	Fry	S			30,455	$104,972	$3.45
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1992	Merritt	S			154,168	$478,359	$3.10

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1992	Fry	S			84,231	$237,600	$2.82
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1993	Currituck	N			46,950	$116,350	$2.48
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1993	Merritt	S			22,125	$116,226	$5.25
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1993	Fry	S			258,416	$841,742	$3.26
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1994	Merritt	S			116,560	$513,300	$4.40
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1994	Fry	S			181,263	$496,950	$2.74
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1995	Merritt	S			194,596	$592,189	$3.04
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New River Inlet	1995	Fry	S			42,370	$82,800	$1.95
NEW RIVER		1995	MERRITT	S			15,425	$38,542	$2.50
NEW RIVER		1995	MERRITT	S			63,949	$159,789	$2.50
NEW RIVER INLET, NC		1995	MERRITT	S			115,223	$287,907	$2.50
NEW RIVER INLET, NC		1995	MERRITT	S			23,175	$57,907	$2.50
NEW RIVER INLET		1996	CURRITUCK	N			16,085	$35,641	$2.22
NEW RIVER INLET, NC		1996	CURRITUCK	N			15,086	$33,428	$2.22
NEW RIVER INLET, NC		1996	FRY	S			33,540	$74,318	$2.22
NEW RIVER INLET, NC		1996	FRY	S			54,450	$120,651	$2.22
NEW RIVER INLET, NC		1996	FRY	S			47,170	$104,520	$2.22
NEW RIVER INLET, NC		1996	FRY	S			11,850	$26,257	$2.22
NEW RIVER INLET, NC		1996	MERRITT	S			97,245	$218,340	$2.22
NEW RIVER INLET		1997	CURRITUCK	N			5,880	$13,202	$2.25
NEW RIVER INLET		1997	FRY	S			82,330	$184,852	$2.25
NEW RIVER INLET		1997	FRY	S			118,186	$265,358	$2.25
NEW RIVER INLET		1997	MERRITT	S			97,247	$218,345	$2.25
NEW RIVER INLET		1997	MERRITT	S			23,768	$53,365	$2.25
NEW RIVER INLET, NC		1997	FRY	S			113,800	$255,510	$2.25
NEW RIVER INLET, NC		1997	FRY	S			78,230	$175,647	$2.25
NEW RIVER INLET, NC		1997	MERRITT	S			66,128	$150,447	$2.25
NEW RIVER INLET		1998	FRY	S			13,180	$29,986	$2.28
NEW RIVER INLET		1998	FRY	S			90,170	$205,145	$2.28
NEW RIVER INLET		1998	FRY	S			34,830	$79,241	$2.28
NEW RIVER INLET		1998	MERRITT	S			73,931	$168,200	$2.28
NEW RIVER INLET, NC		1998	FRY	S			29,270	$66,592	$2.28
NEW RIVER INLET, NC		1998	FRY	S			85,180	$193,792	$2.28
NEW RIVER INLET, NC		1998	FRY	S			90,710	$206,374	$2.28
NEW RIVER INLET,NC		1998	FRY	S			3,950	$9,106	$2.28
NEW RIVER INLET		1999	FRY	S			62,950	$145,120	$2.31
NEW RIVER INLET		1999	FRY	S			50,270	$115,889	$2.31
NEW RIVER INLET		1999	MERRITT	S			77,660	$179,031	$2.31
NEW RIVER INLET, NC		1999	FRY	S			116,844	$272,942	$2.31
NEW RIVER INLET		2000	FRY	S			96,740	$225,980	$2.34
NEW RIVER INLET		2000	FRY	S			33,930	$79,259	$2.34
NEW RIVER INLET		2000	MERRITT	S			94,640	$221,075	$2.34
NEW RIVER INLET, NC		2000	FRY	S			104,930	$245,112	$2.34
NEW RIVER INLET, NC		2000	FRY	S			31,560	$74,702	$2.34
NEW RIVER INLET		2001	FRY	S			77,140	$182,590	$2.37
NEW RIVER INLET		2001	MERRITT	S			69,969	$165,616	$2.37
NEW RIVER INLET		2001	MERRITT	S			53,990	$127,794	$2.37
NEW RIVER INLET, NC		2001	FRY	S			130,650	$309,248	$2.37
NEW RIVER INLET		2002	FRY	S			23,660	$51,600	$2.18
NEW RIVER INLET, NC		2002	FRY	S			22,070	$77,400	$3.51
New River		2003	MERRITT	S			18,230	$45,000	$2.47
New River Inlet		2003	CURRITUCK	N			8,515	$62,300	$7.32
New River Inlet		2003	CURRITUCK	N			6,315	$53,400	$8.46
New River Inlet		2003	FRY	S			68,150	$176,000	$2.58
New River Inlet		2003	FRY	S			19,250	$43,000	$2.23
New River Inlet		2003	FRY	S			13,800	$55,000	$3.99
New River Inlet		2003	FRY	S			77,590	$264,000	$3.40
New River Inlet		2003	FRY	S			74,780	$176,000	$2.35
New River Inlet		2003	FRY	S			33,050	$88,000	$2.66
New River Inlet		2003	MERRITT	S			39,120	$81,000	$2.07
New River Inlet		2003	MERRITT	S			18,230	$61,972	$3.40
New River Inlet		2003	MERRITT	S			16,660	$27,000	$1.62
New River Inlet		2003	MERRITT	S			23,350	$63,000	$2.70

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
New River Inlet		2003	MERRITT	S			11,530	$27,000	$2.34
NEW RIVER INLET		2004	CURRITUCK	N			115,010	$283,500	$2.47
NEW RIVER INLET		2004	MERRITT	S			24,660	$54,000	$2.19
NEW RIVER INLET		2004	MERRITT	S			131,070	$279,000	$2.13
NEW RIVER INLET		2004	MERRITT	S			109,950	$342,000	$3.11
NEW RIVER INLET		2004	MERRITT	S			129,570	$288,000	$2.22
NEW RIVER INLET		2005	MERRITT	S			27,500	$70,221	$2.55
NEW RIVER INLET		2005	MERRITT	S			119,830	$305,984	$2.55
NEW RIVER INLET		2006	FRY	S			15,590	$55,000	$3.53
NEW RIVER INLET		2006	FRY	S			52,600	$132,000	$2.51
NEW RIVER INLET		2006	FRY	S			54,390	$154,000	$2.83
NEW RIVER INLET		2006	FRY	S			39,790	$106,782	$2.68
NEW RIVER INLET		2006	FRY	S			87,490	$220,000	$2.51
NEW RIVER INLET		2006	MERRITT	S			74,700	$152,000	$2.03
NEW RIVER INLET		2006	MERRITT	S			60,950	$163,568	$2.68
New River Inlet	New River Inlet	2007	FRY	S			44,470	$104,500	$2.35
New River Inlet	New River Inlet	2007	FRY	S			18,820	$237,500	$12.62
New River Inlet	New River Inlet	2007	FRY	S			31,670	$72,000	$2.27
New River Inlet	New River Inlet	2007	FRY	S			94,220	$216,000	$2.29
New River Inlet	New River Inlet	2007	FRY	S			23,950	$47,500	$1.98
New River Inlet	New River Inlet	2007	MERRITT	S			13,760	$28,500	$2.07
New River Inlet	New River Inlet	2007	MERRITT	S			77,570	$180,500	$2.33
New River Inlet	New River Inlet	2007	MERRITT	S			18,850	$47,500	$2.52
New River Inlet	New River Inlet	2007	MERRITT	S			94,630	$213,826	$2.26
New River Inlet		2008	FRY	S			181,974	$361,000	$1.98
New River Inlet		2008	FRY	S			107,310	$230,772	$2.15
New River Inlet		2008	FRY	S			36,480	$149,150	$4.09
New River Inlet		2008	MERRITT	S			73,440	$78,850	$1.07
New River Inlet		2008	MERRITT	S			12,050	$38,000	$3.15
New River Inlet		2009	FRY	S			97,070	$209,000	$2.15
New River Inlet		2009	FRY	S			28,350	$66,500	$2.35
New River Inlet		2009	FRY	S			96,030	$247,000	$2.57
New River Inlet		2009	MERRITT	S			83,810	$171,000	$2.04
New River Inlet		2009	MERRITT	S			83,380	$161,500	$1.94
New River Inlet		2010	FRY	S			76,350	$247,000	$3.24
New River Inlet		2010	FRY	S			23,350	$70,000	$3.00
New River Inlet		2010	FRY	S			45,200	$120,000	$2.65
New River Inlet		2010	MERRITT	S			104,540	$228,000	$2.18
New River Inlet		2010	MERRITT	S			19,730	$48,000	$2.43
New River Inlet		2011	MERRITT	S			74,220	$195,000	$2.63
New River Inlet		2011	MERRITT	S			142,980	$416,000	$2.91
New River Inlet		2011	MERRITT	S			22,620	$78,000	$3.45
New River Inlet		2011	MERRITT	S			22,520	$78,000	$3.46
New River	Cedar Bush	2013	MERRITT	S			17,170	$39,000	$2.27
New River Inlet		2014	MERRITT	S			24,110	$93,752	$3.89
New River Inlet		2014	MERRITT	S			36,240	$112,500	$3.10
New River Inlet		2015	CURRITUCK	N			14,445	$157,500	$10.90
New River Inlet		2015	MERRITT	S			49,080	$170,000	$3.46
New River		2015	MERRITT	S			69,770	$204,000	$2.92
New River		2015	MERRITT	S			19,240	$68,000	$3.53
New River Inlet		2015	MERRITT	S			68,830	$182,700	$2.65
							9,173,554		
NEW TOPSAIL INLET & CHANNELS									
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Topsail Inlet	1980	Currituck	N			14,795	$33,600	$2.27
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	Topsail Inlet	1980	Merritt	S			89,694	$122,116	$1.36
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1981	Currituck	N			68,262	$133,564	$1.96
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1982	Merritt	S			49,357	$93,397	$1.89
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1983	Merritt	S			64,223	$176,725	$2.75
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1984	Merritt	S			100,975	$235,519	$2.33
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1985	Merritt	S			48,438	$175,050	$3.61
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1985	Fry	S			45,423	$160,748	$3.54
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1986	Fry	S			129,334	$312,012	$2.41

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1987	Currituck	N			33,015	$110,865	$3.36
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1987	Fry	S			102,033	$180,152	$1.77
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1987	Merritt	S			50,286	$95,596	$1.90
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1988	Currituck	N			37,125	$88,490	$2.38
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1988	Arlington	P			150,017	$366,842	$2.45
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1988	Fry	S			16,632	$62,782	$3.77
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1988	Merritt	S			110,922	$227,283	$2.05
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1989	Fry	S			33,068	$136,519	$4.13
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1989	Merritt	S			91,098	$206,868	$2.27
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1990	Fry	S			90,692	$393,722	$4.34
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1991	Merritt	S			16,926	$44,100	$2.61
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1992	Currituck	N			22,689	$79,226	$3.49
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1992	Merritt	S			36,981	$151,900	$4.11
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1992	Fry	S			77,883	$491,050	$6.30
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet/ Banks Channel	1992	Stuart	P			75,519	$177,519	$2.35
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1993	Stuart	P			80,162	$269,659	$3.36
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1993	Merritt	S			97,486	$839,183	$8.61
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1993	Fry	S			80,314	$472,229	$5.88
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1994	Merritt	S			53,745	$443,676	$8.26
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1994	Fry	S			93,381	$285,359	$3.06
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1995	Merritt	S			70,245	$238,000	$3.39
Atlantic Intracoastal Waterway Between Norfolk, Va and the St. Johns River, Fla	New Topsail Inlet	1995	Richmond	P			38,833	$174,751	$4.50
NEW TOPSAIL INLET & CHNLS,NC		1996	FRY	S			61,970	$187,363	$3.02
NEW TOPSAIL INLET & CHNLS,NC		1996	FRY	S			55,000	$166,290	$3.02
NEW TOPSAIL INLET & CHNLS,NC		1996	FRY	S			53,810	$162,692	$3.02
NEW TOPSAIL INLET & CHNLS,NC		1997	CURRITUCK	N			69,860	$211,303	$3.02
NEW TOPSAIL INLET & CHNSL,NC		1997	MERRITT	S			8,266	$25,002	$3.02
NEW TOPSAIL INLET,NC		1997	MERRITT	S			2,070	$6,261	$3.02
NEW TOPSAIL INLETS, CHNL,NC		1997	MERRITT	S			18,078	$54,680	$3.02
NEW TOPSAIL INLET		1998	FRY	S			50,880	$153,956	$3.03
NEW TOPSAIL INLETS & CHNL,NC		1998	MERRITT	S			24,458	$74,007	$3.03
TRANSIT/NEW TOPSAIL INLET		1998	FRY	S			94,770	$286,762	$3.03
NEW TOPSAIL INLET		1999	CURRITUCK	N			14,230	$43,075	$3.03
NEW TOPSAIL INLET		1999	MERRITT	S			31,940	$96,685	$3.03
NEW TOPSAIL INLET, NC		1999	FRY	S			4,200	$12,714	$3.03
NEW TOPSAIL INLET, NC		1999	MERRITT	S			19,000	$57,515	$3.03
TOPSAIL INLET		1999	CURRITUCK	N			49,915	$151,097	$3.03
NEW TOPSAIL INLET		2000	FRY	S			34,640	$104,900	$3.03
NEW TOPSAIL INLET		2000	MERRITT	S			12,720	$38,520	$3.03
NEW TOPSAIL INLET		2000	MERRITT	S			29,540	$89,456	$3.03
NEW TOPSAIL INLET, NC		2000	CURRITUCK	N			49,510	$149,931	$3.03
NEW TOPSAIL INLET, NC		2000	FRY	S			56,500	$171,099	$3.03
NEW TOPSAIL INLET		2001	MERRITT	S			39,850	$120,726	$3.03
NEW TOPSAIL INLET & CHANNELS		2001	MERRITT	S			122,400	$370,811	$3.03
NEW TOPSAIL INLET, NC		2001	MERRITT	S			55,710	$168,774	$3.03
NEW TOPSAIL INLET		2002	MERRITT	S			26,490	$46,000	$1.74
NEW TOPSAIL INLET		2002	MERRITT	S			135,320	$259,349	$1.92
NEW TOPSAIL INLET & CHNLS		2002	FRY	S			82,260	$154,800	$1.88
NEW TOPSAIL INLET, NC		2002	MERRITT	S			49,030	$104,500	$2.13

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
New Topsail Inlet		2003	FRY	S			101,780	$330,000	$3.24
New Topsail Inlet		2003	FRY	S			72,420	$220,000	$3.04
New Topsail Inlet		2003	MERRITT	S			118,590	$261,000	$2.20
New Topsail Inlet		2003	MERRITT	S			14,150	$27,000	$1.91
New Topsail Inlet		2003	MERRITT	S			33,570	$72,000	$2.14
NEW TOPSAIL INLET		2004	FRY	S			52,640	$143,000	$2.72
NEW TOPSAIL INLET		2004	FRY	S			10,910	$25,639	$2.35
NEW TOPSAIL INLET		2004	FRY	S			122,600	$33,000	$0.27
NEW TOPSAIL INLET		2004	MERRITT	S			6,410	$30,600	$4.77
NEW TOPSAIL INLET		2004	MERRITT	S			54,280	$99,000	$1.82
TOPSAIL INLET		2004	MERRITT	S			29,076	$63,000	$2.17
NEW TOPSAIL INLET		2005	MERRITT	S			19,876	$39,430	$1.98
NEW TOPSAIL INLET		2005	MERRITT	S			30,550	$60,606	$1.98
NEW TOPSAIL INLET		2005	MERRITT	S			38,310	$76,000	$1.98
NEW TOPSAIL INLET		2005	MERRITT	S			46,150	$91,553	$1.98
NEW TOPSAIL INLET		2006	FRY	S			70,150	$176,000	$2.51
NEW TOPSAIL INLET		2006	FRY	S			62,790	$176,000	$2.80
NEW TOPSAIL INLET		2006	MERRITT	S			70,660	$187,670	$2.66
New Topsail Inlet	New Topsail Inlet	2007	FRY	S			31,520	$76,000	$2.41
New Topsail Inlet	New Topsail Inlet	2007	FRY	S			64,250	$142,500	$2.22
New Topsail Inlet	New Topsail Inlet	2007	FRY	S			27,360	$66,500	$2.43
Topsail Inlet	Topsail Inlet	2007	FRY	S			44,535	$104,800	$2.35
Topsail Inlet		2008	FRY	S			66,410	$171,000	$2.57
Topsail Inlet		2008	FRY	S			19,350	$47,500	$2.45
Topsail Inlet		2008	MERRITT	S			84,440	$199,500	$2.36
Topsail Inlet		2008	MERRITT	S			44,820	$104,500	$2.33
Topsail Inlet		2008	MERRITT	S			56,161	$152,000	$2.71
Topsail Inlet		2009	FRY	S			80,117	$218,500	$2.73
Topsail Inlet		2009	MERRITT	S			87,100	$190,000	$2.18
Topsail Inlet		2009	MERRITT	S			39,960	$76,000	$1.90
Topsail Inlet		2010	FRY	S			22,690	$60,000	$2.64
Topsail Inlet		2010	FRY	S			27,070	$70,000	$2.59
Topsail Inlet		2010	MERRITT	S			47,330	$114,000	$2.41
Topsail Inlet		2010	MERRITT	S			44,135	$76,000	$1.72
Topsail Inlet		2011	FRY	S			23,960	$70,000	$2.92
Topsail Inlet		2011	MERRITT	S			19,120	$52,000	$2.72
Topsail Inlet		2013	MERRITT	S			61,740	$169,000	$2.74
New Topsail Inlet		2013	MERRITT	S			36,360	$143,000	$3.93
Topsail Creek		2013	MERRITT	S			1,550	$7,583	$4.89
							5,206,860		
OCRACOKE INLET									
Ocracoke Inlet, NC		1975	Schweizer	S		73,372	73,372	$99,232	$1.35
Ocracoke Inlet, NC		1976	Schweizer	S		141,443	141,443	$196,158	$1.39
Ocracoke Inlet, NC		1979	Schweizer	S		67,000	67,000	$100,185	$1.50
OCRACOKE INLET/TEACHES HOLE		2000	MERRITT	S			32,920	$83,388	$2.53
OCRACOKE		2001	FRY	S			22,910	$59,507	$2.60
OCRACOKE/SILVER LAKE		2001	CURRITUCK	N			10,800	$28,052	$2.60
Ocracoke		2003	MERRITT	S			55,781	$243,000	$4.36
Ocracoke		2003	MERRITT	S			24,970	$45,000	$1.80
Ocracoke Inlet		2003	MERRITT	S			72,610	$171,000	$2.36
Ocracoke Inlet		2003	MERRITT	S			41,090	$81,000	$1.97
Ocrocoke Inlet		2003	MERRITT	S			16,690	$36,000	$2.16
Ocracoke		2009	FRY	S			32,910	$95,000	$2.89
Ocracoke Inlet		2009	MERRITT	S			64,320	$142,500	$2.22
Ocracoke Inlet		2010	MERRITT	S			132,140	$304,000	$2.30
Ocracoke Inlet		2010	MERRITT	S			19,730	$43,359	$2.20
Ocracoke Inlet		2010	MERRITT	S			81,160	$170,000	$2.09
Ocracoke Inlet		2011	MERRITT	S			15,240	$39,000	$2.56
Ocracoke Inlet	Teaches Hole	2013	MERRITT	S			56,470	$273,000	$4.83
Ocracoke	Teach's Hole/Silver Lake	2014	MERRITT	S			48,180	$150,000	$3.11
Ocracoke	SLH	2015	MERRITT	S			13,620	$36,000	$2.64
							1,023,356		
RODANTHE CHANNEL									
Rodanthe Harbor		2009	Snell	B			8,000	$21,855	$2.73
Rodanthe Channel	Rodanthe Emergency Channel	2011	MERRITT	S			49,820	$130,000	$2.61
Rodanthe	Ferry Channel	2013	MERRITT	S			43,930	$143,000	$3.26
Rodanthe		2014	MERRITT	S			49,900	$148,500	$2.98
							151,650		
ROLLINSON CHANNEL									

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
Rollinson Channel	channel from hatteras to hatteras inlet	1984	Marion	P			29,972	$178,550	$5.96
Rollinson Channel		1986	Richmond,Blue Ridge	P			105,966	$387,700	$3.66
Rollinson Channel		1988	Marion	P			74,646	$366,800	$4.91
Rollinson Channel		1992	Richmond	P			19,147	$184,640	$9.64
ROLLINSON, RODANTHE, SILVER		1997		P			371,900	$1,583,779	$4.26
ROLLINSON CHANNEL		2004	FRY	S			62,350	$1,176,000	$18.86
Rollinson Channel		2010	FRY	S			13,680	$40,000	$2.92
Rollinson		2011	CURRITUCK	N			13,180	$164,610	$12.49
Rollinson	and Silver Lake Hb	2012		P			450,000	$3,442,500	$7.65
Rollinson	Ferry Channel	2013	Merritt	S			61,510	$182,000	$2.96
Rollinson	Ferry Channel	2013	Merritt	S			93,900	$377,000	$4.01
Rollinson	Hatteras	2014	Merritt	S			109,160	$300,004	$2.75
Rollinson	Hatteras	2015	Merritt	S			31,010	$144,000	$4.64
Rollinson	Hatteras	2015	Merritt	S			18,670	$48,000	$2.57
							1,455,091		
SHALLOTTE RIVER									
Shallotte River, NC		1975	Richmond	P		46,573	46,573	$54,989	$1.18
Shallotte River		1983	Richmond	P			13,305	$32,707	$2.46
Shallotte River, NC		1987	Richmond	P		42,655	42,655	$117,360	$2.75
Shallotte River		1988	Richmond	P			101,253	$354,152	$3.50
SHALLOTTE RIVER		2002	CURRITUCK	N			13,375	$105,953	$7.92
Shallotte River		2014	CURRITUCK	N			1,910	$60,000	$31.41
							219,071		
SILVER LAKE HARBOR									
Silver Lake Harbor, NC		1975	Richmond	P		47,337	47,337	$83,466	$1.76
Silver Lake Harbor, NC		1977	Merritt	S		10,320	10,320	$18,124	$1.76
Silver Lake Harbor, NC		1979	Marion	P		106,316	106,316	$185,966	$1.75
Silver Lake Harbor	Big Foot Slough	1980	Buxton	P			37,034	$110,489	$2.98
Silver Lake Harbor	Big Foot Slough	1981	Buxton	P			29,534	$71,652	$2.43
Silver Lake Harbor	Big Foot Slough	1981	Marion	P			89,917	$286,443	$3.19
Silver Lake Harbor	Big Foot Slough	1982	Marion	P			104,011	$369,470	$3.55
Silver Lake Harbor	Big Foot Slough	1982	Richmond	P			4,300	$45,977	$10.69
Silver Lake Harbor	Big Foot Slough	1983	Richmond	P			56,033	$173,794	$3.10
Silver Lake Harbor	Big Foot Slough	1983	Northwood	P			39,505	$219,331	$5.55
Silver Lake Harbor	Big Foot Slough	1984	Northwood	P			74,093	$135,513	$1.83
Silver Lake Harbor	Big Foot Slough	1985	Richmond	P			51,271	$205,982	$4.02
Silver Lake Harbor	harbor	1985	Fry	S			34,210	$122,309	$3.58
Silver Lake Harbor		1986	Richmond	P			11,092	$91,055	$8.21
Silver Lake Harbor, NC		1986	Hampton Roads	P		233,281	233,281	$402,378	$1.72
Silver Lake Harbor		1987	Hampton Roads	P			233,281	$672,834	$2.88
Silver Lake Harbor		1987	Merritt	S			23,819	$43,400	$1.82
Silver Lake Harbor		1987	Schweizer	S			59,148	$139,994	$2.37
Silver Lake Harbor		1988	Enterprise	P			179,430	$542,254	$3.02
Silver Lake Harbor		1988	Schweizer	S			46,044	$78,265	$1.70
Silver Lake Harbor, NC		1989	Marion	P		28,566	28,566	$84,447	$2.96
Silver Lake Harbor, NC		1989	Enterprise	P		200,882	200,882	$593,848	$2.96
Silver Lake Harbor		1990	Richmond	P			121,501	$431,507	$3.55
Silver Lake Harbor	Big Foot Slough	1992	Hampton Roads	P			215,204	$653,748	$3.04
Silver Lake Harbor		1994	Enterprise	P			90,000	$270,408	$3.00
Silver Lake Harbor		1995	Enterprise	P			44,305	$145,135	$3.28
SILVER LAKE/MANTEO		2000		P			460,860	$2,329,532	$5.05
Silver Lake-Teaches Hole		2003	MERRITT	S			11,340	$18,000	$1.59
SILVER LAKE HARBOR		2006	FRY	S			43,220	$124,237	$2.87
SILVER LAKE/ROLLINSON/TEACH		2006	MERRITT	S			140,695	$285,000	$2.03
SILVER LAKE		2006	MERRITT	S			17,860	$66,500	$3.72
Silver Lake Harbor		2008	FRY	S			49,640	$133,792	$2.70
Silver Lake Harbor		2009	FRY	S			61,126	$142,500	$2.33
Silver Lake Harbor	Big Foot Slough	2011	FRY	S			49,430	$130,000	$2.63
Silver Lake Harbor	Big Foot Slough	2012	MERRITT	S			40,500	$130,000	$3.21
Ocracoke Island	Silver Lake	2013	MERRITT	S			38,100	$143,000	$3.75
Ocracoke/Silver Lake	Big Foot Slough	2014	MERRITT	S			107,060	$432,000	$4.04
Ocracoke/Silver Lake		2014	MERRITT	S			1,230	$37,500	$30.49
Ocracoke/Silver Lake		2014	MERRITT	S			14,500	$43,752	$3.02
	Big Foot Slough	2014	MERRITT	S			71,280	$187,500	$2.63
Silver Lake	Rollinson	2015	MERRITT	S			28,520	$80,000	$2.81
							3,305,795		
STUMPY POINT BAY									
Stumpy Point Bay, NC		1979	Essex	P		205,580	205,580	$259,630	$1.26
Stumpy Point Bay		1992	Richmond	P			159,187	$392,900	$2.47
Stumpy Point Bay		2011	Noble Spirit	P			79,865	$624,923	$7.82
							444,632		

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
WATERWAY CONNECTING PAMLICO SOUND AND BEAUFORT HARBOR									
Waterway Connecting Pamlico Sound and Beaufort Harbor		1975	Richmond	P		46,493	46,493	$104,902	$2.26
Waterway Connecting Pamlico Sound and Beaufort Harbor		1977	Clerendon	P		232,200	232,200	$543,007	$2.34
Waterway Connecting Pamlico Sound and Beaufort Harbor		1977	Merrit	S		9,205	9,205	$21,526	$2.34
Waterway Connecting Pamlico Sound and Beaufort Harbor	Wainwright Slough and Atlantic Harbor of Refuge	1983	Richmond	P			74,778	$256,142	$3.43
Waterway Connecting Pamlico Sound and Beaufort Harbor	Atlantic Harbor	1985	Richmond	P			48,512	$188,326	$3.88
Waterway Connecting Pamilco Sound and Beaufort Harbor	Altantic Harbor and Wainwright Slough	1986	Richmond	P			50,247	$230,600	$4.59
Waterway Connecting Pamlico Sound and Beaufort Harbor		1988	Richmond	P		58,406	58,406	$166,308	$2.85
Waterway Connecting Pamilco Sound and Beaufort Harbor		1989	Enterprise and Marion	P			30,753	$269,200	$8.75
Waterway Connecting Pamlico Sound and Beaufort Harbor		1991	Richmond	P		183,050	183,050	$549,981	$3.00
Waterway Connecting Pamlico Sound and Beaufort Harbor		1992	Richmond	P			128,150	$486,500	$3.80
Waterway Connecting Pamilco Sound and Beaufort Harbor	Wainwright Slough	1994	Currituck	N			7,140	$35,064	$4.91
ATLANTIC HARBOR OF REFUGE		1999		P			6,278	$21,767	$3.47
							875,212		
WATERWAY CONNECTING SWANQUARTER BAY WITH DEEP BAY									
Waterway Connecting Swanquarter Bay with Deep Bay		1977	Richmond	P		19,132	19,132	$14,236	$0.74
Waterway Connecting Swanquater Bay with Deep Bay, NC		1982	Padre Island	H			687,286	$1,060,225	$1.54
Waterway Connecting Swanquater Bay with Deep Bay, NC		1982	Dauntless	P			140,200	$25,531	$0.18
Waterway Connecting Swanquater Bay with Deep Bay, NC		1982	Enterprise	P			780,597	$538,877	$0.69
Waterway Connecting Swanquater Bay with Deep Bay, NC		1982	Clarendon	P			80,692	$300,614	$3.73
Waterway Connecting Swanquarter Bay with Deep Bay		1983	Marion	P	114,578		114,578	$411,123	$3.59
Waterway Connecting Swanquater Bay with Deep Bay, NC	Swanquarter Bay	1984	Marion	P			114,578	$520,444	$4.54
							1,937,063		
WILMINGTON HARBOR									
WILMINGTON HARBOR	Ocean Bar	1975	GOETHALS	H		789,729	789,729	$374,056	$0.47
WILMINGTON HARBOR	Ocean Bar	1975	GERIG	H		1,089,147	1,089,147	$515,875	$0.47
WILMINGTON HARBOR		1975	CHEROKEE	P		1,567,038	1,567,038	$742,228	$0.47
WILMINGTON HARBOR		1975	CHEROKEE	P		670,463	670,463	$317,565	$0.47
WILMINGTON HARBOR	Ocean Bar	1976	GERIG	H		588,547	588,547	$296,092	$0.50
WILMINGTON HARBOR		1976	ENTERPRISE	P		206,803	206,803	$104,041	$0.50
WILMINGTON HARBOR		1976	CHEROKEE	P		614,225	614,225	$309,011	$0.50
WILMINGTON HARBOR	Ocean Bar	1977	GOETHALS	H		762,762	762,762	$407,590	$0.53
WILMINGTON HARBOR		1977	ARLINGTON	P		905,529	905,529	$483,879	$0.53
WILMINGTON HARBOR		1977	ENTERPRISE	P		471,426	471,426	$251,911	$0.53
WILMINGTON HARBOR		1978	PULLEN	P		471,295	471,295	$267,494	$0.57
WILMINGTON HARBOR		1978	PULLEN,No. 44,CHEROKEE	P		1,326,683	1,326,683	$752,990	$0.57
WILMINGTON HARBOR	Ocean Bar	1978	MCFARLAND	H		496,957	496,957	$282,060	$0.57
WILMINGTON HARBOR		1979	PULLEN	P		1,023,036	1,023,036	$616,738	$0.60
WILMINGTON HARBOR	Ocean Bar	1979	GOETHALS	H		165,420	165,420	$99,724	$0.60
WILMINGTON HARBOR	Ocean Bar	1979	MCFARLAND	H		133,309	133,309	$80,365	$0.60
WILMINGTON HARBOR		1980	HAMPTON ROADS	P		1,632,121	1,632,121	$1,045,082	$0.64
WILMINGTON HARBOR	Ocean Bar	1981	ATCHAFALAYA	H		393,495	393,495	$267,624	$0.68
WILMINGTON HARBOR		1981	CLARENDON	P		96,009	96,009	$65,298	$0.68
WILMINGTON HARBOR		1981	PULLEN	P		439,935	439,935	$299,209	$0.68
WILMINGTON HARBOR		1981	ENTERPRISE	P		678,823	678,823	$461,681	$0.68
WILMINGTON HARBOR	Ocean Bar	1982	PADRE ISLAND	H		687,286	687,286	$496,491	$0.72
WILMINGTON HARBOR	Ocean Bar	1983	MANHATTAN ISLAND	H		718,528	718,528	$551,322	$0.77
WILMINGTON HARBOR		1983	DAUNTLESS	P	453,963	14,232	468,195	$359,243	$0.77
WILMINGTON HARBOR		1983	FLORIDA	P	53,444	1,005,454	1,058,898	$812,486	$0.77
WILMINGTON HARBOR	Ocean Bar	1983	DODGE ISLAND	H		1,018,840	1,018,840	$781,750	$0.77
WILMINGTON HARBOR		1983	ARLINGTON	P		708,533	708,533	$543,653	$0.77
WILMINGTON HARBOR	Ocean Bar	1984	SUGAR ISLAND	H		1,146,645	1,146,645	$934,499	$0.81

*Values in red are estimated

APPENDIX C: DREDGE DATABASE

Location	Specific Location	Fiscal Year	Dredge Name	Dredge Type	New Work	Maintenance	Total CY Removed	Total Cost	Cost/cy
WILMINGTON HARBOR	Anchorage Basin	1985	CLINTON	P		889,217	889,217	$769,742	$0.87
WILMINGTON HARBOR	38' Project	1985	HAMPTON ROADS	P		405,997	405,997	$351,448	$0.87
WILMINGTON HARBOR	32' Project/Anchorage Basin	1986	CLINTON	P		846,840	846,840	$778,623	$0.92
WILMINGTON HARBOR	Ocean Bar	1986	MERMENTAU,OUACHITA	H		804,086	804,086	$739,313	$0.92
WILMINGTON HARBOR		1987	HAMPTON ROADS	P		1,097,060	1,097,060	$1,071,381	$0.98
WILMINGTON HARBOR	38 ft	1988	BUCKET DREDGE,# 52	H		597,568	597,568	$619,853	$1.04
WILMINGTON HARBOR	NE Turning Basin, A/B & B/C	1988	STUART,ENTERPRISE	P		210,179	210,179	$218,017	$1.04
WILMINGTON HARBOR	A/B & B/C	1989	HAMPTON ROADS	P		875,741	875,741	$964,862	$1.10
WILMINGTON HARBOR	A/B & B/C	1989	HAMPTON ROADS	P		1,053,028	1,053,028	$1,160,191	$1.10
WILMINGTON HARBOR	Ocean Bar	1989	MANHATTAN ISLAND	H		1,489,547	1,489,547	$1,641,133	$1.10
WILMINGTON HARBOR		1990	NORTHERY,SUGAR ISLAND	H		524,267	524,267	$613,522	$1.17
WILMINGTON HARBOR	Ocean Bar	1991	PADRE ISLAND,MANHATTAN ISLAND,NORTHERLY ISLAND	H		1,493,648	1,493,648	$1,856,580	$1.24
WILMINGTON HARBOR		1991	ESSEX	P		1,318,140	1,318,140	$1,638,426	$1.24
WILMINGTON HARBOR	38 ft	1991	# 51	H		466,349	466,349	$579,664	$1.24
WILMINGTON HARBOR	38ft A.B and 32 ft	1992	HAMPTON ROADS,ARLINGTON	P		1,027,326	1,027,326	$1,356,318	$1.32
WILMINGTON HARBOR		1995		P			772,333	$814,300	$1.05
WILMINGTON HARBOR	Ocean Bar	1996	MCFARLAND	H			317,908	$735,200	$2.31
WILMINGTON HARBOR	Ocean Bar	1997	MCFARLAND	H			217,294	$1,416,208	$6.52
Wilmington Harbor	Ocean Bar, ODMDS	1997	R.S. Weeks	P			383,230	$927,626	$2.42
WILMINGTON HARBOR, CAPE FEAR	Ocean Bar	1998	MCFARLAND	H			196,519	$266,969	$1.36
WILMINGTON HARBOR		1998		P			513,603	$697,725	$1.36
Wilmington Harbor	Ocean Entrance (Ocean Bar/Baldhead Shoal Ch (0+00 to 305+00)) ODMDS	1998	nhattan Island,Sugar Island,Dodge Isla	H			901,988	$2,078,095	$2.30
WILMINGTON HARBOR		1999		P			581,292	$743,527	$1.28
Wilmington Harbor	Ocean Bar, ODMDS	1999	SUGAR ISLAND	H			683,263	$1,738,744	$2.54
WILMINGTON HARBOR		2000		P			550,259	$1,029,798	$1.87
Wilmington Harbor	Ocean Bar, ODMDS	2000	DODGE ISLAND	H			719,817	$2,267,238	$3.15
WILMINGTON HARBOR		2001		P			465,688	$1,092,355	$2.35
WILMINGTON HARBOR		2001		P			490,476	$957,238	$1.95
Wilmington Harbor	Ocean Entrance (Ocean Bar/Baldhead Shoal Ch (133+00 to 305+00)) ODMDS	2001	Bayport	H			311,287	$657,340	$2.11
Wilminton Harbor	Ocean Entrance (Baldhead Shoal thru Snows Marsh), ODMDS	2001	Merridian, Stuyvesant, Eagle 1	H			4,175,945	$29,439,365	$7.05
Wilmington Harbor	Ocean Bar Contract/Outer Bar New Channel, ODMDS	2001	an, Eagle One, Dodge Island, Northerly	H			5,703,406	$12,631,483	$2.21
WILMINGTON HARBOR		2002		P			412,128	$689,122	$1.67
WILMINGTON HARBOR		2003		P			289,611	$869,147	$3.00
WILMINGTON HARBOR		2003		P			469,608	$1,409,333	$3.00
WH HB-BLAD H. CAW-BALDH S		2004		P			1,578,546	$7,024,100	$4.45
WILM HBR ANCH BASIN 32-42 FT		2004		P			1,415,483	$5,233,676	$3.70
WILMINGTON HARBOR		2004		P			363,156	$1,253,050	$3.45
WILMINGTON HARBOR		2004		P			289,661	$605,455	$2.09
Wilmington Harvor	Ocean Entrance (Baldhead Shoal Sta 260 to Horeshow Shoal Sta 0)	2004	Stuyvesant, Eagle 1	H			2,050,704	$5,698,408	$2.78
WILM HBR ANCH BASIN 32-42 FT		2005		P			1,928,854	$6,504,404	$3.37
WILMINGTON HARBOR		2005		P			195,512	$1,194,449	$6.11
Wilmington Harbor	Ocean Bar, ODMDS	2005	Bayport	H			672,027	$966,276	$1.44
WILM HARBOR (MID-RIVER)		2006		Z			468,410	$3,588,856	$7.66
WILMINGTON & MOREHEAD O. BAR	Ocean Bar	2006		H			1,587,369	$2,338,511	$1.47
WILMINGTON HAR 38'& ANCHOR B		2006		P			1,457,763	$3,422,494	$2.35
Wilmington Harbor	Ocearn Bar, ODMDS	2006	Stuyvesant	H			776,171	$2,901,777	$3.74
Wilminton Harbor	Ocean Bar, ODMDS	2007	Glen Edwards	H			704,874	$1,803,529	$2.56
Wilm Harb	Outer Ocean Bar	2008	Liberty Island	H			489,191	$2,576,650	$5.27
WILMINGTON HBR ANCH BASIN		2008		P			1,390,000	$4,947,200	$3.56
Wilmington Harbor	Outer OB	2009		H			750,000	$3,164,000	$4.22
WILMINGTON HABROR-ANC BASIN		2009		P			1,500,000	$5,449,850	$3.63
WILM HARBOR-ANCH BAS-42FT		2010		P			1,500,000	$3,493,700	$2.33
WILM HARBOR- ANCHORAGE BASI		2011	Cherokee	P			1,160,291	$2,673,579	$2.30
Wilm Harbor	Outer OB/MD Rive	2011	Terrapin, Dredge 54	H			1,205,611	$7,852,042	$6.51
WILM HARBOR ANCHORAGE BASIN		2012		P			71,000	$2,134,900	$30.07
Wilm Harbor	Deepening	2012		B			784,000	$16,429,000	$20.96
Wilm Harbor	OB-Mid River	2012		H			1,500,000	$11,218,500	$7.48
Wilm Hbr	& MHC Hbr OB	2012		H			500,000	$2,326,786	$4.65
WILM HABR ANCHORAGE BASIN		2013		P			500,000	$2,909,620	$5.82
MOTSU/WH/Mid-river		2013		B			700,000	$9,479,100	$13.54
WILMI HBR ANC BAS 42-32 FT		2014		P			1,300,000	$3,890,500	$2.99
WILMINGTON HBR	Outer (OB)	2014		H			750,000	$4,836,250	$6.45
Wilm Hbr	Outer Ocean Bar	2014		H			700,000	$5,837,250	$8.34
WIL HBR ANC BAS-BET CHN/E I		2015		P			1,200,000	$5,959,090	$4.97
							81,072,948		
WRIGHTS CREEK									
Wrights Creek, NC		1977	Marion	P		66,584	66,584	$94,688	$1.42

*Values in red are estimated

APPENDIX D
STAKEHOLDER PROCESS

The DEQ, Division of Water Resources is updating the state's comprehensive Beach and Inlet Management Plan, a systematic management strategy for North Carolina's 326 miles of oceanfront beaches and inlet complexes. The plan divides the state's coastal area into management regions and sub-regions.

A series of public meetings (Table 1) were conducted to receive input and confirm analyses to date on the collection of beach nourishment and dredging data, discuss future projections of beach nourishment and maintenance dredging, provide updated information on the economic impacts of the state's beach and inlets, and identify potential funding options under consideration to achieve sustainable beach and inlets. Figure 1 through Figure 3 show pictures of typical attendance at the meetings. The comments received during the meetings or submitted to representatives of DEQ follow the attendance list in this appendix.

Table 1. Public Meetings

Region	Location	Date	Time
1	Supply, N.C. – Brunswick Electric, 795 Ocean Highway West	Wednesday, September 7	6-8 p.m.
2a, 2b	Wilmington, N.C. – New Hanover Government Building, 230 Government Center Dr., Training Room A/b	Thursday, September 8	6-8 p.m.
2c, 3a	Pine Knoll Shores, N.C. – N.C. Aquarium, 1 Roosevelt Blvd.	Thursday, September 20	6-8 p.m.
3b, 4a, 4b, 4c	Nags Head, N.C. – N.C. Aquarium Jennette's Pier, 7223 South Virginia Dare Trail	Thursday, September 22	6-8 p.m.

Figure 1. 2a, 2b Public Meeting

Figure 2. 2c, 3a Public Meeting

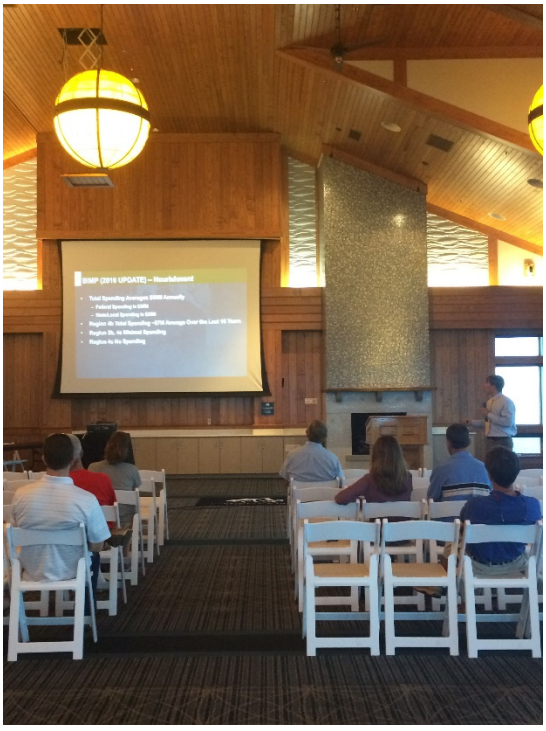

Figure 3. 3b, 4a, 4b, 4c Public Meeting

First Name	Last Name	City	email	Representing	Region Meeting Attended	Comments
Deborah	Ahlers	Caswell Beach	dahlers@caswellbeach.org	Town of Caswell Beach	Region 1	
Heather	Coats	Wilmington	heather.coats@ncdenr.gov	NCDCM	Region 1	
Jeff	Griffin	Bald Head Island	jgriffin@villagebhi.org	VBHI	Region 1	
David	Hewett	Holden Beach	dhewett@hbtownhall.com	Holden Beach	Region 1	
Lee	Hinnant		leehinnant@stateportpilot.com	SPP Newspaper	Region 1	
Rick	Holbrook	Oak Island	rholbrook@fortcaswell.com	NCBA at Fort Caswell	Region 1	
Alan	Holden	Holden Beach	holden@holden-beach.com	Holden Beach	Region 1	
Frank	Iler	Oak Island	jacfra10@gmail.com	NCGA	Region 1	
Daisy	Ivey	Ocean Isle Beach	daisy@oibgov.com	Ocean Isle Beach	Region 1	
Phillip	Lake	Oak Island	pslake@bellsouth.net	Town of Oak Island	Region 1	
Chris	McCall	Bald Head Island	cmccall@villagebhi.org	VBHI	Region 1	
Carol	Painter	Oak Island	cpainter07@yahoo.com	Town of Oak Island (Beach & Inlet Committee)	Region 1	
Dan	Riley	Sunset Beach	dan.riley.nc@gmail.com	Coldwell Banker	Region 1	
Margaret	Rudd Bishop	Oak Island	margaretbishop@rudd.com	Margaret Rudd & Associates	Region 1	
Lisa	Stites	Oak Island	lstites@ci.oak-island.nc.us	Town of Oak Island	Region 1	
Gene	Stokes	Oak Island	gene.stokes@ec.rr.com	Ocean Isle Beach	Region 1	
Pat	Sykes	Southport	commissioner.sykes@brunswickcountync.gov	Brunswick County	Region 1	
John	Taggart	Wilmington	taggartj@uncw.edu	Carolina Wetlands Association	Region 1	
Justin	Whiteside	Ocean Isle Beach	justin@oibgov.com	Town of Ocean Isle Beach	Region 1	
Debbie	Wilson	Wilmington	debra.wilson@ncdenr.gov	DCM	Region 1	
Jeff	Winecoff	Oak Island	oki_jeffw@bellsouth.net	Town of Oak Island	Region 1	
Layton	Bedsole	Wilmington	lbedsole@nhcgov.com		Region 2a, 2b	
Dan	Bell	Wilmington	dan@seasrising.com		Region 2a, 2b	
Sue	Bulluck	WB	bks42@aol.com	Chamber of WB	Region 2a, 2b	wrightsvillebeachchamber@gmail.com
Heather	Coats	Wilmington	heather.coats@ncdenr.gov	NCDCM	Region 2a, 2b	
Paul	Cole	Wilmington	pcole129@gmail.com		Region 2a, 2b	
Carin	Faulkner	N Topsail Beach	townclerk@ntbnc.org	Town of NTB	Region 2a, 2b	
Doug	Huggett	Morehead City	doug.huggett@ncdenr.gov	NCDCM	Region 2a, 2b	
Jim	Iannicci	Wilmington	jiannucci@nhcgov.com	NHC	Region 2a, 2b	
David	Kellam	Figure 8	david@figure8homeowners.com	F8	Region 2a, 2b	
Julia	KirklandBerger		jberger@czr-inc.com	CZR Incorporated	Region 2a, 2b	
Chance	Lambeth	Wilmington	chance.lambeth@mail.house.gov	NC-07 Congress	Region 2a, 2b	
Chris	Marello	Wilmington	ctmarello@gba-inc.com	GBA	Region 2a, 2b	
Spencer	Rogers	Wilmington	rogerssp@uncw.edu	CRAC	Region 2a, 2b	
Mike	Rose	Topsail Beach	townmanager@topsailbeach.org	Topsail Beach	Region 2a, 2b	
Emilie	Swearingen	Kure Beach	emilieswearingen@tokb.org	KB	Region 2a, 2b	
David	Ward	Surf City	dward@bizec.rr.com	Surf City	Region 2a, 2b	
Joseph	Whitley	Kure Beach	josephwhitley@tokb.org		Region 2a, 2b	
W	Wiccliffe	Kure Beach	wickncsu@gmail.com		Region 2a, 2b	
Ken	Wilson	Wilmington	kenneth.willson@cbi.com	CBI	Region 2a, 2b	
Dawn	York	Wilmington	dyork@dialcordy.com	Dial Cordy&Assoc.	Region 2a, 2b	
Kyle	Garner	Beaufort	k.garner@beaufortnc.org	Beaufort	Region 2c, 3a	
Clark	Edwards	PKS	cse60@hotmail.com	PKS	Region 2c, 3a	
Larry	Corsello	PKS	lcorsello@embarqmail.com	PKS	Region 2c, 3a	
Michael A.	Shutak	MHC	mike@thenewstimes.com	Carteret Co. News Times	Region 2c, 3a	
Greg	Rudolph	Carteret	grudolph@carteretcountync.gov	Carteret Co.	Region 2c, 3a	
Randy	Hardee	PKS	rhardee@elitefoodco.com	PKS	Region 2c, 3a	
Frank	Rush	EI	frush@emeraldisle-nc.org	EI	Region 2c, 3a	
Ken	Jones	PKS	mayorjones@townofpks.com	PKS	Region 2c, 3a	
Roy	Brownlow	MHC	roy.brownlow@ncdenr.gov	DCM	Region 2c, 3a	
Ted	Goetzinger	PKS	teddync1@gmail.com	PKS	Region 2c, 3a	
Bob	Danehy	PKS	mbdanehy@gmail.com	citizen	Region 2c, 3a	
Trace	Cooper	Atlantic Beach	tcooper@atlanticbeach-nc.com	Town of AB CC Beau. Comm.	Region 2c, 3a	
Candace	Dooley	EI	doolsgirl@gmail.com	EI	Region 2c, 3a	
Eddie	Barber	EI	ebarber@emeraldisle-nc.org	EI	Region 2c, 3a	

First Name	Last Name	City	email	Representing	Region Meeting Attended	Comments
Brian	Kramer	PKS	manager@townofpks.com	PKS	Region 2c, 3a	
Gary	Perry	Kitty Hawk	gperry@kittyhawktown.net	town	Region 3b, 4a, 4b, 4c	
Frank	Jennings	Eliz. City	frank.jennings@ncdenr.gov	NCDCM	Region 3b, 4a, 4b, 4c	
Mike	Daniels	Wanchese		Wanchese	Region 3b, 4a, 4b, 4c	
Harry	Shiffman	Wanchese	harry@harryobx.com	Oregon Inlet Task Force	Region 3b, 4a, 4b, 4c	
Sabrina	Henry	Manteo	sabrina_henry@nps.gov	NPS	Region 3b, 4a, 4b, 4c	
Cliff	Ogburn	Nags Head	cliff.ogburn@nagsheadnc.gov	NH	Region 3b, 4a, 4b, 4c	
Malcolm	Fearing	Manteo	mkfearing@ncdot.gov	DOT	Region 3b, 4a, 4b, 4c	
John	Ratzenverger	Nags Head	john.ratzenberger@nagsheadnc.gov	Nags Head	Region 3b, 4a, 4b, 4c	
Joe	Heard	Duck	jheard@townofduck.com	Town of Duck	Region 3b, 4a, 4b, 4c	
Lance	Winslow	NCDOT-Ferry	lwinslow@ncdot.gov	NCDOT-Ferry Div	Region 3b, 4a, 4b, 4c	
Catherine	Peele	Kill Devil Hills	cdpeele@ncdot.gov	NCDOT-Ferry Div	Region 3b, 4a, 4b, 4c	
David	Pergerson	Kill Devil Hills	david.pergerson@carolinadesigns.com	N/A	Region 3b, 4a, 4b, 4c	
Willo	Kelly	Nags Head	willokelly@gmail.com	OBAR/OBHBA	Region 3b, 4a, 4b, 4c	

NC Beach and Inlet Management Plan Comment Sheet

Please help us make the update to the NC Beach and Inlet Management Plan as complete as possible. Your participation is greatly appreciated.

Name: _____

Address: _____

_____

Email: _____

Were all the dredging and beach nourishment projects captured in the update summary?

_____

_____

Do the beach nourishment and dredging projections reflect future needs of your community? If not, please explain?

_____

_____

Are there additional funding options that should be considered? If yes, what are they?

_____

_____

_____

Do you have any other specific comments on proposed beach and inlet management projections and funding options as present? If yes, what are they?

_____

_____

_____

Region 1 Comments-9/7/2016

-Be sure to include non-managed projects that are coming online soon

-Be sure to include inlet effects

-Regionalization of these issues should be encouraged

-LDF-% or static for other states

-For state funding availability consider requirement of a FEMA engineered beach

Funding Sources

-Leverage current inlet funds to improve oyster habitat to bring more economic benefit to counties which could then also help pay into fund

-Real estate transfer fee not viable politically

-0.25% sales tax is viable option-education would be needed

-Occupancy tax increase must be careful-do not go over neighboring areas don't price us out

-Tiering as was done for SDI was a great idea

-Provide some flexibility for FEMA engineered beach requirement

-Western part of NC dependent on tourism should be our ally and we should work together

-Ask Dumas oyster farming benefit estimate

-Anything off the shelf for wind farming economic benefit

-Oil/Gas potential benefit?

-Use of ferry owned dredge for SD

-State-owned dredge?

-Optimize dredge plant and channel dimensions to lower costs

Region 2a & 2b Comments-9/8/2016

-Accounting for climate change & sea level in future projections (NOAA studies)

-Conservation mileage vs. population mileage

-Geospatial analysis & properties at risk

-Discuss perception of "rich" beach communities

-Show benefit to State & Fed's

-These beaches are nation's playgrounds & parks

-Inlets & dredging improve oysters & fisheries

-Manage CDF's for habitat restoration

-State should have more flexibility using CDF's USACE does not own them!

-Consider use of funds for other strategies & estuarine restoration

-Shallow draft navigation should be expanded to include AIWW

-Look at lower cost share to begin with

-Include all static revenue generated for taxes

-Jones Act

-Reallocation of funds

-Tease out need vs extra money if possible

-Can we parse out seasonal state sales tax

-Build partnerships with other areas for state wide sales tax-allows for lower rate

-Occupancy tax increase affect conventions & meetings vs. vacations

-Taxes must be directed to lockbox

-Sales tax may be easier

Region 2c & 3a Comments-9/20/2016

-State Surplus, fund have multiple sources for stability

-Emphasize more return on dollars spent, advertise a positive message more, if you spend $XX you will get $YY back

-There is a risk that return on investment can change. Cities keep with taxing homeowners?-work together. Inform state of potential loss of benefit w/o state funding due to inability of local governments to carry entire load

-Give legislature specific alternatives & options with political consequences

-Money should be fenced for use in nourishment/dredging and nothing else

-Provide clarification on how 'Consumer Surplus' was determined-subjective

-There should be a minimum cost share for state that will always be given, an amount that can be counted on

-Give cities/state allowance for only "x, y, z, etc."

-In past show state, local, federal (show how it is gone, missing, decreased) show range

-Funding source linked to public access

-Don't vary cost share per county (don't give discounts to counties with shore protection and monitoring programs in place-don't want to start a war between Carteret & Dare)

-Money should accrue until needed and then is allocated when requested

-Spend less time on how $30M was produced and give funding options & pros and cons & ask opinions

-Sales tax should be referred to as "Tourist Infrastructure Tax" difficult to convince people of a sales tax for beach nourishment.

-Meals Tax-less return

-Lottery Tax? Special beach cards

-Occupancy Tax is already pushed to limit

-New Land Transfer Tax-might be easier to pass, doesn't hit people every day, many people will say they won't sell their house for 10 yrs…

-Keep in mind that funding should come from multiple sources

-Provide a histogram for comparison with other states for land transfer tax and sales tax

-Room Occupancy Tax should not be the full burden is the feedback from this sector

-New State Occupancy Tax don't want to hit reality sector 2 times

-Be Cautious with comparison to other states & NC, but provide background info

-Reallocation of state sales tax not recommended-however it would be quicker and easier than adding a new tax which would be more difficult

-Parts of funding only applicable if state is in surplus

-Need to present invest $X to maintain $Y return, present as a protection of incomes

-Show statewide problems, need statewide support

-Beach user/preservation fee, $1 visitor, flat fee, avoid % terms

Region 3b-4c Comments-9/22/2016

-Oregon Inlet look back at including projects (talk to Harry)

-Nourishment/Dredging cost (State and Fed make up same bar on graph to show total)

-Be careful with projections weigh needing to be conservative to account for peaks without being too conservative

-State should continue to consider innovative erosion control measures & inlet management features to reduce cost

-Consider nourishment cost with new projects being added

-Or make distinction that nourishment cost is for current projects

-Consider projection of nourishment cost in 4-5 yrs. with new projects starting

-This is our infrastructure (inlets & beaches)

-Specify the type of dredge used

-Show 1% sales tax revenue across State not just 8 coastal counties

-Tax would be too much for locals, other revenue sources-oil offshore? wind?

-With state funding should not come additional permit hurdles, reduce them!

-Modify existing legislation to account for federal state/local matching, why different

-Need multiple funding sources, to make fair and distribute burden

-Common (mis)conception is that “sales tax is mostly visitor paid, but locals would hurt the most” on the fence

-look at seasonal sales tax

-0.25% tax already proposed for dredging in Dare (investigate)

-Meals tax not enough money

-Land Transfer tax already in place

-Occupancy tax would hurt small local homes-look into giving locals more control

-Reallocation of sales tax is already on the table, take advantage of this opportunity, worth a fight

-Flood insurance surplus as a revenue source?

-Infrastructure grants & loans

-Campaign to donate $$ at checkout

-Beach user fee would be hard to enforce

APPENDIX E
DEQ STUDY

Beach Nourishment

EXECUTIVE SUMMARY

A Report to the North Carolina General Assembly
Joint Legislative Oversight Committee on Agriculture, Natural and Economic Resources

Session Law 2016-94 (House Bill 1030), Section 14.22.(a)

NOVEMBER 2016

North Carolina Department of Environmental Quality
Division of Coastal Management

Introduction

Coastal areas along the eastern seaboard of the United States are not only popular places to live and work, they also provide recreational opportunities favored by millions of vacationers each year. According to one 2013 study (Houston, 2013), the nation's beaches generate $225 billion a year for the national economy and contribute approximately $25 billion in federal tax revenue, which not only makes them valuable to our nation's and state's economy, but also critical to local coastal economies. Since 2008, North Carolina has been ranked sixth in the nation in terms of travel volume by the North Carolina Department of Commerce (NC DTFSD, 2008-2014).

Based on most recent NC statistics (NC DTFSD, 2014), tourism statewide generates $1.0 billion in state tax revenue and $601.2 million in local tax revenue. In 2013, 3 of the top 10 counties in terms of travel expenditures were coastal counties, with Dare County (#4) generating $957 million, New Hanover County (#8) $478 million, and Brunswick County (#10) $471 million. Dare County alone provides 5% of North Carolina's travel income, with 17.7% of overnight visitors to the state reporting beach recreation as their leading activity during their stay.

Coastal economies continue to transition from traditional economic pursuits, such as fishing, agriculture and forestry, to tourism. With this transition, North Carolina's barrier island communities need to address the growth associated with accommodating more visitors and residents. Tourists and new residents are drawn to the "pristine" beaches of the coast, and the wider the beach, the better (Jones & Mangun, 2001).

Coastal communities, particularly oceanfront communities, also experience stresses associated with seasonal storms (short-term and variable), changes in sand supply, and relative natural changes (longer term). Barrier island beaches provide storm protection for both developed and natural areas, while also providing recreational opportunities for millions of people each year. Beaches are highly dynamic, and constantly shift with tides, currents, wind and wave action. Over the long-term, beaches evolve in response to changes in sea-level and sand supply. Relative to a shifting ocean shoreline, homes, businesses, and infrastructure are geographically static – thus requiring property owners and communities to either relocate or mitigate interactions between public trust lands and private property interests.

There are several factors that must be considered when mitigating beach erosion hazards; including the local and regional beach ecology, economic significance, public and private investments (homes, infrastructure, and businesses), and levels of risk in the face of rising social, environmental, and economic stakes. Living in coastal areas requires a systematic, proactive and resilient approach to managing risks associated with beach erosion. A variety of strategies should be evaluated, including the potential relocation of vulnerable structures from erosional "hot spots," inlet stabilization, inlet channel relocation, and beach nourishment programs.

"Shore protection" has been part of the U.S. Army Corps of Engineers (USACE) mission since 1930 (USACE, 1984). Beach nourishment has been accepted as the shore protection method of choice in the United States, Australia, and Europe (NRC, 1995; NC, 2016). The USACE defines beach nourishment as "the process of mechanically or hydraulically placing sand directly on an eroding shore to restore or form, and subsequently maintain, and adequate protective or desired recreational beach" (USACE, 1984). These projects are designed to retain and rebuild natural systems such as dunes and beaches to protect structures and infrastructure. Various studies have documented that a wide, healthy beach reduces risk

of property and infrastructure damage as a result of coastal storms and floods (NRC, 2014). Not only can beach nourishment reduce a storm's potential physical and economic damages from waves and storm surge, it can also mitigate coastal erosion and help to restore valuable ecosystems that may have been lost (beaches, wetlands, and nesting areas) and provide critical habitats for sea turtles and shore birds. Beach nourishment is the only approach to shore protection that adds sand to an existing coastal system. Engineered and designed to function like a natural beach, placed sand is naturally distributed over a period of time and when complete, the wider beach gently slopes below the water while taller sand dunes act as natural buffers (NRC, 2014).

In addition to considering the environmental impacts associated with beach nourishment, coastal managers and decision-makers also have to consider the fiscal "costs" and "benefits." Economists are specifically interested in a projects "economic efficiency" and "distributional" implications; each of which requires an assessment of who benefits from a given project, and who pays for it (NRC, 1995). In determining the efficient use of resources, all of the social, economic, and ecological benefits from a project should be compared to the cost of the project; where the social costs are the benefits foregone – that is, a measure of the benefits that could have been produced for society by using these resources in a different way (NRC, 1995). Opponents of nourishment point to the sacrificial nature of the projects and argue that the money spent is wasted, especially where erosion rates are high. Despite arguments in favor of or in opposition to beach nourishment, an accurate understanding of costs and benefits is of considerable importance (NRC, 1995).

Review of Costs and Benefits Identified in the Literature

Environmental Concerns

A sandy beach represents a productive and unique habitat supporting the seasonal nesting of threatened and endangered sea turtles, and dense concentrations of benthic invertebrates that feed surf fishes, resident and migrating shorebirds and crabs (Brown and McLachlan 1990). During a beach nourishment project, the nourished part of a beach is considered the "subaerial beach," and can be divided into two major zones: 1) the "supralittoral" (dry) portion of the beach, extending from Mean High Water (MHW) to the primary dune; and 2) the intertidal (wet) zone, located between MHW and Mean Low Water (MLW). Because the primary purpose of beach nourishment is to restore eroded portions of the subaerial beach, most of the fill material is placed in these two zones.

Restoration of an eroded beach can provide new, quality habitat for a variety of shorebirds and sea turtles. However, in the process of sand placement, burial of shallow subaqueous habitats also occurs as the beach is widened. This can disturb indigenous biota inhabiting the subaerial habitats, which may in turn affect the foraging patterns of the species that feed on those organisms, creating the potential to disrupt species that use this area for nesting, and breeding. In some cases, sizeable impacts on several beach ecosystem components (microphytobenthos, vascular plants, terrestrial arthropods, marine zoobenthos and avifauna) can occur (Speybroeck et al., 2006). The projects may also cause undesirable side effects, including ecological impacts on offshore dredging sites and unnatural sand/sediment types at project sites. In addition, if a project results in steep berms and scarps, sea turtles cannot reach preferred nesting sites, and as a result, eggs may be laid closer to water where they are more likely to be swept away by incoming tides (Bagely et al., 1994). The sediment of a nourished beach can also be more compacted than on natural beaches, causing sea turtles to abandon attempts at digging nests for laying eggs (Nelson &

Dickerson, 1989). Depending on location, a nourished beach may not become suitable for turtle nesting in the middle beach zone until two or three years after the project (Steinitz et al., 1998). Negative ecological impacts associated with beach nourishment projects can be reduced or avoided by placing dunes as far landward as possible, using sediments of appropriate size (compatible with native sand on the recipient beach), and minimizing project activity during peak reproductive and nesting periods. For nourishment and dune projects in or adjacent to nesting habitat for protected shorebirds and turtles, design specifics (the slope and height of the beach/dune), time of year for construction, and density of vegetation planted can be modified to allow for successful nesting (Mass.gov, 2013).

Beach Nourishment Longevity

Beach nourishment is not a single event erosion mitigation alternative, and without regular maintenance, the benefits can be ephemeral (Pompe and Rinehart, 1995). For long-term management of beaches and sand resources, careful consideration should be given to the frequency of projects as well as effects of borrow sites located within the closure depth (the water depth at which no appreciable movement of sediment by wave action occurs) of the beach profile, or at a shoal site on adjacent beaches that normally feed the downdrift beaches, and are critical to the success of the nourishment efforts. The impacts of creating a local depression in the sea bottom on offshore sand movement from the nourished beach and the quality and quantity of sand are particularly important. Borrowing sands within closure depths should be done mainly as a sand bypass operation designed to mitigate the effects of any geographical feature or structure that interrupts the littoral movement of sand (ASMFC, 2002).

Success of a beach nourishment project is often determined by how long the project lasts before maintenance is required, and/or how much property damage was prevented (measured in dollars) as a direct result of the project. Longevity is certainly inherent to a well-designed project, but storm frequency will heavily influence a project's long-term effectiveness against storms.

Given the physical volume of fill placed on a beach system, managers and engineers will often examine what percentage of fill is retained in the littoral cell after a given period of time. How a beach fill project performs with time is a function of the interaction of several conditions and properties which include local wave and current conditions, technique and location of fill placement, and the reliability of the monitoring method. These interactions will determine if a fill remains in the system longer or shorter than expected. Performance of beach fill is also determined by the physical compatibility between the fill material and the "native" material of the beach where the fill is to be placed. "Compatibility" refers to the degree of similarity of the two materials and includes the size, type (mineralogy), color, density, and shape of the component sediment grains (ASMFC, 2002).

Monitoring was not a routine aspect of beach nourishment projects before the 1980s (Leonard et al., 1989; Komar, 1997). Up to the end of the 1980s, performance data for projects on the Pacific Coast were less prevalent than those on the Atlantic Coast (Lenard et al., 1989). For instance, most of California's nourishment projects before 2000 were historically pursued as local, rather than regional projects, and were dominantly "opportunistic" projects, meaning that beach restoration was not the primary purpose of the placement of fill. Only in recent years (post-2004) have regional projects become more common. Since 2000, there has been a more coordinated effort to explore regional approaches to protecting beaches with a key aspect of this process including the institution of monitoring programs. One example is the Regional Beach Monitoring Program of San Diego Association of Governments (SANDAG), which began in the middle 1990s (Hearon & Humphreys, 2004). The Regional Beach Sand Project of SANDAG is the first regional beach nourishment program on the Pacific Coast of the United States. In North Carolina,

Carteret County has been the first to establish a Beach Commission (2001), in addition to a Shore Protection Office tasked with taking a regional approach to planning and managing its beaches and resources (Rudolph, 2016).

To date, the overall results of beach nourishment projects based on long-term monitoring data have been mixed. As an example, the Coastal Frontiers Corporation (2004) reported results from monitoring of a major nourishment program in San Diego County, where twelve beaches received nourishment in 2001. During the 2003 monitoring year, the performance of the individual fill at the twelve beaches reportedly varied considerably; at some beaches, previous gains in shore-zone volumes persisted, while at others, the gains were short-lived. This was not the first effort in California to measure "successes" through monitoring. An earlier study (Leonard et al., 1989) also determined that the overall success of various projects (starting in the late 1980s) were mixed as well. As part of this determination, this study also evaluated how five physical parameters (1) project length, 2) density, 3) grain size, 4) hard structures, 5) storm intensity & frequency might influence the success of fill episodes as measured longevity, or "durability," of the placed fills. Some of their major conclusions for Pacific Coast beaches (nearly all are in southern CA) were (Leonard et al., 1989):

- Longevity of fills at Pacific Coast beaches has overall been higher than those at Atlantic Coast and Gulf Coast beaches.
- Of those beaches measured, 48% were successfully maintained, 15% were not, and 36% were unknown.
- The Pacific Coast management philosophy of nourishment by periodic "maintenance" was advantageous over the Atlantic/Gulf Coast management philosophy of nourishment by "crisis."
- Project monitoring must be a mandatory part of each replenishment project.

To get the most physical benefit, sediment management should be viewed on a regional basis, rather than on a project-by-project basis (NRC, 2014). Federal and state agencies have documented offshore sand deposits, but not all are of optimal quality or conveniently located, which can increase costs. Coastal projects can minimize sediment losses by retaining dredge material or emphasizing reuse, as in sand back-passing or bypassing operations. Use of a sediment source that is compatible with a beach fill project site also decreases ecosystem recovery time and enhances habitat value in the nourished area. Projects that also include strategies that reduce the consequences of coastal storms, such as hard zoning (use of hard structures permitted), building elevation, land purchase, and setbacks, have high documented benefit-cost ratios between 5:1 and 8:1 for nonstructural and design strategies that reduce the consequences of flooding. However, between 2004 and 2012, federal funds for such strategies only averaged five percent of disaster relief funds (NRC, 2014).

Economic Benefits

Houston (2013) determined that for every $1 invested annually, the federal government receives $320 in tax revenues from beach tourism. The USACE requires that the cost of nourishment projects involving any federal government funding be justified; however, this justification is solely based on the benefits achieved from reduced storm damage even though the USACE recognizes that there are also other gains (e.g., recreation benefits). Since benefits from less storm damage are not derived from transactions in the marketplace, their value must be estimated indirectly. The USACE estimates storm damage reduction benefits by estimating the value of property that likely would be destroyed from storms if no sand were added to the beach (Pompe & Rinehart, 1995).

Restoring beaches through beach nourishment can greatly increase their attractiveness to tourists (Houston, 2013). For example, in 1989, 74% of those polled in New Jersey said the New Jersey shore was "going downhill." By 1998, only 27% thought New Jersey beaches were in decline, with 86% saying that the shore was one of New Jersey's best features (Zukin, 1998). The difference between 1989 and 1998 was construction of the beach nourishment project from Sandy Hook to Barnegat Inlet, New Jersey (Houston, 2013). Not only did the project bring more tourists, it also provided critical protection during Hurricane Sandy.

In one California survey (King, 2002), those polled said they spend 2/3 of their time at the beach during vacation, and 60% of the respondents said that they would go out of state if California's beaches ceased to exist. This same study examined the fiscal impact of San Clemente's beaches in an attempt to see if benefits outweighed the costs of maintaining its beaches. At the time of the study, it was determined that the city averaged 1.9 million visitors each year and spent approximately $1,557,800 to maintain beaches (beach maintenance, lifeguard services, police). Through various revenue mechanisms (transient occupancy & sales taxes, parking fees, and city concessions), the city generated a total revenue of approximately $1,650,600. The net revenue from beaches was therefore estimated at just over $90k ($0.05 per visitor). The study concluded that while the economic benefits and tax revenues may not have been as high as previously projected, existing sources of revenue in San Clemente were sufficient to cover the long-term costs of beach maintenance.

An economic study of beach nourishment in Florida (Klein & Osleeb, 2010) concluded that beach nourishment projects can have a "dramatic impact on the tourism sector." The impact was seen in ". . . *visible discontinuities and increases in the slope in . . . tourism-sector earnings*" after beach nourishment. They noted that tourism earnings at Miami Beach increased 56% the year after completion of a beach restoration project. This one-year increase in tourism income of $290 million was more than five times the $51 million cost of the beach nourishment. Miami Beach is a good example of the potential economic benefits of beach restoration since the city virtually had no beach by mid-1970 (Wiegel, 1992). Prior to nourishment, many facilities were becoming run down due to a poor economy and by 1977, *Time* magazine reported: "*So rapidly has the seven-mile-long island degenerated that it can be fairly described as a seedy backwater of debt-ridden hotels*." Beach nourishment in the late 1970s rejuvenated Miami Beach and opened its beaches to the public. From 1978 to 1983, estimated beach attendance grew from 8 to 21 million (Wiegel, 1992).

The following is a summary of how communities have benefited (economically and physically) from beach nourishment (Houston & Dean, 2013):

- California (Santa Monica Bay Beaches)
    - In 1925, Venice Beach was 100 feet wide
    - In 2013, almost 90 years later, Venice Beach was 500-700 feet wide, and was the most visited beach in U.S (Houston & Dean, 2013).
- California (Coronado/Silver Stand – San Diego)
    - In 1905, beaches were being starved due to the damming of rivers
    - In 2012, beaches were 500-700 feet wide, and reported to be California's leading tourist destination with "*the beach the marquee attraction*" (*San Diego Business Journal*, *U.S. News Travel*, 2012)
- Florida (Delray Beach)

    - In the 1960s and 1970, emergency protection of the eroded beach ultimately required construction of hardened structure made of an interlocking concrete blocks, which failed at many locations.
    - In the early 1970s, the revetment was covered by beach nourishment
    - Following a series of beach nourishment projects, in 2013, ASBPA gave Delray Beach the "*Best Restored Beach Award*," and 2012 Rand McNally/*USA Today* named Delray Beach the "*Most Fun Small Town in America*"
- Florida (e.g. Atlantic Beach, Jacksonville; Captiva Island Beach; Ft. Myers Beach)
    - Have benefited from a consistently-funded, State-led program of beach nourishment
    - Florida has more beach tourist visits (810 million) annually than any other state or country, and more visits than all theme parks and National Parks combined (Houston, 2013)
    - Florida beaches have an estimated annual recreational value of $50 billion (Houston, 2013)
- New Jersey – Sea Bright – Protection
    - 1995, following attempts to mitigate erosion using a rock revetment (there was no dry sand beach), a 21-mile long beach nourishment project was constructed, which only lasted 1-2 years.
    - In 2001, and after nourishment, the beach was approximately 400 feet wide
    - In 2012, during Hurricane Sandy, an estimated 30-40 feet of beach was lost. Without a nourished beach, damage and losses would have been greater.
- New Jersey – Storm Damage Reduction (Houston & Dean, 2013):
    - Mayor Mancini estimated that had beach nourishment been in place at Long Beach, New Jersey, like at Brant Beach (only six miles away), that damage caused by Hurricane Sandy would have been reduced by approximately $500 million
    - On 18-mile Long Beach Island, only Brant Beach had a USACE beach nourishment (1-mile long) placed just before Hurricane Sandy
        - Long Beach suffered "complete destruction"
        - Brant Beach reported "no overwash or wave damage"
    - Atlantic City, New Jersey, was welcoming tourists four days after Hurricane Sandy
    - Ortley Beach, New Jersey was still recovering from major damage six months after Hurricane Sandy
- Mississippi – Harrison County
    - From 1925 to 1950, a 26-mile sea wall was constructed, and was damaged multiple times
    - In 1951, six million cubic yards of beach fill was placed along the 26 miles to protect the sea wall from being undermined by waves. Fill withstood Hurricanes Camille and Katrina
    - In 2013, beaches have continued to last and made tourism Harrison County's number one business.
- National Statistics (Houston & Dean, 2013):
    - Beaches help generate $225 billion a year for the national economy, contributing about $25 billion in federal tax revenue.
    - 85% of all tourism-related revenue in the U.S. is generated in coastal states, where beaches are the leading tourist attraction
    - Beaches drew an estimated 2.2 billion visits in 2010, more than twice the number of visitors to all federal and state parks.
    - For every $1 the federal government spent on beach nourishment in 2013, it collected an estimated $570 in beach tourism revenues.

Economic benefits linked to beach nourishment projects can be calculated using a variety of methods depending on the beneficiary. Cost-share ratios for projects in which there is federal involvement do not necessarily describe the actual distribution of the benefits or adequately account for the impacts that navigation projects might have along Atlantic shorelines. Interactions between the costs and benefits have historically not been effectively correlated, and in 1995 it was recognized that nourishment needs of beaches affected by navigational projects were not adequately recognized or accommodated in the planning and implementation of navigational projects (NRC, 1995). To conserve and use sand resources optimally, beach-quality sand dredged from navigational projects should be placed in the littoral system from which it was removed, rather than placed offshore. The cost of offshore disposal is greater than has been estimated when only the direct cost of offshore disposal is considered. A preferred approach would be to consider accounting for the economic value of sand and the effects caused by a deficit in the sand budget in the littoral system (NRC, 1995).

Benefit-cost analysis, constrained by acceptable risk and social and environmental dimensions, provides a reasonable framework for evaluating coastal risk management investments (NRC, 2014). Investments in coastal risk reduction should be informed by net benefits, which include traditional risks reduction benefits (e.g., reduced structural damages and reduced economic disruption) and other benefits (e.g., life-safety, social, and environmental benefits), minus the costs of investments in risk reduction and environmental costs. However, because it is difficult to quantify and monetize some benefits and costs, it is important to expand the analysis to include considerations of difficult-to-measure benefits or costs through constraints on what is considered acceptable in social, environmental, and risk reduction dimensions (NRC, 2014). Such unacceptable levels of risk may include a level of individual risk of fatality, the risk of a large number of deaths from a single event, or adverse impacts on social and environmental conditions that may be difficult to quantify in monetary terms (NRC, 2014). Establishing societally acceptable risk standards requires extensive stakeholder engagement, and setting such a standard requires judgements, on which not all individuals or groups will necessarily agree (NRC, 2014).

A 2004 report titled, "*Economics of the Shoreline – An Annotated Bibliography for the National Shoreline Management Study* (NSMS)" (Lent, L.K., 2004) provides a useful summary review of 100 studies and reports pertaining to economic consequences of shoreline change and related issues. One objective of the NSMS was to assess the economic impacts of shoreline change (erosion and accretion) along the nation's coast. Of the studies reviewed, the author concluded that there was no single comprehensive economic analysis that could be used to directly guide national policy. Additionally, the author found that methods conducted at the regional level tended to address a varied range of questions about shoreline use and management, and also used different techniques. Furthermore, even when two studies addressed the same questions, the analytical techniques employed still often differed. As a consequence, although there are many regional studies evaluating the benefits of beaches, the extent to which study results can be compared is limited (Lent, L.K., 2004).

Storm Mitigation Benefits

Beach nourishment has proven to be successful and beneficial in terms of damage reduction resulting from storms (Houston & Dean, 2013). Wider beaches seaward of structures perform as effective energy dissipaters during storm conditions. These benefits can be enhanced by increasing beach widths through nourishment projects. Beach nourishment projects completed with high quality sand will interact existing erosion and accretion process occurring within the project area in a manner that retains it within the

active nearshore region and provide continuing storm damage reduction and recreational benefits (Dean, 1988).

When Hurricane Sandy struck in October 2012, the storm exceeded the design criteria for many beach fill projects along the North Atlantic coast. As a result of Hurricane Sandy's winds, surge and waves, most of the shoreline protection features sustained damage. Nevertheless, features such as barrier dunes helped to soften the storm's impact on the property and infrastructure located behind these risk reduction projects (NJCRC, 2012).

In the aftermath of Hurricane Sandy, the New Jersey Coastal Research Center reported that damage to beaches, dunes and public and/or private property was significantly worse on the north side of the storm's zone of coastal landfall in Atlantic City (NJCRC, 2012). Southern Cape May County faired best with limited overwash, dune scarping and loss of beach elevation. Many Cape May coastal communities were beneficiaries of either USACE or New Jersey State co-sponsored Shore Protection Projects that yielded wider beaches and dunes designed with specific storm resistance in terms of elevation and width. Damages increased towards the region of landfall with moderate dune breaches, especially in the Southern Ocean City area, and damages to the southern Absecon Island's oceanfront properties. Dune breaches, loss and scarping of dunes, and decreased beach width and elevation continued north into Brigantine. From the natural area of Holgate on Long Beach Island, north along the remainder of the Jersey coast, the intensity dramatically increased for dune breaching and overwash and/or complete erosion of the dunes, drastically lowering of the elevation on beaches with substantial sand transport onto and across Long Beach Island or Northern Ocean County's spit. In Monmouth County, the major observation was that Sandy's waves were dramatically higher upon breaking than they were further south, especially south of the storm's center of rotation. Damage seen in Deal and Elberon resulted from waves calculated at exceeding 30 feet in NAVD 88 elevation levels on breaking on the bluff. These huge breakers essentially bulldozed the berm, beach and irregular dune system all along the Monmouth County Atlantic shoreline. Damages to oceanfront property (public and private) increased dramatically northward (NJCRC, 2012).

Even with successes, there is no shoreline stabilization method that can permanently stop all erosion or storm damage. The level of protection depends on the option chosen, project design, and site-specific conditions such as exposure to storms. All options require maintenance, and many require steps to address adverse impacts to the shoreline system (mitigation) over long periods of time (NC, 2016).

In 2004, Florida experienced four major hurricanes and 1 tropical storm impacting more than 695 miles (about 84%) of its beaches. At the time, 17 beach restoration projects lost approximately 7.6 million cubic yards of material between August and September of that same year. Federal shore protection projects prevented $54 million in average annual damages, and there was little or no damage from the storm surge upland of restored beaches.

The damage reduction attributable to a beach nourishment project can be approximated by using existing risk analysis methodologies. It should be noted, however, that the level of protection is not absolute due to the significant uncertainties that exist regarding the frequency of storm conditions that may affect project performance. The level of protection can be reduced rapidly following a major storm and is also progressively diminished if a previously nourished beach is not maintained by subsequent renourishment. In addition to uncertainties associated with performance, there are uncertainties related to the continuing financial means to support a renourishment program when not formally required to do so; as well as the long-term availability of beach-quality sediment resources (Houston and Dean, 2013).

The following is a summarized list of storm protection benefits, strengths, weaknesses, and uncertainties associated with beach nourishment projects:

Storm Surge Damage Risk reduction:

- Breaking of offshore waves (USACE, 2013)
- Attenuation of wave energy (USACE, 2013)
- Beaches, when combined with sand dunes, reduce the risk of storm surge-related wave attack and flooding on barrier islands and the mainland (NRC, 2014)

Strengths Associated with Beach Nourishment:

- Reduces erosion, flooding, and wave attack and may reduce the likelihood of forming new inlets (NRC, 2014)
- An increase in the sediment budget downdrift of fill areas enhances the likelihood for landforms to evolve, increasing topographic diversity in a way that is more natural than by direct nourishment (NRC, 2014)
- Beach fill might protect not only the beach where it is placed, but also downdrift stretches by providing and updrift point source of sand (USACE, 2006)
- Coastal risk reduction projects can be designed to provide increased ecological value (NRC, 2014)

Known Weaknesses Associated with Beach Nourishment:

- Requires periodic to continual sand resources for renourishment.
- Can be eroded by extreme event surge and waves; no high water protection.
- Possible impacts to regional sediment transport.
- Can lead to removal of large volumes of offshore sand. (NRC, 2014)
- Does not address back-bay flooding. (NRC, 2014)
- Can lead to steeper beach profiles, which can increase wave energy on the beach, increase beachside erosion, and preclude wave overwash. (Green, 2002)
- The lifetime of beach nourishment projects is often short, requiring frequent re-nourished.

Uncertainties about utility for risk reduction & resilience

- The level of risk reduction afforded by a beach nourishment project varies over time, as the beach and dunes are eroded by natural processes, requiring periodic renourishment (varying by location) (NRC, 2014).
- Erosional hot spots may develop from a variety of causes, including material composition and the presence of adjacent structural erosion control measures. (Kraus and Galgano, 2001)
- There are several recognized failure modes associated with beach fills (USACE, 2006):
    - Failure to protect upland property or structures during storm events.
    - Movement of fill material to undesired locations, such as into inlets or harbors.
    - Loss of fill material at a rate greater than anticipated for some reason other than design wave exceedance.

Hurricane and coastal storm related economic losses have increased substantially over the past century, largely due to the expanding population and development in the most susceptible coastal areas. The U.S. has experienced extensive and growing losses from natural disasters. Dollar losses due to tropical storms

and floods have tripled over the past 50 years (accounting for inflation; Gall et al., 2011), and currently comprise approximately half of all natural disaster losses. There are two primary reasons for the dramatic increase in natural disaster related losses: an increase in population and property in harm's way, and an increase in the frequency or severity of the hazard events (NRC, 2014).

Eight U.S. cities (Miami, the New York-Newark region, New Orleans, Tampa-St. Petersburg, Boston, Philadelphia, Virginia Beach, and Baltimore) rank among the world's top 20 in terms of estimated potential average annual losses from coastal flooding. Awareness of these vulnerabilities became more apparent following Hurricane Sandy (2012) and Katrina (2005) (NRC, 2014).

Full protection from coastal hazards and related damages is typically impractical at community and national scales. Even the largest levees or surge barriers could be overtopped by a large storm or suffer from structural failures. Thus local, state and federal governments are increasingly recognizing the importance of becoming more resilient to hazards and disasters. "Resilience" is defined as the ability to prepare and plan for, absorb, recover from, or more successfully adapt to actual or potential adverse events (Rose et al., 2007). Resilient communities are able to assess and manage risks, are generally well informed of threats, and are clear about the roles and responsibilities of individuals and organizations in the community with respect to risks (NRC, 2012b). Resilient communities take into account both pre-disaster mitigation measures and post-disaster recovery measures to determine an appropriate allocation of resources to improve resilience within budgetary constraints. Pre-disaster mitigation can prevent property damage and some business and infrastructure impacts, but resilience can also be improved by strategies to recover more quickly (Rose et al., 2007).

Currently, justification of USACE Coastal Storm Risk Management (CSCRM) projects is based on cost-benefit analysis. The "benefit" of a proposed project is the difference between the estimated annual damages that would occur if that project was in place versus the estimated annual damages that would occur without the project. That cost-benefit analysis is used to compare alternatives at a project site. An estimated reduction in damages is based on the modeling of future storms that are expected to occur over the life of the project. Each of these storms is anticipated to produce specific levels of damage depending on the frequency of the event. Those damages are aggregated over the project life, and expected annual damages are estimated for both the with- and without-project conditions. The difference between the with- and without-project benefit streams is the benefit attributable to the project. The average annual cost of the proposed project is subtracted from the benefits estimate—that is, the change in expected annual damages—to generate average annual net benefits. The benefits estimate is arrayed over the average annual cost of the proposed project to generate the benefit-cost ratio (BCR) (USACE, 2015).

As part of the North Atlantic Coast Comprehensive Study (NACCS), the study-team determined that an important element of the Coastal Storm Risk Management Framework to "address flood risks to vulnerable coastal populations impacted by Hurricane Sandy" would be to gather missing data and refine the analyses that USACE uses to estimate benefits for CSRM projects. The NACCS study team began a year-long effort to capture and document the actual economic damages that occurred in Hurricane Sandy to provide field teams with the data they need to properly assess the benefits in the future. Better quantifying the actual effects of the event will also help planners to adequately and cogently discuss and communicate risk. This data collection effort focused on four subcategories of National Economic Development (NED) benefits (USACE, 2015):

- Assessment of damages to structures and their contents

- Loss-of-life projection
- Emergency costs
- Secondary and tertiary effects

The 2013 federal guidance for water resources planning titled, “Principles and Requirements for Federal Investments in Water Resources,” provides an effective framework to account for life safety, social impacts, and environmental costs and benefits in coastal risk reduction decisions.

Summary

A recent literature review (Cunniff & Schwartz, 2015) found that there is sufficient confidence in the ability of natural infrastructure and nature-based measures (i.e., beach nourishment) to reduce impacts of coastal storms and other natural changes to coastal communities such that these approaches should be routinely considered as a viable option by decision-makers. The value of natural infrastructure and nature-based methods does not rest solely in risk reduction as these solutions offer other valuable ecosystem services – co-benefits which are generally absent from traditional hardened infrastructure. Incorporation of ecosystem services into cost-benefit and environmental impact analyses will advance more informed decision-making on the part of communities regarding how they wish to approach increasing their resiliency. As ecosystem service evaluation becomes more broadly accepted and integrated into investment decision-making, natural infrastructure solutions should be more highly valued for their economic, environmental and risk reduction contributions (Cunniff & Schwartz, 2015).

Whether the focus is storm mitigation or economic such as tourism and community growth, beach nourishment has been shown to be a viable and economically feasible approach to erosion control (Jones and Mangun, 2001). Most coastal states, territories, and commonwealths have some mechanisms and/or policies in place that address their own degrees of erosion hazards. However, additional benefits could be realized through further planning. Ideally, states should comprehensively examine their specific needs and issues in order to develop long-term beach management programs, which include the benefits and costs of various management options. Much of the need for beach nourishment can be met if planned in conjunction with navigational projects. Beneficial use many not be ideal for every nourishment scenario, but it is an option worth investigating for meeting long-term needs (NOAA, 2000).

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APPENDIX F
DOC STUDY

Commerce

JOHN E. SKVARLA, III
Secretary

Coastal Counties' Economic Overview

LEGISLATIVE MANDATE

SECTION 14.22.(c) The Department of Commerce shall study and provide an executive summary of readily available economic data related to the 20 coastal counties of the State for the purpose of quantifying the contribution of the coastal economy to the economy of the State as a whole, considering, at a minimum, the benefits of travel and tourism, small businesses, job creation and opportunity, and tax revenues, including property, sales, and income taxes. The Department shall report the results of the study no later than November 1, 2016, to the Department of Environmental Quality and the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources.

COASTAL REGION

The Coastal Region of North Carolina was defined by the federal Coastal Zone Management Act (CZMA) in 1972, and the Coastal Management Act of 1974 (G.S. 113a-103). The twenty counties are:

1. Beaufort	**6. Chowan**	**11. Hertford**	**16. Pasquotank**
2. Bertie	**7. Craven**	**12. Hyde**	**17. Pender**
3. Brunswick	**8. Currituck**	**13. New Hanover**	**18. Perquimans**
4. Camden	**9. Dare**	**14. Onslow**	**19. Tyrrell**
5. Carteret	**10. Gates**	**15. Pamlico**	**20. Washington**

Dare County is the largest county in the region with 1,562mi^2, but land area is only 25 percent of its total area, as the remaining 75 percent is water. Hyde and Carteret Counties are the second and third largest respectively, with more water than land area. Pender County is the largest by land area, followed by Brunswick, Beaufort, and Onslow Counties. Chowan County is the smallest with 233.3mi^2, followed by Pasquotank, and Camden Counties.

The majority of the counties in this region are predominately rural, with five identified as completely rural by the U.S. Census Bureau: (1) Gates, (2) Hyde, (3) Pamlico, (4) Perquimans, and (5) Tyrrell Counties. New Hanover County is the most urban at 97.8 percent, followed by Onslow and Craven Counties.

2010 Rural Percentage

Beaufort	65.6%	**Chowan**	67.6%	**Hertford**	68.6%	**Pasquotank**	41.3%
Bertie	83.2%	**Craven**	27.7%	**Hyde**	100.0%	**Pender**	68.8%
Brunswick	43.0%	**Currituck**	98.3%	**New Hanover**	2.2%	**Perquimans**	100.0%
Camden	99.6%	**Dare**	29.0%	**Onslow**	26.4%	**Tyrrell**	100.0%
Carteret	32.6%	**Gates**	100.0%	**Pamlico**	100.0%	**Washington**	67.8%
		Region	**38.2%**		NC 33.9%		

Source: United States Census Bureau.

POPULATION

The Coastal Region accounted for about **10 percent of the state's population**, consistently growing since 2010. New Hanover County had the largest population with over 200,000, followed by Onslow, Brunswick, and Craven Counties with over 100,000 people each from 2010-2015. The Coastal Region's population density averaged 109 people per square mile compared to the state's average of 142 people per square mile (land only). This region has consistently grown since 2010, at a similar rate to the state as a whole.

Population

	2010	2011	2012	2013	2014	2015
Region	**992,925**	**997,898**	**1,009,500**	**1,018,914**	**1,037,034**	**1,036,500**
NC	9,558,979	9,651,025	9,747,021	9,845,432	9,940,387	10,042,802

Source: United States Census Bureau. *(See appendix for county-level data.)*

Population Density (land only)

	2010	2011	2012	2013	2014	2015
Region	**106.5**	**107.0**	**108.3**	**109.3**	**110.1**	**111.2**
NC	138.5	139.9	141.3	142.7	144.1	145.6

Source: United States Census Bureau. (Population/Miles^2) (*See appendix for county-level data.)*

Population Growth Rate (base year 2010)

	2010	2011	2012	2013	2014	2015
Region	**-**	**0.5%**	**1.7%**	**2.6%**	**3.4%**	**4.4%**
NC	-	1.0%	2.0%	3.0%	4.0%	5.1%

Source: United States Census Bureau. *(See appendix for county-level data.)*

It is important to note that population in this region varies throughout the year due to seasonality of the vacation destinations. Most of these counties experience an influx of population between May and August, where many stay and/or work in these counties during the summer months.

LABOR MARKET

The Coastal Region accounted for almost **10 percent of North Carolina's labor force**. New Hanover County has a significantly larger labor force due to its large population, making up 25 percent of the region's total labor force. The number of unemployed in the Coastal Region has dropped by 40 percent since 2010. Despite the drop in the unemployment number, the Coastal Region's unemployment rate has been higher than the state's rate since 2011.

Labor Force

	2010	2011	2012	2013	2014	2015
Region	**442,706**	**441,012**	**443,614**	**442,228**	**441,728**	**447,492**
NC	4,616,690	4,633,071	4,680,265	4,683,022	4,690,562	4,769,245

Source: Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

Employed

	2010	2011	2012	2013	2014	2015
Region	**396,948**	**395,348**	**401,167**	**404,800**	**411,768**	**419,511**
NC	4,115,628	4,157,543	4,247,139	4,310,817	4,396,286	4,495,473

Source: Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

Unemployed

	2010	2011	2012	2013	2014	2015
Region	**45,758**	**45,664**	**42,447**	**37,428**	**29,960**	**27,981**
NC	501,062	475,528	433,126	372,205	294,276	273,772

Source: Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

Unemployment Rate

	2010	2011	2012	2013	2014	2015
Region	**10.3%**	**10.4%**	**9.6%**	**8.5%**	**6.8%**	**6.3%**
NC	10.9%	10.3%	9.3%	7.9%	6.3%	5.7%

Source: Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

Job Openings for 2015 averaged 7.4 percent of the state's total, with a little over 10,000 openings. About 62 percent of the openings in the region were located in New Hanover County and Onslow County. The labor slack rate (the number of unemployed persons per job opening) was 2.8 for the Coastal Region and 2.0 for the state, meaning the Coastal Region had more unemployed people per job opening than the state as whole.

Job Openings

	2015
Region	**10,043**
NC	135,433

Source: Wanted Analytics, Help Wanted Online, The Conference Board. *(See appendix for county-level data.)*

Labor Slack Rate

	2015
Region	**2.8**
NC	2.0

Source: Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce & Wanted Analytics, Help Wanted Online, The Conference Board. *(Number of unemployed divided by the number of job openings.) (See appendix for county-level data.)*

INDUSTRY

The Coastal Region averaged **8.5 percent of the jobs in North Carolina** between 2010 and 2015, with over 348,000 jobs in 2015. Almost 30 percent of the jobs in the region were located in New Hanover County alone. The growth rate for the region has grown consistently since 2012 but at half the rate of the state's. The average yearly wage for the Coastal Region was about 35 percent less than the state's average yearly wage ($46,563); but almost half of the counties were above the region's average.

Number of Jobs

	2010	2011	2012	2013	2014	2015
Region	**330,991**	**329,737**	**331,718**	**336,548**	**342,433**	**348,852**
NC	3,788,425	3,836,792	3,905,109	3,975,144	4,057,234	4,162,137

Source: Quarterly Census Employment and Wages (QCEW), Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce. *(See appendix for county-level data.)*

Job Growth Rate (base year 2010)

	2010	2011	2012	2013	2014	2015
Region	-	-0.4%	0.2%	1.7%	3.5%	5.4%
NC	-	1.3%	3.1%	4.9%	7.1%	9.9%

Source: Quarterly Census Employment and Wages (QCEW), Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce. *(See appendix for county-level data.)*

Average Yearly Wage (in 2015 dollars)

	2010	2011	2012	2013	2014	2015
Region	**$36,790**	**$36,400**	**$35,761**	**$35,671**	**$35,903**	**$36,675**
NC	$44,709	$44,394	$44,509	$44,548	$45,020	$46,563

Source: Quarterly Census Employment and Wages (QCEW), Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce. Wages are adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index. *(See appendix for county-level data.)*

The top three industry sectors (as measured by employment) for the Coastal Region in 2015 were: (1) Retail Trade, (2) Health Care and Social Assistance, and (3) Accommodation and Food Services. As a region, these coastal counties have a higher concentration of employees in Retail Trade, Accommodation and Food Services, and Public Administration as compared to the state. Fourteen of the 20 counties had Retail Trade as the first or second largest industry sector, for example. Accommodation and Food Services is the number one industry by employment in Dare County, and the second biggest sector in Brunswick, Carteret, Onslow and Perquimans Counties. When compared to the state, manufacturing was far less concentrated, although still important for several counties including Beaufort and Washington.

Coastal Region Top 10 Industry Sectors

2015					
	Industry	**Employees**		**Industry**	**Employees**
1	Retail Trade	55,672	**6**	Administrative and Support and Waste Management and Remediation Services	19,732
2	Health Care and Social Assistance	49,548	**7**	Manufacturing	19,272
3	Accommodation and Food Services	46,368	**8**	Construction	16,167
4	Educational Services	31,293	**9**	Professional, Scientific, and Technical Services	14,552
5	Public Administration	30,108	**10**	Other Services (except Public Administration)	9,722

Source: Quarterly Census Employment and Wages (QCEW), Demand driven Data Delivery System (4D), Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

NC Top 10 Industry Sectors

2015					
	Industry	**Employees**		**Industry**	**Employees**
1	Health Care and Social Assistance	590,275	**6**	Administrative and Support and Waste Management and Remediation Services	290,807
2	Retail Trade	490,823	**7**	Public Administration	239,235
3	Manufacturing	461,008	**8**	Professional, Scientific, and Technical Services	221,796
4	Accommodation and Food Services	396,622	**9**	Construction	189,169
5	Educational Services	370,929	**10**	Wholesale Trade	178,875

Source: Quarterly Census Employment and Wages (QCEW), Demand driven Data Delivery System (4D), Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

Employment projections for the Coastal Region are not available at the county level. Instead, projections are available by NC's Prosperity Zones, a larger regional grouping used by the state for administrative purposes. The Coastal Region is split between the Northeast Prosperity Zone and the Southeast Prosperity Zone. In both zones, the top five major occupations expected to have growth were the same, although in slightly different order.

Top 5 Occupations by Net Projected Employment Growth

Northeast Prosperity Zone	Actual 2012	Projected 2022	Net Change	Wage Annual Median
Food Preparation and Serving Related Occupations	20,228	24,818	4,590	$18,275
Healthcare Support Occupations	9,934	14,040	4,106	$19,317
Office and Administrative Support Occupations	28,798	32,326	3,528	$28,176
Healthcare Practitioners and Technical Occupations	13,697	16,667	2,970	$53,482
Construction and Extraction Occupations	7,477	10,121	2,644	$31,774

Source: Major Occupational Projections, Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

Top 5 Occupations by Net Projected Employment Growth

Southeast Prosperity Zone	Actual 2012	Projected 2022	Net Change	Wage Annual Median
Food Preparation and Serving Related Occupations	39,818	47,670	7,852	$18,403
Office and Administrative Support Occupations	52,061	58,846	6,785	$28,260
Healthcare Practitioners and Technical Occupations	22,394	28,221	5,827	$52,407
Healthcare Support Occupations	15,082	20,739	5,657	$21,858
Construction and Extraction Occupations	17,033	21,152	4,119	$32,818

Source: Major Occupational Projections, Labor & Economic Analysis Division (LEAD), NC Department of Commerce. *(See appendix for county-level data.)*

SMALL BUSINESS

Small firms are defined as having fewer than 500 employees by the Small Business Administration. There were more employees at small firms than large firms in the Coastal Region. From 2010 to 2015, the region has consistently had a higher percentage of employees in small businesses than the state.

Percent of Workers at Small Firms

	2010 Q3	2011 Q3	2012 Q3	2013 Q3	2014 Q3	2015 Q3
Region	**66.7%**	**65.9%**	**65.4%**	**64.7%**	**64.1%**	**64.7%**
NC	49.6%	49.0%	48.2%	47.7%	47.6%	47.5%

Source: Longitudinal Employer–Household Dynamics (LEHD) at the U.S. Census Bureau. *(See appendix for county-level data.)*

TAX REVENUE AND PERSONAL INCOME

The Coastal Region collected, on average, **10 percent of all of North Carolina's sales and property tax revenues**. New Hanover County ($4 billion) reported more than two times the taxable sales as the second highest county, Onslow ($1.9 billion). Sales in the region grew consistently since FY 2009-2010,

which paralleled the state's growth in taxable sales. New Hanover, Onslow, and Brunswick Counties lead the region in gross sales tax collections. Both the Coastal Region and the state repeatedly increased gross sales tax collections for five years (2011-2016). For property taxes, New Hanover ($255 million) collected over a quarter of the region's taxes. The region also accounted for 7.5 percent ($774 million) of the state's individual income tax liability in 2014.

Personal income per capita for the region was $3,000 less than the state's in 2014.

Taxable Sales (in millions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Region	**$10,189.87**	**$11,087.39**	**$11,358.95**	**$11,621.12**	**$12,504.88**	**$13,262.39**
NC	$96,759.10	$102,830.05	$105,367.31	$110,350.58	$120,304.94	$128,156.85

Source: North Carolina Department of Revenue. *(See appendix for county-level data.)*

Gross Sales Tax Collections (in millions)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Region	**$586.93**	**$539.78**	**$541.66**	**$553.19**	**$595.74**	**$631.93**
NC	$5,567.95	$4,990.66	$5,016.41	$5,254.90	$5,731.24	$6,106.79

Source: North Carolina Department of Revenue. *(See appendix for county-level data.)*

Personal Income per Capita

	2014
Region	**$38,927**
NC	$39,171

Source: Bureau of Economic Analysis *(See appendix for county-level data.)*

Property Taxes (in millions)

	2014-2015	2015-2016
Region	**$983.71**	**$1,014.92**
NC	$9,607.54	$9,946.90

Source: North Carolina Department of Revenue. *(See appendix for county-level data.)*

TOURISM

Tourism expenditures fluctuated in the Coastal Region from 2010 to 2015, averaging **15 percent of North Carolina's total tourism spending**. Over a third of the region's expenditures occurred in Dare County ($1 billion), followed by New Hanover and Brunswick Counties. Local tourism tax collections for the region comprised **24 percent of local tourism taxes** collected in the state, and increased since 2012, paralleling the state. Dare, Brunswick, and New Hanover Counties collected the most local tourism tax revenue in the region. Also, the Coastal Region contributed **14 percent to North Carolina's state tourism taxes** in 2015.

Tourism Expenditures (in millions, 2015 $)

	2010	2011	2012	2013	2014	2015
Region	**$2,854.05**	**$2,916.37**	**$3,007.48**	**$3,077.78**	**$3,209.33**	**$3,290.40**
NC	$18,495.30	$19,410.17	$20,037.35	$20,570.95	$21,348.33	$21,961.21

Source: Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association. Adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index. *(See appendix for county-level data.)*

Tourism Local Taxes (in millions, 2015 $)

	2010	2011	2012	2013	2014	2015
Region	**$143.79**	**$143.62**	**$143.48**	**$146.19**	**$151.99**	**$157.19**
NC	$591.06	$591.05	$598.11	$611.70	$637.03	$660.84

Source: Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association. Adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index. *(See appendix for county-level data.)*

Tourism State Taxes (in millions)

	2015
Region	**$ 158.88**
NC	$1,125.54

Source: Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association. *(See appendix for county-level data.)*

Tourism employment steadily increased from 2010 to 2015. The Coastal Region accounted for a little over **16 percent of North Carolina's tourism employees**. The majority of employees were located in Dare, New Hanover, and Brunswick Counties. With this increase in the number of tourism employees, tourism payroll expenses increased as well. The region averaged almost **13 percent of the state's tourism payroll expenses**, with Dare County ($223 million) paying almost double the amount of the next county, New Hanover ($121 million) in 2015.

Tourism Employment

	2010	2011	2012	2013	2014	2015
Region	**30,550**	**30,696**	**31,555**	**32,207**	**33,442**	**34,420**
NC	183,881	188,415	193,610	198,272	204,909	211,487

Source: Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association. *(See appendix for county-level data.)*

Tourism Payroll (in millions, 2015 $)

	2010	2011	2012	2013	2014	2015
Region	**$552.78**	**$548.70**	**$563.74**	**$581.17**	**$612.73**	**$654.71**
NC	$4,343.24	$4,417.58	$4,533.23	$4,691.73	$4,928.45	$5,272.11

Source: Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association. Adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index. *(See appendix for county-level data.)*

APPENDIX

Urban/Rural Mix

	Total	Urban	Rural
Beaufort	47,759	16,429	31,330
Bertie	21,282	3,566	17,716
Brunswick	107,431	61,278	46,153
Camden	9,980	45	9,935
Carteret	66,469	44,798	21,671
Chowan	14,793	4,790	10,003
Craven	103,505	74,825	28,680
Currituck	23,547	397	23,150
Dare	33,920	24,097	9,823
Gates	12,197	0	12,197
Hertford	24,669	7,737	16,932
Hyde	5,810	0	5,810
New Hanover	202,667	198,178	4,489
Onslow	177,772	130,931	46,841
Pamlico	13,144	0	13,144
Pasquotank	40,661	23,860	16,801
Pender	52,217	16,315	35,902
Perquimans	13,453	0	13,453
Tyrrell	4,407	0	4,407
Washington	13,228	4,265	8,963
Region	**988,911**	**611,511**	**377,400**
NC	9,535,483	6,301,756	3,233,727

Urban/Rural Mix data collected from the U.S. Census Bureau.

Population

	2010	2011	2012	2013	2014	2015
Beaufort	47,781	47,692	47,507	47,440	47,513	47,651
Bertie	21,251	20,971	20,589	20,427	20,406	20,199
Brunswick	108,181	110,301	112,255	115,391	118,919	122,765
Camden	9,983	10,042	10,032	10,136	10,286	10,309
Carteret	66,697	67,356	67,729	68,447	68,730	68,879
Chowan	14,746	14,811	14,727	14,734	14,616	14,394
Craven	103,939	104,705	105,327	104,419	104,350	103,451
Currituck	23,663	23,900	24,032	24,340	24,927	25,263
Dare	33,986	34,193	34,463	34,913	35,083	35,663
Gates	12,160	12,070	11,911	11,657	11,550	11,431
Hertford	24,599	24,493	24,395	24,389	24,380	24,184
Hyde	5,813	5,830	5,733	5,715	5,661	5,526
New Hanover	203,298	205,970	209,219	213,324	216,585	220,358
Onslow	179,595	177,857	183,769	185,560	185,267	186,311
Pamlico	13,103	13,291	13,033	12,894	12,909	12,781
Pasquotank	40,721	40,376	40,517	39,739	39,628	39,829
Pender	52,350	53,292	53,872	54,968	56,086	57,611
Perquimans	13,483	13,461	13,536	13,590	13,462	13,440
Tyrrell	4,413	4,338	4,137	4,099	4,118	4,070
Washington	13,163	12,949	12,717	12,732	12,558	12,385
Region	**992,925**	**997,898**	**1,009,500**	**1,018,914**	**1,027,034**	**1,036,500**
NC	9,558,979	9,651,025	9,747,021	9,845,432	9,940,387	10,042,802

Population data collected from the Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015; United States Census Bureau.

Population Density

	2010	2011	2012	2013	2014	2015
Beaufort	49.86	49.77	49.58	49.51	49.58	49.73
Bertie	28.67	28.29	27.78	27.56	27.53	27.25
Brunswick	103.05	105.07	106.93	109.92	113.28	116.94
Camden	32.18	32.37	32.34	32.67	33.16	33.23
Carteret	49.75	50.24	50.52	51.06	51.27	51.38
Chowan	63.21	63.48	63.12	63.15	62.65	61.70
Craven	134.26	135.25	136.05	134.88	134.79	133.63
Currituck	44.94	45.39	45.64	46.22	47.34	47.97
Dare	21.75	21.88	22.06	22.34	22.45	22.82
Gates	35.18	34.92	34.46	33.72	33.41	33.07
Hertford	68.26	67.97	67.70	67.68	67.66	67.11
Hyde	4.08	4.09	4.03	4.01	3.98	3.88
New Hanover	619.43	627.57	637.47	649.98	659.92	671.41
Onslow	198.25	196.33	202.86	204.83	204.51	205.66
Pamlico	23.12	23.45	23.00	22.75	22.78	22.55
Pasquotank	140.69	139.50	139.98	137.30	136.91	137.61
Pender	56.12	57.13	57.75	58.93	60.13	61.76
Perquimans	40.99	40.92	41.15	41.31	40.92	40.85
Tyrrell	7.43	7.30	6.96	6.90	6.93	6.85
Washington	31.06	30.55	30.00	30.04	29.63	29.22
Region	**70.94**	**71.29**	**72.12**	**72.80**	**73.38**	**74.05**
NC	135.21	136.51	137.87	139.26	140.60	142.05

Population Density (Population/Total area mi2): This is the density for the county's total area (including water).
Population Density and Population Land Density data collected from the United States Census Bureau.

Population (Land) Density

	2010	2011	2012	2013	2014	2015
Beaufort	57.76	57.66	57.43	57.35	57.44	57.61
Bertie	30.39	29.99	29.44	29.21	29.18	28.89
Brunswick	127.73	130.23	132.54	136.24	140.41	144.95
Camden	41.50	41.74	41.70	42.14	42.76	42.85
Carteret	131.75	133.05	133.79	135.20	135.76	136.06
Chowan	85.50	85.88	85.39	85.43	84.75	83.46
Craven	146.61	147.69	148.57	147.28	147.19	145.92
Currituck	90.37	91.27	91.78	92.95	95.20	96.48
Dare	88.64	89.18	89.88	91.06	91.50	93.01
Gates	35.72	35.45	34.99	34.24	33.93	33.58
Hertford	69.67	69.37	69.10	69.08	69.05	68.50
Hyde	9.49	9.52	9.36	9.33	9.24	9.02
New Hanover	1,061.44	1,075.39	1,092.36	1,113.79	1,130.82	1,150.51
Onslow	235.46	233.18	240.93	243.28	242.90	244.27
Pamlico	38.93	39.49	38.73	38.31	38.36	37.98
Pasquotank	179.48	177.96	178.58	175.15	174.67	175.55
Pender	60.19	61.27	61.94	63.20	64.48	66.24
Perquimans	54.57	54.48	54.78	55.00	54.48	54.39
Tyrrell	11.34	11.15	10.63	10.54	10.59	10.46
Washington	37.81	37.20	36.53	36.57	36.07	35.58
Region	**106.48**	**107.01**	**108.26**	**109.27**	**110.14**	**111.15**
NC	138.53	139.87	141.26	142.69	144.06	145.55

Population Land Density (Population/Only Land area mi2): This is the density for the county's land area only.

Population Growth Rate

	2010	2011	2012	2013	2014	2015
Beaufort	-	-0.19%	-0.57%	-0.71%	-0.56%	-0.27%
Bertie	-	-1.32%	-3.12%	-3.88%	-3.98%	-4.95%
Brunswick	-	1.96%	3.77%	6.66%	9.93%	13.48%
Camden	-	0.59%	0.49%	1.53%	3.04%	3.27%
Carteret	-	0.99%	1.55%	2.62%	3.05%	3.27%
Chowan	-	0.44%	-0.13%	-0.08%	-0.88%	-2.39%
Craven	-	0.74%	1.34%	0.46%	0.40%	-0.47%
Currituck	-	1.00%	1.56%	2.86%	5.34%	6.76%
Dare	-	0.61%	1.40%	2.73%	3.23%	4.93%
Gates	-	-0.74%	-2.05%	-4.14%	-5.02%	-6.00%
Hertford	-	-0.43%	-0.83%	-0.85%	-0.89%	-1.69%
Hyde	-	0.29%	-1.38%	-1.69%	-2.61%	-4.94%
New Hanover	-	1.31%	2.91%	4.93%	6.54%	8.39%
Onslow	-	-0.97%	2.32%	3.32%	3.16%	3.74%
Pamlico	-	1.43%	-0.53%	-1.60%	-1.48%	-2.46%
Pasquotank	-	-0.85%	-0.50%	-2.41%	-2.68%	-2.19%
Pender	-	1.80%	2.91%	5.00%	7.14%	10.05%
Perquimans	-	-0.16%	0.39%	0.79%	-0.16%	-0.32%
Tyrrell	-	-1.70%	-6.25%	-7.12%	-6.68%	-7.77%
Washington	-	-1.63%	-3.39%	-3.27%	-4.60%	-5.91%
Region	**-**	**0.50%**	**1.67%**	**2.62%**	**3.44%**	**4.39%**
NC	-	0.96%	1.97%	3.00%	3.99%	5.06%

Population Growth Rate used 2010 for the base year.

Population Growth Rate collected from the United States Census Bureau.

Labor Force

	2010	2011	2012	2013	2014	2015
Beaufort	21,169	21,472	21,046	20,406	20,061	20,144
Bertie	9,191	9,069	8,667	8,441	8,507	8,630
Brunswick	46,521	47,007	47,340	47,576	47,618	48,509
Camden	4,596	4,594	4,524	4,516	4,548	4,612
Carteret	31,378	30,963	31,492	31,096	31,021	31,399
Chowan	6,152	5,959	5,906	5,710	5,671	5,662
Craven	42,272	41,917	41,867	41,366	41,024	41,439
Currituck	12,187	12,348	12,459	12,571	12,688	12,758
Dare	19,683	20,052	20,709	20,462	20,079	20,242
Gates	5,459	5,425	5,356	5,243	5,187	5,225
Hertford	9,831	9,632	9,574	9,481	9,370	9,238
Hyde	2,234	2,113	2,130	2,154	2,194	2,178
New Hanover	107,563	107,481	108,840	109,311	110,349	113,185
Onslow	63,331	62,674	63,594	63,891	63,911	63,959
Pamlico	5,501	5,480	5,371	5,318	5,293	5,366
Pasquotank	18,505	18,278	18,135	17,648	17,260	17,402
Pender	24,441	24,617	24,876	24,975	25,266	25,825
Perquimans	5,336	5,305	5,270	5,213	5,094	5,153
Tyrrell	1,659	1,633	1,584	1,559	1,551	1,580
Washington	5,697	4,993	4,874	5,291	5,036	4,986
Region	**442,706**	**441,012**	**443,614**	**442,228**	**441,728**	**447,492**
NC	4,616,690	4,633,071	4,680,265	4,683,022	4,690,562	4,769,245

Labor Force data collected from Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Number of Employed

	2010	2011	2012	2013	2014	2015
Beaufort	18,690	19,084	18,825	18,475	18,593	18,809
Bertie	8,108	7,974	7,681	7,594	7,839	8,003
Brunswick	40,693	41,265	42,034	42,940	43,872	45,013
Camden	4,211	4,201	4,170	4,196	4,272	4,345
Carteret	28,372	27,957	28,693	28,694	29,110	29,535
Chowan	5,414	5,235	5,265	5,150	5,225	5,252
Craven	37,736	37,492	37,910	37,792	38,199	38,904
Currituck	11,102	11,230	11,397	11,589	11,894	12,010
Dare	17,297	17,442	18,162	18,214	18,394	18,733
Gates	5,024	4,980	4,947	4,880	4,881	4,937
Hertford	8,788	8,539	8,546	8,594	8,679	8,584
Hyde	1,986	1,830	1,844	1,906	1,993	1,979
New Hanover	97,120	97,210	99,464	101,089	103,832	107,131
Onslow	58,091	57,481	58,514	59,419	60,036	60,103
Pamlico	4,940	4,947	4,888	4,873	4,943	5,041
Pasquotank	16,664	16,392	16,320	15,956	15,875	16,118
Pender	21,645	21,826	22,288	22,729	23,481	24,250
Perquimans	4,768	4,723	4,722	4,717	4,700	4,786
Tyrrell	1,414	1,389	1,368	1,358	1,397	1,432
Washington	4,885	4,151	4,129	4,635	4,553	4,546
Region	**396,948**	**395,348**	**401,167**	**404,800**	**411,768**	**419,511**
NC	4,115,628	4,157,543	4,247,139	4,310,817	4,396,286	4,495,473

Number of Employed collected from Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Number of Unemployed

	2010	2011	2012	2013	2014	2015
Beaufort	2,479	2,388	2,221	1,931	1,468	1,335
Bertie	1,083	1,095	986	847	668	627
Brunswick	5,828	5,742	5,306	4,636	3,746	3,496
Camden	385	393	354	320	276	267
Carteret	3,006	3,006	2,799	2,402	1,911	1,864
Chowan	738	724	641	560	446	410
Craven	4,536	4,425	3,957	3,574	2,825	2,535
Currituck	1,085	1,118	1,062	982	794	748
Dare	2,386	2,610	2,547	2,248	1,685	1,509
Gates	435	445	409	363	306	288
Hertford	1,043	1,093	1,028	887	691	654
Hyde	248	283	286	248	201	199
New Hanover	10,443	10,271	9,376	8,222	6,517	6,054
Onslow	5,240	5,193	5,080	4,472	3,875	3,856
Pamlico	561	533	483	445	350	325
Pasquotank	1,841	1,886	1,815	1,692	1,385	1,284
Pender	2,796	2,791	2,588	2,246	1,785	1,575
Perquimans	568	582	548	496	394	367
Tyrrell	245	244	216	201	154	148
Washington	812	842	745	656	483	440
Region	**45,758**	**45,664**	**42,447**	**37,428**	**29,960**	**27,981**
NC	501,062	475,528	433,126	372,205	294,276	273,772

Number of Unemployed data collected from Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Unemployment Rate

	2010	2011	2012	2013	2014	2015
Beaufort	11.7%	11.1%	10.6%	9.5%	7.3%	6.6%
Bertie	11.8%	12.1%	11.4%	10.0%	7.9%	7.3%
Brunswick	12.5%	12.2%	11.2%	9.7%	7.9%	7.2%
Camden	8.4%	8.6%	7.8%	7.1%	6.1%	5.8%
Carteret	9.6%	9.7%	8.9%	7.7%	6.2%	5.9%
Chowan	12.0%	12.1%	10.9%	9.8%	7.9%	7.2%
Craven	10.7%	10.6%	9.5%	8.6%	6.9%	6.1%
Currituck	8.9%	9.1%	8.5%	7.8%	6.3%	5.9%
Dare	12.1%	13.0%	12.3%	11.0%	8.4%	7.5%
Gates	8.0%	8.2%	7.6%	6.9%	5.9%	5.5%
Hertford	10.6%	11.3%	10.7%	9.4%	7.4%	7.1%
Hyde	11.1%	13.4%	13.4%	11.5%	9.2%	9.1%
New Hanover	9.7%	9.6%	8.6%	7.5%	5.9%	5.3%
Onslow	8.3%	8.3%	8.0%	7.0%	6.1%	6.0%
Pamlico	10.2%	9.7%	9.0%	8.4%	6.6%	6.1%
Pasquotank	9.9%	10.3%	10.0%	9.6%	8.0%	7.4%
Pender	11.4%	11.3%	10.4%	9.0%	7.1%	6.1%
Perquimans	10.6%	11.0%	10.4%	9.5%	7.7%	7.1%
Tyrrell	14.8%	14.9%	13.6%	12.9%	9.9%	9.4%
Washington	14.3%	16.9%	15.3%	12.4%	9.6%	8.8%
Region	**10.3%**	**10.4%**	**9.6%**	**8.5%**	**6.8%**	**6.3%**
NC	10.9%	10.3%	9.3%	7.9%	6.3%	5.7%

Unemployment rate data collected from Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Job Openings

	2015 Average
Beaufort	181
Bertie	56
Brunswick	702
Camden	17
Carteret	442
Chowan	56
Craven	822
Currituck	33
Dare	490
Gates	17
Hertford	214
Hyde	12
New Hanover	4360
Onslow	1826
Pamlico	39
Pasquotank	408
Pender	224
Perquimans	45
Tyrrell	40
Washington	59
Region	**10,043**
NC	135,433

Job Openings data collected from Wanted Analytics, Help Wanted Online, The Conference Board.

Labor Slack Rate

	Year Rate
Beaufort	7.4
Bertie	11.2
Brunswick	5.0
Camden	15.3
Carteret	4.2
Chowan	7.3
Craven	3.1
Currituck	23.0
Dare	3.1
Gates	17.1
Hertford	3.1
Hyde	16.4
New Hanover	1.4
Onslow	2.1
Pamlico	8.4
Pasquotank	3.1
Pender	7.0
Perquimans	8.1
Tyrrell	3.7
Washington	7.5
Region	2.8
NC	2.0

Labor Slack rate was calculated by dividing the number of unemployed by the job openings.
Job Openings data collected from Wanted Analytics, Help Wanted Online, The Conference Board.
Unemployment rate data collected from Local Area Unemployment Statistics (LAUS), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Number of Jobs

	2010	2011	2012	2013	2014	2015
Beaufort	16,078	16,477	16,048	15,595	15,512	15,654
Bertie	6,633	6,532	6,178	6,117	6,302	6,423
Brunswick	27,292	27,383	28,018	28,710	29,231	29,881
Camden	2,118	2,081	1,928	1,520	1,463	1,398
Carteret	21,930	21,395	22,036	22,080	22,439	22,745
Chowan	4,845	4,597	4,651	4,519	4,599	4,556
Craven	38,090	37,485	38,063	37,451	38,026	38,776
Currituck	5,254	5,322	5,376	6,275	6,477	6,648
Dare	18,041	18,024	18,725	18,755	18,967	19,385
Gates	1,419	1,416	1,446	1,366	1,411	1,424
Hertford	9,226	8,843	8,896	8,956	9,043	8,907
Hyde	2,315	2,076	2,085	2,210	2,171	2,161
New Hanover	95,317	96,708	96,706	99,726	102,532	105,990
Onslow	46,580	46,771	47,053	47,764	48,304	48,232
Pamlico	3,113	3,126	3,177	3,214	3,390	3,419
Pasquotank	16,119	15,822	15,655	15,466	15,308	15,686
Pender	9,790	9,548	9,526	10,026	10,633	10,952
Perquimans	1,830	1,788	1,782	1,927	1,918	1,969
Tyrrell	1,097	1,168	1,228	1,220	1,172	1,146
Washington	3,904	3,175	3,141	3,651	3,535	3,500
Region	**330,991**	**329,737**	**331,718**	**336,548**	**342,433**	**348,852**
NC	3,788,425	3,836,792	3,905,109	3,975,144	4,057,234	4,162,137

Number of Jobs data collected from Quarterly Census Employment and Wages (QCEW), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Job Growth Rate

	2010	2011	2012	2013	2014	2015
Beaufort	-	2.5%	-0.2%	-3.0%	-3.5%	-2.6%
Bertie	-	-1.5%	-6.9%	-7.8%	-5.0%	-3.2%
Brunswick	-	0.3%	2.7%	5.2%	7.1%	9.5%
Camden	-	-1.7%	-9.0%	-28.2%	-30.9%	-34.0%
Carteret	-	-2.4%	0.5%	0.7%	2.3%	3.7%
Chowan	-	-5.1%	-4.0%	-6.7%	-5.1%	-6.0%
Craven	-	-1.6%	-0.1%	-1.7%	-0.2%	1.8%
Currituck	-	1.3%	2.3%	19.4%	23.3%	26.5%
Dare	-	-0.1%	3.8%	4.0%	5.1%	7.4%
Gates	-	-0.2%	1.9%	-3.7%	-0.6%	0.4%
Hertford	-	-4.2%	-3.6%	-2.9%	-2.0%	-3.5%
Hyde	-	-10.3%	-9.9%	-4.5%	-6.2%	-6.7%
New Hanover	-	1.5%	1.5%	4.6%	7.6%	11.2%
Onslow	-	0.4%	1.0%	2.5%	3.7%	3.5%
Pamlico	-	0.4%	2.1%	3.2%	8.9%	9.8%
Pasquotank	-	-1.8%	-2.9%	-4.1%	-5.0%	-2.7%
Pender	-	-2.5%	-2.7%	2.4%	8.6%	11.9%
Perquimans	-	-2.3%	-2.6%	5.3%	4.8%	7.6%
Tyrrell	-	6.5%	11.9%	11.2%	6.8%	4.5%
Washington	-	-18.7%	-19.5%	-6.5%	-9.5%	-10.3%
Region	**-**	**-0.4%**	**0.2%**	**1.7%**	**3.5%**	**5.4%**
NC	-	1.3%	3.1%	4.9%	7.1%	9.9%

Job Growth Rate data collected from Quarterly Census Employment and Wages (QCEW), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Average Annual Wage (in 2015 dollars)

	2010	2011	2012	2013	2014	2015
Beaufort	$35,234	$35,077	$34,891	$34,793	$35,173	$35,925
Bertie	$34,587	$33,267	$29,207	$29,000	$29,293	$30,028
Brunswick	$36,667	$35,720	$35,318	$35,202	$35,730	$36,719
Camden	$43,489	$40,289	$44,467	$40,618	$38,798	$38,411
Carteret	$30,925	$30,470	$30,152	$30,134	$30,230	$31,121
Chowan	$32,863	$33,682	$32,923	$33,380	$33,437	$34,498
Craven	$40,923	$40,704	$40,958	$39,743	$40,492	$40,571
Currituck	$33,585	$34,211	$29,733	$33,238	$32,860	$34,122
Dare	$30,685	$30,175	$29,867	$29,936	$29,740	$30,727
Gates	$31,432	$31,333	$30,979	$29,867	$30,754	$31,938
Hertford	$34,502	$34,142	$34,459	$34,483	$34,926	$35,507
Hyde	$28,426	$29,797	$29,574	$28,566	$29,191	$30,328
New Hanover	$42,005	$41,593	$40,410	$40,189	$40,419	$41,467
Onslow	$32,677	$32,625	$32,154	$32,174	$32,067	$32,321
Pamlico	$29,390	$29,471	$28,458	$27,975	$27,065	$28,034
Pasquotank	$35,256	$34,796	$34,842	$34,915	$34,988	$35,860
Pender	$32,253	$32,459	$31,789	$31,604	$32,359	$32,312
Perquimans	$29,499	$28,681	$28,848	$30,961	$31,284	$32,173
Tyrrell	$28,602	$27,485	$26,620	$27,629	$27,126	$29,421
Washington	$37,592	$29,723	$30,196	$38,464	$38,210	$39,068
Region	**$36,790**	**$36,400**	**$35,761**	**$35,671**	**$35,903**	**$36,675**
NC	$44,709	$44,394	$44,509	$44,548	$45,020	$46,563

Average Yearly Wage data collected from Quarterly Census Employment and Wages (QCEW), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.
Wages adjusted for Inflation using the Bureau of Labor Statistics' Consumer Price Index.

2015 Top 10 Industry Sectors

	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
Beaufort	Manufacturing	Retail Trade	Health Care and Social Assistance	Educational Services	Accommodation and Food Services	Public Administration	Administrative and Support and Waste Management and Remediation Services	Wholesale Trade	Construction	Agriculture, Forestry, Fishing and Hunting
Bertie	Health Care and Social Assistance	Public Administration	Educational Services	Administrative and Support and Waste Management and Remediation Services	Agriculture, Forestry, Fishing and Hunting	Retail Trade	Accommodation and Food Services	Transportation and Warehousing	Other Services (except Public Administration)	Finance and Insurance
Brunswick	Retail Trade	Accommodation and Food Services	Health Care and Social Assistance	Educational Services	Public Administration	Construction	Arts, Entertainment, and Recreation	Administrative and Support and Waste Management and Remediation Services	Utilities	Manufacturing
Camden	Educational Services	Retail Trade	Administrative and Support and Waste Management and Remediation Services	Agriculture, Forestry, Fishing and Hunting	Professional, Scientific, and Technical Services	Construction	Transportation and Warehousing	Other Services (except Public Administration)	Manufacturing	Accommodation and Food Services
Carteret	Retail Trade	Accommodation and Food Services	Health Care and Social Assistance	Public Administration	Educational Services	Construction	Manufacturing	Administrative and Support and Waste Management and Remediation Services	Other Services (except Public Administration)	Arts, Entertainment, and Recreation
Chowan	Health Care and Social Assistance	Retail Trade	Educational Services	Manufacturing	Public Administration	Accommodation and Food Services	Wholesale Trade	Transportation and Warehousing	Agriculture, Forestry, Fishing and Hunting	Construction
Craven	Health Care and Social Assistance	Public Administration	Retail Trade	Accommodation and Food Services	Manufacturing	Educational Services	Administrative and Support and Waste Management and Remediation Services	Professional, Scientific, and Technical Services	Construction	Transportation and Warehousing
Currituck	Educational Services	Retail Trade	Administrative and Support and Waste Management and Remediation Services	Accommodation and Food Services	Real Estate and Rental and Leasing	Health Care and Social Assistance	Construction	Other Services (except Public Administration)	Arts, Entertainment, and Recreation	Professional, Scientific, and Technical Services
Dare	Accommodation and Food Services	Retail Trade	Real Estate and Rental and Leasing	Public Administration	Construction	Educational Services	Health Care and Social Assistance	Administrative and Support and Waste Management and Remediation Services	Professional, Scientific, and Technical Services	Other Services (except Public Administration)
Gates	Educational Services	Retail Trade	Public Administration	Agriculture, Forestry, Fishing and Hunting	Manufacturing	Health Care and Social Assistance	Wholesale Trade	Accommodation and Food Services	Other Services (except Public Administration)	Transportation and Warehousing
Hertford	Health Care and Social Assistance	Retail Trade	Educational Services	Manufacturing	Wholesale Trade	Accommodation and Food Services	Public Administration	Administrative and Support and Waste Management and Remediation Services	Construction	Agriculture, Forestry, Fishing and Hunting
Hyde	Public Administration	Agriculture, Forestry, Fishing and Hunting	Accommodation and Food Services	Wholesale Trade	Retail Trade	Educational Services	Manufacturing	Health Care and Social Assistance	Construction	Transportation and Warehousing
New Hanover	Health Care and Social Assistance	Retail Trade	Accommodation and Food Services	Educational Services	Professional, Scientific, and Technical Services	Administrative and Support and Waste Management and Remediation Services	Construction	Manufacturing	Public Administration	Wholesale Trade
Onslow	Retail Trade	Accommodation and Food Services	Health Care and Social Assistance	Educational Services	Public Administration	Administrative and Support and Waste Management and Remediation Services	Construction	Professional, Scientific, and Technical Services	Other Services (except Public Administration)	Transportation and Warehousing
Pamlico	Retail Trade	Health Care and Social Assistance	Educational Services	Public Administration	Accommodation and Food Services	Manufacturing	Other Services (except Public Administration)	Construction	Transportation and Warehousing	Agriculture, Forestry, Fishing and Hunting
Pasquotank	Health Care and Social Assistance	Retail Trade	Public Administration	Educational Services	Accommodation and Food Services	Other Services (except Public Administration)	Manufacturing	Transportation and Warehousing	Professional, Scientific, and Technical Services	Administrative and Support and Waste Management and Remediation Services
Pender	Retail Trade	Health Care and Social Assistance	Accommodation and Food Services	Educational Services	Public Administration	Construction	Manufacturing	Agriculture, Forestry, Fishing and Hunting	Wholesale Trade	Administrative and Support and Waste Management and Remediation Services
Perquimans	Educational Services	Accommodation and Food Services	Public Administration	Retail Trade	Transportation and Warehousing	Wholesale Trade	Health Care and Social Assistance	Agriculture, Forestry, Fishing and Hunting	Construction	Other Services (except Public Administration)
Tyrrell	Public Administration	Educational Services	Agriculture, Forestry, Fishing and Hunting	Retail Trade	Construction	Accommodation and Food Services	Finance and Insurance	Health Care and Social Assistance	Wholesale Trade	Professional, Scientific, and Technical Services
Washington	Manufacturing	Health Care and Social Assistance	Public Administration	Educational Services	Retail Trade	Accommodation and Food Services	Agriculture, Forestry, Fishing and Hunting	Wholesale Trade	Transportation and Warehousing	Finance and Insurance
Region	**Retail Trade**	**Health Care and Social Assistance**	**Accommodation and Food Services**	**Educational Services**	**Public Administration**	**Administrative and Support and Waste Management and Remediation Services**	**Manufacturing**	**Construction**	**Professional, Scientific, and Technical Services**	**Other Services (except Public Administration)**
NC	Health Care and Social Assistance	Retail Trade	Manufacturing	Accommodation and Food Services	Educational Services	Administrative and Support and Waste Management and Remediation Services	Public Administration	Professional, Scientific, and Technical Services	Construction	Wholesale Trade

Top Industry Sectors data collected from Quarterly Census Employment and Wages (QCEW), Demand driven Data Delivery System (4D), Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Major Occupations Employment Projections by Prosperity Zone

Northeast Prosperity Zone	Actual 2012	Projected 2022	Net Change	Wage Annual Median
Food Preparation and Serving Related Occupations	20,228	24,818	4,590	$18,275
Healthcare Support Occupations	9,934	14,040	4,106	$19,317
Office and Administrative Support Occupations	28,798	32,326	3,528	$28,176
Healthcare Practitioners and Technical Occupations	13,697	16,667	2,970	$53,482
Construction and Extraction Occupations	7,477	10,121	2,644	$31,774

Southeast Prosperity Zone	Actual 2012	Projected 2022	Net Change	Wage Annual Median
Food Preparation and Serving Related Occupations	39,818	47,670	7,852	$18,403
Office and Administrative Support Occupations	52,061	58,846	6,785	$28,260
Healthcare Practitioners and Technical Occupations	22,394	28,221	5,827	$52,407
Healthcare Support Occupations	15,082	20,739	5,657	$21,858
Construction and Extraction Occupations	17,033	21,152	4,119	$32,818

Major Occupations Employment Projections data collected from Occupational Projections, Labor & Economic Analysis Division (LEAD), NC Department of Commerce.

Percent of Workers at Small Firms

	2010 Q3	2011 Q3	2012 Q3	2013 Q3	2014 Q3	2015 Q3
Beaufort	59.4%	58.1%	55.9%	56.0%	57.6%	56.0%
Bertie	46.4%	46.8%	45.9%	44.7%	36.3%	37.1%
Brunswick	71.3%	69.9%	68.8%	69.0%	70.0%	70.8%
Camden	85.6%	85.6%	82.4%	81.3%	84.1%	84.7%
Carteret	78.9%	79.6%	78.5%	77.6%	76.9%	76.2%
Chowan	63.4%	64.2%	63.5%	66.7%	67.7%	67.0%
Craven	64.9%	60.3%	58.5%	58.2%	58.3%	58.7%
Currituck	78.5%	82.2%	81.0%	80.0%	74.3%	74.1%
Dare	86.3%	84.2%	86.7%	85.4%	84.9%	85.4%
Gates	90.6%	91.3%	94.4%	91.3%	90.9%	90.4%
Hertford	56.8%	60.4%	53.3%	54.7%	54.0%	57.8%
Hyde	98.7%	98.6%	95.9%	98.5%	84.0%	94.7%
New Hanover	59.9%	59.4%	60.2%	59.4%	58.7%	60.0%
Onslow	62.5%	60.8%	59.9%	58.0%	58.1%	59.0%
Pamlico	84.0%	86.3%	83.5%	83.3%	80.1%	79.9%
Pasquotank	68.8%	67.9%	66.9%	67.0%	60.8%	62.9%
Pender	84.1%	84.8%	82.0%	80.4%	83.0%	81.9%
Perquimans	76.1%	73.8%	68.8%	69.4%	70.7%	72.8%
Tyrrell	89.5%	94.2%	94.0%	84.3%	84.0%	65.2%
Washington	53.8%	53.3%	53.0%	52.0%	52.7%	48.3%
Region	**66.7%**	**65.9%**	**65.4%**	**64.7%**	**64.1%**	**64.7%**
NC	49.6%	49.0%	48.2%	47.7%	47.6%	47.5%

Percent of Workers at Small Firms data collected from Longitudinal Employer–Household Dynamics (LEHD) at the U.S. Census Bureau.

Taxable Sales

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Beaufort	$367,511,894	$370,216,394	$403,097,199	$382,584,652	$374,004,970	$432,679,562	$433,465,897
Bertie	$58,334,501	$61,433,073	$64,021,627	$69,449,385	$72,189,706	$79,123,112	$80,972,618
Brunswick	$953,091,346	$991,119,126	$1,057,757,262	$1,133,037,050	$1,220,992,492	$1,344,734,361	$1,448,484,197
Camden	$46,360,498	$51,509,036	$50,730,114	$49,972,023	$48,367,738	$47,730,141	$53,588,026
Carteret	$810,347,610	$810,592,085	$867,503,174	$857,547,296	$910,571,306	$979,777,817	$1,042,560,897
Chowan	$90,019,652	$94,155,344	$98,658,950	$97,456,191	$101,836,399	$103,731,300	$116,863,237
Craven	$840,507,069	$816,041,254	$887,252,910	$859,023,029	$856,485,916	$915,307,613	$988,762,387
Currituck	$318,747,965	$332,514,827	$376,757,269	$394,657,890	$400,774,559	$415,039,119	$438,318,788
Dare	$1,052,642,348	$1,099,298,494	$1,159,528,701	$1,190,941,000	$1,214,957,587	$1,278,542,243	$1,352,076,063
Gates	$22,454,230	$22,906,918	$24,437,298	$26,773,298	$28,572,612	$30,456,711	$32,437,062
Hertford	$156,627,704	$175,887,675	$194,621,923	$192,873,792	$199,232,031	$205,167,257	$207,428,383
Hyde	$50,081,900	$51,031,873	$51,972,246	$50,648,032	$54,057,432	$55,677,242	$58,877,060
New Hanover	$2,619,260,826	$2,849,562,321	$3,159,001,174	$3,254,485,249	$3,384,865,474	$3,757,376,202	$4,033,313,586
Onslow	$1,513,485,900	$1,639,522,858	$1,817,064,412	$1,875,368,357	$1,848,663,953	$1,876,170,696	$1,884,607,709
Pamlico	$60,098,820	$67,630,142	$65,378,484	$65,323,398	$69,613,016	$76,249,732	$80,432,280
Pasquotank	$362,760,685	$366,958,373	$391,643,663	$430,289,252	$381,438,721	$403,989,681	$452,153,218
Pender	$243,046,719	$263,642,919	$286,409,398	$294,332,860	$313,074,552	$359,173,557	$403,279,198
Perquimans	$41,252,194	$41,614,880	$42,395,352	$46,836,157	$50,792,415	$53,510,342	$60,797,932
Tyrrell	$15,244,920	$14,157,963	$17,758,634	$18,128,519	$18,986,901	$18,432,369	$21,170,151
Washington	$64,628,577	$70,073,664	$71,404,074	$69,225,957	$71,646,309	$72,006,042	$72,803,309
Region	**$9,686,505,357**	**$10,189,869,217**	**$11,087,393,862**	**$11,358,953,388**	**$11,621,124,092**	**$12,504,875,097**	**$13,262,391,998**
NC	$94,620,555,817	$96,759,102,306	$102,830,051,937	$105,367,312,381	$110,350,582,099	$120,304,939,287	$128,156,846,619

Taxable sales data collected from NC Department of Revenue.

Gross Sales Tax Collections

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Beaufort	$19,498,406	$21,267,497	$19,527,422	$18,182,982	$17,723,570	$20,585,164	$20,671,918
Bertie	$3,130,749	$3,540,433	$3,119,783	$3,322,319	$3,441,458	$3,773,829	$3,865,378
Brunswick	$49,671,793	$57,091,079	$51,627,554	$53,969,058	$58,108,909	$64,008,135	$68,933,918
Camden	$2,439,702	$3,003,630	$2,456,555	$2,378,786	$2,302,563	$2,276,736	$2,588,473
Carteret	$42,015,384	$46,625,761	$42,272,414	$40,830,995	$43,200,872	$46,533,262	$49,552,351
Chowan	$4,808,715	$5,400,857	$4,744,508	$4,650,868	$4,861,841	$4,953,421	$5,580,185
Craven	$44,659,260	$47,030,427	$43,067,062	$40,937,067	$40,796,555	$43,699,947	$47,113,908
Currituck	$15,813,782	$19,180,930	$18,508,365	$18,862,555	$19,091,309	$19,807,221	$20,909,324
Dare	$52,554,877	$63,416,314	$56,770,905	$56,720,164	$57,830,610	$60,926,951	$64,379,053
Gates	$1,197,645	$1,320,173	$1,187,862	$1,276,286	$1,360,668	$1,455,209	$1,550,214
Hertford	$8,359,522	$10,144,126	$9,487,602	$9,211,660	$9,512,154	$9,783,091	$9,887,453
Hyde	$2,532,015	$2,958,819	$2,595,693	$2,424,973	$2,600,518	$2,677,809	$2,828,831
New Hanover	$138,519,908	$164,092,581	$153,562,657	$155,186,654	$161,173,285	$178,907,360	$192,126,730
Onslow	$80,342,087	$94,375,478	$88,148,100	$89,301,303	$87,989,239	$89,392,491	$89,864,358
Pamlico	$3,185,680	$3,909,809	$3,164,229	$3,105,126	$3,310,366	$3,623,939	$3,848,335
Pasquotank	$19,290,971	$21,161,267	$19,123,519	$20,833,041	$18,184,638	$19,293,923	$21,571,602
Pender	$12,659,920	$15,179,600	$13,995,973	$14,047,582	$14,937,353	$17,138,422	$19,248,852
Perquimans	$2,187,504	$2,383,814	$2,063,349	$2,238,662	$2,414,230	$2,553,004	$2,901,530
Tyrrell	$815,849	$811,650	$870,228	$872,335	$913,131	$886,545	$1,015,249
Washington	$3,446,766	$4,036,193	$3,483,575	$3,309,440	$3,441,274	$3,461,477	$3,492,061
Region	**$507,130,535**	**$586,930,438**	**$539,777,355**	**$541,661,856**	**$553,194,543**	**$595,737,936**	**$631,929,723**
NC	$5,025,229,028	$5,567,953,501	$4,990,656,295	$5,016,410,009	$5,254,898,041	$5,731,240,062	$6,106,789,215

Gross sales tax collections data collected from NC Department of Revenue.

Personal Income per Capita

	2014
Beaufort	$36,372
Bertie	$32,312
Brunswick	$35,279
Camden	$39,320
Carteret	$43,903
Chowan	$35,054
Craven	$39,436
Currituck	$38,760
Dare	$44,328
Gates	$32,368
Hertford	$28,752
Hyde	$32,987
New Hanover	$40,076
Onslow	$44,538
Pamlico	$37,926
Pasquotank	$34,331
Pender	$31,366
Perquimans	$35,742
Tyrrell	$30,098
Washington	$32,221
Region	**$38,927**
NC	$39,171

Personal income per Capita data collected from the Bureau of Economic Analysis.

Property Taxes

	2014-2015	2015-2016
Beaufort	$40,424,655	$39,249,939
Bertie	$11,229,241	$11,580,443
Brunswick	$146,908,130	$148,080,522
Camden	$7,343,042	$7,303,378
Carteret	$73,965,542	$70,394,497
Chowan	$11,842,578	$12,212,247
Craven	$68,837,006	$70,112,438
Currituck	$29,413,895	$29,871,214
Dare	$89,886,836	$93,683,135
Gates	$6,227,031	$6,238,098
Hertford	$17,080,383	$17,219,851
Hyde	$7,427,183	$7,525,420
New Hanover	$243,460,452	$255,069,700
Onslow	$118,083,110	$121,201,805
Pamlico	$11,458,975	$11,604,582
Pasquotank	$29,339,041	$30,498,443
Pender	$50,289,995	$62,361,246
Perquimans	$8,602,173	$8,684,569
Tyrrell	$3,681,905	$3,643,368
Washington	$8,211,572	$8,384,512
Region	**$983,712,745**	**$1,014,919,407**
NC	$9,607,543,370	$9,946,896,668

Property Taxes data collected from NC Department of Revenue.

Tourism Expenditures (in 2015 $)

	2010	2011	2012	2013	2014	2015
Beaufort	$72,790,514	$74,141,211	$73,382,094	$72,226,091	$75,771,231	$77,713,226
Bertie	$12,466,517	$13,182,752	$13,093,365	$12,948,284	$13,150,407	$13,184,794
Brunswick	$429,762,669	$440,471,625	$460,282,893	$478,785,738	$496,906,237	$508,875,877
Camden	$1,853,516	$1,920,018	$1,920,843	$1,955,325	$1,971,198	$1,974,353
Carteret	$294,895,218	$293,710,109	$291,146,029	$308,042,694	$325,109,608	$336,957,897
Chowan	$17,885,814	$18,102,672	$18,711,320	$19,043,813	$19,496,796	$20,023,390
Craven	$117,702,989	$122,535,954	$123,174,254	$122,850,579	$127,479,007	$130,546,575
Currituck	$127,299,680	$127,858,464	$135,391,626	$140,108,690	$144,351,694	$146,926,030
Dare	$906,837,982	$924,278,716	$956,282,038	$969,652,983	$1,020,509,859	$1,052,685,850
Gates	$5,736,461	$6,083,939	$6,093,271	$6,129,841	$6,181,722	$6,209,985
Hertford	$25,295,710	$26,337,882	$26,361,719	$26,647,373	$27,123,862	$27,732,240
Hyde	$33,590,616	$33,391,752	$33,025,907	$32,928,131	$33,208,309	$33,538,234
New Hanover	$435,738,109	$448,703,687	$474,928,680	$486,005,795	$508,504,557	$520,863,863
Onslow	$195,980,258	$205,852,445	$209,978,518	$214,160,428	$217,550,450	$216,179,341
Pamlico	$15,617,994	$15,845,313	$16,145,206	$16,525,007	$17,012,542	$17,110,418
Pasquotank	$55,077,049	$56,046,610	$56,483,578	$55,998,560	$57,038,647	$59,474,914
Pender	$79,157,527	$80,486,545	$83,198,891	$85,645,219	$89,734,090	$92,344,851
Perquimans	$9,410,706	$9,514,497	$9,824,016	$10,000,709	$10,014,533	$9,801,739
Tyrrell	$3,386,065	$3,490,254	$3,486,872	$3,515,462	$3,552,071	$3,572,525
Washington	$13,559,882	$14,418,070	$14,567,655	$14,613,223	$14,659,319	$14,686,317
Region	**$2,854,045,273**	**$2,916,372,516**	**$3,007,478,776**	**$3,077,783,943**	**$3,209,326,140**	**$3,290,402,418**
NC	$18,495,295,410	$19,410,174,167	$20,037,352,396	$20,570,948,105	$21,348,326,756	$21,961,209,799

Tourism Expenditure data collected from Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association.
Adjusted for Inflation using the Bureau of Labor Statistics' Consumer Price Index.

Tourism Local Taxes (in 2015 $)

	2010	2011	2012	2013	2014	2015
Beaufort	$4,605,198	$4,434,177	$4,207,332	$4,214,778	$4,408,717	$4,560,926
Bertie	$744,190	$733,578	$698,991	$699,224	$722,622	$730,795
Brunswick	$27,945,931	$27,736,829	$28,050,421	$28,732,475	$29,789,501	$30,771,655
Camden	$167,057	$157,933	$152,378	$155,062	$159,621	$161,264
Carteret	$19,042,741	$18,309,942	$17,529,295	$18,072,073	$18,857,834	$19,714,595
Chowan	$1,185,350	$1,137,586	$1,143,535	$1,170,730	$1,218,883	$1,262,660
Craven	$2,743,529	$2,696,136	$2,618,001	$2,632,397	$2,741,198	$2,831,506
Currituck	$6,274,882	$6,095,611	$6,251,396	$6,391,784	$6,609,954	$6,786,183
Dare	$43,236,854	$42,719,797	$42,743,525	$43,386,057	$45,199,118	$47,028,568
Gates	$230,108	$225,196	$217,624	$219,804	$226,360	$229,367
Hertford	$658,864	$666,642	$643,660	$652,272	$675,204	$696,335
Hyde	$1,882,685	$1,809,636	$1,728,818	$1,744,383	$1,790,273	$1,823,740
New Hanover	$17,085,224	$18,468,642	$19,031,589	$19,352,792	$20,130,805	$20,798,917
Onslow	$7,146,512	$7,793,173	$7,711,573	$7,833,855	$8,123,353	$8,142,162
Pamlico	$1,823,662	$1,764,005	$1,742,351	$1,775,448	$1,838,550	$1,865,164
Pasquotank	$1,306,932	$1,262,357	$1,230,932	$1,237,655	$1,276,650	$1,342,724
Pender	$5,653,647	$5,587,030	$5,778,640	$5,898,692	$6,141,598	$6,375,097
Perquimans	$1,112,531	$1,080,957	$1,081,987	$1,099,926	$1,126,122	$1,111,753
Tyrrell	$341,725	$332,628	$320,689	$324,691	$333,910	$338,746
Washington	$603,328	$607,092	$594,938	$600,673	$615,851	$622,336
Region	**$143,790,952**	**$143,618,946**	**$143,477,678**	**$146,194,772**	**$151,986,123**	**$157,194,491**
NC	$591,061,393	$591,049,474	$598,114,771	$611,697,985	$637,034,324	$660,843,575

Tourism data collected from Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association.
Adjusted for Inflation using the Bureau of Labor Statistics' Consumer Price Index.

Tourism Employment

	2010	2011	2012	2013	2014	2015
Beaufort	436	440	434	426	445	458
Bertie	51	52	51	51	51	51
Brunswick	4,599	4,668	4,841	5,025	5,188	5,334
Camden	9	9	9	9	10	10
Carteret	2,993	2,959	2,929	3,061	3,205	3,333
Chowan	138	137	141	143	146	150
Craven	1,025	1,035	1,037	1,032	1,065	1,095
Currituck	1,384	1,380	1,456	1,504	1,541	1,575
Dare	11,256	11,264	11,615	11,753	12,304	12,711
Gates	18	19	19	19	19	19
Hertford	167	170	169	172	174	178
Hyde	391	381	376	374	375	380
New Hanover	5,043	5,102	5,345	5,458	5,680	5,842
Onslow	1,637	1,673	1,701	1,731	1,749	1,745
Pamlico	77	76	77	79	80	81
Pasquotank	471	466	465	460	466	488
Pender	709	716	738	758	790	816
Perquimans	43	42	43	44	44	43
Tyrrell	15	15	15	15	15	15
Washington	89	93	94	94	94	94
Region	**30,550**	**30,696**	**31,555**	**32,207**	**33,442**	**34,420**
NC	183,881	188,415	193,610	198,272	204,909	211,487

Tourism data collected from Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association.

Tourism Payroll (in 2015 $)

	2010	2011	2012	2013	2014	2015
Beaufort	$9,368,542	$9,327,812	$9,198,852	$9,124,154	$9,673,824	$10,339,413
Bertie	$1,264,025	$1,269,977	$1,251,443	$1,247,174	$1,280,116	$1,326,060
Brunswick	$80,034,152	$79,899,931	$83,191,074	$87,206,346	$91,469,572	$97,616,038
Camden	$205,177	$205,146	$204,491	$209,776	$213,729	$223,082
Carteret	$52,884,451	$51,388,578	$50,768,172	$53,852,405	$57,278,542	$61,751,295
Chowan	$2,647,304	$2,596,545	$2,674,121	$2,742,746	$2,837,855	$3,037,188
Craven	$22,292,382	$22,534,366	$22,569,668	$22,684,929	$23,789,987	$25,387,979
Currituck	$23,735,685	$23,187,899	$24,465,109	$25,513,815	$26,566,083	$28,178,087
Dare	$186,952,969	$185,179,097	$190,896,708	$195,066,982	$207,481,770	$223,032,750
Gates	$492,866	$506,484	$505,423	$512,399	$522,233	$546,704
Hertford	$3,244,446	$3,244,026	$3,218,237	$3,273,490	$3,367,467	$3,587,930
Hyde	$6,434,195	$6,225,908	$6,135,383	$6,164,659	$6,283,245	$6,612,787
New Hanover	$99,587,697	$99,515,183	$103,992,833	$107,243,616	$113,401,856	$121,047,731
Onslow	$36,726,704	$36,785,127	$37,386,476	$38,426,770	$39,450,267	$40,851,806
Pamlico	$1,846,382	$1,816,734	$1,844,411	$1,902,439	$1,979,400	$2,071,622
Pasquotank	$8,439,283	$8,308,564	$8,276,072	$8,268,637	$8,511,803	$9,248,969
Pender	$13,377,463	$13,445,983	$13,848,739	$14,366,494	$15,212,495	$16,314,088
Perquimans	$1,130,811	$1,112,861	$1,144,900	$1,174,530	$1,188,665	$1,212,381
Tyrrell	$324,931	$326,017	$324,521	$329,719	$336,696	$352,890
Washington	$1,790,021	$1,827,087	$1,839,353	$1,859,416	$1,885,123	$1,968,094
Region	**$552,779,487**	**$548,703,327**	**$563,735,985**	**$581,170,495**	**$612,730,729**	**$654,706,893**
NC	$4,343,240,074	$4,417,579,710	$4,533,227,926	$4,691,731,884	$4,928,449,033	$5,272,110,478

Tourism Expenditure data collected from Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association.
Adjusted for Inflation using the Bureau of Labor Statistics' Consumer Price Index.

Tourism State Tax Receipts

	2015
Beaufort	$3,960,000
Bertie	$740,000
Brunswick	$23,630,000
Camden	$110,000
Carteret	$15,220,000
Chowan	$980,000
Craven	$7,170,000
Currituck	$6,310,000
Dare	$50,480,000
Gates	$390,000
Hertford	$1,670,000
Hyde	$1,590,000
New Hanover	$25,370,000
Onslow	$11,390,000
Pamlico	$710,000
Pasquotank	$3,300,000
Pender	$4,450,000
Perquimans	$410,000
Tyrrell	$170,000
Washington	$830,000
Region	**$158,880,000**
NC	$1,125,540,000

Tourism State Taxes data collected from Economic Development Partnership of North Carolina (EDPNC) & Travel Economic Impact Model (TEIM), the Research Department of the U.S. Travel Association.

Individual Income Tax Liability

	2014 Net Tax Liability (after application of tax credits)	% of State Total
Beaufort	$35,384,133	0.3%
Bertie	$8,968,268	0.1%
Brunswick	$99,516,330	1.0%
Camden	$6,359,490	0.1%
Carteret	$59,778,575	0.6%
Chowan	$9,991,126	0.1%
Craven	$71,580,612	0.7%
Currituck	$12,636,368	0.1%
Dare	$36,734,086	0.4%
Gates	$4,470,031	0.0%
Hertford	$10,210,581	0.1%
Hyde	$2,605,060	0.0%
New Hanover	$256,205,852	2.5%
Onslow	$73,334,561	0.7%
Pamlico	$9,855,259	0.1%
Pasquotank	$19,875,938	0.2%
Pender	$41,276,311	0.4%
Perquimans	$7,547,070	0.1%
Tyrrell	$1,901,687	0.0%
Washington	$6,121,444	0.1%
Region	**$774,352,782**	**7.5%**
NC	$10,280,546,481	

Income tax data (preliminary) provided by NC Department of Revenue.

APPENDIX G
DOR STUDY

Table 1. Brunswick County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Brunswick County	6,371	27.66%
Remainder of 8 Oceanfront NC Counties	581	2.52%
Non-Oceanfront NC County	11,036	47.91%
Remainder of United States	4,991	21.67%
Other/Unknown	55	0.24%
TOTAL	**23,034**	**100%**

Table 2. Brunswick County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	290	1.61%
Alexander	28	0.16%
Alleghany	5	0.03%
Anson	41	0.23%
Ashe	14	0.08%
Avery	9	0.05%
Beaufort	9	0.05%
Bertie	2	0.01%
Bladen	66	0.37%
Brunswick	6,371	35.42%
Buncombe	69	0.38%
Burke	50	0.28%
Cabarrus	226	1.26%
Caldwell	86	0.48%
Camden	1	0.01%
Carteret	13	0.07%
Caswell	11	0.06%
Catawba	191	1.06%
Chatham	70	0.39%
Cherokee	0	0.00%
Chowan	2	0.01%
Clay	0	0.00%
Cleveland	53	0.29%
Columbus	184	1.02%
Craven	11	0.06%
Cumberland	508	2.82%
Currituck	0	0.00%
Dare	1	0.01%
Davidson	200	1.11%
Davie	65	0.36%
Duplin	3	0.02%
Durham	265	1.47%
Edgecombe	4	0.02%
Forsyth	541	3.01%
Franklin	14	0.08%
Gaston	294	1.63%
Gates	0	0.00%
Graham	0	0.00%
Granville	17	0.09%
Greene	1	0.01%
Guilford	928	5.16%
Halifax	3	0.02%
Harnett	129	0.72%
Haywood	10	0.06%
Henderson	19	0.11%
Hertford	2	0.01%
Hoke	29	0.16%
Hyde	0	0.00%
Iredell	199	1.11%
Jackson	3	0.02%

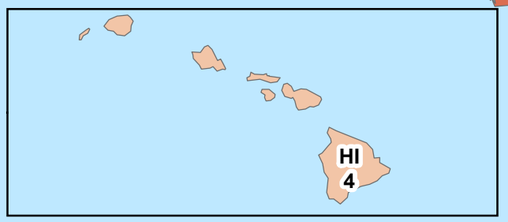
NC County	# Properties	Percent
Johnston	93	0.52%
Jones	0	0.00%
Lee	145	0.81%
Lenoir	4	0.02%
Lincoln	161	0.90%
McDowell	10	0.06%
Macon	2	0.01%
Madison	4	0.02%
Martin	2	0.01%
Mecklenburg	1,389	7.72%
Mitchell	1	0.01%
Montgomery	50	0.28%
Moore	259	1.44%
Nash	39	0.22%
New Hanover	534	2.97%
Northampton	4	0.02%
Onslow	12	0.07%
Orange	338	1.88%
Pamlico	3	0.02%
Pasquotank	0	0.00%
Pender	21	0.12%
Perquimans	0	0.00%
Person	17	0.09%
Pitt	24	0.13%
Polk	1	0.01%
Randolph	286	1.59%
Richmond	54	0.30%
Robeson	206	1.15%
Rockingham	111	0.62%
Rowan	208	1.16%
Rutherford	32	0.18%
Sampson	72	0.40%
Scotland	82	0.46%
Stanly	126	0.70%
Stokes	46	0.26%
Surry	52	0.29%
Swain	1	0.01%
Transylvania	9	0.05%
Tyrrell	0	0.00%
Union	372	2.07%
Vance	10	0.06%
Wake	2,007	11.16%
Warren	0	0.00%
Washington	0	0.00%
Watauga	34	0.19%
Wayne	29	0.16%
Wilkes	39	0.22%
Wilson	21	0.12%
Yadkin	36	0.20%
Yancey	5	0.03%
Total	**17,988**	**100%**

Table 3. Brunswick County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	20	0.09%
AK	2	0.01%
AZ	27	0.12%
AR	9	0.04%
CA	109	0.47%
CO	52	0.23%
CT	100	0.43%
DC	14	0.06%
DE	23	0.10%
FL	185	0.80%
GA	307	1.33%
HI	4	0.02%
ID	2	0.01%
IL	69	0.30%
IN	51	0.22%
IA	13	0.06%
KS	8	0.03%
KY	52	0.23%
LA	10	0.04%
ME	7	0.03%
MD	282	1.22%
MA	59	0.26%
MI	45	0.20%
MN	17	0.07%
MS	7	0.03%
MO	23	0.10%
MT	3	0.01%
NE	2	0.01%
NV	8	0.03%
NH	18	0.08%
NJ	249	1.08%
NM	6	0.03%
NY	226	0.98%
NC	17,988	78.09%
ND	3	0.01%
OH	232	1.01%
OK	9	0.04%
OR	9	0.04%
PA	331	1.44%
RI	7	0.03%
SC	1,111	4.82%
SD	6	0.03%
TN	100	0.43%
TX	97	0.42%
UT	11	0.05%
VT	8	0.03%
VA	914	3.97%
WA	9	0.04%
WV	120	0.52%
WI	10	0.04%
WY	5	0.02%
Other	55	0.24%
Total	**23,034**	**100%**

Brunswick County Barrier Island Property Ownership

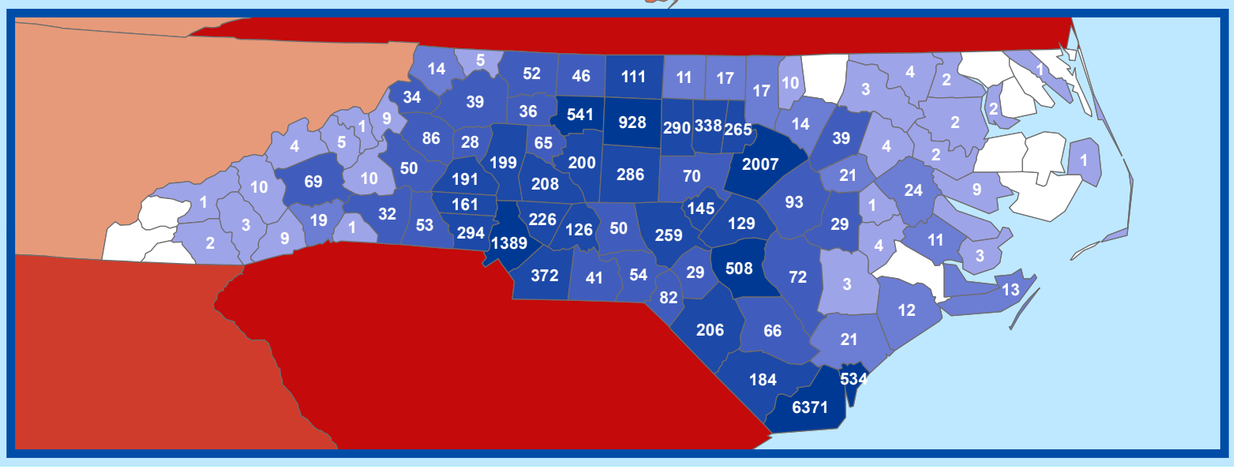
Number of Properties



WA 9
OR 9
CA 109
ID 2
NV 8
MT 3
WY 5
UT 11
AZ 27
CO 52
NM 6
ND 3
SD 6
NE 2
KS 8
OK 9
TX 97
MN 17
IA 13
MO 23
AR 9
LA 10
WI 10
IL 69
MS 7
MI 45
IN 51
KY 52
TN 100
AL 20
OH 232
WV 120
GA 307
FL 185
SC 1111
NC 17988
VA 914
PA 331
NY 226
MD 282
DE 23
NJ 249
CT 100
RI 7
MA 59
VT 8
NH 18
ME 7

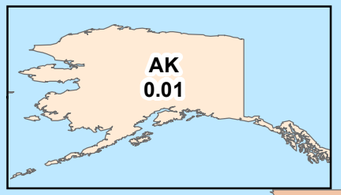
Legend

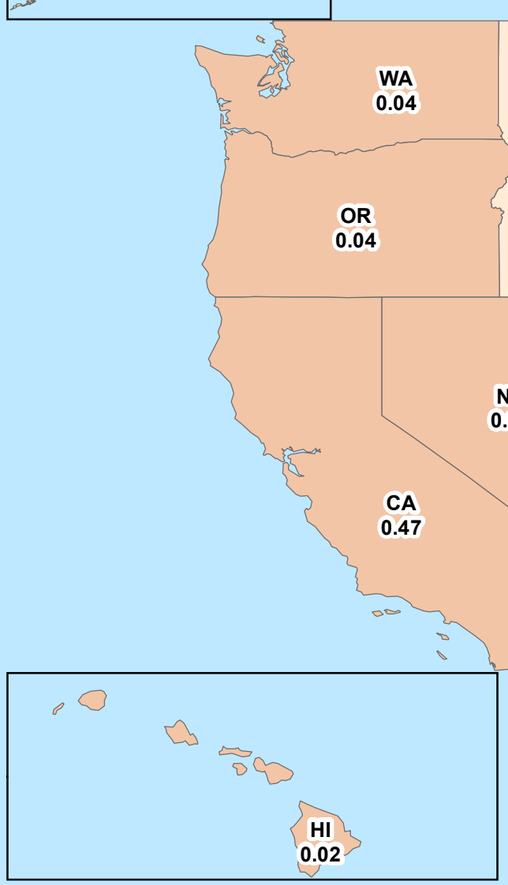
US Number of Properties	NC County Number of Properties
2	0
3 - 25	1 - 10
26 - 100	11 - 25
101 - 250	26 - 100
251 - 500	101 - 500
501 - 17988	501 - 6371



Brunswick County Barrier Island Property Ownership

Percent of Properties





Legend

US Percent of Properties	NC County Percent of Properties
0.01	0.0
0.11 - 1.00	0.01 - 1.00
1.01 - 10.0	1.01 - 10.00
10.01 - 25.00	10.01 - 25.00
25.01 - 50.00	25.01 - 50.00
50.01 - 100.00	50.01 - 100.00

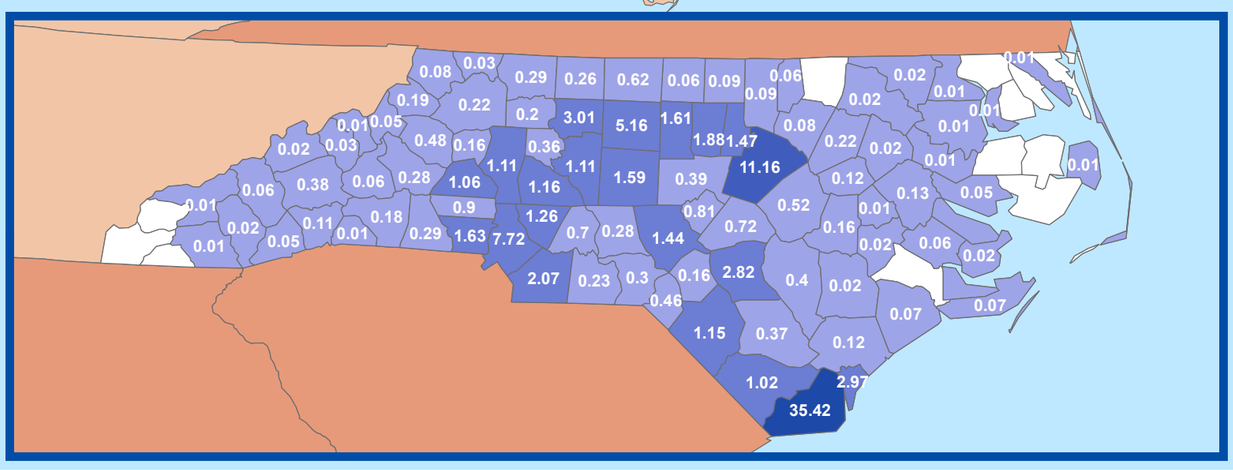


Table 4. New Hanover County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
New Hanover County	6,784	47.78%
Remainder of 8 Oceanfront NC Counties	158	1.11%
Non-Oceanfront NC County	4,902	34.52%
Remainder of United States	2,341	16.49%
Other/Unknown	14	0.10%
TOTAL	**14,199**	**100%**

Table 5. New Hanover County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	83	0.70%
Alexander	4	0.03%
Alleghany	1	0.01%
Anson	4	0.03%
Ashe	4	0.03%
Avery	1	0.01%
Beaufort	4	0.03%
Bertie	0	0.00%
Bladen	16	0.14%
Brunswick	83	0.70%
Buncombe	21	0.18%
Burke	12	0.10%
Cabarrus	50	0.42%
Caldwell	12	0.10%
Camden	0	0.00%
Carteret	5	0.04%
Caswell	6	0.05%
Catawba	25	0.21%
Chatham	25	0.21%
Cherokee	0	0.00%
Chowan	1	0.01%
Clay	0	0.00%
Cleveland	5	0.04%
Columbus	30	0.25%
Craven	6	0.05%
Cumberland	216	1.82%
Currituck	1	0.01%
Dare	6	0.05%
Davidson	67	0.57%
Davie	15	0.13%
Duplin	35	0.30%
Durham	171	1.44%
Edgecombe	4	0.03%
Forsyth	232	1.96%
Franklin	26	0.22%
Gaston	51	0.43%
Gates	0	0.00%
Graham	0	0.00%
Granville	11	0.09%
Greene	2	0.02%
Guilford	389	3.28%
Halifax	3	0.03%
Harnett	55	0.46%
Haywood	2	0.02%
Henderson	2	0.02%
Hertford	4	0.03%
Hoke	3	0.03%
Hyde	0	0.00%
Iredell	43	0.36%
Jackson	5	0.04%

NC County	# Properties	Percent
Johnston	129	1.09%
Jones	0	0.00%
Lee	32	0.27%
Lenoir	5	0.04%
Lincoln	16	0.14%
McDowell	5	0.04%
Macon	0	0.00%
Madison	5	0.04%
Martin	0	0.00%
Mecklenburg	361	3.05%
Mitchell	0	0.00%
Montgomery	6	0.05%
Moore	62	0.52%
Nash	52	0.44%
New Hanover	6,784	57.28%
Northampton	0	0.00%
Onslow	23	0.19%
Orange	239	2.02%
Pamlico	0	0.00%
Pasquotank	0	0.00%
Pender	40	0.34%
Perquimans	0	0.00%
Person	25	0.21%
Pitt	47	0.40%
Polk	1	0.01%
Randolph	53	0.45%
Richmond	11	0.09%
Robeson	22	0.19%
Rockingham	23	0.19%
Rowan	93	0.79%
Rutherford	5	0.04%
Sampson	45	0.38%
Scotland	9	0.08%
Stanly	23	0.19%
Stokes	10	0.08%
Surry	25	0.21%
Swain	1	0.01%
Transylvania	3	0.03%
Tyrrell	0	0.00%
Union	54	0.46%
Vance	8	0.07%
Wake	1,760	14.86%
Warren	1	0.01%
Washington	0	0.00%
Watauga	6	0.05%
Wayne	57	0.48%
Wilkes	5	0.04%
Wilson	43	0.36%
Yadkin	14	0.12%
Yancey	0	0.00%
Total	**11,844**	**100%**

Table 6. New Hanover County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	9	0.06%
AK	2	0.01%
AZ	16	0.11%
AR	5	0.04%
CA	87	0.61%
CO	47	0.33%
CT	57	0.40%
DC	13	0.09%
DE	15	0.11%
FL	132	0.93%
GA	109	0.77%
HI	13	0.09%
ID	2	0.01%
IL	34	0.24%
IN	28	0.20%
IA	10	0.07%
KS	10	0.07%
KY	11	0.08%
LA	7	0.05%
ME	1	0.01%
MD	158	1.11%
MA	32	0.23%
MI	26	0.18%
MN	17	0.12%
MS	3	0.02%
MO	13	0.09%
MT	0	0.00%
NE	5	0.04%
NV	4	0.03%
NH	10	0.07%
NJ	92	0.65%
NM	7	0.05%
NY	262	1.85%
NC	11,844	83.41%
ND	2	0.01%
OH	93	0.65%
OK	6	0.04%
OR	6	0.04%
PA	216	1.52%
RI	9	0.06%
SC	115	0.81%
SD	1	0.01%
TN	43	0.30%
TX	69	0.49%
UT	4	0.03%
VT	1	0.01%
VA	455	3.20%
WA	12	0.08%
WV	28	0.20%
WI	17	0.12%
WY	27	0.19%
Other	14	0.10%
Total	**14,199**	**100%**

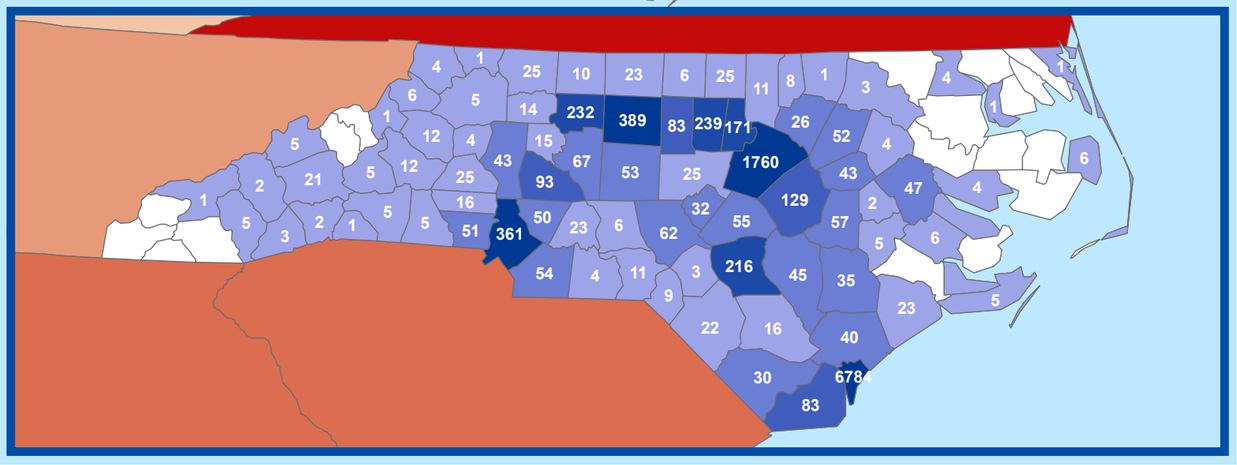
New Hanover County Barrier Island Property Ownership

Number of Properties

AK 2
WA 12
OR 6
CA 87
ID 2
NV 4
MT 0
WY 27
UT 4
AZ 16
CO 47
NM 7
ND 2
SD 1
NE 5
KS 10
OK 6
TX 69
MN 17
IA 10
MO 13
AR 5
LA 7
WI 17
IL 34
MI 26
IN 28
OH 93
KY 11
TN 43
MS 3
AL 9
GA 109
FL 132
SC 115
NC 11844
VA 455
WV 28
PA 216
NY 262
MD 158
DE 15
NJ 92
CT 57
RI 9
MA 32
VT 1
NH 10
ME 1
HI 13

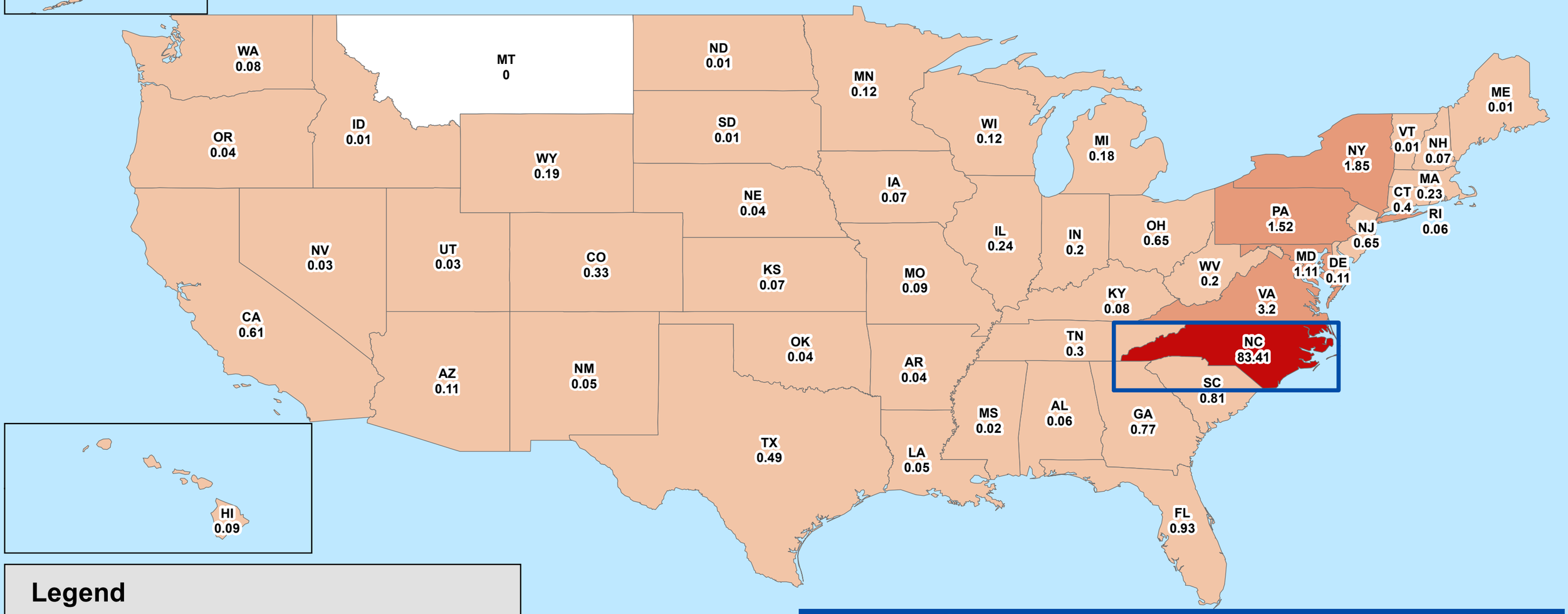
Legend

US Number of Properties	NC County Number of Properties
0	0
1 - 25	1 - 25
26 - 100	26 - 75
101 - 150	76 - 150
151 - 300	151 - 300
301 - 11844	301 - 6784



New Hanover County Barrier Island Property Ownership

Percent of Properties



Legend

US Percent of Properties	NC County Percent of Properties
0	0
0.01 - 1.00	0.01 - 1.00
1.01 - 10.00	1.01 - 10.00
10.01 - 25.00	10.01 - 25.00
25.01 - 50.00	25.01 - 50.00
50.01 - 100.00	50.01 - 100.00

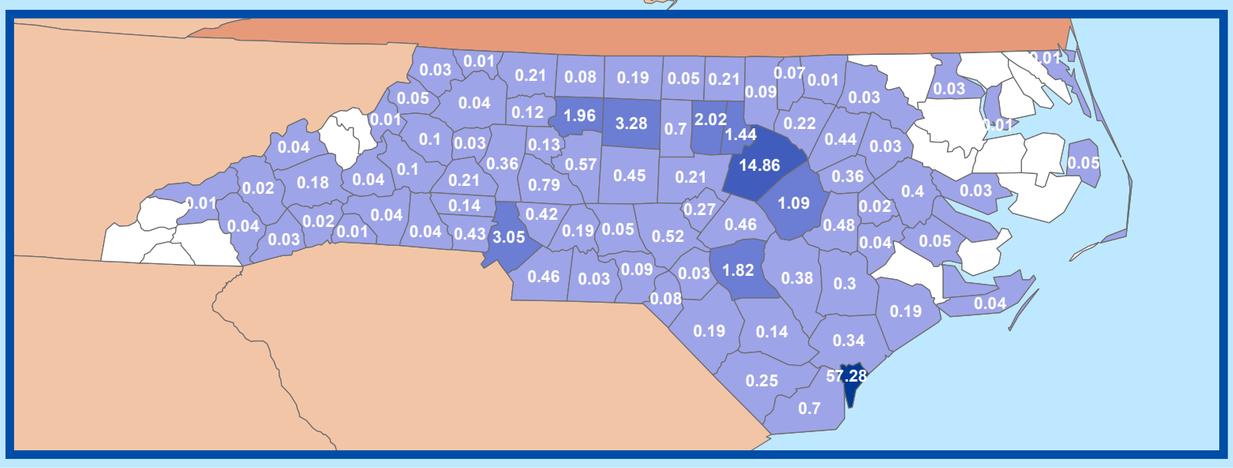


Table 7. Pender County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Pender County	1,265	24.74%
Remainder of 8 Oceanfront NC Counties	436	8.53%
Non-Oceanfront NC County	2,442	47.75%
Remainder of United States	965	18.87%
Other/Unknown	6	0.12%
TOTAL	**5,114**	**100%**

Table 8. Pender County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	66	1.59%
Alexander	1	0.02%
Alleghany	1	0.02%
Anson	0	0.00%
Ashe	3	0.07%
Avery	1	0.02%
Beaufort	3	0.07%
Bertie	0	0.00%
Bladen	13	0.31%
Brunswick	11	0.27%
Buncombe	10	0.24%
Burke	2	0.05%
Cabarrus	3	0.07%
Caldwell	3	0.07%
Camden	0	0.00%
Carteret	3	0.07%
Caswell	0	0.00%
Catawba	24	0.58%
Chatham	10	0.24%
Cherokee	1	0.02%
Chowan	0	0.00%
Clay	0	0.00%
Cleveland	0	0.00%
Columbus	7	0.17%
Craven	13	0.31%
Cumberland	89	2.15%
Currituck	1	0.02%
Dare	1	0.02%
Davidson	6	0.14%
Davie	6	0.14%
Duplin	156	3.77%
Durham	99	2.39%
Edgecombe	11	0.27%
Forsyth	78	1.88%
Franklin	9	0.22%
Gaston	3	0.07%
Gates	0	0.00%
Graham	0	0.00%
Granville	8	0.19%
Greene	1	0.02%
Guilford	102	2.46%
Halifax	6	0.14%
Harnett	63	1.52%
Haywood	6	0.14%
Henderson	2	0.05%
Hertford	1	0.02%
Hoke	9	0.22%
Hyde	0	0.00%
Iredell	27	0.65%
Jackson	0	0.00%

NC County	# Properties	Percent
Johnston	71	1.71%
Jones	2	0.05%
Lee	25	0.60%
Lenoir	27	0.65%
Lincoln	1	0.02%
McDowell	2	0.05%
Macon	0	0.00%
Madison	0	0.00%
Martin	3	0.07%
Mecklenburg	110	2.66%
Mitchell	1	0.02%
Montgomery	2	0.05%
Moore	21	0.51%
Nash	18	0.43%
New Hanover	332	8.01%
Northampton	1	0.02%
Onslow	88	2.12%
Orange	125	3.02%
Pamlico	1	0.02%
Pasquotank	0	0.00%
Pender	1,265	30.53%
Perquimans	0	0.00%
Person	0	0.00%
Pitt	35	0.84%
Polk	0	0.00%
Randolph	8	0.19%
Richmond	1	0.02%
Robeson	5	0.12%
Rockingham	6	0.14%
Rowan	7	0.17%
Rutherford	0	0.00%
Sampson	107	2.58%
Scotland	1	0.02%
Stanly	1	0.02%
Stokes	4	0.10%
Surry	6	0.14%
Swain	1	0.02%
Transylvania	2	0.05%
Tyrrell	0	0.00%
Union	6	0.14%
Vance	6	0.14%
Wake	849	20.49%
Warren	0	0.00%
Washington	0	0.00%
Watauga	7	0.17%
Wayne	85	2.05%
Wilkes	2	0.05%
Wilson	45	1.09%
Yadkin	5	0.12%
Yancey	0	0.00%
Total	**4,143**	**100%**

Table 9. Pender County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	7	0.14%
AK	0	0.00%
AZ	7	0.14%
AR	0	0.00%
CA	36	0.70%
CO	10	0.20%
CT	26	0.51%
DC	5	0.10%
DE	3	0.06%
FL	39	0.76%
GA	28	0.55%
HI	1	0.02%
ID	2	0.04%
IL	16	0.31%
IN	7	0.14%
IA	6	0.12%
KS	4	0.08%
KY	9	0.18%
LA	0	0.00%
ME	5	0.10%
MD	92	1.80%
MA	11	0.22%
MI	12	0.23%
MN	4	0.08%
MS	0	0.00%
MO	3	0.06%
MT	0	0.00%
NE	2	0.04%
NV	9	0.18%
NH	5	0.10%
NJ	47	0.92%
NM	2	0.04%
NY	59	1.15%
NC	4,143	81.01%
ND	0	0.00%
OH	61	1.19%
OK	0	0.00%
OR	1	0.02%
PA	97	1.90%
RI	2	0.04%
SC	44	0.86%
SD	1	0.02%
TN	16	0.31%
TX	26	0.51%
UT	0	0.00%
VT	1	0.02%
VA	235	4.60%
WA	4	0.08%
WV	18	0.35%
WI	1	0.02%
WY	1	0.02%
Other	6	0.12%
Total	**5,114**	**100%**

Pender County Barrier Island Property Ownership

Number of Properties

AK
0

WA
4

OR
1

CA
36

ID
2

NV
9

MT
0

WY
1

UT
0

AZ
7

CO
10

NM
2

ND
0

SD
1

NE
2

KS
4

OK
0

TX
26

MN
4

IA
6

MO
3

AR
0

LA
0

WI
1

IL
16

MS
0

MI
12

IN
7

KY
9

TN
16

AL
7

GA
28

FL
39

SC
44

NC
4143

VA
235

WV
18

OH
61

PA
97

NY
59

MD
92

DE
3

NJ
47

CT
26

RI
2

MA
11

VT
1

NH
5

ME
5

HI
1

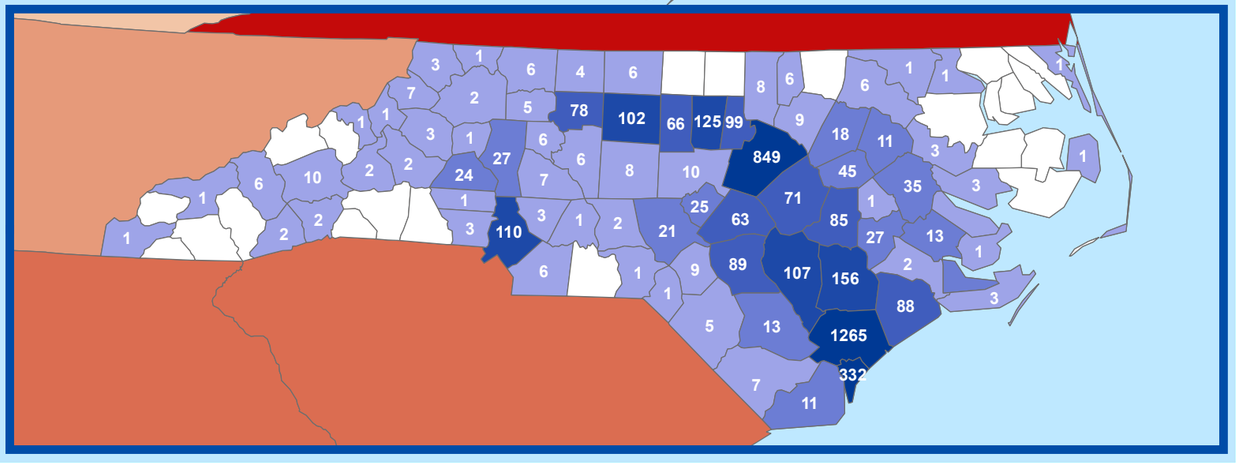
Legend

US Number of Properties

- 0
- 1 - 10
- 11 - 25
- 26 - 50
- 51 - 100
- 101 - 4143

NC County Number of Properties

- 0
- 1 - 10
- 11 - 50
- 51 - 100
- 101 - 250
- 251 - 1265



Pender County Barrier Island Property Ownership

Percent of Properties

AK
0

WA
0.08

OR
0.02

CA
0.7

ID
0.04

NV
0.18

MT
0

WY
0.02

UT
0

AZ
0.14

CO
0.2

NM
0.04

ND
0

SD
0.02

NE
0.04

KS
0.08

OK
0

TX
0.51

MN
0.08

IA
0.12

MO
0.06

AR
0

LA
0

WI
0.02

IL
0.31

MS
0

MI
0.23

IN
0.14

KY
0.18

TN
0.31

AL
0.14

GA
0.55

FL
0.76

SC
0.86

NC
81.01

VA
4.6

WV
0.35

OH
1.19

PA
1.9

NY
1.15

MD
1.8

DE
0.06

NJ
0.92

CT
0.51

RI
0.04

MA
0.22

VT
0.02

NH
0.1

ME
0.1

HI
0.02

Legend

US Percent of Properties

- 0
- 0.01 - 1.00
- 1.01 - 10.00
- 10.01 - 25.00
- 25.01 - 50.00
- 50.01 - 100.00

NC County Percent of Properties

- 0
- 0.01 - 1.00
- 1.01 - 10.00
- 10.01 - 25.00
- 25.01 - 50.00
- 50.01 - 100.00

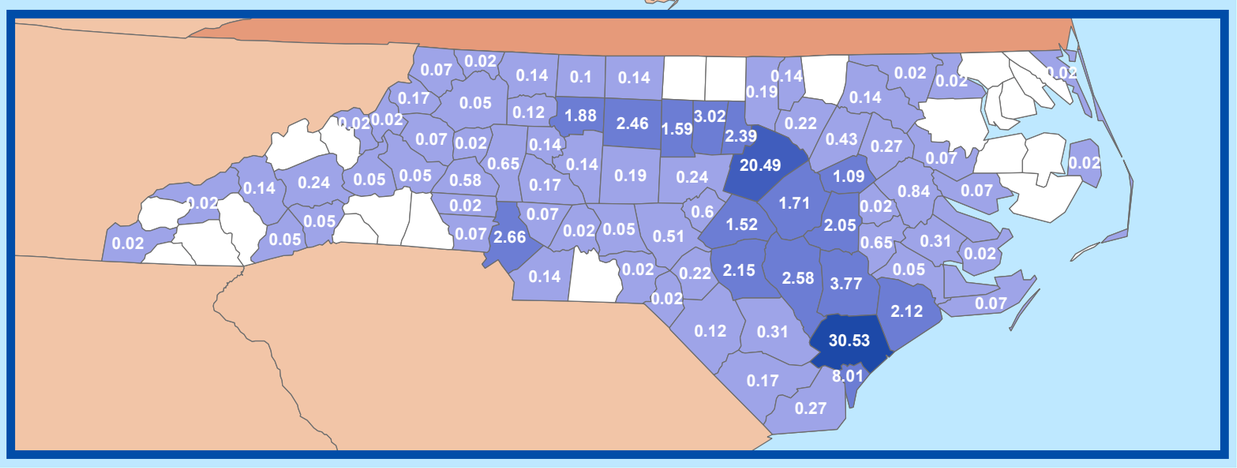


Table 10. Onslow County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Onslow County	907	18.46%
Remainder of 8 Oceanfront NC Counties	452	9.20%
Non-Oceanfront NC County	2,049	41.71%
Remainder of United States	1,466	29.85%
Other/Unknown	38	0.77%
TOTAL	**4,912**	**100%**

Table 11. Onslow County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	51	1.50%
Alexander	0	0.00%
Alleghany	0	0.00%
Anson	0	0.00%
Ashe	6	0.18%
Avery	0	0.00%
Beaufort	1	0.03%
Bertie	1	0.03%
Bladen	2	0.06%
Brunswick	7	0.21%
Buncombe	8	0.23%
Burke	3	0.09%
Cabarrus	10	0.29%
Caldwell	6	0.18%
Camden	0	0.00%
Carteret	10	0.29%
Caswell	2	0.06%
Catawba	5	0.15%
Chatham	11	0.32%
Cherokee	1	0.03%
Chowan	0	0.00%
Clay	0	0.00%
Cleveland	0	0.00%
Columbus	4	0.12%
Craven	24	0.70%
Cumberland	85	2.49%
Currituck	0	0.00%
Dare	5	0.15%
Davidson	9	0.26%
Davie	10	0.29%
Duplin	145	4.25%
Durham	93	2.73%
Edgecombe	4	0.12%
Forsyth	43	1.26%
Franklin	13	0.38%
Gaston	8	0.23%
Gates	0	0.00%
Graham	0	0.00%
Granville	5	0.15%
Greene	4	0.12%
Guilford	93	2.73%
Halifax	2	0.06%
Harnett	81	2.38%
Haywood	4	0.12%
Henderson	2	0.06%
Hertford	0	0.00%
Hoke	1	0.03%
Hyde	0	0.00%
Iredell	26	0.76%
Jackson	0	0.00%

NC County	# Properties	Percent
Johnston	119	3.49%
Jones	2	0.06%
Lee	23	0.67%
Lenoir	38	1.12%
Lincoln	1	0.03%
McDowell	0	0.00%
Macon	0	0.00%
Madison	0	0.00%
Martin	3	0.09%
Mecklenburg	69	2.02%
Mitchell	0	0.00%
Montgomery	0	0.00%
Moore	19	0.56%
Nash	24	0.70%
New Hanover	188	5.52%
Northampton	0	0.00%
Onslow	907	26.61%
Orange	63	1.85%
Pamlico	0	0.00%
Pasquotank	0	0.00%
Pender	242	7.10%
Perquimans	1	0.03%
Person	1	0.03%
Pitt	48	1.41%
Polk	0	0.00%
Randolph	11	0.32%
Richmond	0	0.00%
Robeson	9	0.26%
Rockingham	7	0.21%
Rowan	11	0.32%
Rutherford	1	0.03%
Sampson	60	1.76%
Scotland	4	0.12%
Stanly	1	0.03%
Stokes	1	0.03%
Surry	0	0.00%
Swain	0	0.00%
Transylvania	1	0.03%
Tyrrell	0	0.00%
Union	10	0.29%
Vance	4	0.12%
Wake	571	16.75%
Warren	2	0.06%
Washington	0	0.00%
Watauga	3	0.09%
Wayne	165	4.84%
Wilkes	4	0.12%
Wilson	8	0.23%
Yadkin	2	0.06%
Yancey	0	0.00%
Total	**3,408**	**100%**

Table 12. Onslow County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	2	0.04%
AK	1	0.02%
AZ	1	0.02%
AR	2	0.04%
CA	34	0.69%
CO	11	0.22%
CT	30	0.61%
DC	15	0.31%
DE	11	0.22%
FL	81	1.65%
GA	50	1.02%
HI	0	0.00%
ID	1	0.02%
IL	12	0.24%
IN	6	0.12%
IA	2	0.04%
KS	2	0.04%
KY	17	0.35%
LA	1	0.02%
ME	0	0.00%
MD	129	2.63%
MA	26	0.53%
MI	24	0.49%
MN	7	0.14%
MS	0	0.00%
MO	4	0.08%
MT	3	0.06%
NE	1	0.02%
NV	7	0.14%
NH	30	0.61%
NJ	118	2.40%
NM	3	0.06%
NY	117	2.38%
NC	3,408	69.38%
ND	0	0.00%
OH	93	1.89%
OK	1	0.02%
OR	3	0.06%
PA	139	2.83%
RI	5	0.10%
SC	56	1.14%
SD	0	0.00%
TN	29	0.59%
TX	33	0.67%
UT	0	0.00%
VT	2	0.04%
VA	306	6.23%
WA	5	0.10%
WV	31	0.63%
WI	15	0.31%
WY	0	0.00%
Other	38	0.77%
Total	**4,912**	**100%**

Onslow County Barrier Island Property Ownership

Number of Properties

AK 1
WA 5
OR 3
CA 34
ID 1
NV 7
MT 3
WY 0
UT 0
AZ 1
CO 11
NM 3
ND 0
SD 0
NE 1
KS 2
OK 1
TX 33
MN 7
IA 2
MO 4
AR 2
LA 1
WI 15
IL 12
MS 0
MI 24
IN 6
KY 17
TN 29
AL 2
OH 93
WV 31
GA 50
FL 81
SC 56
NC 3408
VA 306
PA 139
NY 117
MD 129
DE 11
NJ 118
CT 30
RI 5
MA 26
VT 2
NH 30
ME 0
HI 0

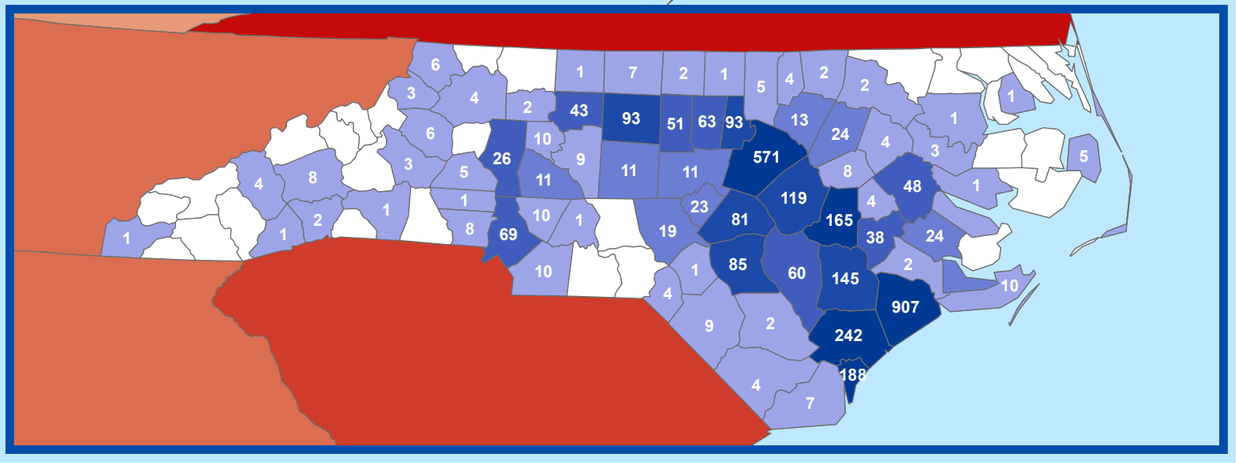
Legend

US Number of Properties

- 0
- 1 - 10
- 11 - 25
- 26 - 50
- 51 - 150
- 151 - 3408

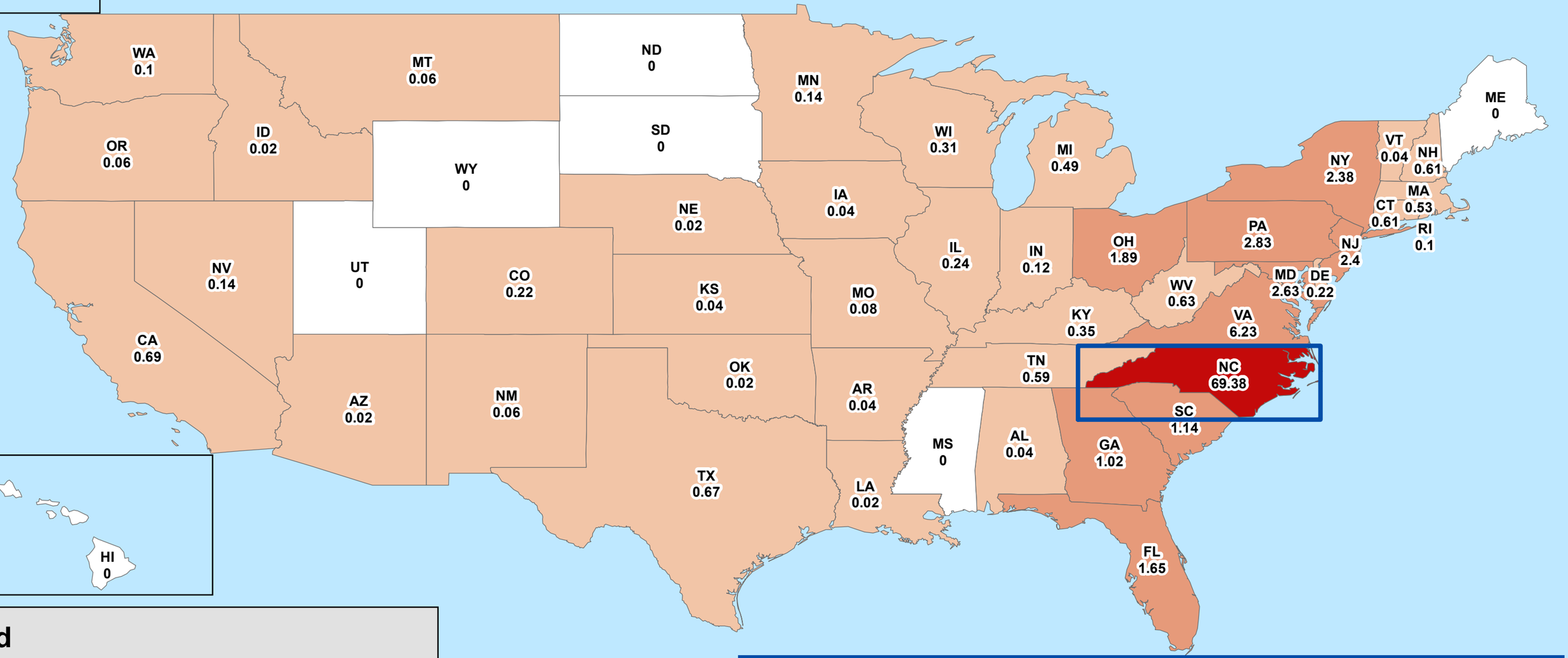
NC County Number of Properties

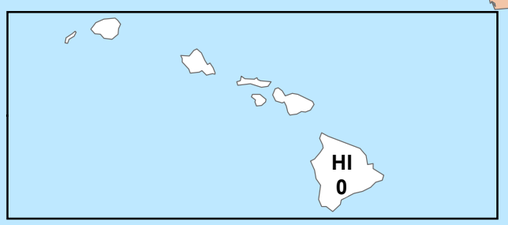
- 0
- 1 - 10
- 11 - 25
- 26 - 75
- 76 - 150
- 151 - 907



Onslow County Barrier Island Property Ownership

Percent of Properties





Legend

US Percent of Properties	NC County Percent of Properties
0	0
0.01 - 1.00	0.01 - 1.00
1.01 - 10.00	1.01 - 10.00
10.01 - 25.00	10.01 - 25.00
25.01 - 50.00	25.01 - 50.00
50.01 - 100.00	50.01 - 100.00

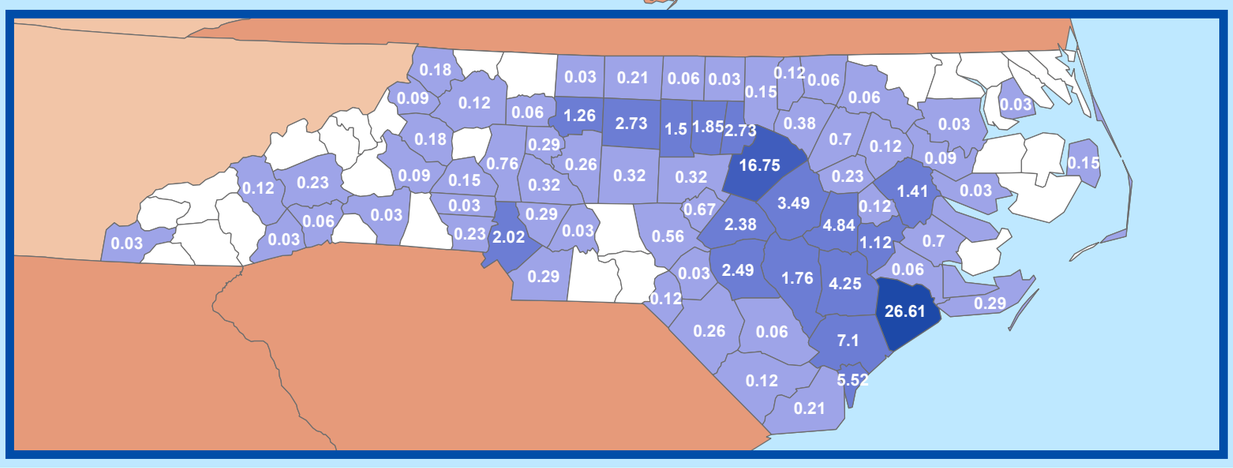


Table 13. Carteret County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Carteret County	4,425	27.45%
Remainder of 8 Oceanfront NC Counties	326	2.02%
Non-Oceanfront NC county	8,747	54.26%
Remainder of United States	2,581	16.01%
Other/Unkown	43	0.27%
TOTAL	**16,122**	**100%**

Table 14. Carteret County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	183	1.36%
Alexander	1	0.01%
Alleghany	2	0.01%
Anson	3	0.02%
Ashe	5	0.04%
Avery	4	0.03%
Beaufort	90	0.67%
Bertie	3	0.02%
Bladen	4	0.03%
Brunswick	13	0.10%
Buncombe	27	0.20%
Burke	9	0.07%
Cabarrus	8	0.06%
Caldwell	3	0.02%
Camden	1	0.01%
Carteret	4,425	32.78%
Caswell	6	0.04%
Catawba	12	0.09%
Chatham	33	0.24%
Cherokee	0	0.00%
Chowan	5	0.04%
Clay	0	0.00%
Cleveland	2	0.01%
Columbus	4	0.03%
Craven	363	2.69%
Cumberland	46	0.34%
Currituck	0	0.00%
Dare	4	0.03%
Davidson	39	0.29%
Davie	17	0.13%
Duplin	10	0.07%
Durham	337	2.50%
Edgecombe	90	0.67%
Forsyth	281	2.08%
Franklin	74	0.55%
Gaston	11	0.08%
Gates	0	0.00%
Graham	0	0.00%
Granville	60	0.44%
Greene	55	0.41%
Guilford	454	3.36%
Halifax	61	0.45%
Harnett	55	0.41%
Haywood	3	0.02%
Henderson	3	0.02%
Hertford	15	0.11%
Hoke	0	0.00%
Hyde	5	0.04%
Iredell	38	0.28%
Jackson	2	0.01%

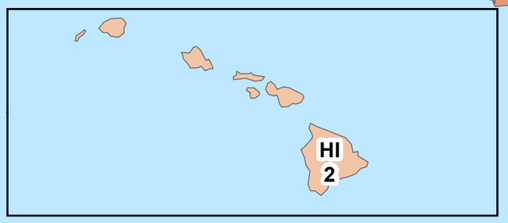
NC County	# Properties	Percent
Johnston	319	2.36%
Jones	20	0.15%
Lee	30	0.22%
Lenoir	305	2.26%
Lincoln	5	0.04%
McDowell	1	0.01%
Macon	1	0.01%
Madison	1	0.01%
Martin	50	0.37%
Mecklenburg	86	0.64%
Mitchell	1	0.01%
Montgomery	2	0.01%
Moore	32	0.24%
Nash	300	2.22%
New Hanover	89	0.66%
Northampton	7	0.05%
Onslow	210	1.56%
Orange	314	2.33%
Pamlico	22	0.16%
Pasquotank	8	0.06%
Pender	5	0.04%
Perquimans	0	0.00%
Person	23	0.17%
Pitt	820	6.07%
Polk	0	0.00%
Randolph	38	0.28%
Richmond	0	0.00%
Robeson	2	0.01%
Rockingham	35	0.26%
Rowan	28	0.21%
Rutherford	2	0.01%
Sampson	11	0.08%
Scotland	1	0.01%
Stanly	2	0.01%
Stokes	20	0.15%
Surry	19	0.14%
Swain	1	0.01%
Transylvania	3	0.02%
Tyrrell	0	0.00%
Union	9	0.07%
Vance	65	0.48%
Wake	2,926	21.68%
Warren	5	0.04%
Washington	6	0.04%
Watauga	13	0.10%
Wayne	340	2.52%
Wilkes	10	0.07%
Wilson	424	3.14%
Yadkin	18	0.13%
Yancey	3	0.02%
Total	**13,498**	**100%**

Table 15. Carteret County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	8	0.05%
AK	5	0.03%
AZ	20	0.12%
AR	4	0.02%
CA	60	0.37%
CO	19	0.12%
CT	47	0.29%
DC	17	0.11%
DE	8	0.05%
FL	128	0.79%
GA	69	0.43%
HI	2	0.01%
ID	2	0.01%
IL	31	0.19%
IN	26	0.16%
IA	7	0.04%
KS	8	0.05%
KY	17	0.11%
LA	7	0.04%
ME	9	0.06%
MD	206	1.28%
MA	78	0.48%
MI	25	0.16%
MN	5	0.03%
MS	3	0.02%
MO	8	0.05%
MT	2	0.01%
NE	1	0.01%
NV	6	0.04%
NH	9	0.06%
NJ	122	0.76%
NM	8	0.05%
NY	166	1.03%
NC	13,498	83.72%
ND	0	0.00%
OH	120	0.74%
OK	4	0.02%
OR	3	0.02%
PA	231	1.43%
RI	4	0.02%
SC	81	0.50%
SD	1	0.01%
TN	38	0.24%
TX	62	0.38%
UT	3	0.02%
VT	2	0.01%
VA	821	5.09%
WA	20	0.12%
WV	49	0.30%
WI	7	0.04%
WY	2	0.01%
Other	43	0.27%
Total	**16,122**	**100%**

Carteret County Barrier Island Property Ownership

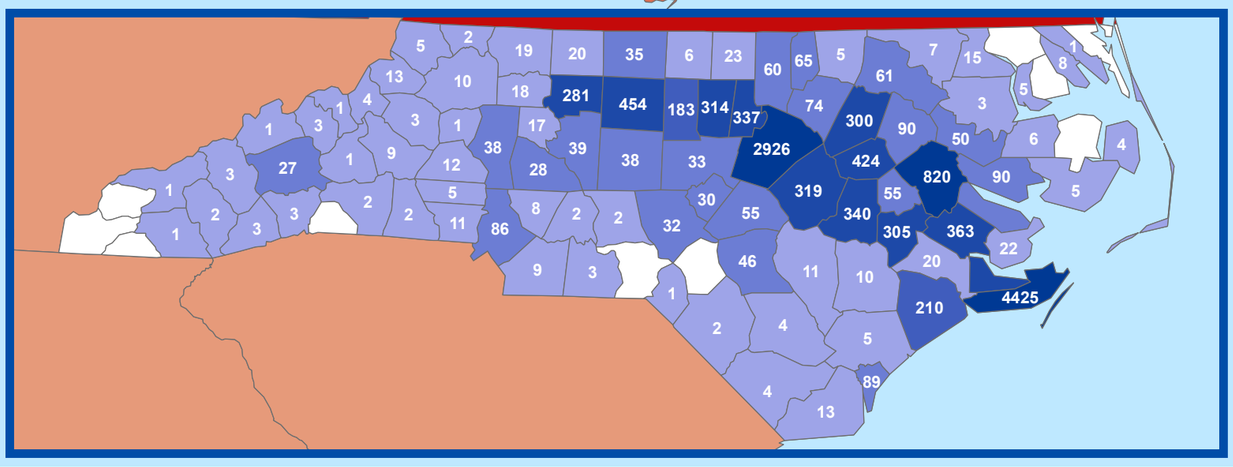
Number of Properties



WA 20
OR 3
CA 60
ID 2
NV 6
MT 2
WY 2
UT 3
AZ 20
CO 19
NM 8
ND 0
SD 1
NE 1
KS 8
OK 4
TX 62
MN 5
IA 7
MO 8
AR 4
LA 7
WI 7
IL 31
MI 25
IN 26
OH 120
KY 17
TN 38
MS 3
AL 8
GA 69
FL 128
SC 81
NC 13498
VA 821
WV 49
PA 231
NY 166
MD 206
DE 8
NJ 122
CT 47
RI 4
MA 78
VT 2
NH 9
ME 9

Legend

US Number of Properties	NC County Number of Properties
0	0
1 - 25	1 - 25
26 - 100	26 - 100
101 - 250	101 - 250
251 - 500	251 - 500
501 - 13498	501 - 4425



Carteret County Barrier Island Property Ownership

Percent of Properties

AK
0.03

WA
0.12

OR
0.02

CA
0.37

ID
0.01

NV
0.04

MT
0.01

WY
0.01

UT
0.02

AZ
0.12

CO
0.12

NM
0.05

ND
0

SD
0.01

NE
0.01

KS
0.05

OK
0.02

TX
0.38

MN
0.03

IA
0.04

MO
0.05

AR
0.02

LA
0.04

WI
0.04

IL
0.19

MI
0.16

IN
0.16

OH
0.74

KY
0.11

TN
0.24

MS
0.02

AL
0.05

GA
0.43

FL
0.79

SC
0.5

NC
83.72

VA
5.09

WV
0.3

PA
1.43

NY
1.03

MD
1.28

DE
0.05

NJ
0.76

CT
0.29

RI
0.02

MA
0.48

VT
0.01

NH
0.06

ME
0.06

HI
0.01

Legend

US Percent of Properties

- 0
- 0.01 - 1.00
- 1.01 - 10.00
- 10.01 - 25.00
- 25.01 - 50.00
- 50.01 - 100.00

NC County Percent of Properties

- 0
- 0.01 - 1.00
- 1.01 - 10.00
- 10.01 - 25.00
- 25.01 - 50.00
- 50.01 - 100.00

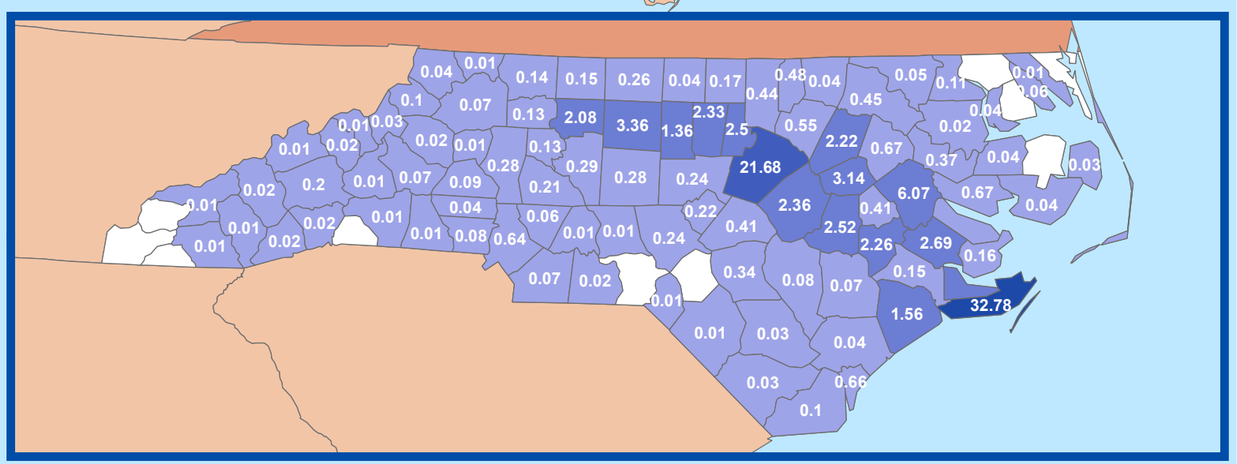


Table 16. Hyde County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Hyde County	828	46.00%
Remainder of 8 Oceanfront NC Counties	129	7.17%
Non-Oceanfront NC County	299	16.61%
Remainder of United States	478	26.56%
Other/Unknown	66	3.67%
TOTAL	**1,800**	**100%**

Table 17. Hyde County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	5	0.40%
Alexander	1	0.08%
Alleghany	4	0.32%
Anson	0	0.00%
Ashe	0	0.00%
Avery	0	0.00%
Beaufort	41	3.26%
Bertie	3	0.24%
Bladen	0	0.00%
Brunswick	2	0.16%
Buncombe	4	0.32%
Burke	2	0.16%
Cabarrus	0	0.00%
Caldwell	0	0.00%
Camden	1	0.08%
Carteret	12	0.96%
Caswell	0	0.00%
Catawba	1	0.08%
Chatham	3	0.24%
Cherokee	0	0.00%
Chowan	2	0.16%
Clay	0	0.00%
Cleveland	0	0.00%
Columbus	4	0.32%
Craven	9	0.72%
Cumberland	1	0.08%
Currituck	7	0.56%
Dare	88	7.01%
Davidson	1	0.08%
Davie	0	0.00%
Duplin	1	0.08%
Durham	11	0.88%
Edgecombe	3	0.24%
Forsyth	12	0.96%
Franklin	0	0.00%
Gaston	0	0.00%
Gates	0	0.00%
Graham	0	0.00%
Granville	0	0.00%
Greene	0	0.00%
Guilford	15	1.19%
Halifax	3	0.24%
Harnett	2	0.16%
Haywood	0	0.00%
Henderson	4	0.32%
Hertford	1	0.08%
Hoke	0	0.00%
Hyde	828	65.92%
Iredell	6	0.48%
Jackson	2	0.16%
Johnston	3	0.24%
Jones	0	0.00%
Lee	3	0.24%
Lenoir	1	0.08%
Lincoln	1	0.08%
McDowell	0	0.00%
Macon	0	0.00%
Madison	0	0.00%
Martin	2	0.16%
Mecklenburg	10	0.80%
Mitchell	0	0.00%
Montgomery	0	0.00%
Moore	2	0.16%
Nash	7	0.56%
New Hanover	14	1.11%
Northampton	4	0.32%
Onslow	3	0.24%
Orange	11	0.88%
Pamlico	0	0.00%
Pasquotank	2	0.16%
Pender	3	0.24%
Perquimans	4	0.32%
Person	2	0.16%
Pitt	30	2.39%
Polk	0	0.00%
Randolph	1	0.08%
Richmond	0	0.00%
Robeson	0	0.00%
Rockingham	3	0.24%
Rowan	5	0.40%
Rutherford	0	0.00%
Sampson	0	0.00%
Scotland	0	0.00%
Stanly	0	0.00%
Stokes	1	0.08%
Surry	2	0.16%
Swain	0	0.00%
Transylvania	4	0.32%
Tyrrell	0	0.00%
Union	0	0.00%
Vance	0	0.00%
Wake	40	3.18%
Warren	0	0.00%
Washington	10	0.80%
Watauga	0	0.00%
Wayne	5	0.40%
Wilkes	0	0.00%
Wilson	2	0.16%
Yadkin	0	0.00%
Yancey	2	0.16%
Total	**1,256**	**100%**

Table 18. Hyde County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	2	0.11%
AK	0	0.00%
AZ	0	0.00%
AR	0	0.00%
CA	7	0.39%
CO	5	0.28%
CT	6	0.33%
DC	9	0.50%
DE	9	0.50%
FL	25	1.39%
GA	17	0.94%
HI	1	0.06%
ID	0	0.00%
IL	1	0.06%
IN	2	0.11%
IA	0	0.00%
KS	0	0.00%
KY	0	0.00%
LA	0	0.00%
ME	1	0.06%
MD	41	2.28%
MA	12	0.67%
MI	0	0.00%
MN	3	0.17%
MS	1	0.06%
MO	3	0.17%
MT	1	0.06%
NE	1	0.06%
NV	1	0.06%
NH	1	0.06%
NJ	15	0.83%
NM	1	0.06%
NY	34	1.89%
NC	1,256	69.78%
ND	0	0.00%
OH	18	1.00%
OK	2	0.11%
OR	2	0.11%
PA	59	3.28%
RI	0	0.00%
SC	12	0.67%
SD	0	0.00%
TN	6	0.33%
TX	7	0.39%
UT	2	0.11%
VT	2	0.11%
VA	148	8.22%
WA	0	0.00%
WV	19	1.06%
WI	2	0.11%
WY	0	0.00%
Other	66	3.67%
Total	**1,800**	**100%**

Hyde County Barrier Island Property Ownership

Number of Properties

AK
0

WA
0

OR
2

CA
7

ID
0

NV
1

MT
1

WY
0

UT
2

AZ
0

CO
5

NM
1

ND
0

SD
0

NE
1

KS
0

OK
2

TX
7

MN
3

IA
0

MO
3

AR
0

LA
0

WI
2

IL
1

MS
1

MI
0

IN
2

KY
0

TN
6

AL
2

OH
18

WV
19

GA
17

FL
25

SC
12

NC
1256

VA
148

PA
59

NY
34

MD
41

DC
9

DE
9

NJ
15

CT
6

RI
0

MA
12

VT
2

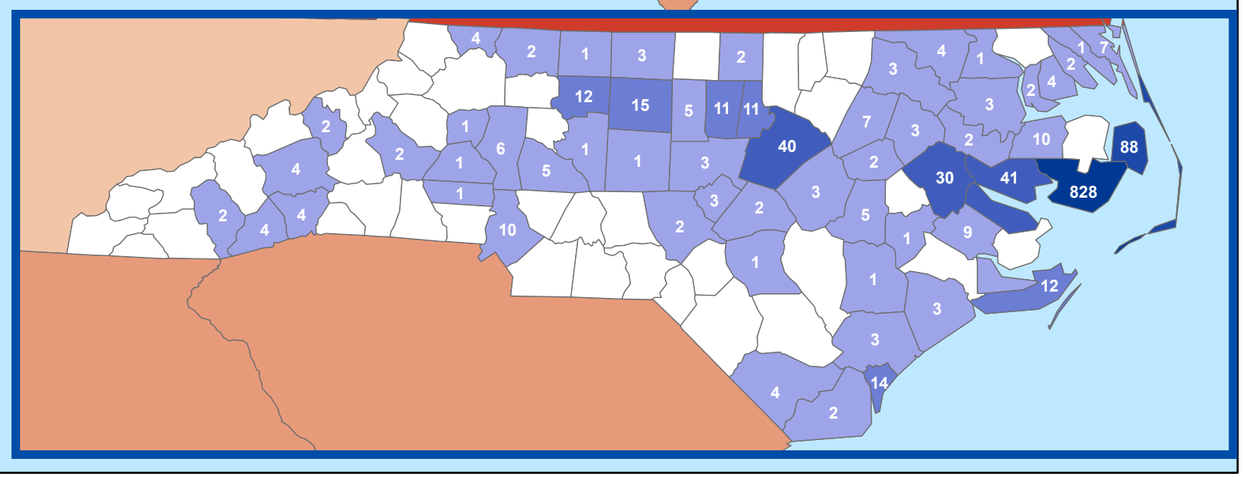
NH
1

ME
1

HI
1

Legend

US Number of Properties	NC County Number of Properties
0	0
1 - 10	1 - 10
11 - 25	11 - 25
26 - 50	26 - 50
51 - 150	51 - 100
151 - 1256	101 - 828



Hyde County Barrier Island Property Ownership

Percent of Properties

AK
0

WA
0

OR
0.11

CA
0.39

ID
0

NV
0.06

MT
0.06

WY
0

UT
0.11

AZ
0

CO
0.28

NM
0.06

ND
0

SD
0

NE
0.06

KS
0

OK
0.11

TX
0.39

MN
0.17

IA
0

MO
0.17

AR
0

LA
0

WI
0.11

IL
0.06

MS
0.06

MI
0

IN
0.11

KY
0

TN
0.33

AL
0.11

OH
1

WV
1.06

VA
8.22

NC
69.78

SC
0.67

GA
0.94

FL
1.39

PA
3.28

NY
1.89

VT
0.11

NH
0.06

ME
0.06

MA
0.67

CT
0.33

RI
0

NJ
0.83

MD
2.28

DE
0.5

HI
0.06

Legend

US Percent of Properties

- 0
- 0.01 - 1.00
- 1.01 - 10.00
- 10.01 - 25.00
- 25.01 - 50.00
- 50.01 - 100.00

NC County Percent of Properties

- 0
- 0.01 - 1.00
- 1.01 - 10.00
- 10.01 - 25.00
- 25.01 - 50.00
- 50.01 - 100.00

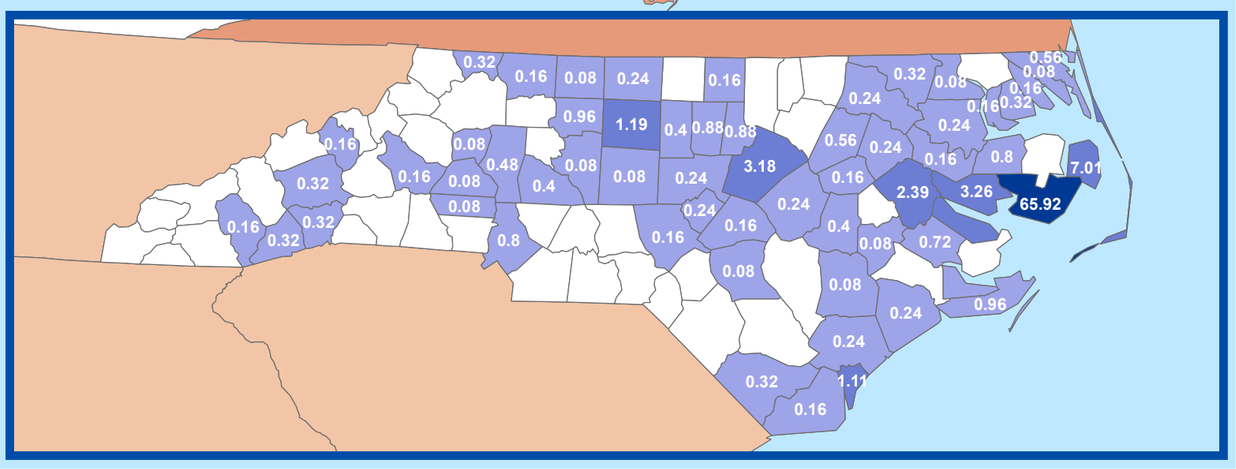


Table 19. Dare County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Dare County	2,183	42.27%
Remainder of 8 Oceanfront NC Counties	97	1.88%
Non-Oceanfront NC County	414	8.02%
Remainder of United States	2,465	47.73%
Other/Unknown	5	0.10%
TOTAL	**5,164**	**100%**

Table 20. Dare County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	1	0.04%
Alexander	0	0.00%
Alleghany	0	0.00%
Anson	0	0.00%
Ashe	0	0.00%
Avery	0	0.00%
Beaufort	2	0.07%
Bertie	4	0.15%
Bladen	0	0.00%
Brunswick	0	0.00%
Buncombe	4	0.15%
Burke	1	0.04%
Cabarrus	3	0.11%
Caldwell	0	0.00%
Camden	13	0.48%
Carteret	0	0.00%
Caswell	1	0.04%
Catawba	1	0.04%
Chatham	0	0.00%
Cherokee	0	0.00%
Chowan	12	0.45%
Clay	0	0.00%
Cleveland	0	0.00%
Columbus	1	0.04%
Craven	3	0.11%
Cumberland	0	0.00%
Currituck	88	3.27%
Dare	2,183	81.03%
Davidson	3	0.11%
Davie	0	0.00%
Duplin	0	0.00%
Durham	43	1.60%
Edgecombe	0	0.00%
Forsyth	5	0.19%
Franklin	1	0.04%
Gaston	1	0.04%
Gates	5	0.19%
Graham	0	0.00%
Granville	3	0.11%
Greene	1	0.04%
Guilford	12	0.45%
Halifax	2	0.07%
Harnett	0	0.00%
Haywood	0	0.00%
Henderson	0	0.00%
Hertford	15	0.56%
Hoke	0	0.00%
Hyde	2	0.07%
Iredell	3	0.11%
Jackson	0	0.00%

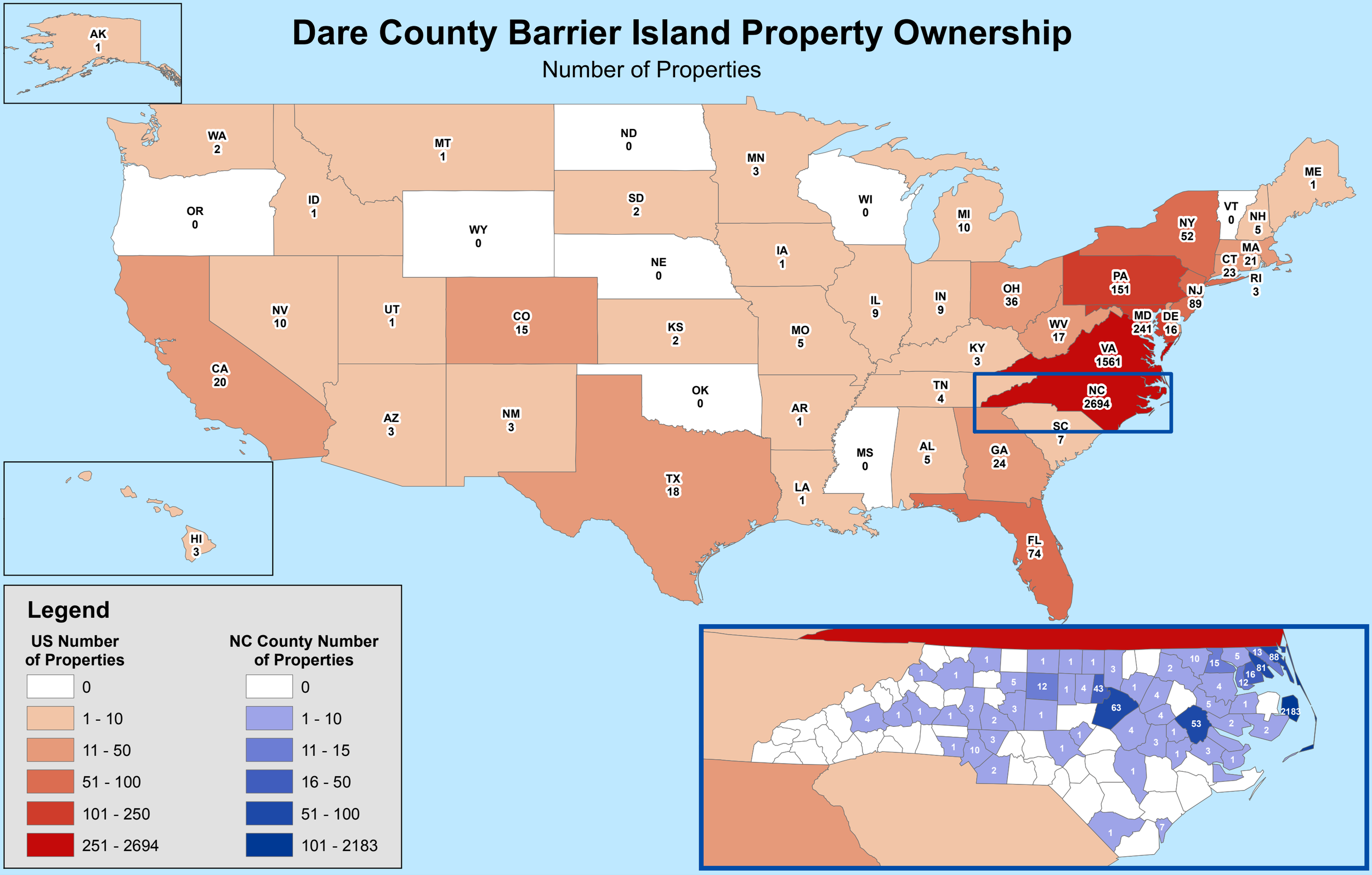
NC County	# Properties	Percent
Johnston	4	0.15%
Jones	0	0.00%
Lee	1	0.04%
Lenoir	1	0.04%
Lincoln	0	0.00%
McDowell	1	0.04%
Macon	0	0.00%
Madison	0	0.00%
Martin	5	0.19%
Mecklenburg	10	0.37%
Mitchell	0	0.00%
Montgomery	0	0.00%
Moore	1	0.04%
Nash	4	0.15%
New Hanover	7	0.26%
Northampton	10	0.37%
Onslow	0	0.00%
Orange	4	0.15%
Pamlico	1	0.04%
Pasquotank	81	3.01%
Pender	0	0.00%
Perquimans	16	0.59%
Person	1	0.04%
Pitt	53	1.97%
Polk	0	0.00%
Randolph	1	0.04%
Richmond	0	0.00%
Robeson	0	0.00%
Rockingham	1	0.04%
Rowan	2	0.07%
Rutherford	0	0.00%
Sampson	1	0.04%
Scotland	0	0.00%
Stanly	0	0.00%
Stokes	0	0.00%
Surry	1	0.04%
Swain	0	0.00%
Transylvania	0	0.00%
Tyrrell	0	0.00%
Union	2	0.07%
Vance	0	0.00%
Wake	63	2.34%
Warren	0	0.00%
Washington	1	0.04%
Watauga	1	0.04%
Wayne	3	0.11%
Wilkes	1	0.04%
Wilson	4	0.15%
Yadkin	0	0.00%
Yancey	0	0.00%
Total	**2,694**	**100%**

Table 21. Dare County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	5	0.10%
AK	1	0.02%
AZ	3	0.06%
AR	1	0.02%
CA	20	0.39%
CO	15	0.29%
CT	23	0.45%
DC	11	0.21%
DE	16	0.31%
FL	74	1.43%
GA	24	0.46%
HI	3	0.06%
ID	1	0.02%
IL	9	0.17%
IN	9	0.17%
IA	1	0.02%
KS	2	0.04%
KY	3	0.06%
LA	1	0.02%
ME	1	0.02%
MD	241	4.67%
MA	21	0.41%
MI	10	0.19%
MN	3	0.06%
MS	0	0.00%
MO	5	0.10%
MT	1	0.02%
NE	0	0.00%
NV	10	0.19%
NH	5	0.10%
NJ	89	1.72%
NM	3	0.06%
NY	52	1.01%
NC	2,694	52.17%
ND	0	0.00%
OH	36	0.70%
OK	0	0.00%
OR	0	0.00%
PA	151	2.92%
RI	3	0.06%
SC	7	0.14%
SD	2	0.04%
TN	4	0.08%
TX	18	0.35%
UT	1	0.02%
VT	0	0.00%
VA	1,561	30.23%
WA	2	0.04%
WV	17	0.33%
WI	0	0.00%
WY	0	0.00%
Other	5	0.10%
Total	**5,164**	**100%**

Dare County Barrier Island Property Ownership

Number of Properties



Legend

US Number of Properties	NC County Number of Properties
0	0
1 - 10	1 - 10
11 - 50	11 - 15
51 - 100	16 - 50
101 - 250	51 - 100
251 - 2694	101 - 2183

Dare County Barrier Island Property Ownership

Percent of Properties

AK 0.02

WA 0.04
OR 0
CA 0.39
ID 0.02
NV 0.19
MT 0.02
WY 0
UT 0.02
AZ 0.06
CO 0.29
NM 0.06
ND 0
SD 0.04
NE 0
KS 0.04
OK 0
TX 0.35
MN 0.06
IA 0.02
MO 0.1
AR 0.02
LA 0.02
WI 0
IL 0.17
MS 0
MI 0.19
IN 0.17
KY 0.06
TN 0.08
AL 0.1
OH 0.7
WV 0.33
VA 30.23
NC 52.17
SC 0.14
GA 0.46
FL 1.43
PA 2.92
NY 1.01
VT 0
NH 0.1
ME 0.02
MA 0.41
CT 0.45
RI 0.06
NJ 1.72
MD 4.67
DE 0.31

HI 0.06

Legend

US Percent of Properties	NC County Percent of Properties
0	0
0.01 - 1.00	0.01 - 1.00
1.01 - 10.00	1.01 - 10.00
10.01 - 25.00	10.01 - 25.00
25.01 - 50.00	25.01 - 50.00
50.01 - 100.00	50.01 - 100.0

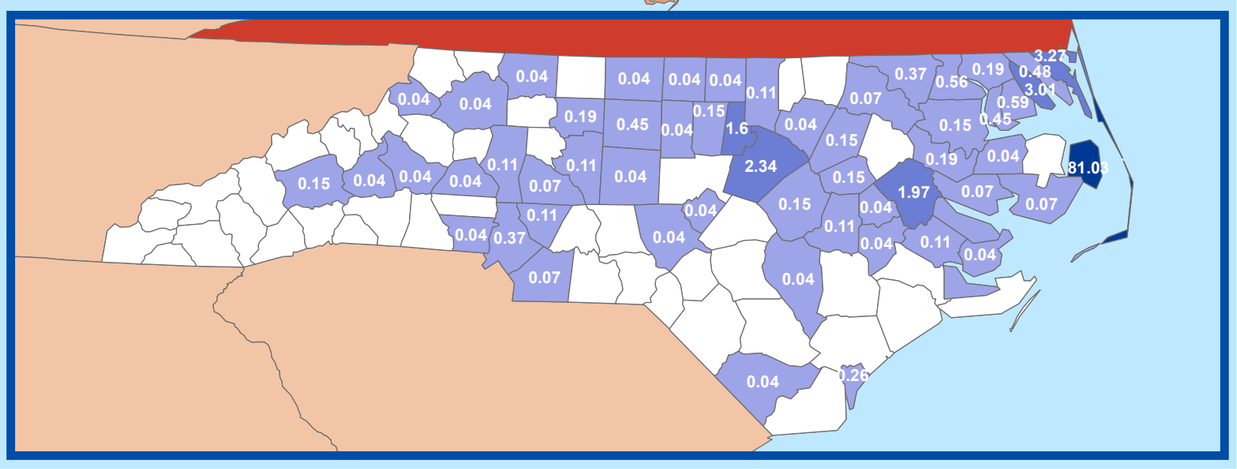


Table 22. Currituck County Barrier Island Property Ownership-Overall Summary

Location	# Properties	Percent
Currituck County	824	10.00%
Remainder of 8 Oceanfront NC Counties	367	4.45%
Non-Oceanfront NC County	336	4.08%
Remainder of United States	6,695	81.21%
Other/Unknown	22	0.27%
TOTAL	**8,244**	**100%**

Table 23. Currituck County Barrier Island Property Ownership- NC County Summary

NC County	# Properties	Percent
Alamance	4	0.26%
Alexander	0	0.00%
Alleghany	0	0.00%
Anson	0	0.00%
Ashe	0	0.00%
Avery	0	0.00%
Beaufort	5	0.33%
Bertie	4	0.26%
Bladen	0	0.00%
Brunswick	4	0.26%
Buncombe	5	0.33%
Burke	0	0.00%
Cabarrus	2	0.13%
Caldwell	0	0.00%
Camden	5	0.33%
Carteret	4	0.26%
Caswell	0	0.00%
Catawba	3	0.20%
Chatham	4	0.26%
Cherokee	0	0.00%
Chowan	5	0.33%
Clay	0	0.00%
Cleveland	0	0.00%
Columbus	0	0.00%
Craven	5	0.33%
Cumberland	3	0.20%
Currituck	824	53.96%
Dare	349	22.86%
Davidson	1	0.07%
Davie	0	0.00%
Duplin	1	0.07%
Durham	2	0.13%
Edgecombe	0	0.00%
Forsyth	26	1.70%
Franklin	1	0.07%
Gaston	3	0.20%
Gates	3	0.20%
Graham	0	0.00%
Granville	2	0.13%
Greene	0	0.00%
Guilford	14	0.92%
Halifax	3	0.20%
Harnett	1	0.07%
Haywood	1	0.07%
Henderson	1	0.07%
Hertford	4	0.26%
Hoke	0	0.00%
Hyde	1	0.07%
Iredell	6	0.39%
Jackson	0	0.00%

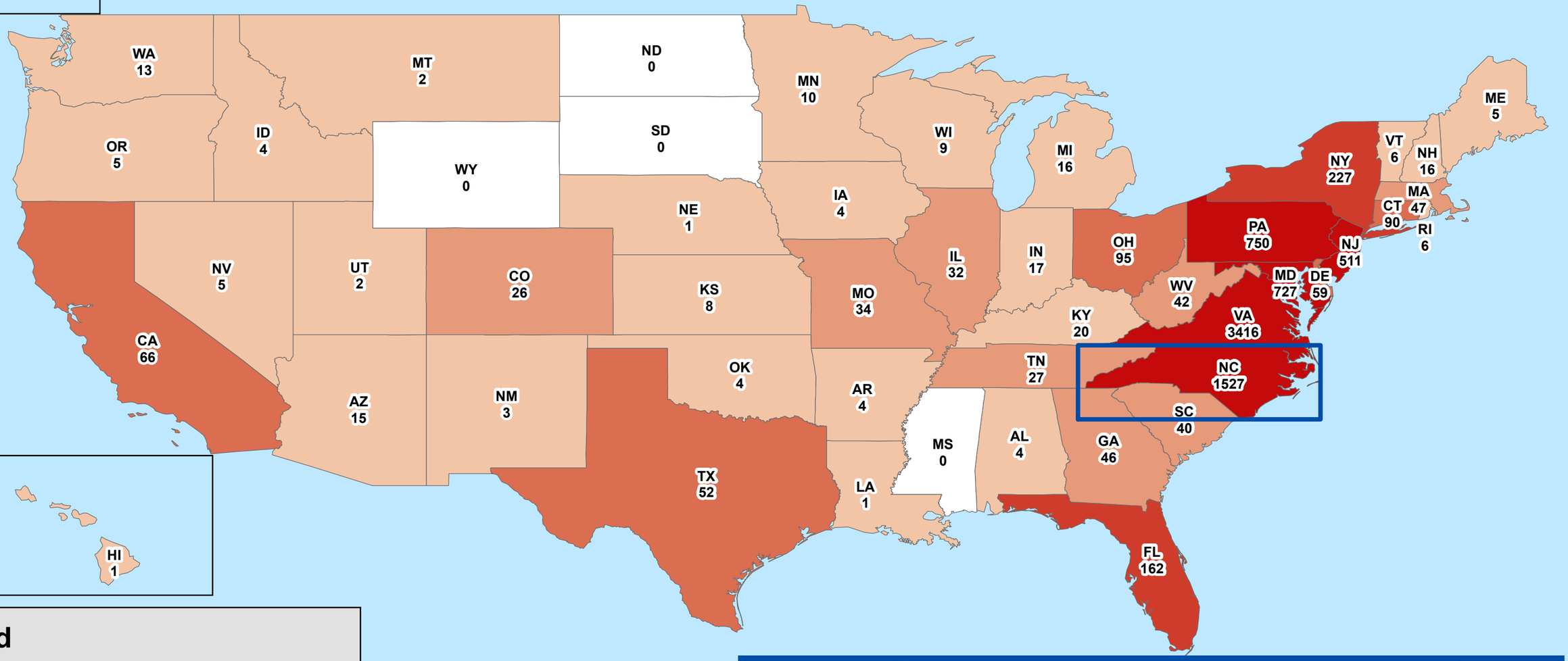
NC County	# Properties	Percent
Johnston	1	0.07%
Jones	0	0.00%
Lee	0	0.00%
Lenoir	0	0.00%
Lincoln	0	0.00%
McDowell	0	0.00%
Macon	0	0.00%
Madison	0	0.00%
Martin	1	0.07%
Mecklenburg	12	0.79%
Mitchell	0	0.00%
Montgomery	0	0.00%
Moore	4	0.26%
Nash	26	1.70%
New Hanover	7	0.46%
Northampton	1	0.07%
Onslow	1	0.07%
Orange	30	1.96%
Pamlico	0	0.00%
Pasquotank	20	1.31%
Pender	1	0.07%
Perquimans	7	0.46%
Person	1	0.07%
Pitt	10	0.65%
Polk	0	0.00%
Randolph	1	0.07%
Richmond	0	0.00%
Robeson	0	0.00%
Rockingham	0	0.00%
Rowan	3	0.20%
Rutherford	0	0.00%
Sampson	1	0.07%
Scotland	0	0.00%
Stanly	0	0.00%
Stokes	0	0.00%
Surry	3	0.20%
Swain	3	0.20%
Transylvania	0	0.00%
Tyrrell	0	0.00%
Union	3	0.20%
Vance	0	0.00%
Wake	89	5.83%
Warren	0	0.00%
Washington	2	0.13%
Watauga	2	0.13%
Wayne	1	0.07%
Wilkes	0	0.00%
Wilson	1	0.07%
Yadkin	0	0.00%
Yancey	0	0.00%
Total	**1,527**	**100%**

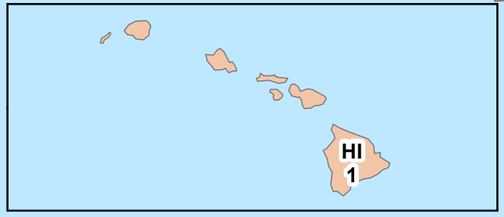
Table 24. Currituck County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	4	0.05%
AK	2	0.02%
AZ	15	0.18%
AR	4	0.05%
CA	66	0.80%
CO	26	0.32%
CT	90	1.09%
DC	63	0.76%
DE	59	0.72%
FL	162	1.97%
GA	46	0.56%
HI	1	0.01%
ID	4	0.05%
IL	32	0.39%
IN	17	0.21%
IA	4	0.05%
KS	8	0.10%
KY	20	0.24%
LA	1	0.01%
ME	5	0.06%
MD	727	8.82%
MA	47	0.57%
MI	16	0.19%
MN	10	0.12%
MS	0	0.00%
MO	34	0.41%
MT	2	0.02%
NE	1	0.01%
NV	5	0.06%
NH	16	0.19%
NJ	511	6.20%
NM	3	0.04%
NY	227	2.75%
NC	1,527	18.52%
ND	0	0.00%
OH	95	1.15%
OK	4	0.05%
OR	5	0.06%
PA	750	9.10%
RI	6	0.07%
SC	40	0.49%
SD	0	0.00%
TN	27	0.33%
TX	52	0.63%
UT	2	0.02%
VT	6	0.07%
VA	3,416	41.44%
WA	13	0.16%
WV	42	0.51%
WI	9	0.11%
WY	0	0.00%
Other	22	0.27%
Total	**8,244**	**100%**

Currituck County Barrier Island Property Ownership

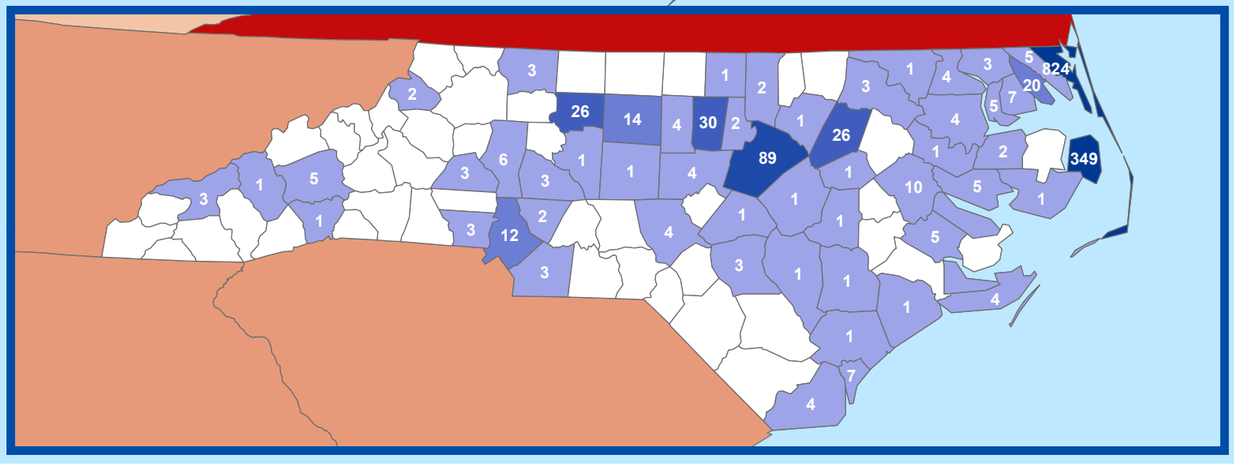
Number of Properties





Legend

US Number of Properties	NC County Number of Properties
0	0
1 - 25	1 - 10
26 - 50	11 - 25
51 - 100	26 - 50
101 - 500	51 - 100
501 - 3416	101 - 824



Currituck County Barrier Island Property Ownership

Percent of Properties

AK 0.02

WA 0.16

OR 0.06

CA 0.8

ID 0.05

NV 0.06

MT 0.02

WY 0

UT 0.02

AZ 0.18

CO 0.32

NM 0.04

ND 0

SD 0

NE 0.01

KS 0.1

OK 0.05

TX 0.63

MN 0.12

IA 0.05

MO 0.41

AR 0.05

LA 0.01

WI 0.11

IL 0.39

MI 0.19

IN 0.21

OH 1.15

KY 0.24

TN 0.33

MS 0

AL 0.05

GA 0.56

FL 1.97

SC 0.49

NC 18.52

VA 41.44

WV 0.51

PA 9.1

NY 2.75

MD 8.82

DE 0.72

NJ 6.2

CT 1.09

RI 0.07

MA 0.57

VT 0.07

NH 0.19

ME 0.06

HI 0.01

Legend

US Percent of Properties	NC County Percent of Properties
0	0
0.01 - 1.00	0.01 - 1.00
1.01 - 10.00	1.01 - 10.00
10.01 - 25.00	10.01 - 25.00
25.01 - 50.00	25.01 - 50.00
50.01 - 100.00	50.01 - 100.00

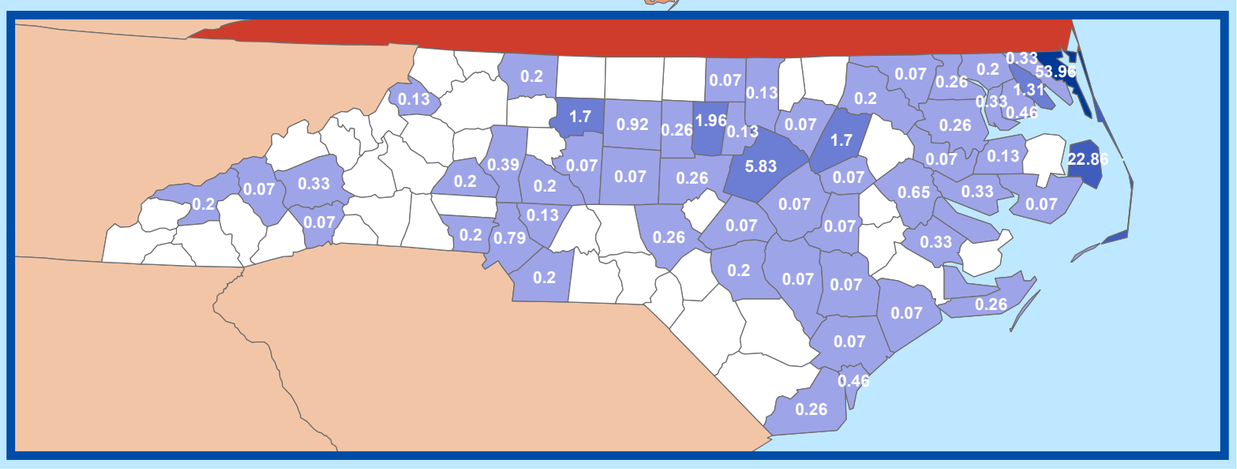


Table 25. All Oceanfront NC County Barrier Island Property Ownership-Overall Summary

		Brunswick	New Hanover	Pender	Onslow	Carteret	Hyde	Dare	Currituck	Total
Oceanfront NC County	# properties	6,371	6,784	1,265	907	4,425	828	2,183	824	**23,587**
	%	27.66%	47.78%	24.74%	18.46%	27.45%	46.00%	42.27%	10.00%	**30.01%**
Remainder 8 Oceanfront NC	# properties	581	158	436	452	326	129	97	367	**2,546**
	%	2.52%	1.11%	8.53%	9.20%	2.02%	7.17%	1.88%	4.45%	**3.24%**
Non-Oceanfront NC County	# properties	11,036	4,902	2,442	2,049	8,747	299	414	336	**30,225**
	%	47.91%	34.52%	47.75%	41.71%	54.26%	16.61%	8.02%	4.08%	**38.46%**
Remainder United States	# properties	4,991	2,341	965	1,466	2,581	478	2,465	6,695	**21,982**
	%	21.67%	16.49%	18.87%	29.85%	16.01%	26.56%	47.73%	81.21%	**27.97%**
Other/Unkown	# properties	55	14	6	38	43	66	5	22	**249**
	%	0.24%	0.10%	0.12%	0.77%	0.27%	3.67%	0.10%	0.27%	**0.32%**
Total	**# properties**	**23,034**	**14,199**	**5,114**	**4,912**	**16,122**	**1,800**	**5,164**	**8,244**	**78,589**
	%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 26. All Oceanfront NC County Barrier Island Property Ownership-NC County Summary

NC County	# Properties	Percent
Alamance	683	1.21%
Alexander	35	0.06%
Alleghany	13	0.02%
Anson	48	0.09%
Ashe	32	0.06%
Avery	15	0.03%
Beaufort	155	0.28%
Bertie	17	0.03%
Bladen	101	0.18%
Brunswick	6,491	11.52%
Buncombe	148	0.26%
Burke	79	0.14%
Cabarrus	302	0.54%
Caldwell	110	0.20%
Camden	21	0.04%
Carteret	4,472	7.93%
Caswell	26	0.05%
Catawba	262	0.46%
Chatham	156	0.28%
Cherokee	2	0.00%
Chowan	27	0.05%
Clay	0	0.00%
Cleveland	60	0.11%
Columbus	234	0.42%
Craven	434	0.77%
Cumberland	948	1.68%
Currituck	921	1.63%
Dare	2,637	4.68%
Davidson	326	0.58%
Davie	113	0.20%
Duplin	351	0.62%
Durham	1,021	1.81%
Edgecombe	116	0.21%
Forsyth	1,218	2.16%
Franklin	138	0.24%
Gaston	371	0.66%
Gates	8	0.01%
Graham	0	0.00%
Granville	106	0.19%
Greene	64	0.11%
Guilford	2,007	3.56%
Halifax	83	0.15%
Harnett	386	0.68%
Haywood	26	0.05%
Henderson	33	0.06%
Hertford	42	0.07%
Hoke	42	0.07%
Hyde	836	1.48%
Iredell	348	0.62%
Jackson	12	0.02%

NC County	# Properties	Percent
Johnston	739	1.31%
Jones	24	0.04%
Lee	259	0.46%
Lenoir	381	0.68%
Lincoln	185	0.33%
McDowell	19	0.03%
Macon	3	0.01%
Madison	10	0.02%
Martin	66	0.12%
Mecklenburg	2,047	3.63%
Mitchell	3	0.01%
Montgomery	60	0.11%
Moore	400	0.71%
Nash	470	0.83%
New Hanover	7,955	14.12%
Northampton	27	0.05%
Onslow	1,244	2.21%
Orange	1,124	1.99%
Pamlico	27	0.05%
Pasquotank	111	0.20%
Pender	1,577	2.80%
Perquimans	28	0.05%
Person	70	0.12%
Pitt	1,067	1.89%
Polk	2	0.00%
Randolph	399	0.71%
Richmond	66	0.12%
Robeson	244	0.43%
Rockingham	186	0.33%
Rowan	357	0.63%
Rutherford	40	0.07%
Sampson	297	0.53%
Scotland	97	0.17%
Stanly	153	0.27%
Stokes	82	0.15%
Surry	108	0.19%
Swain	7	0.01%
Transylvania	22	0.04%
Tyrrell	0	0.00%
Union	456	0.81%
Vance	93	0.17%
Wake	8,305	14.74%
Warren	8	0.01%
Washington	19	0.03%
Watauga	66	0.12%
Wayne	685	1.22%
Wilkes	61	0.11%
Wilson	548	0.97%
Yadkin	75	0.13%
Yancey	10	0.02%
Total	**56,358**	**100%**

Table 27. All Oceanfront NC County Barrier Island Property Ownership-US Summary

State	# Properties	Percent
AL	57	0.07%
AK	13	0.02%
AZ	89	0.11%
AR	25	0.03%
CA	419	0.53%
CO	185	0.24%
CT	379	0.48%
DC	147	0.19%
DE	144	0.18%
FL	826	1.05%
GA	650	0.83%
HI	25	0.03%
ID	14	0.02%
IL	204	0.26%
IN	146	0.19%
IA	43	0.05%
KS	42	0.05%
KY	129	0.16%
LA	27	0.03%
ME	29	0.04%
MD	1,876	2.39%
MA	286	0.36%
MI	158	0.20%
MN	66	0.08%
MS	14	0.02%
MO	93	0.12%
MT	12	0.02%
NE	13	0.02%
NV	50	0.06%
NH	94	0.12%
NJ	1,243	1.58%
NM	33	0.04%
NY	1,143	1.45%
NC	56,358	71.71%
ND	5	0.01%
OH	748	0.95%
OK	26	0.03%
OR	29	0.04%
PA	1,974	2.51%
RI	36	0.05%
SC	1,466	1.87%
SD	11	0.01%
TN	263	0.33%
TX	364	0.46%
UT	23	0.03%
VT	22	0.03%
VA	7,856	10.00%
WA	65	0.08%
WV	324	0.41%
WI	61	0.08%
WY	35	0.04%
Other	249	0.32%
Total	**78,589**	**100%**

All Oceanfront NC County Barrier Island Property Ownership

Number of Properties

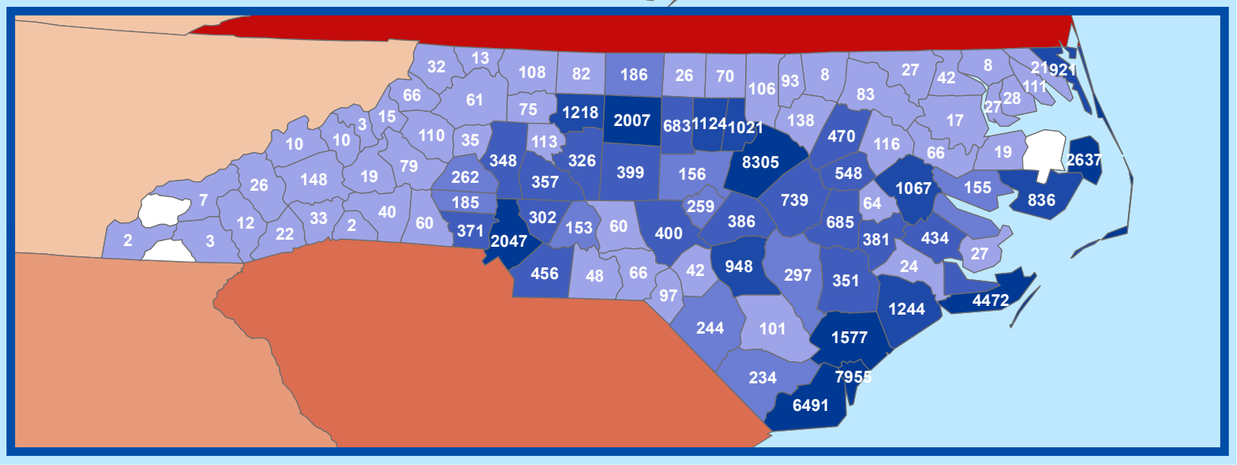
AK 13

WA 65
OR 29
CA 419
ID 14
NV 50
MT 12
WY 35
UT 23
AZ 89
CO 185
NM 33
ND 5
SD 11
NE 13
KS 42
OK 26
TX 364
MN 66
IA 43
MO 93
AR 25
LA 27
WI 61
IL 204
MI 158
IN 146
OH 748
KY 129
TN 263
MS 14
AL 57
GA 650
FL 826
SC 1466
NC 56358
VA 7856
WV 324
PA 1974
NY 1143
MD 1876
DE 144
NJ 1243
CT 379
RI 36
MA 286
VT 22
NH 94
ME 29

HI 25

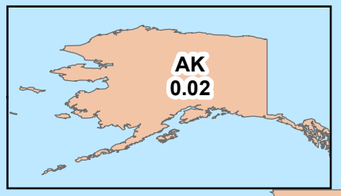
Legend

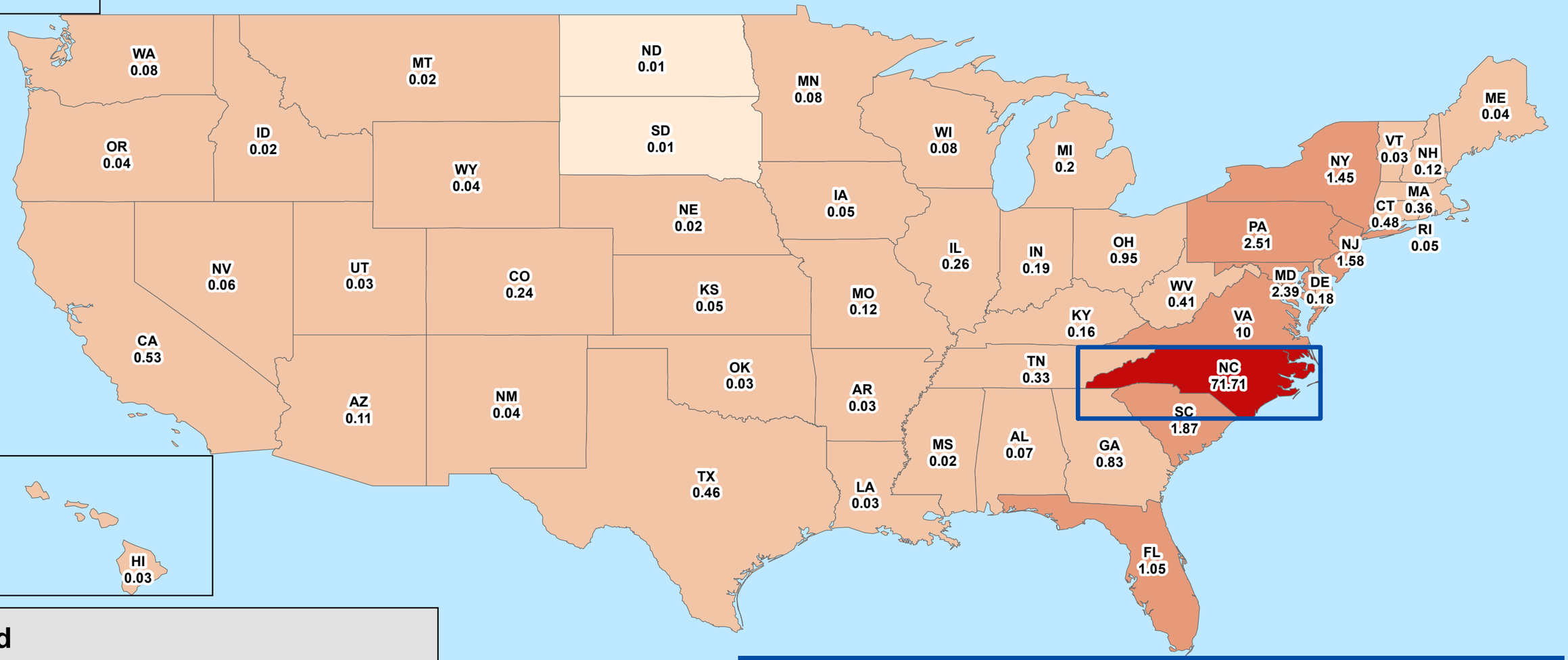
US Number of Properties	NC County Number of Properties
5 - 50	0
51 - 150	1 - 150
151 - 500	151 - 300
501 - 1000	301 - 750
1001 - 2500	751 - 1500
2501 - 56358	1501 - 8305

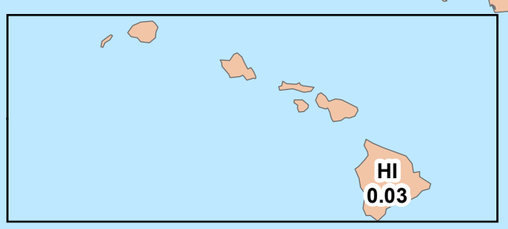


All Oceanfront NC County Barrier Island Property Ownership

Percent of Properties







Legend

US Percent of Properties	NC County Percent of Properties
0.01	0
0.11 - 1.00	0.01 - 1.0
1.01 - 10.00	1.01 - 10.00
10.01 - 25.00	10.01 - 25.00
25.01 - 50.00	25.01 - 50.00
50.01 - 100.00	50.01 - 100.00