



Virginia Coastal Zone  
MANAGEMENT PROGRAM



## Final Project Summary

Your final project summary is an important contribution to the Virginia Coastal Zone Management Program's communication efforts and will be used to produce accomplishment reports, fact sheets and **Virginia Coastal Zone Management Web Site** information.

Please submit this form electronically to: [april.bahen@deq.virginia.gov](mailto:april.bahen@deq.virginia.gov).

**YOU DO NOT NEED TO SUBMIT A HARD COPY**

NOAA Grant #:	NA17NOS4190152	Grant Year:	2017	Task #:	92.01
Agency/Locality:	VA Institute of Marine Science				
Project Title:	Coastal Resiliency and Shoreline Management - Adaptive Management for Resilient Communities				
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**PROJECT SUMMARY:** Please confine your summary to the space provided below. Remember to:

- write for the public
- do not use first person
- include an abstract of project results
- provide a brief description, and titles, of publication(s) and/or dataset(s) produced
- describe how products will be distributed and if available on-line, please give the **Web address!**

With the shift in management priorities at local levels towards coastal resiliency, baseline data remains the backbone for the recent development of resiliency tools now populating the Virginia coastal resiliency atlas known as AdaptVA (<http://adaptva.org>). This one stop shop addressing all issues surrounding coastal adaptation and resiliency, is the gateway to geo-spatial models and tools developed to encourage the use of nature based solutions, support flood risk management in the Commonwealth, and address physical and social vulnerability within Tidewater communities. The need for up-to-date, accurate baseline data pertaining to shoreline condition remains a critical priority. To that end, this project has funded shoreline data that describes conditions along tidal shoreline, and contributes to the Virginia Shoreline Inventory and Tidal Marsh Inventory. These data are critical to running the Shoreline management model (SMM) that delivers shoreline best management practices (BMPs) to local and state government agencies across Virginia. This project has completed:

- 4 Shoreline Inventories for Richmond, Essex, Caroline, and New Kent counties
- 2 Tidal Marsh Inventories for Essex and Richmond counties.
- 1 run of the SMM and updates to comprehensive viewer for each locality using these new data
- 1 Assessment of public lands in the coastal plain of Virginia suitable for living shorelines

All data is available through the Comprehensive Coastal Resource Management Portals (CCRMPs) for Tidewater localities: <http://www.vims.edu/ccrm/ccrmp/index.php>. Direct links to the reports and data are listed below:

LOCALITY	Shoreline and Tidal Marsh Inventory Report	GIS Data Link (Shoreline and Tidal Marsh)
Caroline County	<a href="https://scholarworks.wm.edu/reports/1901/">https://scholarworks.wm.edu/reports/1901/</a>	<a href="https://scholarworks.wm.edu/data/381/">https://scholarworks.wm.edu/data/381/</a>
Essex County	<a href="https://scholarworks.wm.edu/reports/1906/">https://scholarworks.wm.edu/reports/1906/</a>	<a href="https://scholarworks.wm.edu/data/389/">https://scholarworks.wm.edu/data/389/</a>
New Kent County	<a href="https://scholarworks.wm.edu/reports/1916/">https://scholarworks.wm.edu/reports/1916/</a>	<a href="https://scholarworks.wm.edu/data/392/">https://scholarworks.wm.edu/data/392/</a>
Richmond County	<a href="https://scholarworks.wm.edu/reports/1905/">https://scholarworks.wm.edu/reports/1905/</a>	<a href="https://scholarworks.wm.edu/data/387/">https://scholarworks.wm.edu/data/387/</a>
		Tidal Marsh Inventory Data Only
Essex County		<a href="https://scholarworks.wm.edu/data/388/">https://scholarworks.wm.edu/data/388/</a>
Richmond County		<a href="https://scholarworks.wm.edu/data/385/">https://scholarworks.wm.edu/data/385/</a>

The SMM output is displayed in a comprehensive map viewer accessed through each localities' Comprehensive Coastal Resource Management Portal (CCRMP). The information is also available through ADAPTVA on the Interactive Map: [http://cmap2.vims.edu/AdaptVA/adaptVA\\_viewer.html](http://cmap2.vims.edu/AdaptVA/adaptVA_viewer.html). The data is served through the William and Mark Scholar Works site. Below is a list of links to access these products:

Caroline County

Link to SMM Map Viewer: [http://cmap2.vims.edu/CCRMP/Caroline2018/Caroline\\_CCRMP\\_Viewer.html](http://cmap2.vims.edu/CCRMP/Caroline2018/Caroline_CCRMP_Viewer.html)

Link to SMM GIS Data: <https://scholarworks.wm.edu/data/383/>

Essex County

Link to SMM Map Viewer: [http://cmap2.vims.edu/CCRMP/Essex2018/Essex\\_CCRMP\\_Viewer.html](http://cmap2.vims.edu/CCRMP/Essex2018/Essex_CCRMP_Viewer.html)

Link to SMM GIS Data: <https://scholarworks.wm.edu/data/390/>

New Kent County:

Link to SMM Map Viewer: [http://cmap2.vims.edu/CCRMP/NewKent2018/Newkent\\_CCRMP\\_Viewer.html](http://cmap2.vims.edu/CCRMP/NewKent2018/Newkent_CCRMP_Viewer.html)

Link to SMM GIS Data: <https://scholarworks.wm.edu/data/393/>

Richmond County:

Link to SMM Map Viewer: [http://cmap2.vims.edu/CCRMP/RichmondCo2018/RichmondCo\\_CCRMP\\_Viewer.html](http://cmap2.vims.edu/CCRMP/RichmondCo2018/RichmondCo_CCRMP_Viewer.html)

Link to SMM GIS Data: <https://scholarworks.wm.edu/data/386/>

Digital data is delivered to Va Coastal Zone Management Program for inclusion in their Coastal Gems site, and to each individual locality on CD along with an accompanying user guide.

Finally, the project targeted public lands across the coastal zone to prepare a data resource that could be used for enhancing or restoring resiliency to public lands through the use of living shorelines. Using data from the Commonwealth's Department of Conservation and Recreation's Public Lands Database, these lands were selected and the SMM model run to generate an independent shape file which depicts where living shorelines are possible along public lands. Since conservation lands are frequently targeted for living shoreline projects, conservation lands that are held in private trusts were also included in this database. The deliverable associated with this task was a shape file deliver to VA CZMP for inclusion on their Coastal GEMS site.

These data have been added to ADAPTVA's natural resource inventory displayed in the Interactive Map found here: [http://cmap2.vims.edu/AdaptVA/adaptVA\\_viewer.html](http://cmap2.vims.edu/AdaptVA/adaptVA_viewer.html)

The project delivered all data to VA CZM as shape files with FGDC compliant metadata.