



## INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA)

### WATERSHED REHABILITATION PROGRAM (REHAB) FUNDING

*Round 1 : March 4, 2022*



*Alphabetically by State and Congressional District*

#### **MASSACHUSETTS – MA08**

##### **Allen Site**

The funds for the Allen Site Dam Project will be used to prepare the design for rehabilitation of the Allen Dam Site located in Walpole, Massachusetts. The Allen Site Dam is a high hazard dam; the hazard classification is based on the potential for loss of human life to residents, workers and motorists, and risk of damage to homes, commercial facilities and infrastructure resulting from dam failure. The dam was constructed in 1981 and provides flood protection along Diamond Brook which runs through the center of the Town of Walpole. The dam will be upgraded to meets NRCS and Massachusetts dam safety standards for high hazard dams.

The goal of the project is to maintain flood control protection for up to the 100-year flood event on Diamond Brook and for the dam to meet NRCS and State of Massachusetts dam safety standards. The resource concerns identified in the environmental assessment for rehabilitation of the dam include: Fish and Wildlife, Forest Resources, Invasive Species, Migratory Species, Parklands, Plant Condition, Regional Water Resource Plans, Riparian Areas, Scenic Beauty, Soil Resources, Waters of the United States, Including Special Aquatic Sites, Wetlands, Erosion and Sediment Yield, Aquatic Resources, and Recreation. The downstream beneficiaries include the general public, Town of Walpole, Norfolk County, Massachusetts Department of Transportation (MassDOT), and the Massachusetts Department of Conservation and Recreation (DCR).

#### **MISSISSIPPI – MS02**

##### **Buntyn Creen STR 16 A-1 & 2**

The Buntyn Creek Watershed FWRS No. Y-16A-1 was planned and built with flood prevention being the primary purpose for the structure. The dam is a 43-foot tall (maximum height) earthen embankment with a drainage area of 3.23 square miles. The permanent pool (sediment pool) or normal pool during non-flood periods is 29.8 acres. During major flood events, the flood pool can enlarge to cover an area of 81.0 acres. The site has the capability to store 234 ac-ft. of sediment. At flood stage the site can store up to 915 ac-ft of potential floodwater that is then slowly released after the storm event.



The principal spillway system consists of a concrete intake structure in the pool (riser) with a concrete outlet pipe through the dam. This system controls the release of floodwater. The riser is a single stage, covered top riser, with inside dimensions of 2.0 ft wide x 6.0 ft long x 15 ft. high. The outlet pipe is a 21-inch concrete pipe with a steel internal cylinder. Potential seepage alongside the pipe system is controlled with six anti-seep collars. The embankment foundation has a sand and gravel toe drain with a 6-inch perforated asbestos cement pipe to provide for internal drainage of the structure.

Dam failure may damage isolated homes, main highways or minor railroads or cause interruption of use or service of relatively important public utilities. Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards and reduce risk to loss of life and property damage.

**Buntyn Creek Watershed FWRS Y-16A-2** was planned and built with flood prevention being the primary purpose for the structure. The dam is a 32-foot tall (maximum height) earthen embankment with a drainage area of 0.65 square miles. The permanent pool (sediment pool) or normal pool during non-flood periods is 10.0 acres. During major flood events, the flood pool can enlarge to cover an area of 62.0 acres. The site has the capability to store 24 ac-ft. of sediment. At flood stage the site can store up to 176 ac-ft of potential floodwater that is then slowly released after the storm event. The principal spillway system consists of a concrete intake structure in the pool (riser) with a concrete outlet pipe through the dam. This system controls the release of floodwater. The riser is a single stage, covered top riser, with inside dimensions of 2.0 ft wide x 6.0 ft long x 9 ft. high. The outlet pipe is a 15-inch concrete pipe with a steel internal cylinder. Potential seepage alongside the pipe system is controlled with four anti-seep collars.

A sudden dam breach of Dam No. 1680 will inundate approximately 77 acres between the dam site and the MS Highway 35. The depth of inundation at the downstream point will be about 3 feet with maximum flow velocities exceeding 3.86 fps (feet per second). About 1250-foot section of Peters Hill Road, which is located at approximately 2250 ft downstream of the dam will be inundated by sudden breach of this dam structure. Fourteen residential structures will be inundated due to sudden breach of this dam.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards and reduce risk to loss of life and property damage.

#### **Ascalmore Creek Str Y – 17A-1 & 2**

Ascalmore Creek Watershed, Structure No. Y-17A-1 site was originally designed to accumulate and store 762 ac-ft. of sediment. The dam is 1725 feet long and 36 feet tall earthen embankment with a drainage area of approximately 10.48 square miles. The principal spillway system consists of a concrete riser structure with a concrete outlet pipe through the dam. The riser is a single-stage, covered top riser, with inside dimensions of 2.5 ft. x 7.5 ft. x 12 ft. high with a 30-inch diameter concrete outlet pipe. Potential seepage alongside the pipe system is controlled with five concrete anti-seep collars.



A dam failure impacts 32 homes, 3 commercial businesses, the fire station, a church, and 3 county road crossings/bridges; therefore, meets both the loss of life and property damage criteria for a high hazard dam.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards.

**Ascalmore Creek Watershed, Structure No. Y-17A-2** site was originally designed to accumulate and store 256 ac-ft. of sediment. The dam is 985 feet long and 39 feet tall earthen embankment with a drainage area of approximately 5.99 square miles. The principal spillway system consists of a Concrete riser structure with a concrete outlet pipe through the dam. The riser is a multiple-stage, covered top riser, with inside dimensions of 4.0 ft. x 4.0 ft. x 30 ft. high with a 36-inch diameter concrete outlet pipe. Potential seepage alongside the pipe system is controlled with three concrete anti-seep collars.

A dam failure could result in eight (8) local roads being inundated from 1.0 to 9.8 feet and twenty-nine (29) homes, 3 commercial businesses, community fire station, and a church inundated from 0.1 to 6.4 feet.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards.

#### **Bentonia Creek WS STR no. 7**

The Bentonia Creek Watershed, Structure No. 7 is a floodwater retarding structure dam. The site was originally designed to accumulate and store 215 ac-ft. of sediment. The dam is 1971 feet long and 23 feet tall earthen embankment with a drainage area of approximately 2.58 square miles. The principal spillway system consists of a concrete riser structure with a concrete outlet pipe through the dam. The riser was designed as a two-stage, covered top riser, with inside dimensions of 2.5 ft. x 7.5 ft. x 14 ft. high with a 30" x 18" low stage inlet and a 30-inch diameter concrete outlet pipe. Potential seepage alongside the pipe system is controlled with 4 concrete anti-seep collars.

A dam failure could result in 2 local county roads being inundated from 0.3 to 4.7 feet and 3 homes being inundated from 2.6 to 3.2 feet of floodwater.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety measures and performance standards and reduce risk of loss of life and property damage.

#### **Eden Creek WS STR Y 37D 10**

The Eden Creek, Structure No. Y-37D-10 site was originally designed to accumulate and store 54 ac-ft. of sediment. The dam is 550 feet long and 47-feet tall earthen embankment with a drainage area of approximately 0.4937 square miles. The principal spillway system consists of a concrete riser structure with a concrete outlet pipe through the dam. The riser is a multi-stage, covered top riser, with inside dimensions of 2.5 ft. x



7.5 ft. x 14 ft. high with a 12" x 6" low stage opening and a 30-inch diameter concrete outlet pipe. Potential seepage alongside the pipe system is controlled with six concrete anti-seep collars.

A dam failure could result in Highway 49E being inundated by 7.0 feet and 1 home being inundated by 2.6 feet. Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards and reduce risk to loss of life and property damage.

#### **Tillatoba Creek Str Y - 17B - 1**

Tillatoba Creek Watershed FWRS Y-17B-1 site was designed and constructed as a class (a) low hazard site, meaning that failure may damage farm buildings, agricultural land, or township and county roads. The dam was planned and built with flood prevention and public recreation being the primary purposes for the structure.

It is estimated that 5 single family dwellings have been constructed within the potential breach inundation area downstream of the dam since its completion. In the event of a sudden dam failure there would be an eminent threat to human life for the occupants of these dwellings.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards and reduce risk to loss of life.

#### **N. Tillatoba- Hunter Creek WS Y-17C-6B**

The North Tillatoba-Hunter Creek Watershed, Structure No. Y-17C-6B is a floodwater retarding structure dam. The site was originally designed to accumulate and store 326 ac-ft. of sediment. The dam is 1850 feet long and 35 feet tall earthen embankment with a drainage area of approximately 7.01 square miles. The principal spillway system consists of a concrete riser structure with a concrete outlet pipe through the dam. The riser is a single-stage, covered top riser, with inside dimensions of 4 ft. x 12 ft. x 12 ft. high with a 48-inch diameter concrete outlet pipe. Potential seepage alongside the pipe system is controlled with an embankment drain located approximately 32 feet downstream of centerline.

A dam failure could result in Highway 32E being inundated by 7.2 feet and five (5) homes, 3 commercial businesses, and the fire training complex inundated from 1.2 to 5.9 feet.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety measures and performance standards and reduce risk of loss of life and property damage.

#### **Black Creek WS Dam No.100**

Black Creek Watershed, Structure No. 100 site was originally designed to accumulate and store 122 ac-ft. of sediment. The dam site is located on Yazoo Creek, an upstream



tributary of the Black Creek. The dam is 940 feet long and 34 feet tall earthen embankment with a drainage area of approximately 0.75 square miles. The dam impounds approximately 20 acres at normal pool level. Spillways consist of a covered top principal spillway concrete riser (2.5' x 7.5') with a 30-inch diameter outlet pipe and a 100 feet wide earthen auxiliary spillway located in the right abutment.

A dam failure could result in six (6) local county roads being inundated from 1.0 to 6.1 feet and seventy-eight (78) homes and one (1) business inundated from 0.1 to 5.3 feet.

Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Mississippi dam safety criteria and performance standards and reduce risk to loss of life and property damage.

## **OHIO - OH15**

### **Margaret Creek 1 and 6**

#### **Margaret Creek 1 ( Meeks Lake Dam)**

Meeks Lake Dam was originally completed as a significant hazard structure in 1973 and has since been reclassified as possessing a high hazard potential. Located in Athens County, Ohio, this structure protects the local communities of Fisher, Alexander, and Athens, Ohio from flooding during major storm events. Funding for this project will be used to empower the Margaret Creek Conservation District with funds to raise the embankment of the structure, armor the spillway, and extend the life of the structure by at least another 50 years.

#### **Margaret Creek 6 ( Fox Lake Dam)**

Fox Lake Dam began operation as a significant hazard potential flood control structure in 1967. Since then, this structure has been reclassified as possessing high hazard potential and become a local recreational retreat for communities near Athens, Ohio. Funding for this project will empower the Margaret Creek Conservation District with funding to bring the structure into compliance with Ohio's safety regulations and restore the original flood protection benefits of the structure to last another 50 years or more.

### **Upper Hocking 3**

Funding for planning of a high-hazard flood control structure originally designed as significant. Structure past it's 50-year service life. Primarily protects ag land and residents near Lancaster, OH.

## **PUERTO RICO**

### **Ajies Dam and Daugey Lake Dam**

In the early 1980s NRCS supported the PR government thru the Department of Natural and Environmental Resources (DNER) as sponsor in the construction of two Floodwater Retarding Structure (FRS) along the Añasco River Watershed, Site 3 (Daguëy Dam) and Site 2A (Ajies Dam). Both these earth dams are a single purpose FRS that were designed and constructed as a high-hazard dam. Daguëy was completed in 1982 and Ajies in 1984; these are located about 0.5 miles north of the town of Añasco along road PR-404. These



structures were able to perform their intent and prevented major flooding to the Añasco valley communities and industries during Hurricane Maria in 2017, but both dams suffered damages (repair work design under NRCS support is well underway and construction should commence in 2022). The rehabilitation project intends to bring both structures to compliance with current NRCS safety criteria and performance standards, extend their lifespan and in turn reduce flood risk to life and property.



## TEXAS

### Upper Brushy 25 – TX31

Upper Brushy Creek FRS No. 25 is a single purpose FRS that was designed in 1972 and built by the Natural Resources Conservation Service (NRCS) in 1975 as a low hazard dam and is located on Little Mustang Creek, a tributary to South Fork Mustang Creek, approximately 3 miles west of Taylor, Texas. The results of the current dam assessment support a “Significant Hazard” classification.

The breach inundation maps shows that no residential structures would be inundated by the FRS No. 25 dam breach and only portions of County Road 398, County Road 403 and W. Rio Grande Street are overtopped during the breach. The dam breach flood is generally contained within the 100-year floodplain. FRS No. 25 does not meet current dam design and safety requirements for a Significant Hazard structure. Routing the 6-hour and 24-hour FBH using SITES indicates that FRS No. 25 is not able to contain the FBH without overtopping and fails to meet stability requirements for the 6-hour SDH.

Several alternatives are proposed for evaluation in rehabilitating Site 25 to comply with dam safety regulations, including decommissioning, increasing the size of the principal spillway conduit and widening the auxiliary spillway from 200 ft. to 400 ft., and increasing the size of the principal spillway conduit along with raising the dam 1.0 ft.

### Olmitos & Garcias Creek Site 5 and 6 – TX28

**Site 5** was constructed under John A. Shuford in 1961. The Olmitos-Garcia Creek WS provides flood protection and recreational benefits to surrounding areas of Starr County. Rehabilitation of this dam is necessary to bring the dam into compliance with NRCS and Texas state dam safety criteria and performance standards and reduce risk to loss of life.

Olmitos and Garcias Creeks Watershed Floodwater Retarding Dam No. 6 (**Site 6**) is a single purpose Floodwater Retarding Structure (FRS) that was designed and constructed as a low hazard dam. Site 6 was constructed in 1961 on El Gato Creek, a tributary of the Rio Grande River. It was determined that Site 6 does not meet design criteria for adequately passing the PSH, which is the 24-hour design storm that the structure is to safely contain without engaging the auxiliary spillway. Site 6 has been classified as a "high hazard" dam due to the risk of loss of life downstream should the dam breach. Breach studies indicate that at least 250 residential structures, at least 23 commercial structures, U.S. highway 83, Border Pacific Railroad, FM 1430, and old Military Road will be inundated. Several alternatives are proposed for evaluation in rehabilitating Site 6 to comply with dam safety regulations, including decommissioning of the dam, building a new and enlarged principal spillway at a lower elevation and raising the crest of the dam 11.4 ft., and building a new and enlarged principal spillway at a lower elevation plus widening the auxiliary spillway to 380 ft. and raising the top of dam 5.4 ft.



### **Nolan Creek Site 12 – TX31**

Nolan Creek FRS No. 12 is a single purpose dam that was designed and constructed as a significant hazard dam. FRS No. 12 was constructed in 1970 on an unnamed tributary of South Nolan Creek, a tributary of Nolan Creek, 3 miles east of Nolanville, or 7 miles west of Belton, Bell County, Texas. The assessment was prepared in 2011.

The assessment confirmed the need to pass the runoff from the Probable Maximum Precipitation (PMP) storm without overtopping the embankment, which cannot currently be met. FRS No. 12 does not meet current dam design and safety requirements and is currently classified as “high hazard” due to the risk of loss of life downstream should the dam breach. Breach studies indicate that 6 homes, a county road, and a railroad are at risk from a catastrophic breach of FRS No. 12.

Several alternatives are proposed for evaluation in rehabilitating Site 5 to comply with dam safety regulations, including decommissioning, raising the dam 0.5 ft and adding about 1 ft. of fill to the existing dikes, replacing the existing 24 inch principal spillway with a 30 inch conduit and raising the dam 0.5 ft. along with raising the dikes about 1.0 ft., and relocating at-risk facilities and purchasing downstream deed restrictions in order to reclassify the dam to a Significant hazard class.

### **Lower East Fork Laterals Site 9 and 10 – TX05**

Historical floods in the past 67 years since FRS No. 9 and FRS No. 10 were constructed have caused the auxiliary spillways to function on at least four occasions on FRS No. 9 and more than ten occasions on FRS 10. These FRSs were constructed as low hazard dams in a series. Residential development has occurred downstream of the dams, an increase in traffic has occurred downstream of FRS No. 10 on FM 148, and FRS No. 10 has developed both sand boils and seepage issues at the downstream toe. These factors have caused concerns regarding the hydraulic capacity of the dams and human health and safety. As a result, the dams have been reclassified as high hazard dams. They do not comply with current high hazard dam safety and performance criteria and have been prioritized as among the highest risk of failure in Texas. The preferred rehabilitation of FRS No. 9 will include constructing a secondary 200-foot-wide earthen auxiliary spillway (AS) on the right abutment, raising the existing AS 1.5 feet, flattening downstream slope to 2.5:1, replacing the existing principal spillway (PS) inlet tower, replacing the existing PS conduit with 42-inch diameter pipe and an impact basin, and raising the top of the dam (TOD) by 2.0 feet with earth fill. The preferred rehabilitation of FRS No. 10 will include raising the existing AS 1.0 foot, constructing a secondary labyrinth weir AS over the existing embankment, replacing the existing PS inlet tower, installing a new 48-inch diameter pipe and impact basin, flattening downstream slope to 3:1, installing a foundation drain system, and raising the TOD by 1.2 feet with earth fill.

### **Lower Plum 28 – TX27**

Lower Plum Creek Site 28 is an existing floodwater retarding structure located approximately 9.8 miles east of Lockhart and approximately 0.6 miles north of the





McMahan Community, Caldwell County, Texas. Site 28 was designed in 1962 and constructed in 1963 by the Soil Conservation Service (now Natural Resources Conservation Service) cooperating with the Caldwell-Travis County Soil and Water Conservation Districts (SWCD), Hays County SWCD and the Plum Creek Conservation District as a single-purpose, low hazard, floodwater retarding structure located in a predominantly agriculture area.

Due to downstream development, the site has been reclassified as a high hazard potential structure. A supplemental watershed plan was developed in May 2016 to address rehabilitating Site 28 to meet current design, performance, and safety standards required for high hazard potential structures.

Rehabilitation measures for this site will entail raising the top of dam elevation approximately 0.3 feet to elevation 481.0; widening the right auxiliary spillway from its constructed 400 feet width to 440 feet by constructing two 220 feet wide channels that are separated by a splitter dike; raising the crest of the left auxiliary spillway approximately 0.5 feet to elevation 475.8; lowering the crest of the right auxiliary spillway approximately 0.5 feet to elevation 475.3; installing a 30-inch diameter hooded inlet principal spillway pipe with a standard impact basin outlet structure that discharges into a newly constructed 14 feet wide outlet channel; flattening the downstream embankment slope; installing a new impact basin on the existing 24-inch diameter principal spillway system; providing rock riprap for wave protection along the upstream slope; and installing a new foundation drainage system.

The site is situated within the Blackland Prairie physiographic area of Texas and is located on Tenney Creek, a tributary of Segment 1810 of Plum Creek, within the Lower San Marcos River Basin, Caldwell County, Texas. Plum Creek Conservation District (PCCD) along with Caldwell-Travis Soil and Water Conservation District and Hays County Soil and Water Conservation District are the local sponsors for the rehabilitation of Site 28, the cost of which will be shared between NRCS, PCCD, and The Texas State Soil and Water Conservation Board (TSSWCB). Site 28 is an integral part of the Watershed Work Plan Agreement for Lower Plum Creek Watershed as approved in June 1961 and as supplemented up to the current supplement dated May 2016.

### **Tehuacana Creek Site 21 - TX17**

Tehuacana Creek FRS No. 21 is a single purpose FRS that was designed in 1963 and built by the Natural Resources Conservation Service (NRCS) in 1965 as a low hazard dam and is located approximately 2.3 miles east of Axtell and 15 miles northeast of Waco in McLennan County, Texas. FRS No. 21 does not meet current dam design and safety requirements and is currently classified as "high hazard" due to the risk of loss of life downstream should the dam breach.

The breach inundation maps show that 12 homes, 13 mobile homes and 32 other structures are inundated by the FRS No. 21 dam breach and portions of Gilwood Lane, North Vicha Road, Rudy Road and U.S. Highway 84 are overtopped during the breach.



Several alternatives are proposed for evaluation in rehabilitating Site 21 to comply with dam safety regulations, including decommissioning, replacing the existing 24-inch principal spillway conduit with a 36-inch conduit along with widening the auxiliary spillway bottom width from 220 feet to 1,120 feet, replacing the existing 24-inch principal spillway conduit with a 36-inch conduit along with raising the dam by 5.3 ft. and armoring the auxiliary spillway with articulated concrete blocks.

## **WEST VIRGINIA**

### **North and South Mill Creek Site 3 - WV01**

North and South Mill Creek 3 is a zoned earthfill embankment, single purpose flood control dam in Grant County, West Virginia that was constructed in 1982. It is a part of the North and South Mill Creek Subwatershed of the Potomac River Watershed Project, planned in June 1975 utilizing PL-534 funds. North and South Mill Creek 3 is one of four flood control dams in the watershed and is located on Rough Run, a tributary of South Mill Creek. Site 3 provides protection to approximately 18 residences, buildings, road crossings, bridges, farms and commercial buildings, utilities and other infrastructure.

The dam was designed and originally constructed as a significant hazard potential dam and was reclassified as high hazard potential dam in August 2011. Local sponsorship for the North and South Mill Creek Subwatershed of the Potomac River Project includes the Potomac Valley Conservation District, Grant County Commission, Pendleton County Commission and State Conservation Committee.

Funding will be used for the planning phase for rehabilitation of the structure. Current deficiencies include overtopping of the dam, breaching of the auxiliary spillway during activation and drain fill filter compatibility within the embankment not meeting current NRCS design criteria. Development of the watershed continues downstream of the structure.

### **North and South Mill Creek Site 4 - WV01**

North and South Mill Creek 4 is a zoned earthfill embankment, single purpose flood control dam in Grant County, West Virginia that was constructed in 1980. It is a part of the North and South Mill Creek Subwatershed of the Potomac River Watershed Project, planned in June 1975 utilizing PL-534 funds. North and South Mill Creek 4 is one of four flood control dams in the watershed and is located on an unnamed tributary of South Mill Creek.

Site 4 provides protection to approximately 21 residences, buildings, road crossings, bridges, farms and commercial buildings, utilities and other infrastructure. The dam was designed and originally constructed as a significant hazard potential dam and was reclassified as high hazard potential dam in December 2017. Local sponsorship for the North and South Mill Creek Subwatershed of the Potomac River Project includes the Potomac Valley Conservation District, Grant County Commission and State Conservation Committee.



Funding will be used for the planning phase for rehabilitation of the structure. Current deficiencies include breaching of the auxiliary spillway during activation and drain fill filter compatibility within the embankment not meeting current NRCS design criteria.

Development of the watershed continues both upstream and downstream of the structure.

### **Pocatalico River Site 28 – WV02**

Pocatalico River Site 28, is a zoned earthfill embankment, multi-purpose (flood control, stream flow regulation, & municipal and industrial water supply) dam located in Jackson County, West Virginia that was constructed in 1987. Site 28 is a part of the Jackson County, Pocatalico River Basin Joint Study planned in 1972 utilizing PL-566 funds. Site 28 is one of two structures in the watershed and is located on the Middle Fork of the Pocatalico River. Site 28 provides flood protection to approximately 2,984 residences, buildings, road crossings, bridges, farms and commercial buildings, utilities and other infrastructure. Local sponsorship for the Pocatalico River Site 28 includes the Western Conservation District and the State Conservation Committee.

Funding will be used for the planning phase for rehabilitation of the structure. Current deficiencies include overtopping of the dam, breaching of the auxiliary spillway during activation and drainfill filter compatibility within the embankment not meeting current NRCS design criteria. Development of the watershed continues downstream of the structure.

### **Brush Creek Site 12 – WV03**

Brush Creek Site 12 is an earthen embankment, flood control dam in Mercer County West Virginia that was constructed in 1965. It is a part of the Brush Creek Watershed Project, planned in March 1960 utilizing PL-566 funds, which alleviates flooding in the city of Princeton. Brush Creek Site 12 is one of 10 flood control dams in the watershed which also includes three flood control channels. Site 12 is on Glady Fork, a tributary of Brush Creek. Site 12 provides protection to a community hospital (which serves an adjacent limited resource area), several associated healthcare buildings, Princeton High School, a regional athletic facility, several businesses, 200 residences, and multiple roads and other infrastructure. Development of the watershed continues both upstream and downstream of the structure.

Local sponsorship for the Brush Creek Watershed Project includes Southern Conservation District, Mercer County Commission, Green Valley-Glenwood Public Service District, City of Princeton, City of Bluefield, State Conservation Committee, and WV Division of Highways. Three other Brush Creek dams are currently in the design phase of dam rehabilitation.

Funding will be used for the planning phase for rehabilitation of the structure. There is presently the potential for erosion of the auxiliary spillway and downstream toe of the embankment during ASW activation. The riser also needs repaired/or replaced, and the internal filter and drainage of the embankment may need addressed.



### **Bonds Creek Site 1 – WV01**

Bonds Creek Site 1, is a zoned earthfill embankment, multi-purpose (flood control & fish & wildlife development) dam in Ritchie County, West Virginia that was constructed in 1961. Bonds Creek Site 1 is a part of the Bonds Creek Watershed Project, planned in

June 1960 utilizing PL-566 funds. Bonds Creek Site 1 is the only flood control structure in the watershed and is located on Long Bottom, a tributary of Bonds Creek. There is also 5.8 miles of channel improvements. Site 1 provides flood protection to approximately 65 residences, buildings, road crossings, bridges, farms and commercial buildings, utilities and other infrastructure. The dam was designed and originally constructed as a significant hazard potential dam and was reclassified as high hazard potential dam in August 2011. Local sponsorship for the Bonds Creek Watershed includes the Little Kanawha Conservation District and The Town of Pennsboro.

Funding will be used for the planning phase for rehabilitation of the structure. Current deficiencies include overtopping of the dam, breaching of the auxiliary spillway during activation and drain fill filter compatibility within the embankment not meeting current NRCS design criteria. Development of the watershed continues downstream of the structure.

### **Big Ditch Run Site 1 – WV03**

Big Ditch Run Site 1 is a zoned earthfill embankment, multi-purpose (flood control and recreation) dam located in Webster County, West Virginia that was constructed in 1968. Webster County is a limited resource area. Site 1 is a part of the Big Ditch Subwatershed of the Gauley River Watershed Project, planned in June 1963 utilizing PL-566 funds. Site 1 is the only flood control structure in the watershed and is located on Long Glade Run, a tributary of Big Ditch Run. There is also 3.75 miles of channel improvements on the main stem of Big Ditch Run extending from the Town of Cowen to downstream of its' confluence with Long Glade Run.

Site 1 provides flood protection to approximately 125 residences, buildings, road crossings, bridges, farms and commercial buildings, utilities and other infrastructure. The dam was designed and originally constructed as a significant hazard potential dam and was reclassified as high hazard potential dam in August 2011. Local sponsorship for the Big Ditch Run Subwatershed includes the Elk Conservation District, The Town of Cowen, The Webster County Court, and the West Virginia Department of Natural Resources.

Funding will be used for the planning phase for rehabilitation of the structure. Current deficiencies include overtopping of the dam, breaching of the auxiliary spillway during activation and drain fill filter compatibility within the embankment not meeting current NRCS design criteria. Development of the watershed continues downstream of the structure.