ARRA in Virginia (2009 - 2013)

Investing in Watersheds and Communities

Overview

Virginia received $4.5 million under the American Recovery and Reinvestment Act of 2009 to improve infrastructure, stimulate the state's economy and create jobs.

NRCS initiated five projects to update aging flood control structures, protect and maintain water supplies, improve water quality, reduce soil erosion, enhance fish and wildlife habitat, and restore wetlands.

Pohick Creek Watershed

Fairfax County installed six dams in the Pohick Creek Watershed between 1969 and 1985 to protect homes, businesses and infrastructure from flooding during large storms.

Over time, four of those dams (Woodglen Lake, Royal Lake, Huntsman Lake and Lake Barton) needed to be upgraded to meet Virginia's Dam Safety standards. NRCS contributed ARRA funding for rehabilitating Lake Barton and Woodglen Lake.

Lake Barton (Site 2)

Description: This project raised the water level in the lake and prolonged the life of the dam another 50 years with increased sediment storage capacity.

Benefits: Rehabilitating the dam will prevent flooding and protect 535 residents, 192 homes and businesses, four highways, two railroads, and five utilities. It will also minimize flood risks to 1,050 workers and clients who do business at 15 industrial sites, three public sites, and 23 commercial and office sites.

NRCS contributed approximately $2,343,842 million in ARRA funds for this $3,605,910 project, which was completed in 2011. The rehabilitated structure will provide more than $122,000 in average flood damage reduction benefits each year.

These secant walls will increase the stability of the Lake Barton Dam.

Woodglen Lake (Site 3)

Description: The project involved armoring the auxiliary spillway with articulated concrete blocks to prevent severe erosion during major storms.

The existing training dike was raised and lengthened to protect the dam embankment. A second training dike was built to direct auxiliary spillway flow to the valley floor.

Benefits: Completed in 2010, this project has given surrounding homeowners a renewed sense of safety and security. The rehabilitation has helped to minimize the threat to loss of life for approximately 435 residents who live in 157 single family homes and townhouses.

It also reduced these risks for the 440 people at 14 industrial sites, two public sites, four commercial sites and two office sites.

ARRA funds totaling $1,123,834 million helped cover the costs of the $1,728,976 million project, which will offer an estimated average annual flood damage benefit of $118,400. Woodglen Lake (and Lake Barton) protect residential property below the dam(s) valued at nearly $57 million.

Articulated concrete blocks on the auxiliary spillway and inside the training dikes will help prevent erosion at Woodglen Lake.

North Fork Powell

Description: Located in Lee County, the North Fork Powell River Watershed covers 57,620 acres. Acid mine drainage (AMD) from 70 years of unrestricted surface coal mining had severely impacted water quality and threatened

habitat for 15 threatened/endangered species of freshwater mussels and fish.

The Benefits: Reclamation of five abandoned mine sites is helping to reduce sediment and improve pH levels to re-establish fishable waters in Upper Stone Creek and Ely Creek. Bluegill, herons, toads, and salamanders are returning and the mussel population in these tributaries is increasing.

These reclamation projects have had a positive impact on the water quality in Ely Creek and Upper Stone Creek, treating more than 500 gallons per minute of AMD.*

The first two sites were finished in summer 2010 and the other three were completed in 2011. The total value of the combined projects is $420,874.

* *Combined total including previously completed Army Corps of Engineers (COE) projects in these subwatersheds.*

The anaerobic wetland constructed on this Ely Creek site contains organic materials that absorb oxygen and allow heavy metals to stay in suspension.

Chestnut Creek

Description: The project is located in Carroll and Grayson Counties, the Town of Fries, and the City of Galax. Covering 91,594 acres, Chestnut Creek ranks in the top 10 percent of the state's priority watersheds due to erosion on agricultural land.

Grazing management practices are helping to improve water quality on Crestnut Creek.

The Benefits: Chestnut Creek is a water supply for about 2,700 residences in the City of Galax and the communities of Fairview and Cranberry. Conservation practices are currently being installed to protect 12,883 acres of pasture, hay, wood, and cropland. These measures will also reduce erosion by 283,400 tons per year, restore trout habitat on 28.6 miles of local streams and improve farm income and water quality through better grazing management.

ARRA dollars were used to fund four long-term contracts with landowners covering 400 acres of grazing land for a total of $272,170. Obligations for construction work on these farms totaled $362,893 (includes landowner contributions). These projects will be completed by September 2013.

Little Reed Island

Description: The project is located in Carroll, Pulaski, and Wythe Counties and the Town of Hillsville. Though one-third of the land is in pastures, it contributes three-fourths of the sediment to local streams.

Benefits: The Little Reed Island project will protect drinking water for nearly 3,000 residents in Carroll County and the Town of Hillsville. Conservation practices being installed on 15,629 acres of pasture, hay, wood, and cropland will reduce sediment, nutrients, and bacteria in local streams, and lower water treatment costs by nearly $3,400 per year.

ARRA dollars were used to fund two contracts covering 164 acres. Total funding for construction work on these farms totaled $136,547 (including landowner contributions). Payments to landowners totaled $102,410. These projects were completed in May 2012.

Exclusion fencing is reducing sediment, nutrients, and bacteria in local streams.