Proposal Name: Coastal Virginia Water Resources Authority
Submission Date: 09/16/2016
Proposal ID Number: 3fa36ccd-2a28-4c47-b691-2978ce459aba

Purpose of Proposal: The purpose of the proposed study authority is to identify resilient and sustainable strategies and projects to enable communities in coastal Virginia to address sea level rise and climate change impacts. Coastal Virginia, and the Hampton Roads region in particular, is one of the most vulnerable regions of the country to sea level rise and coastal flooding. Hampton Roads has the highest rate of relative sea level rise on the East Coast, with a 50-year trend of 5.5 mm/year. Sea level rise will affect all Corps primary missions, including navigation, ecosystem restoration, and flood risk management. Sea level rise impacts, including increased erosion, more frequent flooding, higher storm surges, and loss of critical habitat and other natural resources, have already been observed in coastal Virginia. The proposed authorization is a critical need for the Commonwealth of Virginia and local governments to perform feasibility studies to address these issues. The scale of these issues is beyond the continuing authorities program and specific authority does not exist. In addition, multi-jurisdictional feasibility studies will enable neighboring communities to identify strategies that work at the appropriate scales and within watersheds without being constrained by jurisdictional boundaries.
1. Administrative Details

Proposal Name: Coastal Virginia Water Resources Authority

by Agency: Hampton Roads Planning District Commission

Locations: VA

Date Submitted: 09/16/2016

Confirmation Number: 3fa36ccd-2a28-4c47-b691-2978ce459aba

Supporting Documents

<table>
<thead>
<tr>
<th>File Name</th>
<th>Date Uploaded</th>
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<tbody>
<tr>
<td>USACE Letter.pdf</td>
<td>09/16/2016</td>
</tr>
<tr>
<td>virginia-czm-boundary-map.pdf</td>
<td>09/16/2016</td>
</tr>
</tbody>
</table>
2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Letter of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonwealth of Virginia (Primary)</td>
<td>The Commonwealth of Virginia is willing and able to participate as the Lead Sponsor for the Virginia Peninsula Coastal Flood Risk Management Study, in partnership with the U.S. army Corps of Engineers, to cooperatively investigate opportunities to address the impacts of sea level rise, recurrent coastal flooding, and coastal storms to the Virginia Peninsula region of Hampton Roads. The Commonwealth of Virginia, if this project is selected, intends to sign a Feasibility Cost Sharing Agreement to initiate up to two studies with the USACE, at a total cost of no more than $3 million for each study.</td>
</tr>
<tr>
<td>Hampton Roads Planning District Commission</td>
<td>The Hampton Roads Planning District Commission is the regional planning organization for southeastern Virginia, representing ten independent cities, six counties, and one town. The HRPDC has established a Coastal Resiliency Committee and program with dedicated funding from its member localities. The HRPDC supports the use of multi-jurisdictional feasibility studies to help identify cost-effective local and regional solutions to water management issues. As part of its Coastal Resiliency Program, the HRPDC would provide in-kind support for multi-jurisdictional feasibility studies within the Hampton Roads region.</td>
</tr>
</tbody>
</table>

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

[x] Feasibility Study
4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The purpose of the proposed study authority is to identify resilient and sustainable strategies and projects to enable communities in coastal Virginia to address sea level rise and climate change impacts. Coastal Virginia, and the Hampton Roads region in particular, is one of the most vulnerable regions of the country to sea level rise and coastal flooding. Hampton Roads has the highest rate of relative sea level rise on the East Coast, with a 50-year trend of 5.5 mm/year. Sea level rise will affect all Corps primary missions, including navigation, ecosystem restoration, and flood risk management. Sea level rise impacts, including increased erosion, more frequent flooding, higher storm surges, and loss of critical habitat and other natural resources, have already been observed in coastal Virginia. The proposed authorization is a critical need for the Commonwealth of Virginia and local governments to perform feasibility studies to address these issues. The scale of these issues is beyond the continuing authorities program and specific authority does not exist. In addition, multi-jurisdictional feasibility studies will enable neighboring communities to identify strategies that work at the appropriate scales and within watersheds without being constrained by jurisdictional boundaries.
5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>Non-Federal</th>
<th>Total</th>
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<tr>
<td>Study</td>
<td>$1,500,000</td>
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<td>$3,000,000</td>
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<tr>
<td>Construction</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Explanation (if necessary)

The total estimate for each study is approximately $3,000,000, half of which would be covered by nonfederal participants, including the Commonwealth of Virginia, regional Planning District Commissions, and localities, as appropriate for each specific study. Coastal Virginia, as defined in the Code of Virginia, includes seventeen (17) independent cities, twenty-nine (29) counties, and forty-two (42) towns, which encompass all or part of eight (8) planning districts. Preliminary discussions have identified ten (10) potential multi-jurisdictional studies in coastal Virginia. It is anticipated that each study’s partners would include the Commonwealth of Virginia, the appropriate Planning District Commission, and the affected cities, counties, and towns.

The estimated budget is expected to cover staff time and associated study costs. At this point there is no available of potential constructions. Construction costs are expected to vary considerably for implementation of each study’s recommendations.
6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

Multi-jurisdictional feasibility studies in coastal Virginia will have numerous monetary and nonmonetary benefits for the communities involved, Commonwealth of Virginia, and the United States. These studies will have significant benefits for the built environment, economy, transportation network, environment, and the nation’s security.

In Hampton Roads alone there are over 4,500 repetitive loss properties, with total losses of nearly $240 million. Of these, over 300 properties are severe repetitive loss, with total losses of over $40 million. Feasibility studies will help identify strategies and implementation measures to reduce losses from flooding and storm surge.

The Chesapeake Bay is, according to Executive Order 13508, a “national treasure” and “one of the largest and most biologically productive estuaries in the world.” Coastal Virginia counties and cities encompass over 7,213 miles of the Bay’s tidal shores (61.7%) and over 7,582 square miles of the Bay’s watershed (11.8%). Feasibility studies will help restore the Bay and identify natural and nature-based solutions that have ecological co-benefits including ecosystem restoration.

The region is home to major economic and national security facilities. Newport News Shipbuilding is the nation’s only facility capable of producing nuclear aircraft carriers and one of two capable of constructing nuclear submarines. The Hampton Roads port handles approximately 16% of all East Coast foreign trade by weight. Naval Station Norfolk is the largest naval base in the world and is home to 46,000 military personnel and 21,000 civilian workers. Other major military bases in coastal Virginia include Norfolk Naval Shipyard, Naval Support Activity South Potomac, and Joint Base Langley-Eustis. Each of these military and civilian facilities is vulnerable to tidal flooding and storm surge. These feasibility studies will help identify strategies to mitigate current and future risks from flooding.
7. **Does local support exist? If ‘Yes’, describe the local support for the proposal.**

[x] Yes

**Local Support Description**

The Hampton Roads Planning District Commission is the regional planning organization for Southeastern Virginia. Its membership includes ten independent cities, six counties, and one town. The Commission itself is comprised of elected representatives and the chief administrative officers of each member locality. At its Executive Committee meeting on May 19, 2016, the HRPDC voted to authorize that the chairman of the Commission, Mayor Clyde A. Haulman of the City of Williamsburg, to send a letter to the region’s representatives in Congress expressing support for multi-jurisdictional feasibility studies and requesting the authorization of these studies in a Water Resources Development Act. The letter signed letters are included in Section 10.

8. **Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?**

[x] Yes
Primary Sponsor Letter of Support

(As uploaded)
July 6, 2016

Colonel Jason E. Kelly
Commander, Norfolk District
U.S. Army Corps of Engineers
803 Front Street
Norfolk, VA 23510

Dear Colonel Kelly,

The Commonwealth of Virginia is willing and able to participate as the Lead Sponsor for the Virginia Peninsula Coastal Flood Risk Management Study, in partnership with the U.S. Army Corps of Engineers (USACE), to cooperatively investigate opportunities to address the impacts of sea level rise, recurrent coastal flooding, and coastal storms to the Virginia Peninsula region of Hampton Roads, to include the cities of Hampton, Newport News and Poquoson, and York County and potentially, other Peninsula localities.

The Commonwealth of Virginia understands a study cannot be initiated unless it is selected as a new start study with associated allocation of Federal funds provided through the annual Congressional appropriations process. If selected, we intend to sign a Feasibility Cost Sharing Agreement (FCSA) to initiate up to two studies with the USACE. It is our understanding the FCSA targets completion of the feasibility study within 3 years at a total cost of no more than $3 million for each study. After signing the FCSA, a Project Management Plan will be developed and agreed upon by the Commonwealth of Virginia, other interested local non-Federal Sponsors and the USACE. The study will be conducted and managed by USACE with participation from local, regional, and state partners. The cost-sharing for the study is based on a 50% contribution by the Federal government and a 50% contribution provided by the non-federal Sponsors for each study that can be satisfied in cash, or by a portion or all of the contribution provided through in-kind non-monetary services.

The Commonwealth of Virginia is aware that this letter constitutes an expression of intent to initiate a study partnership to address the specified water resources problems and is not a contractual obligation. We understand work on the study cannot commence until it is included in the Administration’s budget request, funds are appropriated by the Congress, and an FCSA is signed. It is understood that we or the USACE may opt to discontinue the study at any time after the FCSA is signed but will commit to work together as partners from the scoping phase, and subsequent decision points throughout the feasibility study, on providing the necessary support.
to risk-informed decision making. If it is determined that additional time or funding is necessary
to support decisions to be made in order to complete the study, we will work with USACE to
determine the appropriate course of action.

If you require additional information, please contact my Deputy Secretary Curtis Brown
at 804-786-5351 or curtis.brown@governor.virginia.gov.

Sincerely,

Terence R. McAuliffe

cc:  The Honorable Brian J. Moran, Secretary of Public Safety and Homeland Security
Additional Proposal Information

(This is as uploaded, a blank page will show if nothing was submitted)
May 19, 2016

The Honorable Timothy Kaine  
Senator  
United States Senate  
222 Central Park Avenue  
Suite 120  
Virginia Beach, VA 23462

RE: 2016 Water Resources Development Act

Dear Senator Kaine:

Recurrent flooding is a major issue for Hampton Roads communities. Flooding caused by tides, heavy rainfall, and coastal storms causes significant impacts including damage to public and private property and lost economic productivity. In an interconnected region such as Hampton Roads, the physical and economic impacts of recurrent flooding are not constrained by jurisdictional boundaries. This makes it critical to pursue collaborative strategies between jurisdictions and levels of government. Many Hampton Roads localities are planning and constructing projects to mitigate the impacts of flooding, but additional federal support is needed.

In particular, the U.S. Army Corps of Engineers is a major source of funding and expertise in designing and constructing mitigation projects. Corps feasibility studies play a critical role in helping communities identify projects. Typically, feasibility studies would only cover one city or county. In Hampton Roads, there is a need to address these issues through a multi-jurisdictional approach. To that end, we request that you consider including the following language in the 2016 Water Resources Development Act, which will authorize the U.S. Army Corps of Engineers to conduct multi-jurisdictional feasibility studies:

The Secretary of the Army is authorized to conduct studies of water resource needs of communities located within the Commonwealth of Virginia which are adjacent to bodies of water that are influenced by tidal action to determine the feasibility of carrying out projects for flood risk management, navigation, aquatic ecosystem restoration and other allied purposes due to increased coastal storm damage risk related to coastal storms and sea-level rise.

Recurrent flooding is an issue that will take many years to address, but it is important to start the process for identifying and constructing projects with the U.S. Army Corps of Engineers as soon as possible.
We thank you for your assistance and leadership and look forward to working with you to improve the resilience of communities throughout Hampton Roads and coastal Virginia.

Sincerely,

Clyde A. Haulman
Chairman

copy: Hampton Roads Congressional Delegation
RE: 2016 Water Resources Development Act

Dear Senator Warner:

Recurrent flooding is a major issue for Hampton Roads communities. Flooding caused by tides, heavy rainfall, and coastal storms causes significant impacts including damage to public and private property and lost economic productivity. In an interconnected region such as Hampton Roads, the physical and economic impacts of recurrent flooding are not constrained by jurisdictional boundaries. This makes it critical to pursue collaborative strategies between jurisdictions and levels of government. Many Hampton Roads localities are planning and constructing projects to mitigate the impacts of flooding, but additional federal support is needed.

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We thank you for your assistance and leadership and look forward to working with you to improve the resilience of communities throughout Hampton Roads and coastal Virginia.

Sincerely,

Clyde A. Haulman
Chairman

copy: Hampton Roads Congressional Delegation
May 19, 2016

The Honorable Rob Wittman
Congressman
U.S. House of Representatives
P.O. Box 494
Yorktown, VA 23690

RE: 2016 Water Resources Development Act

Dear Congressman Wittman:

Recurrent flooding is a major issue for Hampton Roads communities. Flooding caused by tides, heavy rainfall, and coastal storms causes significant impacts including damage to public and private property and lost economic productivity. In an interconnected region such as Hampton Roads, the physical and economic impacts of recurrent flooding are not constrained by jurisdictional boundaries. This makes it critical to pursue collaborative strategies between jurisdictions and levels of government. Many Hampton Roads localities are planning and constructing projects to mitigate the impacts of flooding, but additional federal support is needed.

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We thank you for your assistance and leadership and look forward to working with you to improve the resilience of communities throughout Hampton Roads and coastal Virginia.

Sincerely,

Clyde A. Haulman
Chairman

copy: Hampton Roads Congressional Delegation
May 19, 2016

The Honorable Bobby Scott
Congressman
U.S. House of Representatives
2600 Washington Avenue
Suite 1010
Newport News, VA 23607

RE: 2016 Water Resources Development Act

Dear Congressman Scott:

Recurrent flooding is a major issue for Hampton Roads communities. Flooding caused by tides, heavy rainfall, and coastal storms causes significant impacts including damage to public and private property and lost economic productivity. In an interconnected region such as Hampton Roads, the physical and economic impacts of recurrent flooding are not constrained by jurisdictional boundaries. This makes it critical to pursue collaborative strategies between jurisdictions and levels of government. Many Hampton Roads localities are planning and constructing projects to mitigate the impacts of flooding, but additional federal support is needed.

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Recurrent flooding is an issue that will take many years to address, but it is important to start the process for identifying and constructing projects with the U.S. Army Corps of Engineers as soon as possible.
We thank you for your assistance and leadership and look forward to working with you to improve the resilience of communities throughout Hampton Roads and coastal Virginia.

Sincerely,

[Signature]

Clyde A. Haulman
Chairman

copy: Hampton Roads Congressional Delegation
May 19, 2016

The Honorable Scott Rigell
Congressman
U.S. House of Representatives
4772 Euclid Road, Suite E
Virginia Beach, VA 23462

RE: 2016 Water Resources Development Act

Dear Congressman Rigell:

Recurrent flooding is a major issue for Hampton Roads communities. Flooding caused by tides, heavy rainfall, and coastal storms causes significant impacts including damage to public and private property and lost economic productivity. In an interconnected region such as Hampton Roads, the physical and economic impacts of recurrent flooding are not constrained by jurisdictional boundaries. This makes it critical to pursue collaborative strategies between jurisdictions and levels of government. Many Hampton Roads localities are planning and constructing projects to mitigate the impacts of flooding, but additional federal support is needed.

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Recurrent flooding is an issue that will take many years to address, but it is important to start the process for identifying and constructing projects with the U.S. Army Corps of Engineers as soon as possible.
We thank you for your assistance and leadership and look forward to working with you to improve the resilience of communities throughout Hampton Roads and coastal Virginia.

Sincerely,

Clyde A. Haulman
Chairman

copy: Hampton Roads Congressional Delegation
May 19, 2016

The Honorable J. Randy Forbes  
Congressman  
U.S. House of Representatives  
505 Independence Pkwy  
Suite 104  
Chesapeake, VA 23320

RE: 2016 Water Resources Development Act

Dear Congressman Forbes:

Recurrent flooding is a major issue for Hampton Roads communities. Flooding caused by tides, heavy rainfall, and coastal storms causes significant impacts including damage to public and private property and lost economic productivity. In an interconnected region such as Hampton Roads, the physical and economic impacts of recurrent flooding are not constrained by jurisdictional boundaries. This makes it critical to pursue collaborative strategies between jurisdictions and levels of government. Many Hampton Roads localities are planning and constructing projects to mitigate the impacts of flooding, but additional federal support is needed.

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Sincerely,

[Signature]

Clyde A. Haulman
Chairman

copy: Hampton Roads Congressional Delegation
Map Document

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virginia\_czm\_boundary\_map.pdf
Virginia’s coastal zone encompasses 29 counties, 15 cities, and 42 incorporated towns in the “Tidewater” region of the state. Virginia’s coastal zone includes 5,000 miles of shoreline, four tidal rivers reaching as far as 100 miles inland—the Potomac, Rappahannock, York, and James Rivers—and all of the waters therein, and out to the three nautical mile Territorial Sea boundary, including all of Virginia’s Atlantic coast watershed as well as parts of the Chesapeake Bay and Albemarle–Pamlico Sound watersheds.

Federal Consistency

Federal consistency is the CZMA requirement where Federal agency activities, Federal license or permit activities, and Federal financial assistance activities located inside or outside the state's coastal zone that have reasonably foreseeable effects on coastal uses or resources must be consistent with the enforceable policies of the state’s coastal zone management program.