

Atlantic Ocean Basin

The Atlantic Ocean Basin is comprised of a single HUC (02080110) encompassing the eastern half of Virginia's Eastern Shore whose coastal lagoons and barrier islands are largely unaltered by human impact and are considered the best remaining Atlantic coast wilderness. The basin is located within the Conservancy's Chesapeake Bay Lowlands Ecoregion and has significant acreage protected through local, state, federal and private efforts. Conservation targets include nearshore Atlantic marine fauna, coastal estuarine and lagoon systems, the barrier island systems, migratory shorebirds, waterfowl, land birds and raptors, and breeding barrier island and lagoon birds.

The projects discussed in this section serve as mitigation for permitted impacts within the Atlantic Ocean Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

AO-1 Virginia Coast Reserve (SAV Beds)

Please reference the 2007 Annual Report for additional details on this project.

The purpose of this project is to restore ten acres of submerged seagrass beds, primarily eelgrass (*Zostera marina*), within the seaside coastal bays of the Eastern Shore. The final year of aerial monitoring was conducted in the spring of 2010 and demonstrated successful establishment of seagrass beds and the dramatic increase in coverage by seagrass over the past five years.

This restoration and the activities described for AO-1 are a small part of a much larger effort to restore seagrass beds along the Eastern Shore. Additional information about the full restoration project may be found at <http://web.vims.edu/bio/sav/sav09/index.html>. An interactive map site using Google Earth allows various views of the beds from differing levels: <http://web.vims.edu/bio/sav/maps.html>.

The Conservancy plans to request official closure of this site in 2015.

AO-2 Virginia Coast Reserve (Oyster Beds)

The project was officially closed in 2011. Please reference the 2007 Annual Report for additional details on this project.

AO-3 Virginia Coast Reserve (SAV Beds II)

The purpose of this project is to build on the restoration efforts conducted in the previous project (AO-1) and restore an additional ten acres of submerged seagrass beds, primarily eelgrass (*Zostera marina*), within the seaside coastal bays of the Eastern Shore. The funding for this project was approved by the Corps on August 5, 2008. VIMS harvested and broadcast a minimum of 100,000 seeds per acre in the fall of 2008 to cover a total of five acres and an additional five acres in 2009. Monitoring was conducted for a total of five years, ending in 2013.

This restoration and the activities described for AO-3 are a small part of a much larger effort to restore seagrass beds along the Eastern Shore. Additional information about the full restoration project may be found at <http://web.vims.edu/bio/sav/sav09/index.html>.

An interactive map site using Google Earth allows various views of the beds from differing levels: <http://web.vims.edu/bio/sav/maps.html>.

The Conservancy plans to request official closure of this site in 2015.

AO-4 Oyster (Cubberly)

The purpose of this mitigation site is to provide wetland and upland buffer preservation on approximately 53 acres of private land placed under deed restriction by the Conservancy. The site is located along Cobb Mill Creek near Oyster Harbor in Northampton County, Virginia. The mitigation site includes 20 acres of forested wetlands along approximately 1,200 linear feet of Cobb Mill Creek and approximately 2,300 linear feet of an unnamed tributary to Cobb Mill Creek near Oyster Slip within the barrier island lagoon system. The project is proceeding under the guidance of the Initial Evaluation Letter (IEL) provided by the Corps on August 8, 2012. The Conservancy plans to close this project, following confirmation of the site delineation to be conducted in 2015 and completion of a Site Development Plan and credit release. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

Big Sandy River Basin

The Big Sandy River Basin is comprised of two HUCs (0507202 and 0507201) that flow northwest out of the Appalachian Mountains of Southwestern Virginia into Kentucky and West Virginia. This basin is within the Conservancy's Cumberland and Southern Ridge and Valley and Central Appalachian Ecoregions.

Through 2014, the Conservancy has not requested funds to pursue any mitigation projects in this basin. The Conservancy did release a Request for Proposals in the fall of 2011 to address the existing liability from stream impacts. A potential project was identified through this process, but did not proceed due to severed mineral rights. The Conservancy is currently pursuing other options to identify a project in this basin.

Chesapeake Bay Basin

The Chesapeake Bay Basin is comprised of four HUCs (02080101, 02080102, 02080108, and 02080109) that surround one of the largest and most productive bay ecosystems on the east coast of the United States. The basin is located within the Conservancy's Chesapeake Bay Lowlands Ecoregion and is the focal area of several conservation groups, including the Chesapeake Bay Foundation and the Alliance for the Chesapeake Bay, as well as efforts of federal, state, and local governments. Conservation targets include migratory waterfowl, high-energy beaches, and bayside

estuarine systems.

The projects discussed in this section serve as mitigation for permitted impacts within the Chesapeake Bay Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

CB-1 Dameron Marsh (Smith 1)

The purpose of this project is to conduct non-tidal wetland establishment, non-tidal and tidal wetland preservation, and upland buffer restoration and preservation at the Dameron Marsh property in Northumberland County. The funding for this project was approved by the Corps on October 9, 1997. The site was purchased by the Conservancy on December 10, 1997. The site is now managed as a State Natural Area Preserve (NAP) by the Virginia Department of Conservation and Recreation (DCR) Natural Heritage Program. Long-term protection is achieved through the dedication and maintenance of the site as a NAP.

Mitigation monitoring of the site was conducted from 2002 to 2011. 2011 was the tenth year of monitoring.

In coordination with the Virginia Department of Conservation and Recreation, control of the invasive species common reed has been completed within portions of the property since 2001. In 2010, a modified invasive species management plan was adopted to incorporate three more consecutive years of control efforts. In 2011, portions of the property were treated with aerial application of Habitat herbicide. In October 2013, the site was treated through the use of helicopter and aerial application equipment, and then with backpack sprayers. In September 2014, the site was treated through foliar application using an amphibious vehicle and backpack sprayers. Additional control efforts are planned for spring 2015.

The Conservancy anticipates requesting closure of the project in 2015, following completion of invasive species control efforts and subsequent release of the remaining mitigation credits. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CB-2 New Point Comfort (Trimmer)

The project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

CB-3 Dragon Run (Calhoun 1; Piedmont Farms)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

CB-4 Dragon Run (Byrd)

This project was officially closed in 2009. Please reference the 2008 Annual Report for details on this project.

CB-5/CH-12 Eastern Virginia Phragmites Control

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

CB-6 Dragon Run (Calhoun 2; Piedmont Farms)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

CB-7 Dragon Run (Calhoun 3; Piedmont Farms)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

CB-8/YK-4 Upper Crab Neck (BP America)

The purpose of this project is to conduct non-tidal wetland and upland buffer preservation at the Upper Crab Neck (BP America) site in York County. The funding for this project was approved by the Corps on April 21, 2005 and on February 22, 2007. The property was donated to the Conservancy by BP America on May 11, 2006. The Conservancy plans to transfer this site to the Virginia Department of Game and Inland Fisheries (DGIF) subject to Corps approval of the deed restriction. No additional monitoring is required for this project.

A delineation of surface waters and wetlands was confirmed by the Corps in April 2002 and the mapping from this delineation was used to estimate wetland and upland acres in Chesapeake Bay Basin and York River Basin using GIS. The Conservancy is negotiating a transfer of the property, and will request official closure of the project once the transfer is completed.

CB-9 Guinea Neck Site

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

CB-10 East River (Brooks/Ober)

The purpose of this project is to conduct non-tidal wetland restoration and upland buffer restoration at the East River (Brooks/Ober) property in Mathews County. The project involves a donation of a conservation easement to the Middle Peninsula Land Trust (MPLT) and donation of fee simple interest to the Conservancy. Long-term protection is achieved through the monitoring and enforcement of the easement by the MPLT.

Based upon a feasibility study conducted by the Conservancy, funding was secured in 2007 to restore 12.5 acres of forested non-tidal wetlands and 4.2 acres of upland field through vegetation establishment techniques. Reforestation of the site occurred in spring of 2008. The project also includes the preservation of 5.87 acres of non-tidal forested wetland and 18.2 acres of upland forest.

Mitigation monitoring of the site has been conducted since 2007. 2015 represents the seventh year post construction and mitigation monitoring is scheduled through 2018.

Invasive species management will be conducted in 2015 to ensure site success. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CB-11 Dragon Run (Friends of Dragon Run)

The purpose of this project is to conduct non-tidal wetland and associated upland buffer preservation and stream and associated upland riparian buffer preservation at this site in King and Queen County. The funding for this project was approved by the Corps on December 7, 2006. A subsequent funding approval was granted on June 16, 2008. The Friends of Dragon Run closed the land acquisition of the property on June 5, 2008. Long-term protection of the site will be accomplished through the monitoring and enforcement of an easement by the Virginia Outdoors Foundation (VOF). No additional monitoring is required for this project.

Stream mitigation consists of the preservation of a 200 foot mature forested riparian buffer along the right bank of 1,004 linear feet (3.60 acres) of Dragon Run at the southern end of the property. A wetlands and surface waters delineation was completed in October 2008, and confirmed on February 12, 2009. The delineation confirmed the presence of 33.86 acres of palustrine forested and scrub-shrub wetlands, and 1,004 linear feet of stream channel.

CB-12 Guilford Shores Site

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

CB-13 – Dameron Marsh/Hughlett Point/Fleet Bay (Thompson et al.)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

CB-14 – York Complex (Harris Creek Site)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

CB-15 – Dragon Run Site

The purpose of this project is to conduct a wetland and upland buffer stream preservation project along Dragon Run in King and Queen County, Virginia. On August 13, 2007, the Corps approved the purchase of the conservation easement over the 46 acre property. Long-term protection will be provided by the conservation easement. Monitoring and enforcement of the conservation easement will maintain the long-term protection of the property.

The Nature Conservancy is currently pursuing the purchase of the conservation easement on this property. A wetlands delineation of the site to determine mitigation credits was completed in December of 2008, and confirmed on February 26, 2009. The delineation confirmed the presence of 14.85 acres of palustrine forested wetlands. As the delineation is now older than five years, it will need to be reconfirmed. The

Conservancy will request official closure of the site following easement recordation.

CB-16 – Jacobus Creek (Hampton)

The purpose of this project is to perform wetland and upland buffer preservation on the bayside of Northampton County, Virginia. On September 24, 2008 the Corps approved this project. The site contains 3.58 acres of tidal emergent marsh, as determined by a wetlands delineation completed in 2009, and 1.84 acres of upland buffer that will be preserved to protect the water quality of the nearby aquatic systems. The long term protection of the site was accomplished through the recording of a donated conservation easement to the Conservancy on December 8, 2008. Monitoring and enforcement of the easement will provide the long-term protection. No additional monitoring will be required for this project.

A surface water delineation of the site was conducted in 2013 and 2014 in order to determine mitigation crediting. A delineation report will be submitted for confirmation in 2015. The Conservancy will request closure of this project in 2015 pending delineation confirmation and credit release.

CB-17 – Dameron Marsh/Hughlett Point/Fleet Bay (William Thompson)

The purpose of this project is to provide non-tidal and tidal wetland restoration, tidal and non-tidal preservation, and upland buffer preservation of this 223-acre site in Northumberland County, Virginia. On November 2, 2008 the Corps approved funding for the restoration and preservation of the site. The long-term protection of the site was accomplished through the recordation of a conservation easement held by the Conservancy on December 23, 2008. Long-term protection will be achieved through the monitoring and enforcement of the easement by the Conservancy.

In October 2011, the Conservancy released a request for proposals to provide wetland mitigation design, permit acquisition, bidding support, and construction oversight services for this project. A project designer was selected in 2012. 60% design plans have been coordinated with the IRT, with remaining design and permitting plans ongoing through 2014. The site development plan will be submitted to the IRT for review and approval in 2015. Implementation of the design is expected to occur in 2015/2016. Invasive species management is ongoing and will continue to ensure site success. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CB-18 Dragon Run Site #2

The purpose of this project is to purchase land for wetland and upland buffer preservation along the Dragon Run in Gloucester County, Virginia. On March 16, 2009 the Corps approved funding for the purchase of this property. Additional funding was approved in August 2010. The site contains a significant wetland complex along Dragon Run that has not been disturbed in over 100 years. The project consists of the preservation in perpetuity of approximately 132.25 acres of palustrine forested wetlands and 44 acres of associated forested upland buffer. The property contains approximately 17,000 feet of frontage (approximately 10,000 on one bank; 3,500 linear feet on both banks) on the west side of the main stem of Dragon Run and along tributaries to the Dragon that drain from the property.

The long term protection of the site will be accomplished through the purchase and recordation of a conservation easement held by the Conservancy. The Conservancy will request closure of this project pending finalization of land protection and completion of a surface water delineation of the site to determine credit.

CB-19 Dragon Run (Carlson)

The purpose of this project is to provide a wetland and upland restoration and stream, wetland and upland buffer preservation on a 176.5-acre property along Dragon Run in Gloucester County and King and Queen County, Virginia. On May 18, 2009, the Corps approved funding for the restoration and preservation of the site. The Conservancy purchased the property in July 2009.

In October 2011, the Conservancy released a request for proposals to provide wetland mitigation design, permit acquisition, bidding support, and construction oversight services for this project. A project designer was selected in 2012. In 2013, the design was approved, permits were issued, and a deed restriction was drafted. Construction occurred in fall 2014 and planting in winter 2015. Invasive species management is ongoing and will continue to ensure site success. Year 1 monitoring and reporting will begin 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CB-20 Dragon Run Site #3

The purpose of this project was to purchase land for a wetland and stream preservation project along Dragon Run in Middlesex County, Virginia. The Conservancy no longer expects to use the approved funding to complete the acquisition of this site. Project is currently on hold.

CB-21 Deep Creek (Level Ponds)

The purpose of this project is to provide wetland restoration and wetland and upland buffer preservation on a 49-acre property in Accomack County, Virginia. On April 19, 2011, the Corps approved funding for the restoration and preservation of the site.

In May 2011, the Conservancy released a request for proposals to provide wetland mitigation design, permit acquisition, bidding support, and construction oversight services for this project, and entered into contract for the work in the summer of 2011. The design and permitting phase of the project was completed in 2012. Construction commenced the week of June 18, 2012 and was completed the week of August 13, 2012. Planting of the site was completed in May 2013, with corrective action being taken to replant washed-out areas with additional wetland seed mix in August 2013. Supplemental replanting took place in spring 2014 in accordance with a 100% planting warranty to meet proper stem density. Invasive species management will occur in 2015 and will continue as needed to ensure site success. Year two monitoring occurred in November 2014 and year three monitoring will occur in fall 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CB-22 Church Neck (Oliver)

The purpose of this mitigation site is to provide wetland and riparian area preservation on approximately 197 acres of private land which has been placed under easement with the Conservancy. The site is located adjacent to the 1,853 acres protected as part of the Church Neck Conservation Corridor in Northampton County, Virginia. The mitigation site includes 5,350 linear feet of tidal creeks adjacent to the Chesapeake Bay and nearly 5.5 acres of tidal and non-tidal wetlands along Westerhouse Creek encompassing approximately 47 acres, which is part of the Chesapeake Bay Drainage. The project is proceeding under the guidance of the project approval letter and budget approval letter provided by the Corps on December 10, 2012. A site development plan and delineation will be completed in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

Chowan River Basin

The Chowan River Basin is comprised of five HUCs (03010201, 03010202, 03010203, 03010204, and 03010205) located in southeastern Virginia extending into northeastern North Carolina. It encompasses the northernmost portion of the Albemarle-Pamlico drainage and is among the best developed embayed wetland environments of the outer Mid-Atlantic Coastal Plain Ecoregion estuary and includes much of the original extent of the Great Dismal Swamp. Conservation targets include blackwater swamp aquatic system, riverine and basin swamp forest, brownwater tributaries and rivers, Atlantic white cedar swamp, bottomland hardwood forest, Roanoke logperch, Atlantic pigtoe, red-cockaded woodpecker, and seepage wetlands.

The projects discussed in this section serve as mitigation for permitted impacts within the Chowan River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

CH-1 Northwest River (Kellam Riganto)

The purpose of this project is to conduct non-tidal wetland and upland buffer preservation at the Northwest River (Kellam Riganto) property in the City of Chesapeake. The funding for this project was approved by the Corps on December 20, 1995. Subsequent funding was approved on August 28, 2008.

The site was purchased by the Conservancy on December 22, 1995. Long-term protection is achieved through Conservancy ownership. No additional monitoring is required for this project. An assessment level wetland delineation of the site was submitted to the Corps and all credits were released in 2013. The Conservancy anticipates closing the project pending the sale of the credits. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CH-2 North Landing River (Onesimus Ministries)

This project was officially closed in 2007. Please reference the 2007 Annual Report for

details on this project.

CH-3 Dismal Swamp (Bruff)

The project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

CH-4 North Landing River (Mayo)

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

CH-5 Northwest River (Benefits)

The project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

CH-6 Northwest River (Hall)

The purpose of this project is to conduct non-tidal wetland and upland buffer restoration and upland buffer preservation at the Northwest River (Hall) property in southern Chesapeake. The funding for this project was approved by the Corps on May 26, 1999. Additional background information is available in the 2008 Annual Report.

Due to the overall success of the site in meeting wetland criteria in most years, the Conservancy conducted a comprehensive wetland delineation of the site to determine mitigation credits in early 2012. The delineation was confirmed by the Corps in the summer of 2012 and all credits were released in 2013. The Conservancy anticipates closing the project pending the sale of the credits. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CH-7 Nawney Creek (Knight)

The purpose of this project is to conduct non-tidal wetland and upland buffer restoration at the Nawney Creek (Knight) property in Virginia Beach. The funding for this project was approved by the Corps on May 23, 2000. The site was purchased by the Conservancy on September 27, 2000, and long-term protection is achieved through this ownership. Monitoring was completed in 2003, 2004, 2005, 2007, 2008 and 2010. Additional supplemental hydrology monitoring was conducted in 2009.

The tenth and final year of monitoring was conducted in 2013. The Conservancy anticipates conducting a final delineation of the site to determine mitigation credits and requesting closure of the project in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CH-8 Northwest River (Su)

The purpose of this project is to conduct non-tidal wetland restoration and upland buffer restoration and non-tidal wetland and upland buffer preservation at the Northwest River (Su) property in southern Chesapeake. The funding for this project was approved by the Corps on March 16, 2001. Additional funding for this project was approved on February

8, 2008. The site was purchased by the Conservancy on April 28, 2000, and long-term protection is achieved through this ownership. Two adjacent properties (projects CH-5 and CH-6) were acquired in earlier purchases, together representing significant wetland restoration and preservation acres.

Mitigation monitoring was conducted from 2002 to 2011. 2011 represented the tenth year of mitigation monitoring for this project. The Conservancy conducted a comprehensive wetland delineation of the site to determine mitigation credits in early 2012. The delineation was confirmed by the Corps in the summer of 2012. The Conservancy conducted additional hydrology monitoring in 2012, 2013, and 2014 in order to gather additional data to support credit release. Hydrology data will be assessed in early 2015 to determine if credit release can be requested. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CH-9/LJ-4 Northwest River (Stephens)

The purpose of this project is to conduct non-tidal wetland restoration and upland buffer restoration and non-tidal wetland and upland buffer preservation at the Northwest River (Stephens) property in Chesapeake. The funding for this project was approved by the Corps on July 17, 2002. The Conservancy proposed to restore wetlands and uplands through site modifications and to preserve wetlands and uplands. The site was purchased by the Conservancy on November 15, 2002, and long-term protection is achieved through this ownership.

Mitigation monitoring of the site has been conducted since 2004. The tenth and final year of monitoring was conducted in 2013. The final delineation was confirmed in 2013 and final credit release is expected to be completed in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CH-10 Northwest River (Powers)

The purpose of this project is to conduct non-tidal wetland restoration and non-tidal wetland and upland buffer preservation at the Northwest River (Powers) property in Chesapeake. The initial funding for this project was approved by the Corps on March 7, 2003. The Conservancy requested additional funding for acquisition and restoration, which was authorized by the Corps on October 27, 2004. The site was purchased by the Conservancy on January 31, 2001 and the site has been designated as a Natural Area Preserve under the management of Department of Conservation and Recreation (DCR).

A closely spaced ditch network historically drained the agricultural fields on the site. In late 2004, the ditches in the agricultural fields were filled, the fields were graded to remove field crowns, and a perimeter berm was installed to prevent flooding adjacent properties. In early 2005, the restoration site was planted with 6,300 and 2,800 bare root tree and shrub seedlings respectively. Five automatic recording shallow groundwater wells were installed in 2005.

Mitigation monitoring of the site has been conducted since 2005. The tenth year of hydrologic and vegetation monitoring occurred in 2014. Corrective action for invasive species will occur in 2015 in order to meet success criteria. An additional year of monitoring will occur in 2015 to ensure success.

The Conservancy anticipates conducting a final delineation of the site to determine mitigation credits in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CH-11 Nawney Creek (Fentress)

The purpose of this project is to conduct non-tidal wetland and upland buffer restoration at the Nawney Creek (Fentress) property in Virginia Beach. The funding for this project was approved by the Corps on December 19, 2003. The site was purchased by the Conservancy on December 13, 2003, and long-term protection is achieved through this ownership.

The tenth and final year of monitoring was conducted in 2013. The Conservancy anticipates conducting a final delineation of the site to determine mitigation credits in 2015. Upon confirmation of the delineation by the Corps, the Conservancy will request to close this project in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

CB-5/CH-12 Eastern Virginia Phragmites Control

A summary of the project details is included under the Chesapeake Bay Basin.

CH-13 Northwest River (SP Forests LLC)

The purpose of this project is to conduct non-tidal wetland restoration and preservation at the Northwest River (SP Forests, LLC) property in the City of Chesapeake. The funding for this project was approved by the Corps on February 2, 2006. An amended approval letter was issued by Corps on February 22, 2007. The Conservancy proposed to restore drained forest land by plugging a large ditch system and to preserve wetlands on 150 acres located within the 3,800-acre parcel. The site was purchased by the Virginia Department of Game and Inland Fisheries (DGIF) on September 13, 2006, and is managed as the Cavalier Wildlife Management Area.

This project is in the planning/permitting phases and will proceed once approved through the Site Development Plan process.

CH-14 Raccoon Creek Pinelands Site

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

CH-15 Blackwater River (Owen)

The purpose of this project is to conduct stream, wetland, and riparian buffer preservation along the Blackwater River in Surry County, Virginia. On September 28, 2009 the Corps approved funding for the costs associated with conducting a stream and wetland delineation along with acquisition of a conservation easement. The overall site is 58 acres, which is comprised of approximately 33.6 acres of wetlands and 1.5 acres of upland buffer that will be preserved in perpetuity, protected from all development, timber harvesting and other land disturbing activities. These areas will be preserved to protect

the water quality of the nearby aquatic systems. The long term protection of the site was accomplished through the recordation of a conservation easement, which was granted to the Conservancy on November 20, 2009. No additional monitoring will be required for this project.

The Conservancy anticipates completing the final surface water delineation in 2015. Pending confirmation of the delineation, the Conservancy will request credit determination and closure of this project in 2015.

CH-16 Nottoway River Site

The purpose of this project was to conduct a stream and riparian buffer preservation project along the Nottoway River in Sussex County, Virginia. On August 11, 2010, the Corps approved funding for the costs associated with conducting a stream and wetland delineation along with acquisition costs associated with the donation of a conservation easement on the property. However, in 2011, alternate funding sources were secured to complete the preservation activities associated with this site. As such, the Conservancy will not pursue this project in association with the Trust Fund and will request official closure of this project in 2015.

CH-17 Piney Grove Preserve

The purpose of this mitigation site is to provide stream restoration and riparian area preservation on approximately 24 acres of Conservancy land. The site is located within the 3,200 acre Piney Grove Preserve in Sussex, Virginia. The mitigation activities include restoring 4,200 linear feet of two headwater tributaries and preserving a 100-foot buffer along the tributaries which drain to unnamed tributaries of Seacorrie Swamp which ultimately drains to the Nottoway River. The site development plan for the project will be submitted to the IRT for approval in 2015. Construction is expected to occur in late 2015 or early 2016. Year 1 monitoring is expected to take place in 2016. The project is proceeding under the guidance of the project approval letter and budget approval letters provided by the Corps on January 30, 2012 and June 21, 2013. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

Lower James River Basin

The Lower James River Basin is comprised of two HUCs (02080206 and 02080208) encompassing the portion of the James River from Richmond east to Norfolk. This basin is located within both the Conservancy's Mid-Atlantic Coastal Plain and the Chesapeake Bay Lowlands Ecoregions and is the focal area of several conservation groups, including the James River Association and the Chesapeake Bay Foundation, as well as efforts of federal, state and local governments. Conservation targets include tidal freshwater and brackish marshes, Chesapeake Bay lowlands estuarine and stream systems, waterfowl and colonial nesting waterbirds, blue crabs, and spawning habitat for striped bass, shad, herring, and yellow perch.

The projects discussed in this section serve as mitigation for permitted impacts within the Lower James River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

Due to historical hydrology modifications, one of the non-tidal projects (CH-9/LJ-4) mitigates for impacts within both the Lower James River Basin and the Chowan River Basin. The total funds authorized by the Corps and crediting value for this project have been appropriately divided between the two basins.

LJ-1 Chickahominy River (Walters)

Please reference the 2007 Annual Report for additional details on this project.

The purpose of this project is to conduct non-tidal wetland restoration and upland buffer restoration and non-tidal wetland and upland buffer preservation at the Chickahominy River (Walters) property near Richmond. The objectives of this project are to restore 20 acres of forested wetland and restore 23 acres of upland buffer in addition to preservation of 198 acres of wetland and 32.8 acres of upland buffer.

Mitigation monitoring of the site was conducted from 2004 to 2011. 2011 was the tenth year post construction and the final year of mitigation monitoring. Monitoring results indicated that reforestation and wetland restoration appears successful at the site, as all wells met for hydrology and the majority of the vegetation plots met for hydrophytic vegetation in 2011.

A comprehensive wetland delineation was conducted on the property in early 2012, and was confirmed by the Corps in late 2012. The remaining mitigation credits were released in 2013 and the Conservancy will sell the credits in order to close the project. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

LJ-2 Chickahominy River (Cheswick Park)

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

LJ-3 VMRC Oyster Reef

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

CH-9/LJ-4 Northwest River (Stephens)

The Stephens property (detailed under the Chowan River Basin) is also included as part of Lower James River Basin due to the split drainage.

LJ-5 Isle of Wight Site

This project was officially closed in 2007. Please reference the 2007 Annual Report for

details on this project.

LJ-6 Chickahominy River (Rogers-Chenault)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

LJ-7 Great Dismal Swamp Northwest Section (Jacobson et al.)

Please reference the 2007 Annual Report for details on this project.

The purpose of this project is to conduct non-tidal wetland restoration, enhancement and upland buffer restoration and non-tidal wetland and upland buffer preservation at this 84-acre property in Chesapeake. The property contains approximately 54 acres of cropland, 22 acres of forested wetlands and several acres of drained forested wetland and upland forest. In the past a ditch system was installed on this site to lower the ground water table to make farming more successful.

A shallow groundwater table study was conducted at the site during the 2007 growing season. A preliminary design was completed in 2009 and was presented to the City for review. Additional coordination is required and will be ongoing in 2015. The Conservancy anticipates implementation of the restoration once the project has been reviewed and approved through the Site Development Plan process.

LJ-8 Lower Chickahominy River (Church Point Farm, LLC)

This project was officially closed in 2009. Please reference the 2007 and 2009 Annual Reports for details on this project.

LJ-9 James River Site

This project was officially closed in 2010. Please reference the 2007 Annual Report for details on this project.

LJ-10 James River (VCU)

Please reference the 2008 Annual Report for details on this project.

The purpose of this project is to provide restoration of the natural stream channel and wetland habitats resulting from the removal of the dam at the mouth of Kimages Creek on the Virginia Commonwealth University (VCU) Rice Center property. The property is located along the James River in Charles City County.

Restoration of the site was initiated in late 2010, and consisted of the removal of approximately 180 linear feet of the existing dam where it intersects the pre-existing stream channel of Kimages Creek. The project also includes re-establishment of native wetland plant communities in the former impounded areas. Planting was completed in April/May 2014. Several corrective actions, including prescribed burns, cutting, and herbicide application were undertaken in 2013 and 2014 in an effort to control *Typha* (cattail), *Phragmites australis* (common reed), and *Ailanthus altissima* (tree-of-heaven). Invasive species management will continue as needed to ensure site success.

Supplemental planting to ensure success is planned for early 2015.

Long-term monitoring of stream and wetland conditions will be conducted as part of the restoration project, including vegetation and hydrology monitoring, stream geomorphology and hydrology, and photographic documentation. In June of 2010, ten groundwater monitoring wells were installed within the restoration area to begin collecting baseline hydrology data. Restoration monitoring was completed in 2014 (Year 1). Year 2 monitoring will occur in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

LJ-11 Chickahominy River (Wilson)

The purpose of this project is to conduct a non-tidal wetland, stream preservation, and stream restoration project along the Chickahominy River and tributaries in Henrico and New Kent Counties. The project will provide approximately 263 acres of preservation, and include 160 acres of non-tidal wetlands and upland buffer and 4,861 linear feet of stream channel. The stream buffer will entail approximately 51 acres, and 52 acres will be counted as additional protected acreage. The site is located downstream of LJ-1 and upstream of LJ-6.

Initial funding for preservation activities was approved by the Corps on August 28, 2008. Additional funding was approved in August 2010. The Conservancy submitted a proposal in 2013 to add stream mitigation activities, including dam removal and restoration of 438 linear feet of stream and 0.17 acres of riparian buffer. The stream restoration component of the project is proceeding under the guidance of the Initial Evaluation Letter (IEL) provided by the Corps on March 11, 2013. The site development plan for the stream restoration was submitted in December 2013 and was thorough reviewed in 2014. The Conservancy expects to complete acquisition of a conservation easement on property and implement stream restoration activities in 2015d Year 1 monitoring is anticipated to occur in 2016.

LJ-12 James River (Blair's Wharf)

Please reference the 2008 Annual Report for details on this project.

The purpose of this project is to conduct a stream, wetland and riparian buffer preservation project at Blair's Wharf on the James River, in Prince George County, Virginia.

The property provides approximately 6,720 linear feet of high quality vegetated riparian buffer along the James River (3,365 feet) and along two unnamed tributaries (3,203 feet and 152 feet) that flow directly into the James River. In addition, there are approximately 15 acres of PFO wetlands on the property. Two-hundred-foot buffers will be established and credited for both wetland and stream systems. Nearly 30 acres will be protected as stream mitigation acreage and over 40 acres will be protected as wetland and wetland buffer mitigation acreage.

The property has been transferred to the U.S. Fish and Wildlife Service. A comprehensive wetland and stream delineation was initiated in 2011 and will be completed on the property in 2015. Upon confirmation of the wetland delineation by the Corps, the Conservancy will request credit release and project closure.

LJ-13 James River (VCU – Harris)

The purpose of this project is to conduct a non-tidal wetland and stream preservation project on property in Charles City County along the James River in Virginia. The property includes 6.5 acres of forested land, and provides preservation of 2.5 acres of riparian buffer along 232 linear feet of the north bank of the James River and 778 linear feet of a pristine freshwater creek (Harris Creek). The property also contains four acres of mature bottomland hardwood swamp forest. This property is adjacent to the VCU Rice Center and Trust Fund stream and wetland restoration project (LJ-10), and is in close proximity to the James River National Wildlife Refuge (including Trust Fund project Blair's Wharf (LJ-12)), Presquile National Wildlife Refuge, and several Virginia Outdoors Foundation easements and other state and federal land holdings.

Funding to assist VCU with acquisition of this property and completion of a conservation easement was approved by the Corps on August 11, 2010. VCU completed acquisition of the property in 2011. A comprehensive wetland and stream delineation was completed on the property in 2013, and was confirmed by the Corps in June 2013. All mitigation credits were released in November 2013. The Conservancy will request closure of this project once all credits have been sold. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

LJ-14 Lower Chickahominy (Fowlkes)

The purpose of this mitigation site is to provide wetland, stream, and upland buffer preservation on approximately 10 acres of land purchased by the Conservancy. The site is located within the boundary of the 5,200-acre Chickahominy Wildlife Management Area managed by the Virginia Department of Game and Inland Fisheries (VDGIF) in Charles City County, Virginia. A surface water delineation for the site was confirmed in December 2013. The mitigation site includes 0.12 acres of non-tidal emergent wetlands and 1.02 acres of non-tidal forested wetlands and 1,844 linear feet of unnamed tributaries to Morris Creek near the mouth of the Chickahominy River which drains to the James River. The project is proceeding under the guidance of the Initial Evaluation Letter (IEL) provided by the Corps on August 27, 2012. Year 1 monitoring was completed in 2014. Year 2 monitoring will occur in 2015. The Conservancy anticipates completing the Site Development Plan process and credit release for this site in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

LJ-15 Chippokes Creek (Bacon's Castle)

The purpose of this project is to provide wetland and riparian buffer preservation, riparian buffer enhancement, and stream restoration/enhancement along Chippokes Creek, Castle Mill Run, and several unnamed tributaries. The 388-acre mitigation site is located in Surry County, Virginia (HUC 02080206). The project will add lands adjacent to the already protected Chippokes Plantation State Park and help protect tidal marsh and buffer habitat for a globally rare skipper (*Problema bulenta*).

This mitigation site contains frontage on approximately 35,593 lf of streams and 9,500 lf of tidal streams. The site also contains 56.66 acres of non-tidal and 15.25 acres of tidal wetlands. A surface water delineation was confirmed in September 2013.

A feasibility study was completed on the property to determine the extent of stream restoration/enhancement opportunities. Stream enhancement is proposed along 953 lf of several tributaries to Lower Chippokes Creek and Castle Mill Run. Restoration activities are proposed along 1,869 lf of tributaries to Lower Chippokes Creek and Castle Mill Run. Buffer enhancement is also proposed within 14.3 acres of the riparian buffer. The project is proceeding under the guidance of the Initial Evaluation Letter (IEL) provided by the Corps on November 18, 2013. Stream restoration/enhancement design is expected to occur in 2015, and restoration activities are expected to occur in 2016/2017, pending submittal and approval of a site development plan for the project.

Middle James River Basin

The Middle James River Basin is comprised of four HUCs (02080203, 02080204, 02080205 and 02080207) encompassing the portion of the James River from the Blue Ridge Parkway east to Richmond. This basin is located within the Conservancy's Piedmont Ecoregion. Conservation targets include small Piedmont streams and tributaries, James spiny mussel, isolated wetlands, and working and old growth forests.

The projects discussed in this section serve as mitigation for permitted impacts within the Middle James River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable. One project approval was received in 2014, to add additional wetland mitigation activities to an existing project (MJ-1).

MJ-1 Rivanna River (Lamb)

Please reference the 2007 and 2008 Annual Reports for additional details on this project.

The purpose of this project is to conduct non-tidal wetland and upland buffer restoration, stream restoration and enhancement, and riparian buffer planting activities at the Lamb property (also known as the Forks of the Rivanna project) in Albemarle County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on April 10, 2001, October 20, 2003, and November 19, 2007.

The objective of the wetland portion of this project is to restore a mixture of emergent and forested wetlands and to restore and preserve the upland buffer associated with the wetland restoration area. Wetland restoration activities began in 2005. Stream restoration and enhancement activities were completed in 2005 on 3,239 linear feet of unnamed tributaries to the North Fork of the Rivanna River. Planting of live stakes along both tributaries was completed in March 2006. A forested buffer was planted along the wetlands, tributaries, and 6,000 linear feet of the North Fork and South Fork of the Rivanna River in 2003 and due to impacts of invasive species, the buffer was replanted in 2009. Invasive species and beaver management have been ongoing and will

continue to ensure site success.

Year 5 monitoring of the stream buffer, wetland buffer, wetland upland buffer and the live stakes planted along the stream restoration/enhancement reaches was completed in 2014. Year 10 monitoring of the wetland restoration area was completed in 2014. Year 10 geomorphic monitoring of the stream restoration is scheduled for 2015.

The Conservancy submitted a prospectus in February 2014 to restore an additional 15.23 acres of wetland buffer through planting in an agricultural field located in the center of the property adjacent to the wetland restoration area. Approval was granted through an initial evaluation letter provided by the Corps in July 2014. The landowner decided not to proceed with the planting activities so this element of the project will not move forward.

A wetlands and surface waters delineation was completed in 2014. The Conservancy will close the wetland restoration aspect of the project in 2015 pending confirmation of the final delineation and release of remaining credits.

Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

MJ-2 Rivanna Watershed site

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

MJ-3 Beaumont (Sisters of the Blessed Sacrament)

This project was officially closed in 2009. Please reference the 2007 and 2009 Annual Reports for details on this project.

MJ-4 Southern Shenandoah (Bennett)

This project was officially closed in 2009. Please reference the 2007 and 2009 Annual Reports for details on this project.

MJ-5 Rivanna Watershed (Meadow Creek site 1)

Please reference the 2008 Annual Reports for additional details on this project.

The purpose of the MJ-5, MJ-6, MJ-7, MJ-8, MJ-10, and MJ-11 projects is to conduct stream mitigation on six adjacent sites along Meadow Creek in the City of Charlottesville and Albemarle County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on November 16, 2007, December 16, 2008, and December 21, 2009. The project includes stream restoration, enhancement, and riparian buffer enhancement and preservation along approximately 9,000 linear feet of Meadow Creek.

Construction began in spring 2012, and was completed in early 2013. Construction on a portion of the stream proposed for restoration (approximately 500 feet) was postponed due to difficulties with access. The Conservancy continues to coordinate with the

engineer and the City of Charlottesville to determine whether completion of this section is feasible. Planting was completed in the 2012/2013 dormant season. Supplemental planting within the buffer and along the streambanks was completed in 2014. Invasive species treatment was completed in 2012, 2013, and 2014. Minor streambank maintenance activities were completed in 2014. Supplemental planting, invasive species control, and minor streambank maintenance is planned for 2015. Year 2 geomorphic, hydrologic, biological, and vegetation monitoring was conducted in 2014. Year 3 monitoring will occur in 2015. Several shallow groundwater hydrology wells were installed along Meadow Creek within constructed depressions to assess the formation of wetlands along the corridor, which have been monitored since 2013. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

MJ-6 Rivanna Watershed (Meadow Creek site 2)

Project description is detailed above at MJ-5.

MJ-7 Rivanna Watershed (Meadow Creek site 3)

Project description is detailed above at MJ-5.

MJ-8 Rivanna Watershed (Meadow Creek site 4)

Project description is detailed above at MJ-5.

MJ-9 Southern Shenandoah site

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

MJ-10 Rivanna Watershed (Area 3)

Project description is detailed above at MJ-5.

MJ-11 Rivanna Watershed (Area 4)

Project description is detailed above at MJ-5.

Upper James River Basin

The Upper James River Basin is comprised of two HUCs (02080201 and 02080202) encompassing the portion of the James River from the West Virginia border east to the Blue Ridge Parkway. This basin is located within the Conservancy's Central Appalachian Ecoregion. Conservation targets include Central Appalachian river systems (with particular interest to the Cowpasture River and the associated tributaries), montane, non-alluvial wetlands, cave invertebrate communities, bats, alluvial forests and

grasslands, pine-oak-heath woodlands, and Central Appalachian mixed hardwood forests.

The projects discussed in this section serve as mitigation for permitted impacts within the Upper James River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

UJ-1 Warm Springs Mountain/Cowpasture River (Phillips)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct non-tidal wetland restoration and creation and upland buffer restoration at the Phillips property in Bath County. The restoration of the site was completed in the spring of 2008. The site design included the restoration of 3.09 acres of non-tidal wetlands, the enhancement of 1.78 acres of non-tidal wetlands and the restoration of 3.81 acres of upland forested buffer. Wetlands restoration and creation is supported by groundwater seeps located in a former pasture.

Mitigation monitoring has been conducted since 2009 and is scheduled through 2018. Year 7 monitoring is scheduled for 2015. In order to address invasive plant issues corrective actions were implemented in 2013 and 2014 and are scheduled through 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

UJ-2 Warm Springs Mountain/Cowpasture River Site

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

SH-3 / UJ-3 Laurel Fork (Rifle Ridge Farm, LLC)

This project mitigates for stream impacts in both the Shenandoah and Upper James River Basins. Projects details are given under the SH-3 description.

New River Basin

The New River Basin is comprised of two HUCs (05050001 and 05050002). This basin is located within the Conservancy's Central Appalachian Ecoregion. Conservation targets include small, Central Appalachian streams and tributaries and general locations encompassing habitat for known Virginia Department of Conservation and Recreation Natural Heritage elements.

The projects discussed in this section serve as mitigation for permitted impacts within the New River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier

reports as indicated below. Updates are given for each project as applicable.

NW-1 New River (Phipps)

Please reference the 2011 Annual Report for additional details on this project.

The purpose of this project is to conduct stream and riparian buffer enhancement and livestock exclusion activities along the New River and tributaries in Grayson County, Virginia. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on June 22, 2011 and June 20, 2012. Stream enhancement and livestock exclusion activities were completed in summer/fall 2013. Planting was completed during the 2013/14 dormant season. Invasive species and beaver management were completed in 2013 and 2014, and will continue as needed to ensure site success. Year 1 monitoring of the mitigation activities was completed in 2014. Year 2 monitoring of the mitigation activities will occur in 2015.

Potomac River Basin

The Potomac River Basin is comprised of three HUCs (02070008, 02070010, and 02070011) encompassing the Lower Potomac east of the Blue Ridge to the Bay. This basin is located within the Conservancy's Piedmont Ecoregion. Conservation targets include small Piedmont streams and tributaries, sportfish and nongame fish populations, and estuarine and riverine systems.

The projects discussed in this section serve as mitigation for permitted impacts within the Potomac River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

PO-1 Caledon (Nash)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct non-tidal wetland restoration and preservation, upland buffer restoration and preservation, stream restoration, and livestock exclusion activities at the Nash property in King George County. The Conservancy proposed to reverse the existing ditching effects and restore the forest cover in the pastureland at the property and to restore the proper dimension, pattern, and profile to the degraded segment of an unnamed tributary to Chotank Creek. The stream portion of this project was completed successfully and closed in 2007. Please reference the 2007 Annual Report for details on this portion of the project.

The goal of the wetland mitigation activities is to restore the livestock pasture area to a mixture of forested wetlands (10 acres) and upland buffer (26 acres) and to preserve

approximately 50 acres of forested wetland and 66 acres of upland. Restoration work was completed in 2003 and the site was planted in 2004. A supplemental planting was completed in 2010 in the southern portion of the project site.

Mitigation monitoring of the site was conducted from 2004 to 2013. The tenth and final year of mitigation monitoring was completed in 2013. A final surface water delineation was completed in 2014. Confirmation of the delineation and final credit release request is expected to occur in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

PO-2 Dogue Creek (Kingstowne)

Please reference the 2007 Annual Report for additional details on this project.

The purpose of this project is to conduct stream restoration and riparian buffer enhancement activities at a property in Fairfax County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on October 6, 2006 and February 2, 2007. Stream restoration construction was completed in early 2011. Mitigation activities entailed restoration of 1,608 linear feet of tributaries to Dogue Creek and invasive species control and planting along the stream banks and riparian buffer. Post-restoration invasive species management has been ongoing and will continue in the buffer area to ensure site success. The Year 3 monitoring of the stream and buffer was completed in 2013. Year 5 monitoring is scheduled for 2015. Monitoring reports are available in the site cyber repository on RIBITS.

PO-3 Goose Creek Site

Please reference the 2007 Annual Report for additional details on this project.

The purpose of this project is to conduct stream restoration, enhancement, and livestock exclusion activities at a property in Loudoun County. The project is no longer moving forward and the Conservancy expects to close the project in 2015.

PO-4 Goose Creek Site

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

PO-5 Goose Creek (Bluewildlife, LLC)

Please reference the 2007 Annual Report for additional details on this project.

The purpose of this project is to conduct non-tidal wetland enhancement and creation and stream and buffer restoration, enhancement and preservation activities at the Bluewildlife property in Fauquier County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on July 27, 2007 and February 17, 2009.

The stream and wetland restoration activities were completed in spring 2009. The project generated 4.71 acres of non-tidal wetland restoration/creation and 1.41 acres of non-tidal wetland enhancement. The project also generated 7,243 linear feet of stream

restoration/enhancement and 22.55 acres of riparian buffer restoration. Invasive species and beaver management have been ongoing and will continue to ensure site success. Year 5 monitoring was conducted in 2013. Year 7 monitoring will occur in 2015. Monitoring reports are available in the site cyber repository on RIBITS.

PO-6 Crow's Nest (Stafford Lakes Partnership, Phase I)

This project was officially closed in 2009. Please reference the 2008 and 2009 Annual Reports for details on this project.

PO-7 Crow's Nest Phase II

This project was officially closed in 2009. Please reference the 2008 and 2009 Annual Reports for details on this project.

PO-8 Goose Creek (Cattail L.C.)

The purpose of this project is to provide stream restoration, enhancement, preservation, upland buffer preservation, and livestock exclusion on nearly 25,000 linear feet of stream on an approximately 816-acre site in Loudoun County, Virginia.

A variety of mitigation options are available on the site. Opportunities for Priority 1 restoration to restore stable dimension, pattern and profile, enhancement through bank shaping and addition of instream structures, streambank and buffer planting, livestock removal, and invasive species removal are evident in the various reaches. A few of the reaches have intact forested buffers and may qualify for preservation credit. Throughout most of the stream reaches, buffer planting and establishment of a forested buffer is necessary and will be considered.

The project is proceeding under the guidance of the project approval letter and budget approval letter provided by the Corps on April 15, 2011. The Conservancy completed acquisition of a conservation easement over the riparian areas in 2011. A surface water delineation and design will be developed in 2015. The Conservancy anticipates restoration activities will begin in 2016/2017, pending submittal and approval of the site development plan.

Rappahannock River Basin

The Rappahannock River Basin is comprised of two HUCs (02080103 and 02080104) encompassing the headwaters of the Rappahannock and Rapidan rivers east to the Chesapeake Bay. This basin is located within both the Conservancy's Piedmont and Chesapeake Bay Lowlands ecoregions. Conservation targets include small, Blue Ridge foothill streams and inner Piedmont streams, tributaries, and rivers, anadromous fishes, freshwater mussels, seepage wetlands, tidal freshwater system, migratory land birds and raptors, Coastal Plain mixed pine-hardwood forest matrix, Piedmont forest matrix,

and calcareous forest.

The projects discussed in this section serve as mitigation for permitted impacts within the Rappahannock River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in the earlier reports as indicated. Updates are given for each project as applicable.

RP-1 Rappahannock River Phragmites Control

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

RP-2 Linden Farm

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

RP-3 Rappahannock River Fish Passage

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

RP-4 Upper Rappahannock (City of Fredericksburg)

The purpose of this project is to conduct stream and the associated upland riparian buffer preservation along a significant length of the Rappahannock and Rapidan Rivers (and associated tributaries) on a property owned by the City of Fredericksburg. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on July 27, 2006, December 15, 2006, February 22, 2007, and May 7, 2008. The Conservancy and partners purchased a conservation easement on approximately 4,232 acres along the two major rivers. The Conservancy, the Virginia Outdoors Foundation, and the Virginia Department of Game and Inland Fisheries co-hold the easement.

The Conservancy anticipates closing this project following confirmation of the surface water assessment in 2015.

RP-5 Rappahannock River (Wellford)

The purpose of this project is to conduct non-tidal wetland and upland buffer preservation at the Wellford property in Richmond County. The funding for this project was approved by the Corps on April 21, 2005. Subsequent funding was approved on August 28, 2008. The Conservancy proposed to buy the timber rights for an 18-acre portion of the property including wetlands and upland buffer. The property was placed under easement on April 5, 2005, which is held and monitored by the Virginia Outdoors Foundation (VOF). Long-term protection of this site is achieved through the monitoring and enforcement of this easement by VOF. No additional monitoring is required for this project.

A wetland delineation of the mitigation area was completed in 2008, showing a marked

difference from what was proposed, though showing potential for restoration. The Conservancy will investigate the full potential for restoration before proceeding further with this project.

RP-6 Rapidan River Site

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

RP-7 Upper Rappahannock Forest Block Site

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

RP-8 Upper Rappahannock Forest Block (Collawn, R.)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

RP-9 Rappahannock River (Rose)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

RP-10 Rappahannock River (Rose II)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

RP-11 Mountain Run (EBX)

The purpose of this project is to conduct a non-tidal wetland restoration and creation, wetland enhancement and preservation and upland buffer restoration, enhancement and preservation adjacent to Mountain Run in Orange County. Reference the 2008 Annual Report for additional background information on this site.

Construction of the wetlands mitigation project was completed in April 2009. This project is being managed through a full delivery contract. All aspects of the project through the monitoring and delivery of credits will be handled under this contract. Mitigation monitoring has been conducted for this site since 2009. 2013 represented the fifth year post construction and mitigation monitoring is scheduled through 2018, with 2015 marking Year 7. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

RP-12 Rappahannock River (Norman's Ford – Jamie Craig)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

RP-13 Rappahannock River Site

This project was officially closed in 2011. Please reference the 2011 Annual Report for details on this project.

Roanoke River Basin

The Roanoke River Basin is comprised of seven HUCs (03010101, 03010102, 03010103, 03010104, 03010105, 03010106 and 0304010) encompassing the Roanoke headwaters and the Dan River draining south into North Carolina. This basin is located within both the Conservancy's Piedmont and Central Appalachian Forest ecoregions. Conservation targets include Ridge and Valley rivers, calcareous seeps/fens, basic mesic forests, acidic oak pine forests, calcareous woodlands/forests, and warm water fish communities including orangefin madtom, Roanoke hogsucker, bigeye jumprock, Roanoke logperch and riverweed darter.

The projects discussed in this section serve as mitigation for permitted impacts within the Roanoke River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

RO-1 Apple Orchard Mountain (Edwards)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

RO-2 Apple Orchard Mountain (City of Bedford)

This project was officially closed in 2008. Please reference the 2008 Annual Report for details on this project.

RO-3 Goose Creek-Roanoke (Bedford County)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct non-tidal wetland and stream mitigation at Montvale Park in Bedford County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on February 22, 2007, February 8, 2008, and December 16, 2008. The project generated approximately 4 acres of wetland restoration/creation, 0.4 acres of wetland enhancement, 5 acres of wetland preservation, and restoration and preservation of the associated wetland buffer areas. The project also generated 3,150 linear feet of stream restoration.

Stream and wetland restoration construction was completed in August 2010. Soon after construction completion, the restored stream suffered damage following a storm in September 2010. Repairs were completed and the site was planted in early 2013.

Invasive species control was completed in 2012, 2013, and 2014 and will continue as needed to ensure site success. Supplemental planting will also be completed in early 2015 to increase density where needed. Year 2 monitoring was conducted in 2014. Year 3 monitoring will occur in 2015. Monitoring reports are available in the site cyber repository on RIBITS.

RO-4 Turkeycock Mountain (Grassy Fork site)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct stream preservation on an approximately 350-acre property in Franklin County. The property encompasses approximately two miles of Grassy Fork and an unnamed tributary to Crab Creek. The property appraisal was completed in 2008 and negotiations have not progressed with the landowner. The Conservancy anticipates closing this project in 2015.

RO-5 Poor Mountain (Sanzone)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct a stream and riparian buffer preservation and enhancement project on Dry Branch, a tributary of the Roanoke River, in Roanoke County, Virginia. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on November 2, 2008. The project seeks to accomplish preservation of approximately 13,200 linear feet of both banks of 1st and 2nd order tributaries to the Roanoke River and 1,500 linear feet of one bank of a tributary. The Conservancy has also proposed the enhancement of 2.3 acres of riparian buffer along 800 linear feet of one bank of Dry Branch through removal of existing tree-of-heaven (*Ailanthus altissima*) trees and replanting with native trees and shrubs.

The initial tree-of-heaven removal was completed in early 2009, followed by seeding and planting to establish a native forested buffer. Invasive species management is ongoing and will continue to ensure site success. Year 3 monitoring was conducted in 2013. Year 5 monitoring will occur in 2015. Monitoring reports are available in the site cyber repository on RIBITS.

RO-6 Roanoke Headwaters (Blake)

Please reference the 2009 Annual Report for additional details on this project.

The purpose of this project is to conduct stream system preservation, streambank enhancement, and riparian buffer enhancement on Mill Creek and tributaries in the Roanoke Headwaters in Montgomery County, Virginia. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on September 28, 2009, August 11, 2010, and August 3, 2011. Mitigation activities at the site include buffer preservation, stream enhancement (live stakes planting), and buffer enhancement (invasive species removal and planting) along approximately 6,748 linear feet of Mill Creek and tributaries. Autumn olive (*Elaeagnus umbellata*) removal and planting with native trees and shrubs was conducted in 2011 and 2012. Live stakes planting was also completed in 2012.

Supplemental planting will be conducted in early 2015 to increase density where needed. Invasive species management is ongoing and will continue to ensure site success. Year 3 monitoring was conducted in 2013. Year 5 monitoring will occur in 2015. Monitoring reports are available in the site cyber repository on RIBITS.

RO-7 Turkeycock Mountain (Roanoke Stream Credit Purchase)

The Nature Conservancy released a request for proposals (RFP) in October 2012 for delivery of 2,500-3,500 stream credits in the Roanoke River basin. After thoughtful consideration, it was decided that 2,500 stream credits would be purchased from the Roanoke River Stream and Wetland Mitigation Bank, located in Franklin and Henry Counties. Roanoke River Stream and Wetland Mitigation Bank is located adjacent to Turkeycock Mountain, which has been identified by the Conservancy as a Terrestrial Portfolio Conservation Area. The project is proceeding under the guidance of the Initial Evaluation Letter (IEL) provided by the Corps on January 15, 2013.

Phase I of the Roanoke River Stream and Wetland Mitigation Bank includes livestock exclusion, buffer preservation, enhancement, and re-establishment, and stream restoration/enhancement along several unnamed tributaries to Reed Creek.

The credit purchase was completed in 2013 and the Conservancy anticipates closing this project in 2015

Shenandoah River Basin

The Shenandoah River Basin is comprised of four HUCs (02070004, 02070005, 02070006, and 02070007) encompassing the headwaters of the Shenandoah River to the Potomac River. This basin is located within the Conservancy's Central Appalachian Forest Ecoregion. Conservation targets include Blue Ridge stream and tributaries, Central Appalachian mixed hardwood forest matrix, cave invertebrate communities, endangered wood turtles, freshwater mussels, and sportfish and nongame fish populations.

The projects discussed in this section serve as mitigation for permitted impacts within the Shenandoah River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable. One new project was approved in 2014.

SH-1 Cedar Creek (Mowery)

Please reference the 2007 Annual Report for additional details on this project.

The purpose of this project is to conduct stream and riparian buffer enhancement at the Mowery property (also known as the Ogden's Cave project) in Frederick County. The

Conservancy proposed to exclude cattle from the stream and plant a woody riparian buffer and live stakes along approximately 1,700 linear feet of Buffalo Marsh Run. The restoration activities were completed in spring of 2007. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on June 21, 2006 and September 28, 2006.

Invasive species management has been ongoing and will continue to ensure site success. Year 7 monitoring was conducted in 2014. Year 10 monitoring will occur in 2017. Monitoring reports are available in the site cyber repository on RIBITS.

SH-2 Blacks Run (City of Harrisonburg)

Please reference the 2007 and 2008 Annual Reports for additional details on this project.

The purpose of this project is to conduct stream restoration activities at Purcell Park in the City of Harrisonburg. The Conservancy proposed to conduct restoration activities along Blacks Run, Seibert Creek, and an unnamed tributary to Seibert Creek. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on December 7, 2006 and September 24, 2008.

The stream restoration and buffer planting activities were completed in spring 2009. The total channel length in the mitigation area is 5,310 linear feet. Mitigation activities generated 1,774 linear feet of stream restoration, 2,329 linear feet of stream enhancement, 8 acres of buffer restoration, and 8.9 acres of buffer preservation.

Invasive species management has been ongoing and will continue to ensure site success. Year 5 monitoring was conducted in 2014. Year 7 monitoring will occur in 2016. Monitoring reports are available in the site cyber repository on RIBITS.

SH-3 / UJ-3 Laurel Fork (Rifle Ridge Farm, LLC)

This project was officially closed in 2009. Please reference the 2007 and 2009 Annual Reports for additional details on this project.

SH-4 Shenandoah Mountain/Cow Knob (Smith)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct non-tidal wetland restoration activities on a portion of a 200-acre property located in Fulks Run, Virginia. The mitigation area will be placed under a conservation easement. Long-term protection of the site will be accomplished through the monitoring and enforcement of the easement. The project will include a total of approximately 10.4 acres of wetland mitigation, including an appropriate mix of upland buffer (100 foot minimum), and emergent, scrub/shrub and forested wetland community types. This project is being managed through a full delivery contract. All aspects of the project through the monitoring and delivery of credits will be handled under this contract.

The final mitigation plan was completed in 2010. An approved conservation easement with Potomac Conservancy was recorded in October of 2011. Wetland restoration

activities commenced in May of 2012 and were completed in July of 2012. Planting of woody vegetation was conducted prior to the onset of the 2013 growing season.

Year2 monitoring was completed in 2014. Year 3 monitoring will occur in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

SH-5 Cedar Creek (Swartz)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct a wetland, stream, and buffer preservation project on Buffalo Marsh Run adjacent to the Ogden's Cave property (SH-1) in Frederick County, Virginia. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on August 28, 2008. The property is owned by DCR and protected with a deed of dedication which will require the property to be managed with the primary objectives of protecting stream water quality and natural heritage resources

Mitigation activities at the site include the preservation of approximately 1,465 lf of both banks of Buffalo Marsh Run, 1.02 acres of emergent wetland, and 10.2 acres of riparian buffer. A surface water delineation was confirmed in September 2014. The Conservancy expects to close this project in 2015 following confirmation of the surface water delineation.

SH-6 Shenandoah River (Cedar Creek)

The purpose of this project is to establish an approximately 58-acre mitigation site on Cedar Creek and an unnamed tributary in Warren County, Virginia. The project will provide stream restoration and preservation, livestock exclusion, and riparian buffer enhancement and preservation along 9,128 linear feet of Cedar Creek and unnamed tributaries. The project is proceeding under the initial evaluation letter (IEL) provided by the Corps on February 4, 2014. The property is owned by the Shenandoah Valley Battlefields Foundation and will be protected with a conservation easement which will require the property to be managed with the primary objectives of protecting stream water quality and natural heritage resources.

Cedar Creek is a major tributary to the North Fork of the Shenandoah River. The project will help conserve riparian habitat along Cedar Creek, adding to a significant amount of land already protected in this area. The Property contains a portion of the North Fork Shenandoah River – Warren Creek stream conservation unit (rank B5) described as river substrate primarily “corrugated” bedrock, with pockets of finer sediments. The Property is also within 3 miles of 12 element occurrences. Cedar Creek is identified as a portfolio stream reach in the Conservancy's Compensation Planning Framework. The Property is adjacent to or within close proximity of lands already protected by the Battlefields Foundation, the Virginia Outdoors Foundation, the Potomac Conservancy, the Virginia Department of Historic Resources, the U.S. National Park Service, and the National Trust for Historic Preservation. A total of approximately 1,600 acres are preserved within the 3,700-acre Cedar Creek and Belle Grove National Historic Park, and the Battlefields Foundation is currently working with other landowners in the area to protect additional properties.

A surface water delineation was confirmed in September 2014. Invasive species management is anticipated to begin in summer 2015 and will continue as needed to ensure site success. The Conservancy expects to complete the design and submit the site development plan for approval in 2015, with construction and planting anticipated in 2016.

Tennessee River Basin

The Tennessee River Basin is comprised of four HUCs (06010205, 06010206, 06010101, and 06010102) encompassing the headwaters of the Clinch, Holston, and Powell Rivers draining south into Tennessee. This basin is located within the Conservancy's Cumberland and Southern Ridge Valley Ecoregion. Conservation targets include endemic mussels and associated assemblages, Appalachian bogs, fens and seeps, Southern Appalachian forest matrix, upper Tennessee fish community, bats, karst communities, calcareous river-fronting slope communities and limestone and dolomite barrens.

The projects discussed in this section serve as mitigation for impacts within the Tennessee River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier reports as indicated below. Updates are given for each project as applicable.

TN-1 Gray's Island (Holston Land Company)

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

TN-2 Barns Chapel (Garry Smith Enterprises, Inc.)

Please reference the 2008 Annual Report for additional details on this project.

The purpose of this project is to conduct stream restoration activities and exclude livestock from a stream and pond at the Smith property located near Abingdon in Washington County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on March 28, 2006. The Conservancy proposed to install livestock exclusion fencing, reconfigure a small pond, and conduct Priority 1 relocation on approximately 1,580 linear feet of Rattle Creek located on the property. Restoration activities were completed in 2007 and 2008.

Year 7 monitoring was conducted in 2014. Year 10 monitoring will occur in 2017. Monitoring reports are available in the site cyber repository on RIBITS.

TN-3 Barns Chapel (Atwell)

This project was officially closed in 2007. Please reference the 2007 Annual Report for

details on this project.

TN-4 Upper Clinch River Site

This project was officially closed in 2007. Please reference the 2007 Annual Report for details on this project.

TN-5 Pinnacle (Rich)

The purpose of this project is to complete a stream mitigation project on the Rich Tract in Russell County, Virginia. Stream preservation will be conducted on approximately 3,393 linear feet of stream channel. Funding for this project was approved by the Corps on June 16, 2008. The landowner sold the Conservancy 28.29 acres of property, providing a buffer ranging from approximately 143 feet to over 200 feet adjacent to the main stem of the Clinch River. The proposed mitigation area is approximately 9.75 acres. The additional 19.04 acres purchased will be reported as "additional protected acreage." Long-term protection of the site will be achieved through a deed restriction. The Conservancy intends to transfer ownership of the property to the Virginia Department of Conservation and Recreation. The Conservancy staff completed a surface water delineation of the site on April 20, 2009 and the Corps provided confirmation in January 2010. Based on the delineation, the 28.29-acre property contains 13.7 acres of riparian buffer mitigation area and 14.59 additional protected acres. The property preserves 3,201 linear feet of the Clinch River. The Conservancy will close the project upon transfer to DCR.

TN- 6 Rich Mountain Site

The purpose of this project is to complete a 23.1-acre wetland mitigation project on a tract in Russell County, Virginia. Funding for this project was approved by the Corps on November 2, 2008. Wetland enhancement activities, via cattle exclusion, will be conducted on approximately 7.9 acres of existing calcareous fen wetlands with an additional 15.2 acres of forested buffer preservation on the adjacent uplands. The proposed wetland mitigation area is wholly contained within an area currently held under a permanent forest management easement by the Conservancy. Additional restrictions will be added to the existing easement to meet mitigation requirements. The wetlands on the property are heavily impacted by cattle grazing and watering. In addition to fencing cattle out of the wetlands and establishing or maintaining a forested buffer, an alternative watering system will be installed along the Rich Mountain ridgeline. This will protect these high elevation wetlands that are currently impacted by cattle grazing and watering needs.

The project area contains approximately 8.0 acres of groundwater-controlled, non-alluvial wetlands that have been identified for potential enhancement. These wetlands are seep driven and contain species that are indicative of calcareous fens, an identified globally rare habitat. Golden ragwort (*Packera aurea*), swamp lousewort (*Pedicularis lanceolata*), and royal fern (*Osmunda regalis* var. *spectabilis*) have been identified in the wetland enhancement areas.

The Conservancy is negotiating the terms of the restrictions that will be placed on the existing forest management easement. Fencing of the site and installation of the alternate water source will be implemented following protection of the site. .

TN-7 Upper Clinch River Site

This project was officially closed in 2011. Please reference the 2011 Annual Report for details on this project.

TN- 8 North Fork Holston (KCI)

The purpose of this project is to complete a 31.9-acre wetland mitigation project on two tracts in Smyth County, Virginia. Funding for this project was approved by the Corps on August 11, 2010. This project is being managed through a full delivery contract. All aspects of the project through the monitoring and delivery of credits will be handled under this contract.

The project consists of wetland restoration, creation, and enhancement activities on properties owned by two separate landowners. The properties are located in close proximity to one another and adjacent to the North Fork Holston River, approximately 8.5 miles northeast of Saltville, Virginia. Combined, the project parcels encompass approximately 262 acres, a majority of which is dedicated to agriculture and pastureland. Combined, wetland mitigation activities on the project parcels will provide for restoration/creation of 19.8 acres of wetlands, and enhancement of 1.0 acre of existing wetlands. An additional 100-foot upland buffer will be established. The mitigation area will be placed under a conservation easement.

Land protection activities were finalized in January 2012, and the final mitigation plan was completed in June of 2012. Wetland restoration activities commenced in September of 2012 and were completed in December of 2012. Planting of woody vegetation was conducted in early 2013, prior to the growing season.

Year 2 monitoring was completed in 2014 Year 3 monitoring will occur in 2015. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

TN- 9 Cedars (Brooks)

Please reference the 2010 Annual Report for additional details on this project.

The purpose of this project is to conduct a stream and riparian buffer preservation and stream buffer enhancement project on a 42-acre property containing frontage on the Powell River and a tributary to the Powell River in Lee County. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on July 2, 2010. Proposed mitigation activities include stream and riparian buffer preservation and stream buffer enhancement along 2,500 linear feet of the south bank of the Powell River and 250 linear feet of a tributary to the Powell River. Buffer planting was completed in early 2011.

Year 3 monitoring of the buffer enhancement area was conducted in 2013. Year 5 monitoring will occur in 2015. Invasive species management is ongoing and will continue as needed to ensure site success.

TN-10 Cedars (Bowen)

The purpose of this project is to conduct stream preservation, buffer enhancement, and livestock exclusion on Hardy Creek and the Powell River in Lee County, Virginia. The project is proceeding under the guidance of the project and budget approval letters provided by the Corps on July 22, 2011. Mitigation activities include buffer preservation and buffer planting along approximately 9,720 linear feet of the right bank of Powell River and preservation of 1,318 linear feet of the right bank of Hardy Creek. In addition, buffer planting in approximately 9.6 acres of riparian buffer along Powell River will be conducted within an agricultural field located along the right bank in the southern portion of the property. This project will also exclude livestock from approximately 6,039 linear feet of Powell River.

Livestock exclusion fencing was installed in early 2013 and buffer planting is expected to occur in the 2015/2016 dormant season, pending submittal and approval of the project's site development plan. Invasive species management began in 2013 and will continue as needed to ensure success. Year 1 monitoring is expected to be conducted in 2016.

TN-11 Pinnacle (Underwood)

The purpose of this mitigation site is to provide stream and riparian area preservation and enhancement on a site located adjacent to the Pinnacle Natural Area Preserve in Russell County, Virginia. The mitigation activities include buffer planting and preservation. Buffer planting will occur within a 9-acre field along the Clinch River. Buffer preservation will encompass 2,586 linear feet of the left bank of the Clinch River and 4,267 linear feet of tributaries to the Clinch River. The project is proceeding under the guidance of the Initial Evaluation Letter (IEL) provided by the Corps on August 8, 2012. The Conservancy anticipates that buffer planting will occur in the 2015/2016 dormant season, pending submittal and approval of the project's site development plan. Invasive species management began in 2013 and will continue as needed to ensure success. Year 1 monitoring is expected to be conducted in 2016. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

York River Basin

The York River Basin is comprised of three HUCs (02080105, 02080106, and 02080107) encompassing the headwaters of the Mattaponi, Pamunkey and York rivers draining east into the Bay. This basin is located within both the Conservancy's Piedmont and Chesapeake Bay Lowland ecoregions. Conservation targets include tidal freshwater systems, small Piedmont streams and tributaries, bald cypress forests, anadromous fishes, migratory land birds and raptors, seepage wetlands, Coastal Plain mixed pine-hardwood forest matrix, and calcareous forests.

The projects discussed in this section serve as mitigation for permitted impacts within the York River Basin for which the Fund was used as compensatory mitigation. Complete project descriptions for projects approved prior to 2014 may be found in earlier

reports as indicated below. Updates are given for each project as applicable

YK-1 Po River (Leonard)

The purpose of this project is to conduct a non-tidal wetland and upland buffer preservation project at the Po River property in Spotsylvania County. The funding for this project was approved by the Corps on March 28, 2003. The property was purchased by the Central Virginia Battlefields Trust (CVBT) and placed under easement in February of 2003. The easement is held and monitored by the Virginia Department of Conservation and Recreation (DCR). Long-term protection will be achieved in accordance with the conservation easement. No additional monitoring is required for this project.

An initial delineation of surface waters and wetlands was conducted on the site in December 2006. An updated wetland delineation was completed in April, 2014. The Corps provided confirmation of the delineation in November 2014. The Conservancy anticipates closing the project in 2015.

YK-2 Mattaponi River (Gwathmey 1)

The purpose of this project is to conduct a non-tidal wetland and upland buffer restoration, wetland enhancement and wetland and upland preservation project at the Gwathmey project in King William County. The initial funding for this project was approved by the Corps on February 5 and 20, 2004. Goals for the project include restoration/creation of 67.5 acres of forested wetlands on approximately 76.9 acres of former agricultural land, which was abandoned in 2004. Restoration efforts began in 2006 and included plugging of field ditches, creation of several seasonally flooded ponds, construction of a berm system, deep ripping of the surface soil, and planting of 44,450 bare root seedlings and 9,600 shrubs. Long-term protection will be achieved in accordance with the conservation easement which is held and monitored annually by the Conservancy.

Mitigation monitoring has been conducted on the site since 2007. Year 10 monitoring will occur in 2016. Corrective actions to address invasive plants were undertaken in the fall of 2013 and are scheduled through 2015. Additionally, the site is experiencing problems with ponding due to beaver activity. In 2013, a beaver control structure was installed which decreased water levels in one part of the project. Installation of a second device will take place in 2015. Insect scales have been observed on trees. The Conservancy is determining whether corrective action for this pest is needed. Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

YK-3 Dragon Run (Beldon)

The project was officially closed in 2009. Please reference the 2009 Annual Report for more details on this project.

CB-8/YK-4 Upper Crab Neck (BP North America)

The details of this project are included under the Chesapeake Bay River Basin summary.

YK-5 Cumberland Marsh (Healthvest, Inc.)

The purpose of this project is to conduct non-tidal wetland, tidal wetland, and stream restoration at the Cumberland Marsh Preserve in New Kent County. The funding was initially approved by the Corps on July 1, 2005, with additional funds approved on February 22, 2007 and August 11, 2010. The Conservancy has owned and managed the preserve since December 28, 1993. The preserve is comprised of a mixture of freshwater tidal marsh, open-water impoundments and wooded upland, and provides habitat for wetlands species and migrating waterfowl, as well as a large population of the federally-endangered sensitive joint vetch (*Aeschynomene virginica*). Long-term protection of the site is achieved through ownership by the Conservancy.

Feasibility studies completed in 2007 confirmed that the dam and impoundment were not structurally stable, and their removal combined with restoration of a natural stream channel and associated wetlands will benefit water quality and habitat. Design and construction plans were completed in 2009. The project involved removal of two earthen embankment dams located on an unnamed tributary to Holts Creek, which in turn drains to the Pamunkey River. Wetland, stream and buffer restoration activities began in late autumn 2010.

Monitoring of wetland vegetation and stream channel stability has been conducted since 2011. Year 5 monitoring will occur in 2015.

In addition to the proposed restoration activities at the impoundments, TNC has enhanced the wooded riparian buffer along sections of Holt's Creek and the Pamunkey River through the planting of additional hardwoods to extend the existing wooded buffers to 100-200 feet. Year 5 monitoring of the buffer enhancement area was conducted in 2014. Year 7 monitoring will occur in 2016.

Due to problems with invasive plants on site, treatment plans have been developed and implemented in 2013 and are scheduled through 2015.

Additional information regarding this mitigation site may be found in the site cyber repository on RIBITS.

YK-6 Mattaponi River (Atwood)

The purpose of this project is to conduct stream and non-tidal wetland preservation on approximately 72.5 acres located near the town of Aylett in King William County. The site is bordered by the Mattaponi River. The funding for the appraisal was approved by the Corps on August 12, 2005, with subsequent funding for easement acquisition approved on May 2, 2006. The Conservancy completed negotiations with the landowner and signed the easement at the end of 2009. A final delineation was conducted in April 2014. The Corps provided confirmation of the delineation in December 2014. The Conservancy anticipates closing the project in 2015.

YK-7 Mattaponi River (Gwathmey 3)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

YK-8 Mattaponi River (Bach 1)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

YK-9 Mattaponi River Site 2

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.

YK-10 Mattaponi River (Bach 2)

This project was officially closed in 2009. Please reference the 2009 Annual Report for details on this project.