

2011

Summary Tables: City of Hampton, Virginia Shoreline Inventory Report

Marcia Berman

Virginia Institute of Marine Science

Harry Berquist

Virginia Institute of Marine Science

Sharon Killeen

Virginia Institute of Marine Science

Carl Hershner


Virginia Institute of Marine Science

Karina Nunez

Virginia Institute of Marine Science

See next page for additional authors

Follow this and additional works at: <https://publish.wm.edu/reports>

 Part of the [Environmental Indicators and Impact Assessment Commons](#), [Natural Resources Management and Policy Commons](#), and the [Water Resource Management Commons](#)

Recommended Citation

Berman, M.R., Berquist, H., Killeen, S., Hershner, C., Nunez, K., Reay, K., Rudnick, T., 2011. City of Hampton, Virginia - Shoreline Inventory Report, Comprehensive Coastal Inventory Program, Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, Virginia, 23062

This Report is brought to you for free and open access by W&M Publish. It has been accepted for inclusion in Reports by an authorized administrator of W&M Publish. For more information, please contact wmpublish@wm.edu.

Authors

Marcia Berman, Harry Berquist, Sharon Killeen, Carl Hershner, Karinna Nunez, Karen Reay, and Tamia Rudnicky

Table 4. City of Hampton, Virginia Shoreline Attributes - Riparian Land Use - River System Summary

CITY OF HAMPTON RIVER SYSTEM	TOTAL MILES SURVEYED	RIPARIAN LAND USE (miles)																													
		AGRICULTURE				BARE				COMMERCIAL				FOREST			GRASS				INDUSTRIAL				MARSH ISLAND						
		no tree buffer	tree fringe only	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total	no canopy over-hang	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total			
Back River	9.16	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.83	1.44	0.03	0.00	1.47	1.37	0.00	1.37	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.46
Chesapeake Bay	9.51	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.83	0.14	0.00	0.00	0.14	0.00	0.00	0.00	0.60	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	
Hampton River	21.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76	0.23	0.05	3.04	0.83	0.35	1.18	0.89	0.53	0.30	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Hampton Roads	12.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.66	0.00	0.02	2.68	0.23	0.00	0.23	2.03	0.09	0.00	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.09	
Harris River	16.96	0.00	0.43	0.00	0.43	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.24	4.80	0.00	4.80	0.22	0.44	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.09		
Long Creek	14.67	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.17	0.00	0.00	0.00	0.00	3.48	0.03	3.51	0.30	0.02	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.38		
Mill Creek	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.34	0.12	0.00	0.12	2.05	0.03	0.00	2.08	0.00	0.00	0.00	0.00	0.00	3.24	0.00	0.00	3.24		
Northwest Branch																															
Back River	10.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	1.30	4.89	0.00	4.89	1.18	0.00	0.00	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Salt Ponds	10.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.12	0.09	0.00	0.09	0.06	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	3.40	0.00	0.00	3.40		
Southeast Branch																															
Back River	41.20	0.00	0.00	0.00	0.00	0.03	0.23	0.00	0.26	1.83	0.26	0.04	2.13	6.56	1.67	8.23	4.78	1.11	0.40	6.29	0.00	0.13	0.00	0.13	2.91	0.00	0.00	2.91			
Total	157.54	0.00	0.43	0.00	0.43	1.86	0.23	0.00	2.09	10.83	0.52	0.11	11.46	22.37	2.05	24.42	12.31	2.22	0.70	15.23	0.00	0.13	0.00	0.13	10.62	0.00	0.00	10.62			

Table 4. City of Hampton, Virginia Shoreline Attributes - Riparian Land Use - River System Summary (con't)

CITY OF HAMPTON RIVER SYSTEM	TOTAL MILES SURVEYED	RIPARIAN LAND USE (miles)											
		PAVED				RESIDENTIAL				SCRUB-SHRUB			
		no tree buffer	tree fringe only	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total	no tree buffer	tree fringe only	canopy over-hang	total
Back River	9.16	0.89	0.00	0.00	0.89	0.59	0.47	0.00	1.06	2.88	0.00	0.00	2.88
Chesapeake Bay	9.51	2.49	0.00	0.00	2.49	2.41	0.00	0.00	2.41	3.01	0.00	0.00	3.01
Hampton River	21.93	0.90	0.43	0.02	1.35	8.88	3.61	1.66	14.15	0.39	0.05	0.05	0.49
Hampton Roads	12.74	2.18	0.01	0.07	2.26	4.52	0.64	0.06	5.22	0.13	0.00	0.00	0.13
Harris River	16.96	0.60	0.03	0.00	0.63	4.99	2.56	0.00	7.55	2.49	0.07	0.00	2.56
Long Creek	14.67	0.13	0.00	0.00	0.13	2.03	0.80	0.01	2.84	7.14	0.00	0.18	7.32
Mill Creek	11.04	1.57	0.04	0.00	1.61	2.45	0.13	0.00	2.58	1.06	0.00	0.00	1.06
Northwest Branch													
Back River	10.31	0.36	0.00	0.00	0.36	0.52	0.00	0.00	0.52	2.06	0.00	0.00	2.06
Salt Ponds	10.02	0.24	0.00	0.00	0.24	3.65	0.45	0.00	4.10	2.01	0.00	0.00	2.01
Southeast Branch													
Back River	41.20	3.78	1.05	0.00	4.83	7.90	2.44	0.28	10.62	5.69	0.10	0.00	5.79
Total	157.54	13.14	1.56	0.09	14.79	37.94	11.10	2.01	51.05	26.86	0.22	0.23	27.31

Table 5. City of Hampton, Virginia Shoreline Attributes - Riparian Bank Condition - River System Summary

CITY OF HAMPTON RIVER SYSTEM	TOTAL MILES SURVEYED	BANK (bank height and erosion status - miles of shore)																							
		0-5 FEET						5-10 FEET						10-30 FEET						>30 FEET					
		erosional	erosional undercut	stable	stable undercut	transitional	transitional undercut	erosional	erosional undercut	stable	stable undercut	transitional	transitional undercut	erosional	erosional undercut	stable	stable undercut	transitional	transitional undercut	erosional	erosional undercut	stable	stable undercut	transitional	transitional undercut
Back River	9.16	0.00	0.00	8.17	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chesapeake Bay	9.51	2.82	0.00	1.64	0.00	5.02	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hampton River	21.93	0.00	0.04	21.22	0.00	0.24	0.19	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hampton Roads	12.74	0.08	0.01	11.03	0.00	0.11	0.00	0.00	0.00	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harris River	16.96	0.09	0.02	16.75	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long Creek	14.67	0.10	0.23	14.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mill Creek	11.04	0.00	0.01	10.27	0.00	0.26	0.03	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northwest Branch																									
Back River	10.31	0.00	0.00	9.71	0.00	0.08	0.02	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Ponds	10.02	0.24	0.00	9.32	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southeast Branch																									
Back River	41.20	0.42	0.47	39.63	0.04	0.03	0.02	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	157.54	3.75	0.78	142.07	0.04	5.77	0.26	0.00	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 6. City of Hampton, Virginia Shoreline Attributes - Riparian Buffer Condition, *Phragmites australis* and Survey Dates - River System Summary

CITY OF HAMPTON RIVER SYSTEM	TOTAL MILES SURVEYED	BANK COVER (miles)											PHRAGMITES (miles)	MILES REMOTELY SURVEYED	FIELD SURVEY DATES
		BANK COVER			BEACH	NATURAL BUFFER (miles)									
		bare	partial	full		embayed	extensive	fringe <5	fringe 5-10	fringe 10-15	fringe >15	marsh island			
Back River	9.16	0.00	0.00	9.16	1.53	0.31	1.15	1.01	0.58	0.49	2.21	0.46	2.79	1.10	August 20, 25, & 31, 2010
Chesapeake Bay	9.51	0.03	1.28	8.20	8.57	0.00	1.95	0.73	0.00	0.00	0.67	0.05	1.67	5.02	August 31, 2010 and October 11, 2010
Hampton River	21.93	0.00	0.05	21.88	0.00	0.07	0.04	5.61	0.85	0.59	0.93	0.00	1.59	4.59	September 2 & 7, 2010
Hampton Roads	12.74	0.01	0.02	12.71	0.99	0.81	0.00	0.48	0.02	0.00	0.00	0.09	0.00	8.33	September 2 & 9, 2010
Harris River	16.96	0.08	0.00	16.88	0.00	0.70	2.32	3.71	1.75	1.44	4.68	0.09	5.44	3.14	August 25, 2010
Long Creek	14.67	0.00	0.29	14.38	0.17	0.00	7.02	1.07	0.31	0.50	3.39	0.38	1.76	2.55	August 31, 2010 and October 11, 2010
Mill Creek	11.04	0.00	0.29	10.75	0.11	0.20	0.23	3.60	0.43	0.11	0.50	3.24	1.23	0.39	September 9, 2010
Northwest Branch															
Back River	10.31	0.08	0.15	10.08	0.00	0.00	7.36	1.16	0.33	0.05	0.82	0.00	3.69	0.00	August 16, 2010
Salt Ponds	10.02	0.00	0.00	10.02	0.30	0.00	2.33	1.24	0.23	0.15	1.53	3.40	5.48	2.07	October 11, 2010
Southeast Branch															
Back River	41.20	0.02	0.21	40.97	0.15	0.48	4.84	9.57	2.24	0.83	11.81	2.91	7.59	20.69	August 16 & 20, 2010
Total	157.54	0.22	2.29	155.03	11.82	2.57	27.24	28.18	6.74	4.16	26.54	10.62	31.24	47.88	

Table 7. City of Hampton, Virginia Shoreline Attributes - Shoreline Features - River System Summary

CITY OF HAMPTON RIVER SYSTEM	TOTAL MILES SURVEYED	SHORELINE FEATURES																		
		No. docks	No. dilapidated docks	No. boathouses	No. ramps		No. outfalls	No. groinfields	No. marinas		No. jetties	No. breakwater	Miles of debris	Miles of unconventional	Miles of bulkhead	Miles of dilapidated bulkhead	Miles of marsh toe revetment	Miles of riprap	Miles of wharf	
Back River	9.16	11	1	0	1	2	0	0	1	3	3	0	0.06	0.23	0.11	0.05	0.00	0.59	0.01	
Chesapeake Bay	9.51	2	0	0	0	0	0	1	0	0	2	2	0.00	0.00	2.18	0.00	0.00	0.60	0.00	
Hampton River	21.93	224	10	24	22	2	32	0	8	4	0	0	0.62	1.12	5.68	0.30	0.03	3.82	0.30	
Hampton Roads	12.74	52	4	3	4	0	2	7	0	2	2	2	0.47	0.13	2.64	0.26	0.00	6.40	0.14	
Harris River	16.96	86	6	11	11	0	1	0	0	1	0	0	0.00	0.67	1.05	0.00	0.00	0.86	0.00	
Long Creek	14.67	72	3	0	1	0	2	0	0	0	0	0	0.00	0.07	0.98	0.02	0.00	0.27	0.00	
Mill Creek	11.04	42	9	1	11	0	7	1	0	0	0	0	0.52	0.29	1.39	0.00	0.11	2.18	0.05	
Northwest Branch																				
Back River	10.31	1	0	0	0	0	0	0	0	0	0	0	0.04	0.00	0.01	0.01	0.00	0.76	0.00	
Salt Ponds	10.02	60	3	2	0	0	3	0	0	2	0	0	0.03	0.00	0.80	0.01	0.02	0.40	0.00	
Southeast Branch																				
Back River	41.20	129	10	3	11	3	13	1	0	1	0	0	0.13	0.34	2.43	0.06	0.06	3.76	0.00	
Total	157.54	679	46	44	61	7	60	10	9	13	7	4	1.86	2.85	17.27	1.17	0.23	19.66	0.5	