



**Virginia Coastal Zone**  
MANAGEMENT PROGRAM



# FINAL REPORT: RICHMOND REGIONAL TECHNICAL ASSISTANCE

Federal Fiscal Year 2017

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## Executive Summary

### Technical Assistance Report

RRPDC staff completed 64 environmental reviews and 53 intergovernmental reviews during the reporting period. For a listing and summary of each project or permit reviewed by RRPDC staff, see the Environmental and Intergovernmental Review section of the [RRPDC website](#). RRPDC staff participated in a committee to develop a Richmond region native plant guide. RRPDC staff attended meetings through participation on the City of Richmond's RVA H2O technical committee. The RVA H2O program is tied to the City's integrated permit and improving water quality in the City of Richmond. More information can be found at <http://www.rvah2o.org/>. RRPDC staff continue to follow the development of Virginia's Phase III Watershed Implementation Plan associated with the Chesapeake Bay TMDL. RRPDC staff participate on the James River Action Team (JRAT) of the Capital Region Collaborative (CRC). The goal of the JRAT is to implement the Rivers of the Region Plan and help to coordinate CRC activities related to the James River.

### Coordination and Training Report

RRPDC staff hosted an Environmental TAC (Env TAC) meeting on December 19, 2017; DEQ staff presented updates about Bay Act training and the Chesapeake Bay TMDL Phase III Watershed Implementation Plan (WIP) process. RRPDC staff provided an update on projects completed and underway. The meeting concluded with a roundtable update discussion.

In February 2018 RRPDC staff completed a white paper outlining recommendations to reinvigorate the RRPDC Env TAC for greater benefit for the localities and the RRPDC work program.

RRPDC staff hosted two Environmental TAC conference calls on April 10 and May 2, 2018 devoted to discussion of Virginia's development of the Phase III WIP associated with the Chesapeake Bay TMDL.

On May 24, RRPDC staff hosted an in-person meeting with local staff representatives and Virginia DEQ staff to discuss the process for development of the Phase III WIP.

On June 12, RRPDC jointly hosted a training workshop with Crater PDC staff for locality staff. DEQ provided attendees training on Chesapeake Bay Preservation Act Resource Protection Area determination. The workshop included an in-class portion and a field study portion.

On August 23, 2018, RRPDC staff hosted an expanded Environmental TAC meeting with local environmental, planning, economic development, and parks and recreation staff in attendance. DCR staff presented information about the Scenic Rivers Program and encouraged consideration of such designation by localities in the region.

### Regional Public Water and Sewer Inventory

RRPDC staff updated the Regional Water and Sewer Inventory initially published in 2010. The 2018 update was done in cooperation with the region's utility directors and presents information on permitted capacities, recent and future projects, and regional cooperation. A digital copy of the 2018 update is available on the [RRPDC website](#).

### Benefits Accrued

RRPDC staff have noted examples of benefits accrued from previously funded work. Highlights about public access and conserved land mapping will be summarized.

## Technical Assistance Report

Throughout the grant year, RRPDC staff provided Technical Assistance to locality staffs.

### Environmental and Intergovernmental Reviews

RRPDC staff processed 64 environmental and 53 intergovernmental reviews during FFY17. These reviews include but are not limited to groundwater withdrawal permits, environmental impact reports, federal coastal consistency certifications and determinations, Virginia water protection permits, Virginia pollutant discharge elimination system permits, Virginia pollution abatement permits, etc. For a listing and summary of each project or permit reviewed by RRPDC staff, see the Environmental and Intergovernmental Review section of the [RRPDC website](#).

Once these reviews are received, RRPDC staff communicates with local staffs about comments, questions, or concerns they may have. PDC staff performs any further research or analysis necessary to understand the regional impacts of proposed actions in question. RRPDC staff prepare and submit an appropriate response letter to the requesting agency for the proposed project or permit in question.

### Regional and Local Assistance

RRPDCS staff participate in and follow local, regional, state, and national planning efforts related to Coastal issues. Information about these efforts is always shared with local staff at coordination meetings.

RRPDC staff have followed developments with the Chesapeake Bay Total Maximum Daily Load and Virginia's development of a Phase III Watershed Implementation Plan.

RRPDC staff participated on the Technical Advisory Committee (TAC) for RVA H2O, the City of Richmond's integrated permit planning process. The TAC exists to allow the City and DEQ staff the opportunity to vet program and permit elements with technical experts and stakeholders. Meetings were held every 6 to 8 weeks. More information can be found on the [RVA H2O website](#).

RRPDC staff are members of the James River Advisory Council (JRAC) attending regular quarterly meetings throughout the year. Information gathered at these meetings is always shared with local staffs. For more information see the [JRAC website](#).

## Coordination and Training Report

RRPDC staff hosted multiple coordination events for staff of member localities during FFY 2017. A formal venue and forum for coordination with local staff are the RRPDC Environmental Technical Advisory Committee(TAC) meetings. All meetings include at least one educational presentation or training session and a roundtable organizational update time.

On December 19, 2017 RRPDC staff hosted an Environmental TAC meeting. Virginia DEQ staff presented updates about Chesapeake Bay Preservation Act training and the Chesapeake Bay TMDL Phase III Watershed Implementation Plan process. RRPDC staff provided an update on PDC projects completed or underway. The meeting concluded with a roundtable update discussion by all present on local programs and projects.

On April 10 and May 2, 2018 RRPDC staff hosted conference calls with locality staff and Virginia DEQ staff to discuss the process planned for Virginia's development of the Phase III Watershed Implementation Plan for the Chesapeake Bay TMDL.

On May 24, RRPDC staff hosted an Environmental TAC meeting with locality staff and Virginia DEQ staff to discuss participation in and the process for Phase III WIP development for the Chesapeake Bay TMDL.

On June 12, 2018 RRPDC staff jointly hosted a training workshop with Crater PDC for locality staff. DEQ provided attendees training on Chesapeake Bay Preservation Act Resource Protection Area determination. The workshop included an in-class portion and a field study portion along a nearby stream.

On August 23, 2018 RRPDC staff hosted an expanded Environmental TAC meeting with local environmental, planning, economic development, and parks and recreation staff in attendance. Virginia Department of Conservation and Recreation staff presented information about the Virginia Scenic Rivers Program and encouraged consideration of such designation by localities in the region.

From November 2017 through February 2018, RRPDC staff developed a white paper outlining recommendations to reinvigorate the RRPDC Environmental TAC to make it more relevant for both the RRPDC work program and local staff members. The report includes the following near-term recommendations:

- RRPDC staff should build bridges between the Environmental TAC and the RRPDC Board, the Boards of associated agencies, and other advisory committees of the RRPDC.
- RRPDC staff should define and expand membership of the Environmental TAC.
- RRPDC staff should expand topics commonly addressed by the Environmental TAC to include all topics relevant to the Virginia Coastal Zone Management Program.

Longer-term recommendations include:

- The establishment of subcommittees on topics of great interest.
- Improved coordination with the Richmond Area Transportation Planning Organization so that environmental and coastal issues can be better incorporated into transportation planning processes.
- Local and regional contract projects on important issues or topics
- Seeking additional grant funding streams for important projects advanced by the members of the Environmental TAC.

RRPDC staff have started to enact the recommendations above by broadening the meeting topics and invite lists. Additional work to improve the RRPDC Environmental TAC will occur during FFY 2018.

Copies of the Environmental TAC meeting agendas, meeting materials and the Environmental TAC White Paper are available from RRPDC staff upon request. Contact Sarah Stewart at (804)323-2033 or [sstewart@richmondregional.org](mailto:sstewart@richmondregional.org).

## Regional Public Water and Sewer Inventory

Working with the region's local utility directors, the RRPDC first documented existing and planned public water and sewer utilities in 2010 as part of a public information brochure. The GIS data layer along with

plant capacities and use showing total regional systems capacity at that time serves as a large-scale planning resource indicating development readiness, growth patterns, and economic development potential.

The 2018 Regional Water & Sewer Inventory is intended to be an update of the 2010 map layer making use of the most recent data from the localities. The goal is to provide a summary every five- years with annually updated GIS map layer posted on the agency website.

Key findings of the update include:

- Total permitted water capacity in the region is approximately 300 million gallons per day (MGD) with an average daily use estimated to be 121 MGD (or 31 percent).
- Permitted water treatment capacity has increased regionally by approximately 110 MGD, but water use has declined by 14 MGD (or 10 percent) over the past eight (8) years despite a healthy 8.0 percent population increase and the addition of 10,000 housing units.
- More than 75 percent of the total permitted water supply is exchanged through contract purchase/sale among the localities in the region.
- Less than one (1) percent of the region's drinking water comes from ground water resources, serving less than 10 percent of the population; however, the region's growth is very dependent on reducing the demands on ground water, finding alternative sources and employing new technologies since 60 percent of the land area is currently dependent on ground water as a primary source.
- Significant investments by Henrico County in Cobb's Creek reservoir will ultimately provide an additional 17 MGD to Henrico water customers and regional partners.
- The Richmond region is served by 15 public wastewater treatment (WWTP) facilities with a total permitted hydraulic capacity of almost 200 MGD, an almost 8.0 MGD upgrade in capacity from 2010 with WWTP expansions by Chesterfield at Falling Creek, by Hanover at Totopotomoy and the City of Richmond's WWTP.
- The City of Richmond has invested \$120 million in their Nutrient Reduction Program (NRP) at the WWTP resulting in an 86 percent decrease in nitrogen and a 45 percent reduction in phosphorous in the James River to the ultimate benefit of the Chesapeake Bay.

Digital and hard copies of the final technical report are available from RRPDC staff; a digital file of the report is posted to the [RRPDC website](#).

## Benefits Accrued

### Public River Access

RRPDC has been dedicating CZM technical assistance funds over the past six years to projects which support, promote or make available public access to the Region's rivers:

- In FFY11 technical assistance funds were used to inventory and map all of the existing public access locations with descriptions of site, access, and location on the six rivers of the Richmond Region, including the North Anna, South Anna, Pamunkey, Chickahominy, James, and Appomattox Rivers.
- A FFY11 Coastal Focal Grant was used to support the James River Park System (JRPS) supported by in-kind volunteer labor to construct a one-mile river trail with interpretative signage and a

kayak launch on Chapel Island of the Great Ship Lock Park. This project provides a vital access point to the James River, and offers the public greater opportunity to appreciate the varied history and important functions the site now serves to improve water quality.

- Making partial use of FFY14 and 15 technical assistance funds, the Regional River Guide was updated with additional public access points and reprinted to meet the demand for the brochure. Funding for the additional printing was secured from MeadWestvaco (now WestRock) in coordination with the Capital Region Collaborative (CRC). In the 2nd update images and information were edited for greater clarity. The 3rd printing included 15 additional access points through the mapping inventory. More information about the Rivers of the Richmond Region Guide is available [here](#), and printed brochures continue to be made available through area visitor centers, parks & recreation departments and outfitters.
- An FY14 Coastal Focal Grant was secured to contribute to the T. Potterfield Dam Walk South Bank Habitat Restoration and Native Plant Demonstration project on the southern bank of the James River in downtown Richmond. The project cleared invasive species from the southern bank and then restored habitat using native plants, bioswales and rain gardens to filter runoff. An interpretative signage was installed to educate the public on the value of using native plants.
- FFY15 technical assistance funds enabled the RRPDC to provide technical support to the James River Association through the CRC in the preparation of a Regional Rivers Plan for the four (4) major rivers in the Richmond Region including the James, Appomattox, Chickahominy and Pamunkey rivers. The plan describes each river's character, providing an inventory of existing conditions, and outlining local and regional projects for implementation to make the rivers a more coordinated network for enhanced recreation, entertainment, and commerce.
- In FFY16, the Regional Rivers Plan was used by the CRC, localities, and non-profit partners in the Richmond region to move priority projects and related efforts forward.
  - City of Richmond Riverfront Plan – The First Richmond Riverfront Plan: The first amendment to the Richmond Riverfront Plan will be considered by City Council in September.
  - Gillies Creek Greenway: Community stakeholders met at Stone Brewing July 13th to kick-off the Gillies Creek Greenway Green Infrastructure Planning Project. SKEO Solutions of Charlottesville is leading this project with support from the James River Association. The project will result in a plan to install green infrastructure along the planned greenway.
  - Malvern Hill / Turkey Island Creek Access: Capital Region Land Conservancy continues to lead the effort to protect historic Malvern Hill. Public access on Turkey Island Creek is an important component of the project.
  - Primitive Camping at Lawrence Lewis, Jr. Park: The James River Association is presented a proposal for primitive camping at Lawrence Lewis, Jr. Park to the Charles City County Board of Supervisors in September, and it was approved. The proposed primitive camping area will primarily serve paddlers and cyclists. The project concept plan is attached to this email.
- In FFY17, the James River Association created a [Rivers of the Richmond Region Public Access Mapper](#). Visitors to the online mapping platform can zoom and query location information about public access sites and their features or amenities. The starting base of information for

the mapper included Virginia Department of Conservation and Recreation data as well as RRPDC public access data collected in earlier years for the Regional River Guide.

### Conserved Land Mapping

In FFY16, RRPDC staff worked with staff from the Capital Region Land Conservancy(CRLC) and local governments to create a conserved lands GIS database and associated maps.

In FFY17, RRPDC staff used this conserved lands database as a base for creating an accurate conserved lands database for the Lower Chickahominy study currently underway and funded by a separate Coastal Zone Management Program grant.

Also in FFY17, CRLC used the Richmond regional conserved lands map as the base map for its own Vision Map. The Vision Map will help CRLC prioritize areas of the region for easements, assist in explaining the role and mission of the organization to potential easement holders, and aide in long term planning for the organization.

The CRLC Vision Map is available on the [CRLC website](#).