

Reports

2017

Summary Tables: City of Fredericksburg, Virginia Shoreline Inventory Report

Marcia Berman
Virginia Institute of Marine Science

Karina Nunez
Virginia Institute of Marine Science

Sharon Killeen
Virginia Institute of Marine Science

Tamia Rudnicky
Virginia Institute of Marine Science

Julie Bradshaw
Virginia Institute of Marine Science

See next page for additional authors

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

Recommended Citation

Berman, M.R., Nunez, K., Killeen, S., Rudnicky, T., Bradshaw, J., Duhring, K., Brown, K.F., Hendricks, J., Weiss, D., and Hershner, C.H. 2017. City of Fredericksburg, Virginia -Shoreline Inventory Report: Methods and Guidelines, SRAMSOEno.458. 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 ScholarWorks. It has been accepted for inclusion in Reports by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.

Authors

Marcia Berman, Karinna Nunez, Sharon Killeen, Tamia Rudnicki, Julie Bradshaw, Karen Duhring, Kallie Brown, Jessica Hendricks, David Weiss, and Carl Hershner

Table 4. City of Fredericksburg, Virginia Shoreline Attributes - Riparian Land Use (miles) - River System Summary 2017

RIVER SYSTEM	TOTAL* MILES SURVEYED	AGRICULTURE			BARE			COMMERCIAL			FOREST total	GOVERNMENT			GRASS			INDUSTRIAL			PAVED			RESIDENTIAL			SCRUB-SHRUB			TIMBERED			
		no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	no tree buffer	tree fringe	total		no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	no tree buffer	tree fringe	total	
Rappahannock River (east of Rte 1)	4	0	0	0	0	0	0	1	<1	1	1	0	0	0	<1	<1	<1	0	<1	<1	<1	1	1	<1	<1	1	0	0	0	0	0	0	0
Rappahannock River (west of Rte 1)	5	0	0	0	0	0	0	0	<1	<1	4	0	0	0	<1	<1	<1	0	0	0	<1	0	<1	<1	1	1	0	0	0	0	0	0	
Total	9	0	0	0	0	0	0	1	<1	1	5	0	0	0	<1	1	1	0	<1	<1	<1	1	1	2	0	0	0	0	0	0	0		

*Total = upland shoreline only (upland/marsh and upland/water). Does not include marsh/water shoreline.

**tree fringe: When the dominant riparian land use is not forested but a line of trees is maintained along the bank edge, the land use is noted to include a tree fringe. This tree fringe value includes tree fringe and tree fringe > 100 feet wide.

Note: Numbers have been rounded. Summing numbers across rows or down columns may not necessarily equal the exact total whole number shown.

Table 5. City of Fredericksburg, Virginia Shoreline Attributes - Riparian Bank Condition - River System Summary 2017

RIVER SYSTEM	TOTAL* MILES SURVEYED	BANK COVER (miles)			BANK HEIGHT (miles)		
		bare	partial	total	0-5 feet	5-30 feet	>30 feet
Rappahannock River (east of Rte 1)	4	<1	1	3	4	<1	0
Rappahannock River (west of Rte 1)	5	0	<1	5	4	1	0
Total	9	<1	1	8	9	1	0

*Total = upland shoreline only (upland/marsh and upland/water). Does not include marsh/water shoreline.

Note: Numbers have been rounded. Summing numbers across rows or down columns may not necessarily equal the exact total whole number shown.

Table 6. City of Fredericksburg, Virginia Shoreline Attributes - Natural Buffers, *Phragmites australis* and Marsh Survey Dates - River System Summary 2017

RIVER SYSTEM	BEACH (miles)	# Wetland Polygons		Marsh Type (acres)						MARSH Community Type ¹ (acres)												PHRAGMITES ³ (percent of field checked marshes)	MARSH SURVEY DATES		
		total	field checked	marsh	marsh island	no marsh forested	no marsh sand	no marsh scrub-shrub	total marsh	I	II	III	IV	V	VI	VII	VIII ²	IX	X	XI	XII			DNS ^{**}	
Rappahannock River (east of Rte 1)	0	4	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	DNS	DNS
Rappahannock River (west of Rte 1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	DNS	DNS
Total	0	4	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1		

**DNS = Did Not Survey

¹Community Type:

- | | |
|-------------------------------------|---|
| I = Saltmarsh Cordgrass / low marsh | VII = Arrow Arum – Pickerel Weed |
| II = Saltmeadow / high marsh | VIII = Reed Grass (<i>Phragmites australis</i>) |
| III = Black Needlerush | IX = Yellow Pond Lily |
| IV = Saltbush | X = Saltwort |
| V = Big Cordgrass | XI = Freshwater mix |
| VI = Cattail | XII = Brackish mix |

²Type VIII - Field checked marshes where *Phragmites australis* was estimated to cover >50% marsh area.

³Phragmites - percent of field checked marshes where *Phragmites australis* is present in any amount.

Table 7. City of Fredericksburg, Virginia Shoreline Attributes - Shoreline Features - River System Summary 2017

RIVER SYSTEM	TOTAL* MILES SURVEYED	Number										Miles							
		docks		boathouses		ramps		marinas		wharfs	jetties	bulkhead	dilapidated bulkhead	debris	marsh toe revetment	riprap	unconventional	breakwater	groinfields
Rappahannock River (east of Rte 1)	4	0	5	0	0	2	0	0	0	0	0	<1	0	0	0	0	0	0	0
Rappahannock River (west of Rte 1)	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	0	5	0	0	2	0	0	0	0	0	<1	0	0	0	0	0	0	0

*Total = upland shoreline only (upland/marsh and upland/water). Does not include marsh/water shoreline.

Note: Numbers have been rounded. Summing numbers across rows or down columns may not necessarily equal the exact total whole number shown.