West Virginia Conservation Agency
Watershed Division

Watershed Programs

Dams and Channels

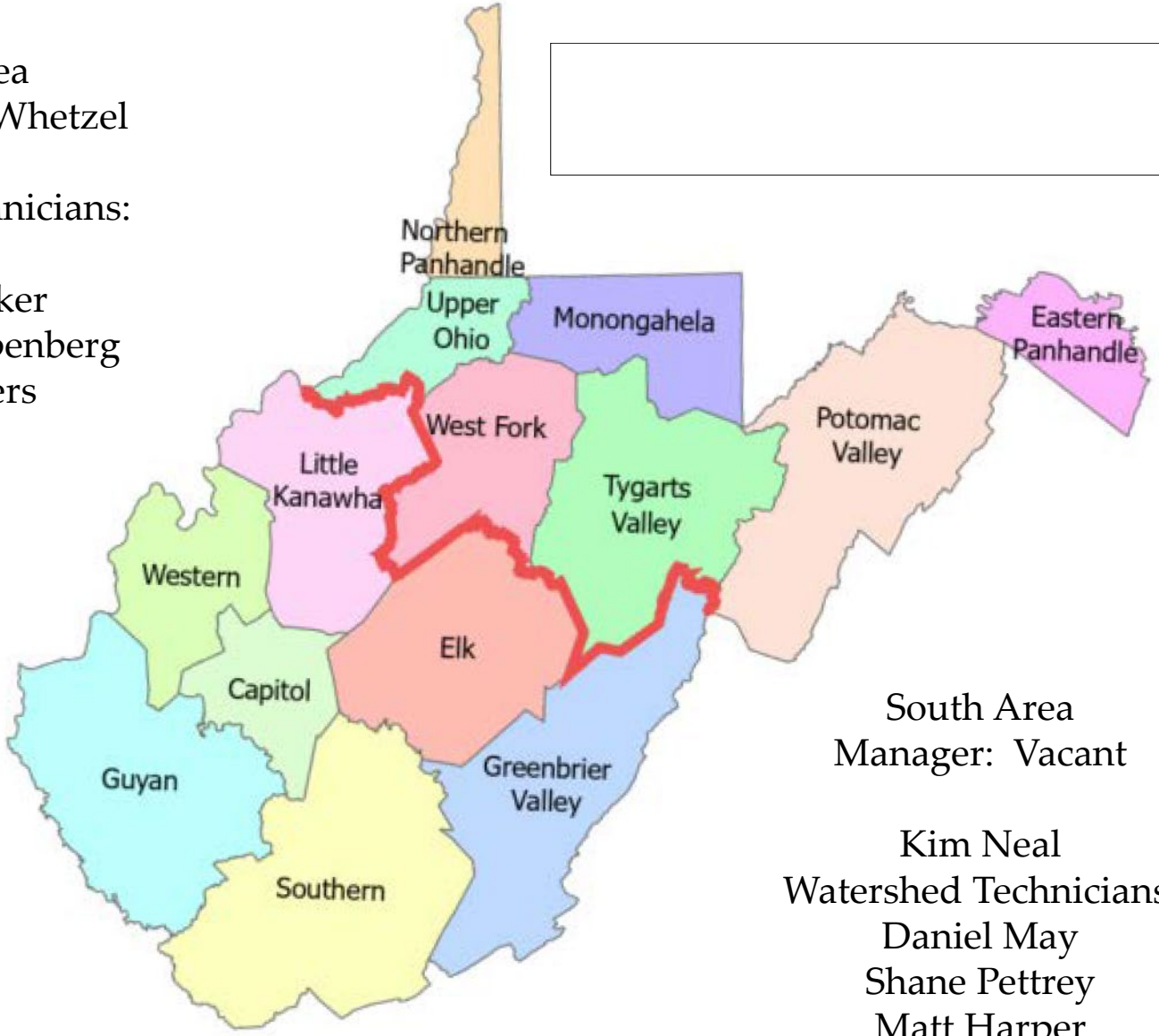
- Operation & Maintenance
- Repair
- Rehabilitation

Streams

- Stream Restoration
- Emergency Watershed Programs
- Stream Permit Assistance

North Area
Manager: Don Whetzel

Watershed Technicians:
Jim Roy
Geoff Brinker
Michael Scherpenberg
Krista Ayers



Engineers
Levi Cyphers
Josh Wilt

Stream Team:
Ross Tuckwiller
Brian Fry
John Nelson

South Area
Manager: Vacant

Kim Neal
Watershed Technicians:
Daniel May
Shane Pettrey
Matt Harper

304-872-4302

Watershed Dam History

- Congress established the USDA Watershed Program by enacting the Flood Control Act of 1944 (Public Law 78-534) and the Watershed Protection and Flood Prevention Act of 1954 (Public Law 83-566).
- Under these authorizations, the USDA Natural Resources Conservation Service (NRCS) has assisted watershed project sponsors in the construction of more than 11,845 flood control dams in 1,271 watersheds in 47 States since 1948.
- The primary purpose of these dams is flood control, but they often provide other benefits such as water supply, recreation, irrigation, erosion control, livestock water and wildlife habitat.

Project Sponsors

- These Programs all require a sponsor that makes a request for assistance from the USDA Natural Resources Conservation Service (NRCS), the agency that administers the programs.

- Sponsors must be a unit of local government such as a conservation district, water improvement district, county, city, town or tribal government.

- West Virginia Conservation Agency was added to the O&M agreements in 2002 to assist with funding and provide technical assistance.

O&M Agreement

Project Saltlick Creek Watershed

State West Virginia

OPERATION AND MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into the 13th day of April, 1964, by and between the Soil Conservation Service, United States Department of Agriculture, hereinafter referred to as the "Service", and the Elk Soil Conservation District, hereinafter referred to as the "District" relates to the operation and maintenance of the following described Works of Improvement:

Five floodwater retarding structures which are to be located within the Watershed of Saltlick Creek. These improvements are described and located in the Work Plan of the Saltlick Creek Watershed and numbered as follows: 4, 6, 7, 8, and 9.

The estimated annual cost for operating and maintaining the works of improvement herein described is $1,500.00 based on present construction costs.

I. OPERATION

The parties hereto agree as follows as to the operation of the works of improvement:

A. The Service will provide such technical services as are available for assistance in the proper operation of the works of improvement.

B. The District will:

1. Be responsible for operation of the works of improvement simultaneously with the receipt of a notice from the Service that works of improvement have been accepted from the contractor.

2. Prohibit the installation of gates or other obstructions of any kind being placed in any portion of the principal or emergency spillway(s).

3. Prohibit any works to raise any portion of the spillways above the planned elevation or to deflect or decrease the planned flow through the spillways in any manner.

4. Prohibit the installation of dikes or other structures which may decrease the capacity of the flood channel or deflect the flow from the constructed channel bottom.

AMENDMENT No. 1
TO THE
OPERATION AND MAINTENANCE AGREEMENT
FOR
SALTLICK CREEK WATERSHED
SITES 4, 6, 7, 8 and 9

Between the

ELK CONSERVATION DISTRICT,

WEST VIRGINIA STATE CONSERVATION COMMITTEE,

and the

United States Department of Agriculture
Natural Resources Conservation Service

PURPOSE: To add the West Virginia State Conservation Committee as a responsible party under the terms and conditions of the Agreement.

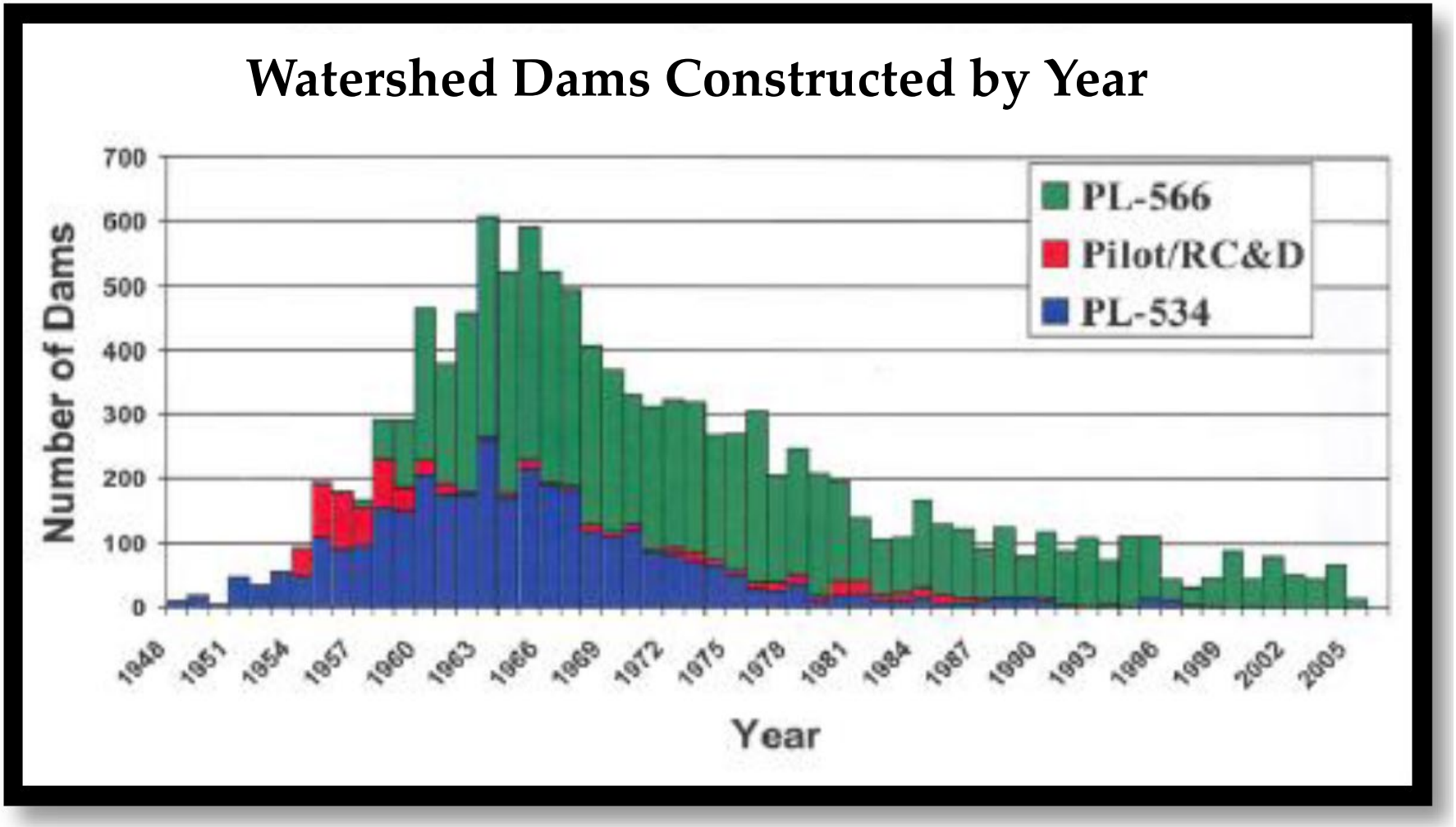
1. All references to the Soil Conservation Service and/or SCS are hereby changed to the Natural Resources Conservation Service (NRCS).

2. The Elk Soil Conservation District and West Virginia State Conservation Committee (WVSCC) shall be referred to as the Sponsors.

3. The Sponsors agree to the terms and conditions as contained in the original O&M Agreement signed on April 13, 1964.

All other terms and conditions remain unchanged.

Watershed Dams Constructed by Year

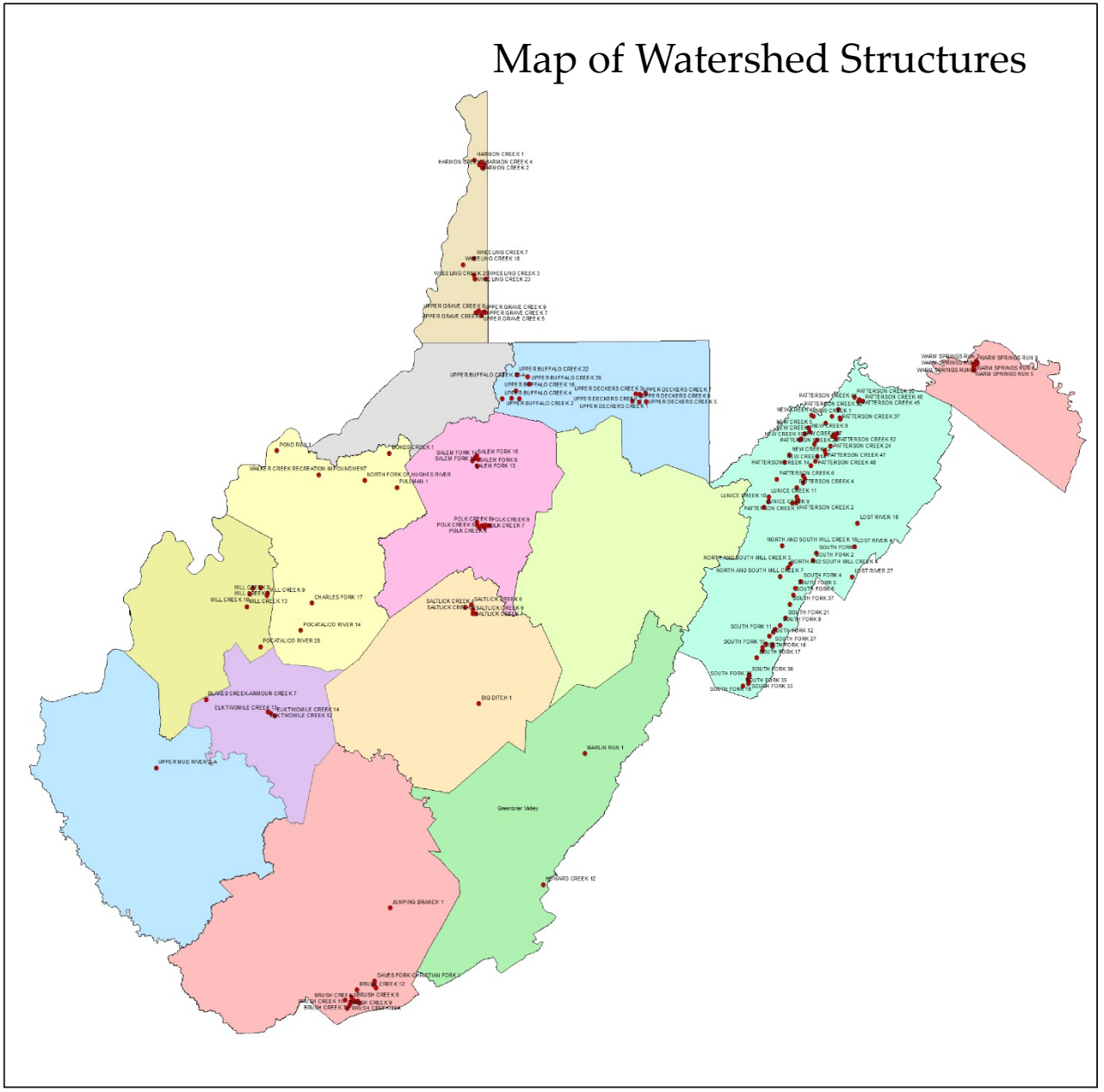


OM&R

170 Dams, 22 Channels, 13 Districts

District	# of Dams	# of Channels
Capitol	4	0
Eastern Panhandle	8	2
Elk	6	1
Greenbrier Valley	2	2
Guyan	1	0
Little Kanawha	7	2
Monongahela	14	2
Northern Panhandle	18	1
Potomac Valley	73	3
Southern	14	6
Tygarts Valley	1	2
Western	7	0
West Fork	15	1

Map of Watershed Structures



Upper Buffalo Creek Disaster

The Buffalo Creek Disaster, February 26, 1972

One of worst floods in US occurred here 26 February 1972, when Buffalo Mining Co. impoundment dam for mine waste broke, releasing over 130 million gallons of black waste water: killed 125; property losses over $50 million; and thousands left homeless. Three commissions placed blame on ignored safety practices. Led to 1973 Dam Control Act and $13.5 million class action legal settlement in 1974.

Dam Safety Act (State Code Chapter 22-14)

- In 1972, an unregulated and poorly designed coal refuse dam on Buffalo Creek in Logan County failed, killing 125 persons and causing major property damage. After this disaster, the West Virginia Legislature enacted the West Virginia "Dam Control Act" to regulation the design and operation of "Dams" in West Virginia.

Dam Inspections

- Dams are inspected monthly and after high rain events by WVCA Technician and/or Dam Monitors.
- Dams are inspected annually by WVCA, NRCS and local sponsors.
- O&M work plan is developed based on maintenance needs and is prioritized by funding.

Hazard Classification

Dam Safety requires that each dam be evaluated for its hazard potential downstream. Hazard potential is not related to the structural integrity of a dam, but strictly to the potential for downstream flooding. The hazard potential evaluation places the dam in one of four classifications that are defined in the Dam Safety Regulations (47CSR34-3.5.b.) as follows:

Class 1 **(High Hazard)** dams are those dams located where failure may cause loss of human life or major damage to dwellings, commercial or industrial buildings, main railroads, important public utilities, or where a high risk highway may be affected or damaged. This classification must be used if failure may result in the loss of human life.


Flood Pool
< Riser
Dam Terminology-General
Patterson Creek Dam 50
Embankment
Auxiliary Spillway
Impact basin>
Plunge Pool
Outlet Channel

Lunice Creek #11

New Creek #5

OM&R Expenses

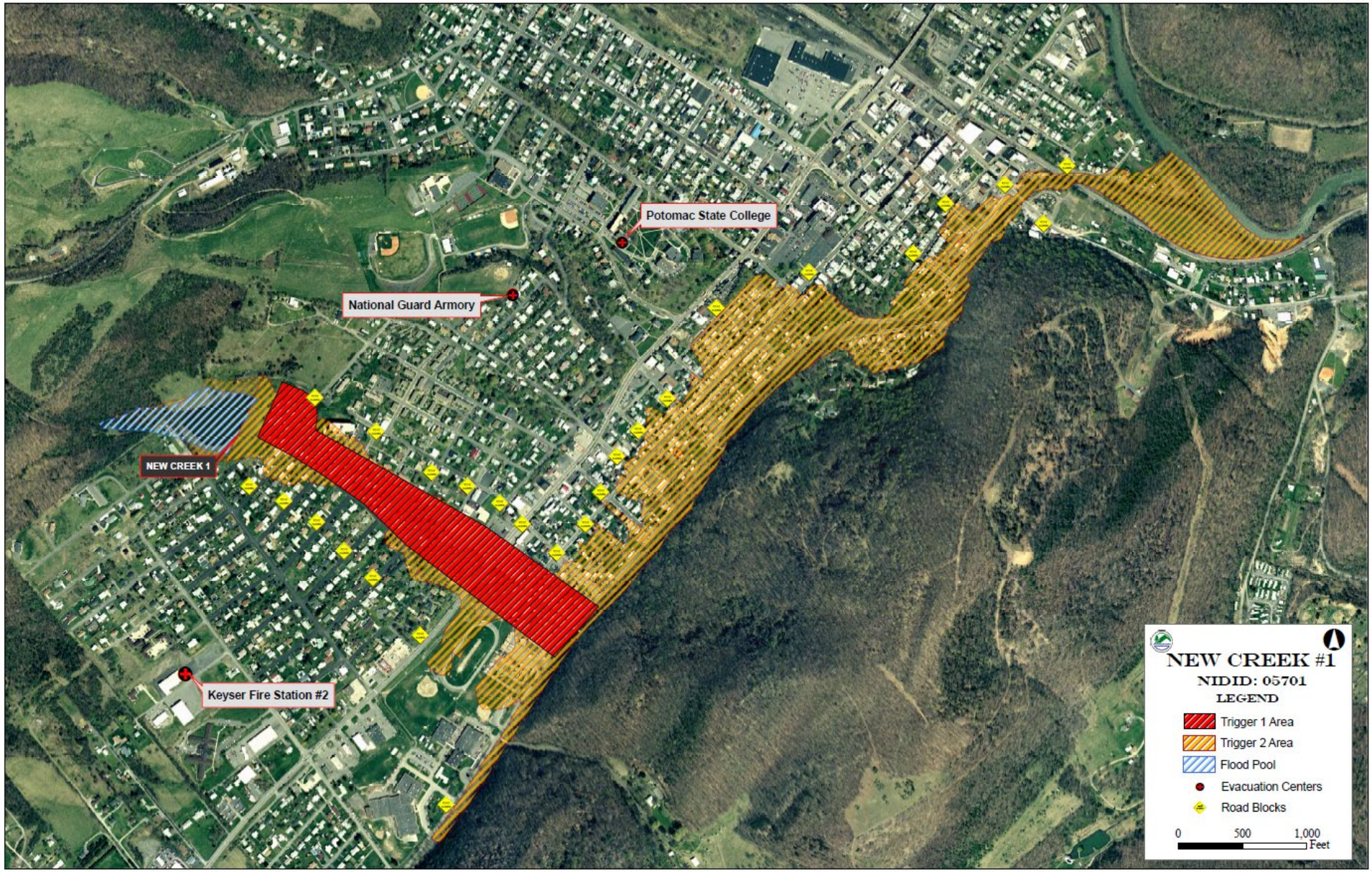
Calendar Year	O&M Total	Repair	Engineering
2010	$294,963.91		
2011	$258,777.21		
2012	$413,407.13		
2013	$442,867.10		
2014	$1,004,371.40		
2015	$954,886.64		
2016	$663,315.15		
2017	$537,811.31		
2018	$755,494.18		
2019	$830,892.25		
2020	$1,061,656.28	$237,540.00	$320,414.82
2021	$791,800.74	$68,607.31	$377,410.41

Monitoring and Emergency Action Plans (EAP's)

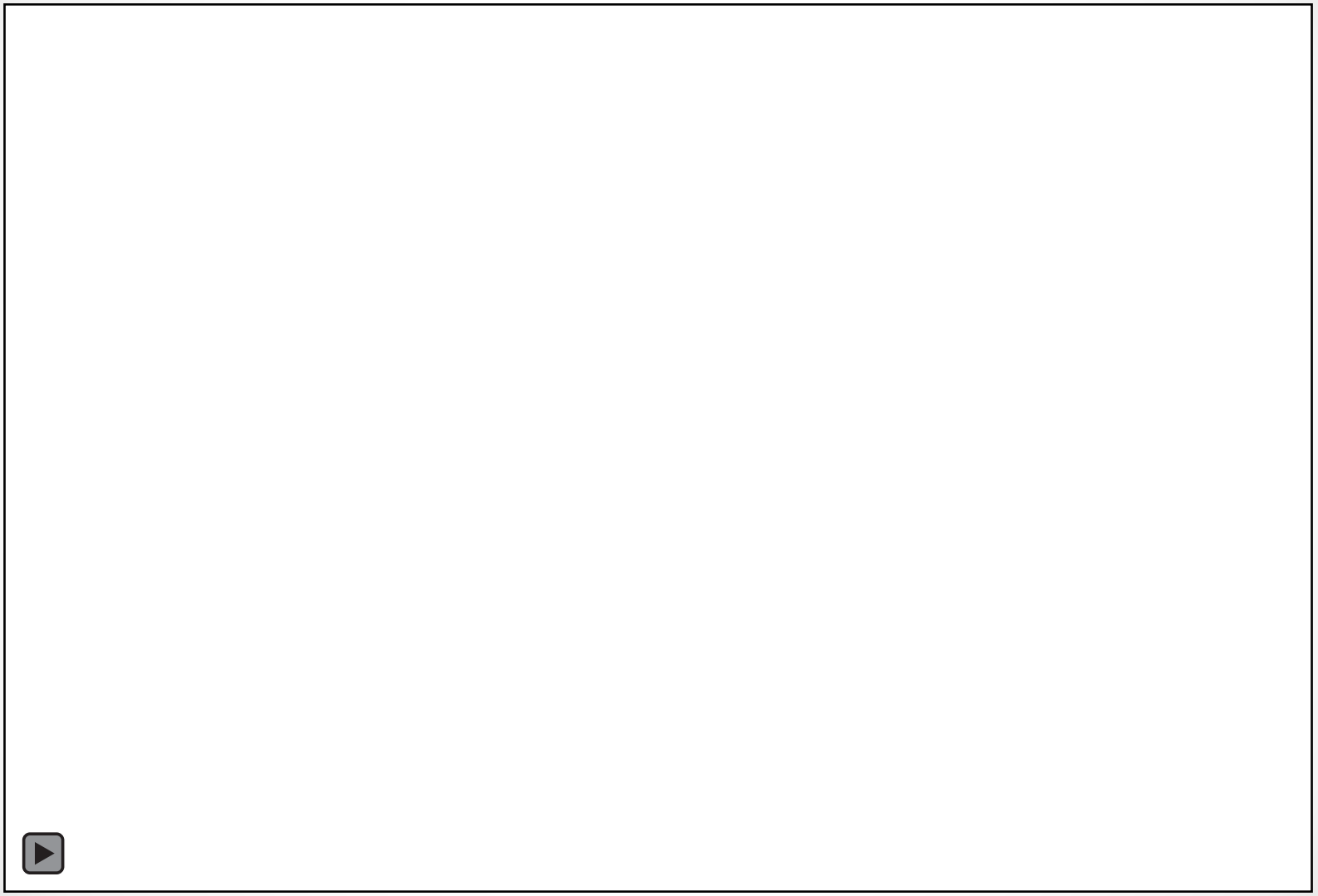
- What is an EAP?
  - Prepared plan in place to monitor the dam's condition, evacuate downstream residents and schedule needed repairs after an emergency
  - Reference of important contact information (OES, Fire and Rescue Units, and Agencies)
  - Approved by WVDEP Dam Safety Section
    - Reviewed yearly, recertified every two years

Monitors

- Monitors volunteer to monitor the dam and report anything out of the normal and/or during high rain events.
- Each dam must have two monitors: Primary and Alternate.
- Monitors are provided training to complete their task.
- EAPs cannot be approved by DEP Dam Safety without having monitors listed.
- Supervisors play an important role in the EAP process.


Potomac State College
National Guard Armory
NEW CREEK 1
Keyser Fire Station #2
NEW CREEK #1
NIDID: 05701
LEGEND
Trigger 1 Area
Trigger 2 Area
Flood Pool
Evacuation Centers
Road Blocks
0
500
1,000
Feet

New Creek 1 Breach Simulation



List of Channels

- Evitt's Run
- Pikeside Channel
- Big Ditch Channel
- Howard's Creek Channel
- Marlin Run Channel
- Bonds Creek Channel
- Pond Run Channel
- Upper Buffalo Channel
- Upper Deckers Channel
- Harmon Creek Channel Middle Grave Creek Channel
- Lunice Creek Channel
- South Fork Channel
- Moorefield Floodway
- Brush Creek Channel
- Daves/Christians Fork Channel
- Soak Creek Channel
- Glady Fork Channel
- Cranberry Creek Channel
- Little Whitestick Channel
- Shook's Run Channel
- Peck's Run Channel
- Polk Creek Channel

Cranberry Creek Channel

Cranberry Creek Channel

Dam Repair

- Dam repair typically is the responsibility of the local sponsors.
- Repair focuses on individual deficiencies identified during the inspections that are outside the normal maintenance.
- Current Actives
  - Trash Rack Replacement
  - Seep Repairs

Brush Creek 4

Brush Creek 4

Brush Creek 5

Brush Creek 5

Trash Racks

Wheeling Creek #25

Trash Racks

Patterson Creek #12

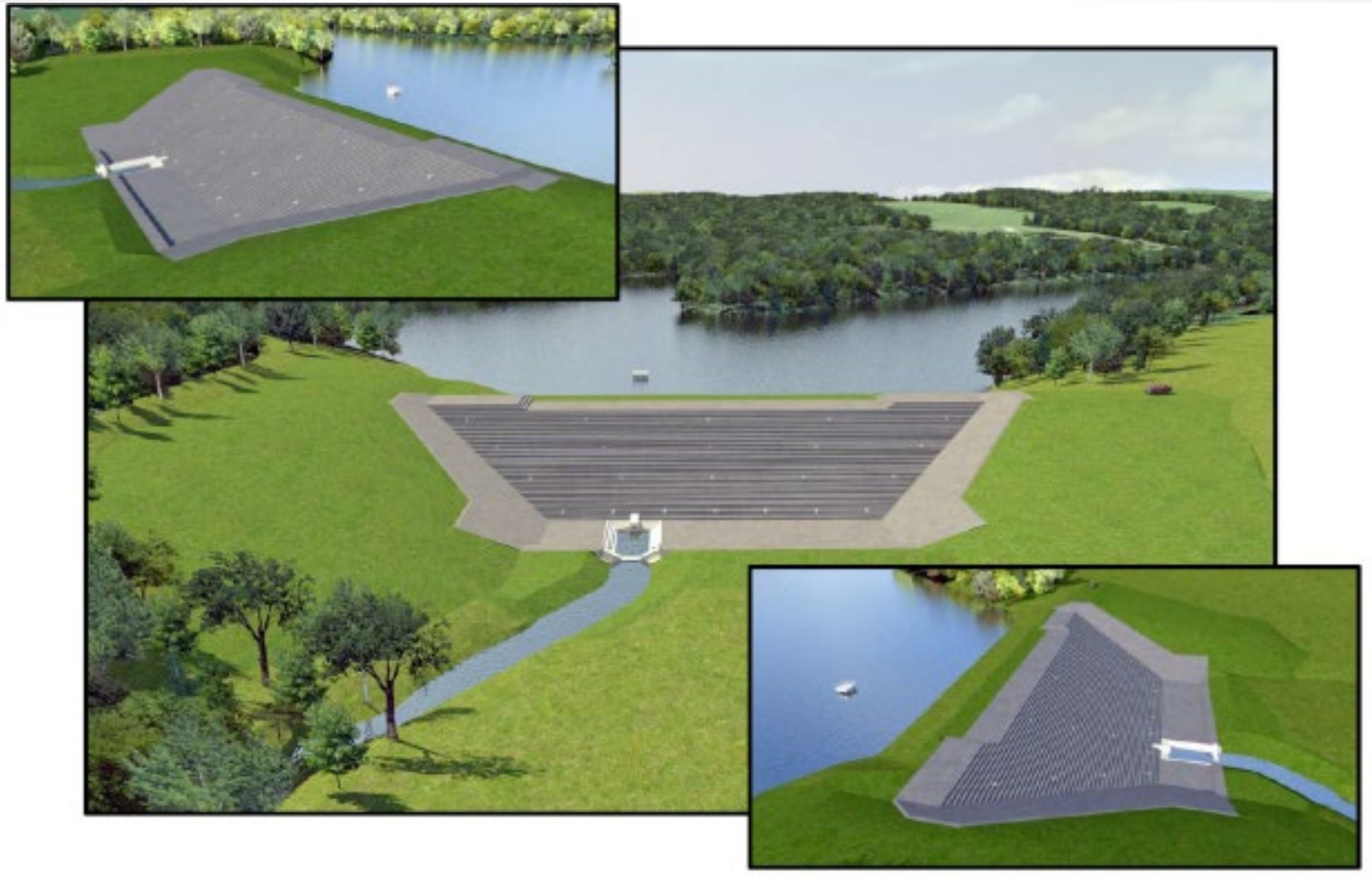
South Fork #5 Seep

Upper Buffalo #4 - Seep

Dam Rehabilitation

- Dam Rehabilitation can be 100% state funded or cost shared with NRCS depending on the site and situation.
- Dam Rehabilitation looks at all aspects of the dam.
- Cost share with NRCS and local sponsors.

Dam Rehabilitation – Upper Deckers 1



Dam Rehabilitation – Upper Deckers 1

Dam Rehabilitation – Upper Deckers 1

State Rehabilitation - Warm Springs 7

- Between 3-to-4 inches of rain fell in the area Sept. 1-2, 2021.
- Post-storm inspection noted increased flow and size of seep beneath spillway pipe on Warm Springs 7.
- Fine sands used in dam construction were seen in flow.
- DEP required draining of impoundment to aid investigation, which stopped flow underneath pipe.
- Camera investigation revealed both joints in the drainpipe were disconnected creating a potential source for water to tunnel through the dam.
- Additional investigation revealed cracks in the riser.
- Temporary measures installed in early October.

Warm Springs 7

Warm Springs 7

NRCS Rehabilitation

USDA

United States Department of Agriculture

Natural Resources Conservation Service

Presented by:

Andy Deichert

USDA NRCS WV State Conservation Engineer

Natural Resources Conservation Service

nrcs.usda.gov/

USDA United States Department of Agriculture

Natural Resources Conservation Service

NRCS

our mission

Helping People Help the Land

Watershed and Flood Prevention Operations (WFPO) Program

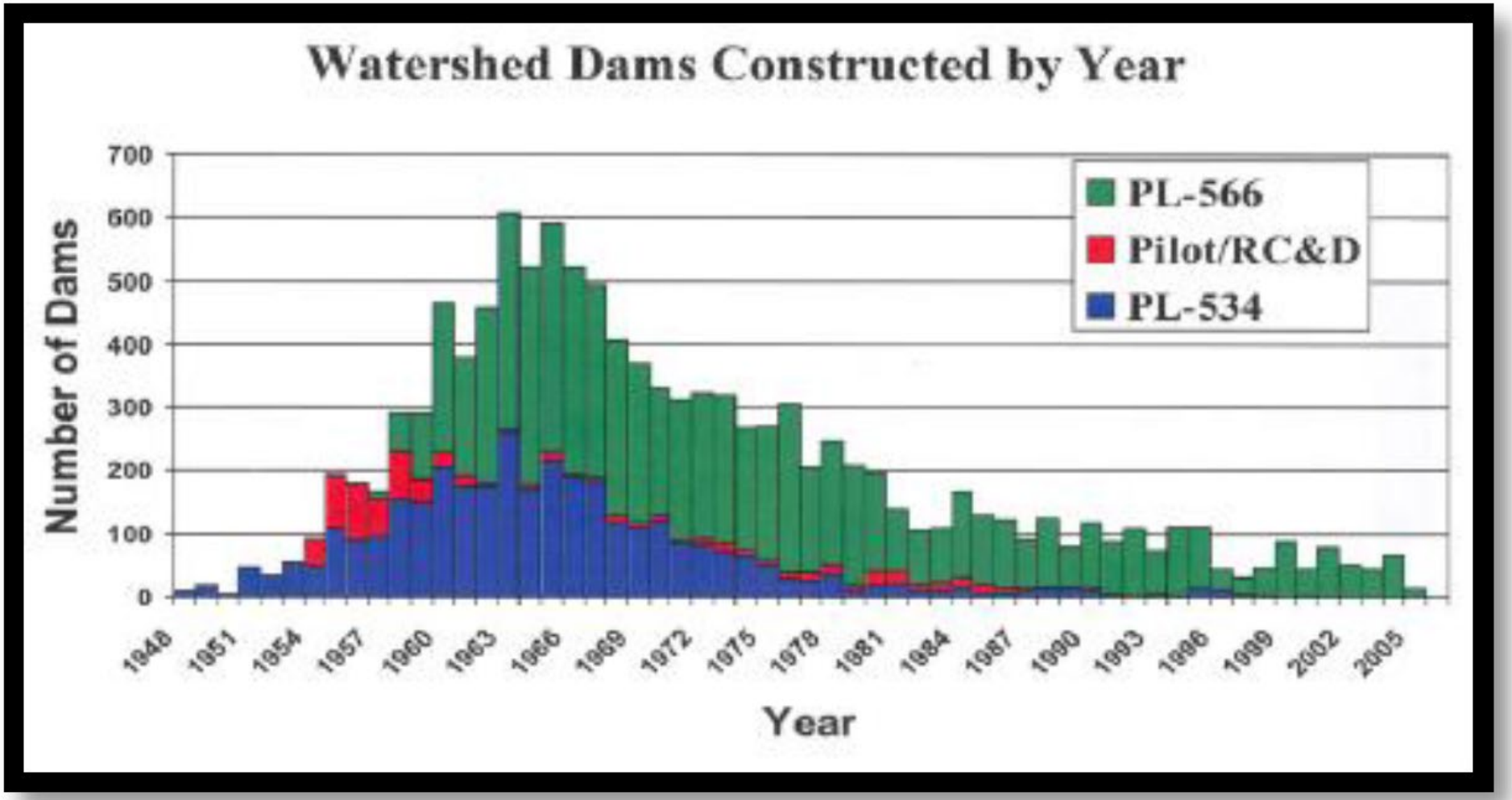
The Watershed Protection and Flood Prevention Program helps units of federal, state, local and tribal of government (project sponsors) protect and restore watersheds up to 250,000 acres.

This program provides for cooperation between the Federal government and the states and their political subdivisions to work together to prevent erosion; floodwater and sediment damage; to further the conservation development, use and disposal of water; and to further the conservation and proper use of land in authorized watersheds.

There are 1,271 active or completed watershed projects in the 50 states, the Commonwealth of Puerto Rico and the Pacific Basin.

NRCS Dams Provide Many Benefits

- Communities depend on dams for flood control, water supply, recreation, and other purposes.
- 11,900 dams were constructed with assistance of the NRCS Watershed Programs
- In West Virginia NRCS has assisted with 170 Watershed Dams


Watershed Dams Constructed by Year
Number of Dams
700
600
500
400
300
200
100
0
PL-566
Pilot/RC&D
PL-534
1948
1951
1954
1957
1960
1963
1966
1969
1972
1975
1978
1981
1984
1987
1990
1993
1996
1999
2002
2005
Year

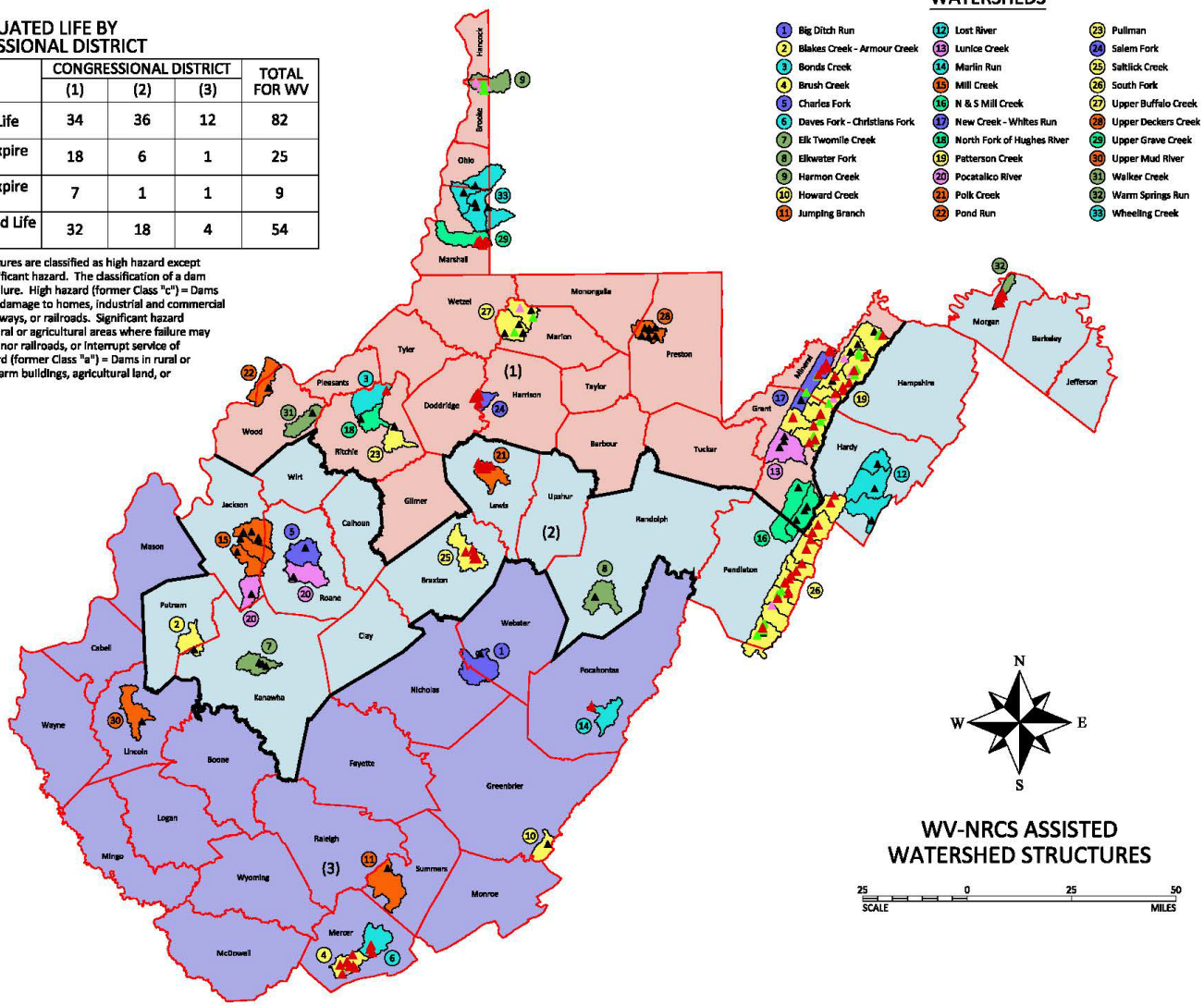
EVALUATED LIFE BY CONGRESSIONAL DISTRICT

DESCRIPTION	CONGRESSIONAL DISTRICT (1)	(2)	(3)	TOTAL FOR WV
▲ Dam with expired Evaluated Life	34	36	12	82
▲ Dam with Evaluated Life to expire within the next 5 years	18	6	1	25
▲ Dam with Evaluated Life to expire within the next 6 to 10 years	7	1	1	9
▲ Dam with remaining Evaluated Life greater than 10 years	32	18	4	54

NOTE: All WV-NRCS assisted watershed structures are classified as high hazard except for North and South Mill Creek 4 which is significant hazard. The classification of a dam is determined by the potential hazard from failure. High hazard (former Class "c") = Dams where failure may cause loss of life or serious damage to homes, industrial and commercial buildings, important public utilities, main highways, or railroads. Significant hazard (former Class "b") = Dams in predominantly rural or agricultural areas where failure may damage isolated homes, main highways, or minor railroads, or interrupt service of relatively important public utilities. Low hazard (former Class "a") = Dams in rural or agricultural areas where failure may damage farm buildings, agricultural land, or township and country roads.

WATERSHEDS

1. Big Ditch Run
2. Blakes Creek - Armour Creek
3. Bonds Creek
4. Brush Creek
5. Charles Fork
6. Daves Fork - Christians Fork
7. Elk Twomile Creek
8. Elkwater Fork
9. Harmon Creek
10. Howard Creek
11. Jumping Branch
12. Lost River
13. Lunice Creek
14. Marlin Run
15. Mill Creek
16. N & S Mill Creek
17. New Creek - Whites Run
18. North Fork of Hughes River
19. Patterson Creek
20. Pocatalico River
21. Polk Creek
22. Pond Run
23. Pullman
24. Salem Fork
25. Saltlick Creek
26. South Fork
27. Upper Buffalo Creek
28. Upper Deckers Creek
29. Upper Grave Creek
30. Upper Mud River
31. Walker Creek
32. Warm Springs Run
33. Wheeling Creek



WV-NRCS ASSISTED WATERSHED STRUCTURES

25 0 25 50
SCALE MILES

Dam Rehabilitation under PL-566

Congress passed the Watershed Rehabilitation Amendments of 2000 which amended the PL-566 law and authorized the NRCS to provide technical and financial assistance to watershed project sponsors in rehabilitating their aging dams.

Dam Rehabilitation under PL-566

The watershed rehabilitation program:

helps project sponsors rehabilitate aging dams.

allows sponsors to create new, or add to, existing water supplies.

Dam Rehabilitation

COST SHARE

- FED cost-share is 65 percent of the total eligible project cost, not exceeding 100 % of the actual construction cost.
- SLO is responsible for the non-FED share of the cost of the project.

Dam Rehabilitation

FOUR PHASES

- Assessment
- Planning
- Design
- Construction

Dam Rehabilitation

FOUR PHASES

- ☑ Assessment
- ☑ Planning
- ☑ Design
- ☑ Construction

Assessment

Dam Assessment Report

- Intent is to provide local sponsors with data regarding the condition of the dam, risks to the public should a dam fail, and estimated rehabilitation alternatives costs.

- Original design summary

Dam Rehabilitation

FOUR PHASES

- ☑ Assessment
- ☑ **Planning**
- ☑ Design
- ☑ Construction

USDA United States Department of Agriculture
Natural Resources Conservation Service

Dam Rehabilitation Planning

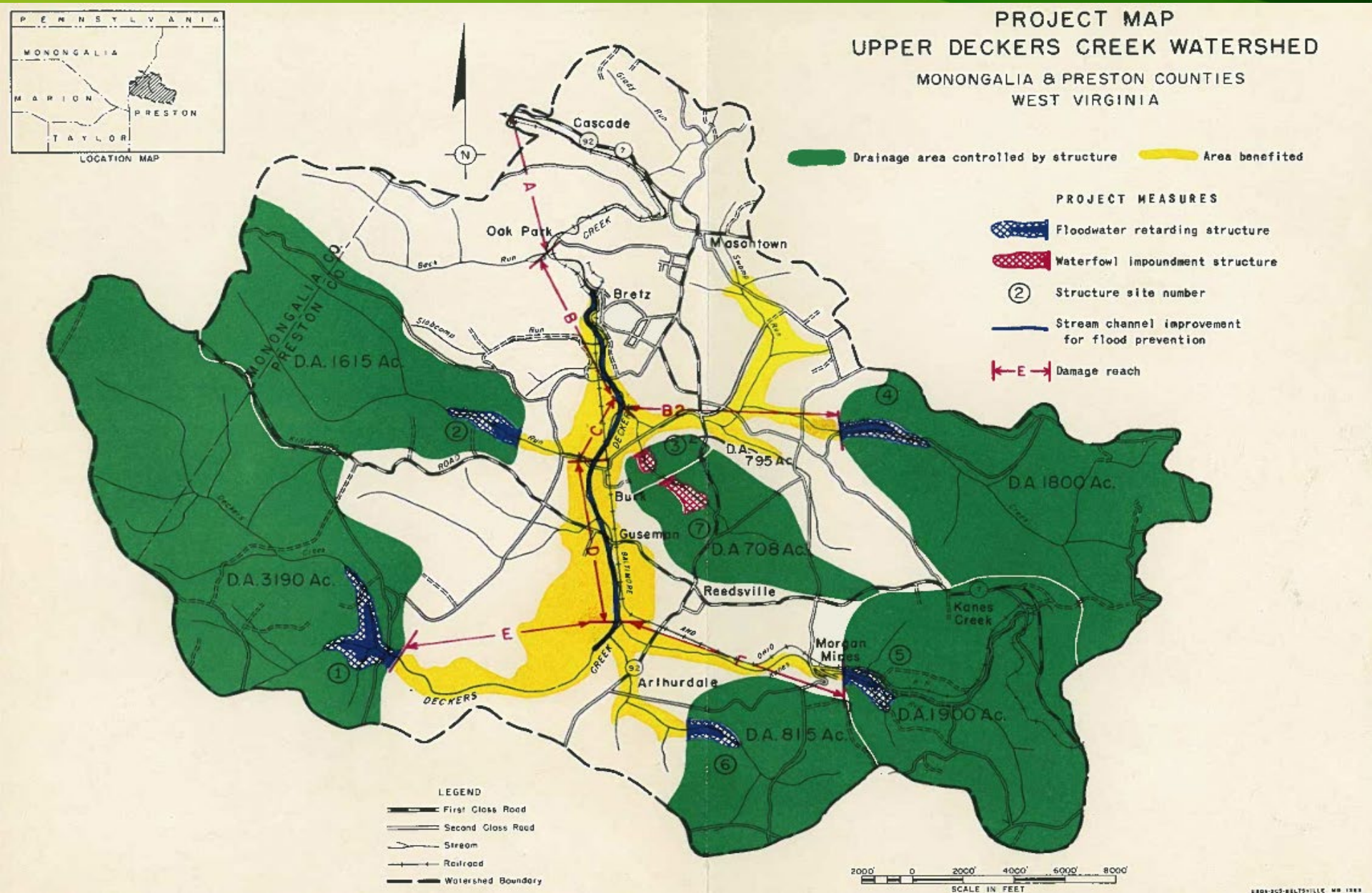
- Rehabilitation work and action require a supplemental Plan-EA or Plan-EIS to address the effects of the rehabilitation action unless all the activities proposed are categorically excluded.

- If a categorical exclusion applies to the proposed action, the supplemental plan must include the environmental evaluation (EE) documentation.

- The rehab plan will be prepared for one or more dams in a watershed. Information for installed, or remaining to be installed, works of improvement in the project area will not be updated or displayed.

USDA United States Department of Agriculture
Natural Resources Conservation Service

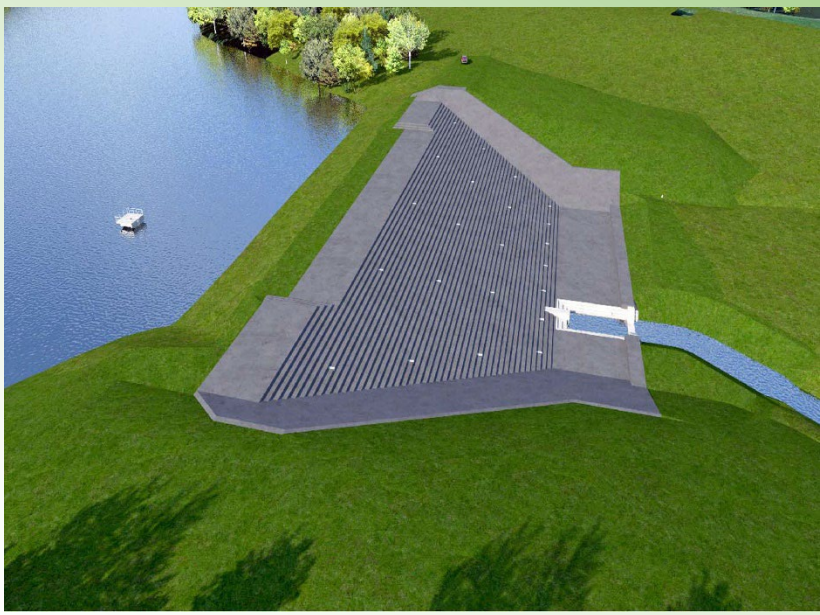
Dam Rehabilitation Planning



Dam Rehabilitation

FOUR PHASES

- ☑ Assessment
- ☑ Planning
- ☑ **Design**
- ☑ Construction



USDA United States Department of Agriculture
Natural Resources Conservation Service

Dam Rehabilitation Design

Consists of three stages:

- Data collection and evaluation for all information
- Preliminary design, developing general features of the works
- Final design, including refining preliminary design, hydraulic layout, structural, construction drawings and specifications, design report, O&M Plan, and QAP

USDA United States Department of Agriculture
Natural Resources Conservation Service

Dam Rehabilitation Design

Can include the following:

- Final Design Summary Report
- Instruction to the Engineer during Construction
- Quality Assurance Plan
- Operation, Inspection, and Maintenance Plan
- Survey and Mapping Report
- Structural Design Report
- Erosion and Sediment Control Plan
- H&H-Hydrology
- H&H-ASW Design
- Dam Breach Analysis and Inundation Mapping
- Final Geotechnical Report with investigation and soil/rock testing
- ASW SITES Analysis Report

Dam Rehabilitation

FOUR PHASES

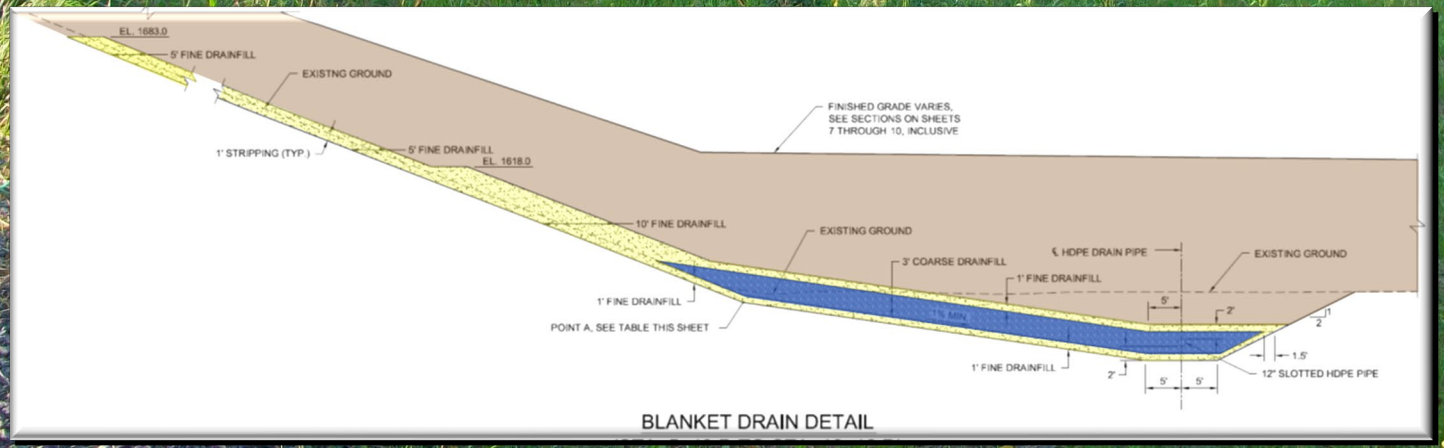
- ☑ Assessment
- ☑ Planning
- ☑ Design
- ☑ **Construction**

Quality Assurance Activities

- ✓ Inspection of Materials
- ✓ Records and QA Testing
- ✓ As-Built Drawings

USDA United States Department of Agriculture
Natural Resources Conservation Service

New Creek Site 14 Dam Rehab in Grant County, WV



BLANKET DRAIN DETAIL


CATERPILLAR

USDA United States Department of Agriculture
Natural Resources Conservation Service

Dam Rehabilitation in WV

Current Status

- ✓ Assessments-all but seven of 170 NRCS-assisted dams in WV have assessment reports. NRCS currently working on 5 of 7.
- ✓ Plans-two plans close to completion and an additional 11 dams were funded under BIL.
- ✓ Design-five designs in process and an additional six dams were funded under BIL.
- ✓ Construction-none at this time. Two dams have been rehabilitated, New Creek 14 and Upper Deckers Creek 1.

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In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English. USDA is an equal opportunity provider, employer and lender.

Questions

Emergency Watershed Protection Program

- Assist communities in the event of a declared disaster.
- Remove blockages from streams that pose an immediate threat to life and property.
- Stabilization of banks that have been damaged or impaired that pose an immediate threat to improved properties after a flood event.
- Federal and local partners.

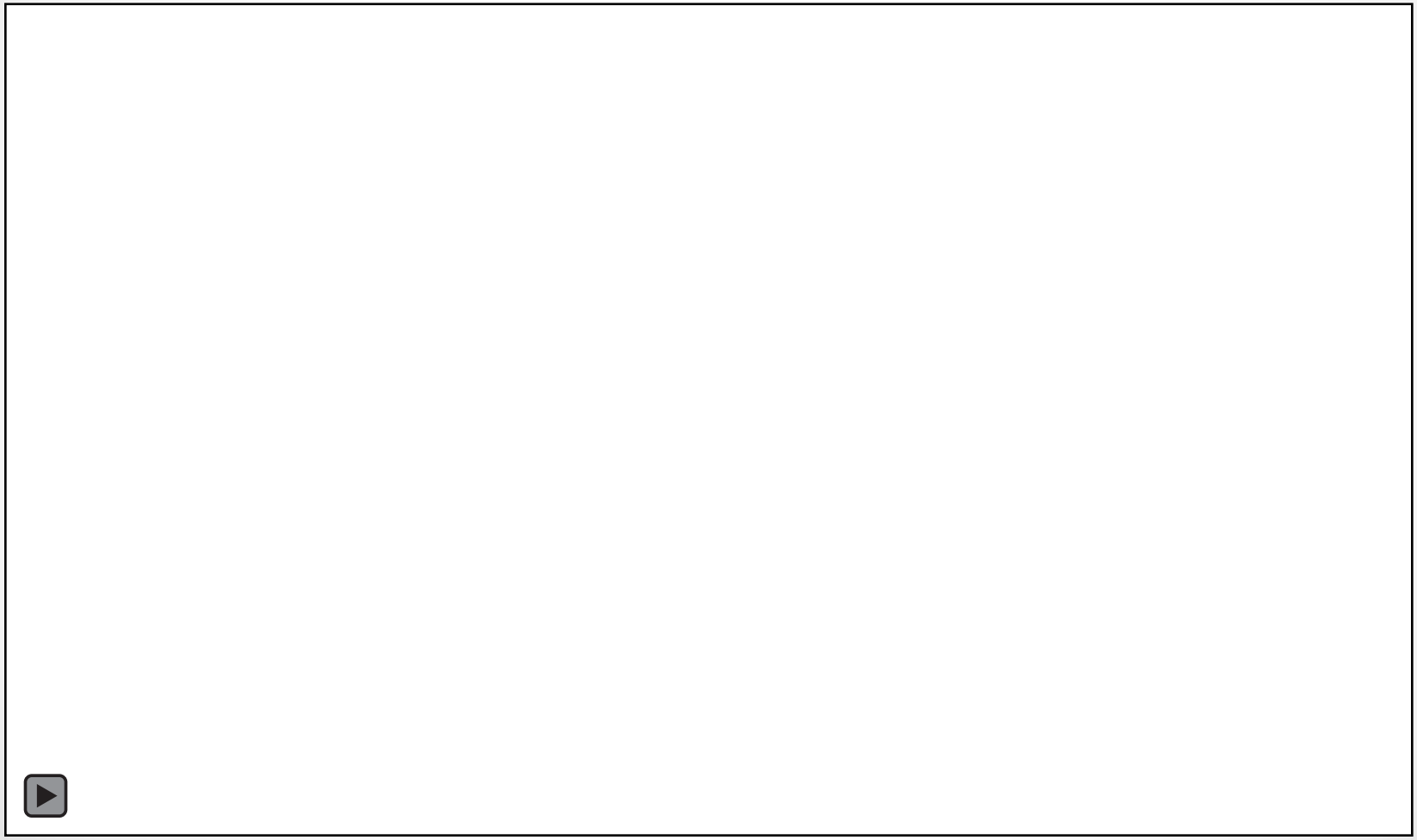
Clay County

Thorofare Run – Kanawha County

Caldwell Dump Site

Marion/Wetzel Burn Site

Burn Sites



Clay County Bank Stabilization Site

Clay County Bank Stabilization Site

Before- Wharton, Boone County

After -Wharton Site

Stream Restoration

Natural Stream Restoration

- Use of natural materials in process of restoring stream to more of former state.
- Incorporate a holistic approach by use of reference stream, identifying outlying issues.
- Long process with survey, assessments and studies.

Traditional Riprap/Gabions

- Used mainly for bank stabilization after flood damages.
- Cost prohibitive verses natural stream restoration.

South Fork Cherry River Phase 1
Greenbrier County

Little Coal River – Boone County

Little Grave Creek - Marshall County

Little Grave Creek - Marshall County

Little Grave Creek - Marshall County

Snake Creek, Greenbrier County

Aarons Creek - Before

Aarons Creek - After

Gabions/Riprap

Funding for Streamwork

(Outside of EWP)

- State Funds
  - Line Item Funds
  - Partnering Agency Funds
- Local Funds
  - City, County, Townships
- Mix of State/Local Funds

Stream Permits

- MOU with the US Army Corp of Engineers to assist landowners in obtaining permits.
- WVCA staff conducts site visit with landowner to discuss goals for their project.
- WVCA staff develops a stream management plan.
  - Calculates measurements for cubic yards of material and length of stream bank to be worked.
  - Draws a plan with current and proposed cross section(s) of site.
  - Submits the application to the appropriate agencies for review.
  - Provides technical assistance to landowner after receipt of permit authorization from the US Army Corp of Engineers.

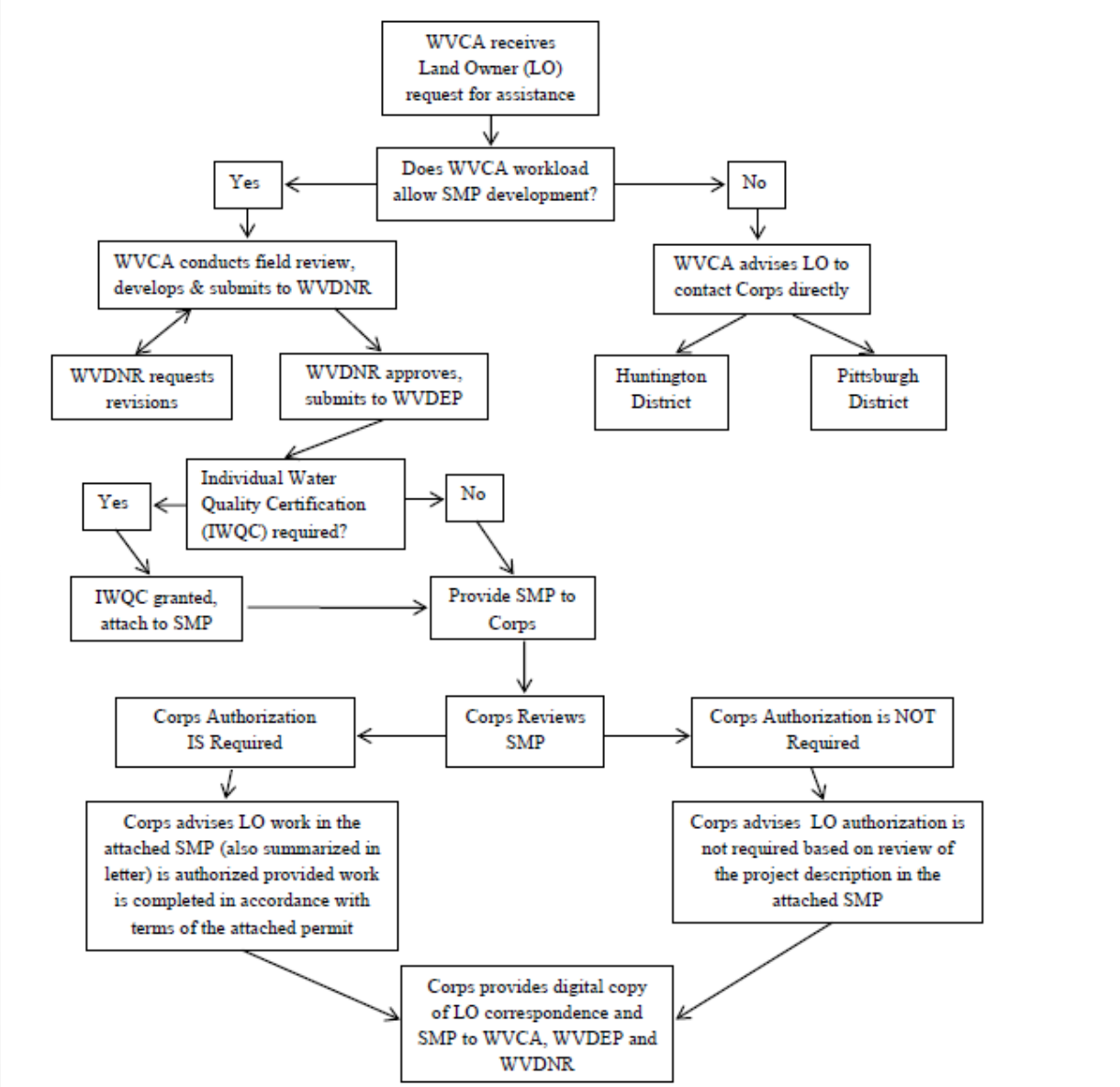
MOU

MEMORANDUM OF UNDERSTANDING
between
THE UNITED STATES ARMY CORPS OF ENGINEERS,
HUNTINGTON DISTRICT, REGULATORY DIVISION and
PITTSBURGH DISTRICT, REGULATORY BRANCH
and
WEST VIRGINIA CONSERVATION AGENCY
and
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
and
WEST VIRGINIA DIVISION OF NATURAL RESOURCES

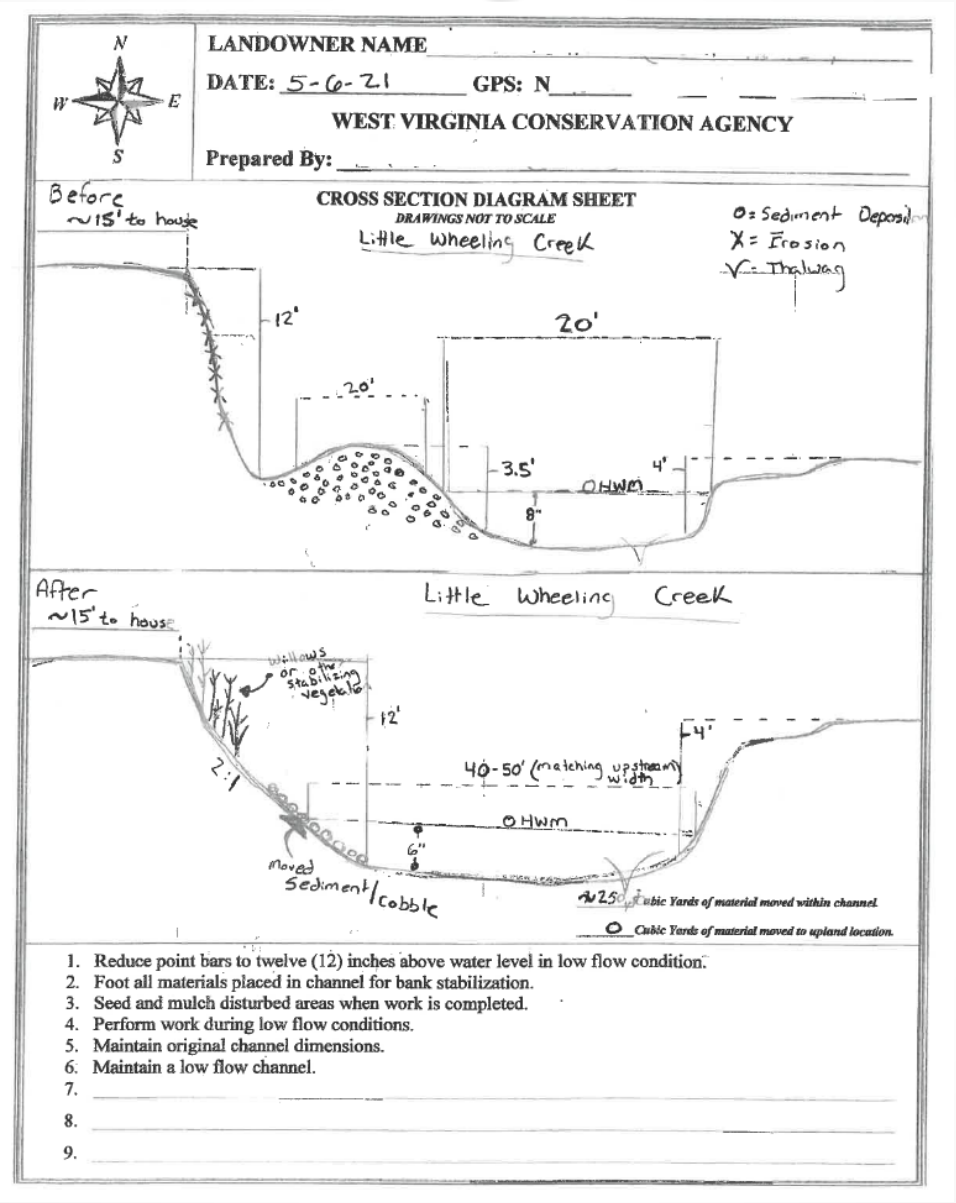
I. Introduction.

A. The U.S. Army Corps of Engineers (Corps) is authorized by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition or capacity of navigable waters of the United States (U.S.). Under Section 404 of the Clean Water Act (33 USC 1344), the Corps is authorized by Congress to regulate the discharge of dredged and fill material into all waters of the U.S., including wetlands. As shown in the attached Appendix A, two Corps districts, Huntington District and

Flow Chart from MOU



Stream Management Plans



LANDOWNER NAME

DATE: 5-6-21 GPS: N

WEST VIRGINIA CONSERVATION AGENCY

Prepared By:

CROSS SECTION DIAGRAM SHEET

DRAWINGS NOT TO SCALE

Little Wheeling Creek

O = Sediment Deposit
X = Erosion
V = Thalweg

Before
~15' to house

12'
20'
20'
3.5'
4'
OHWM
8"

After
~15' to house

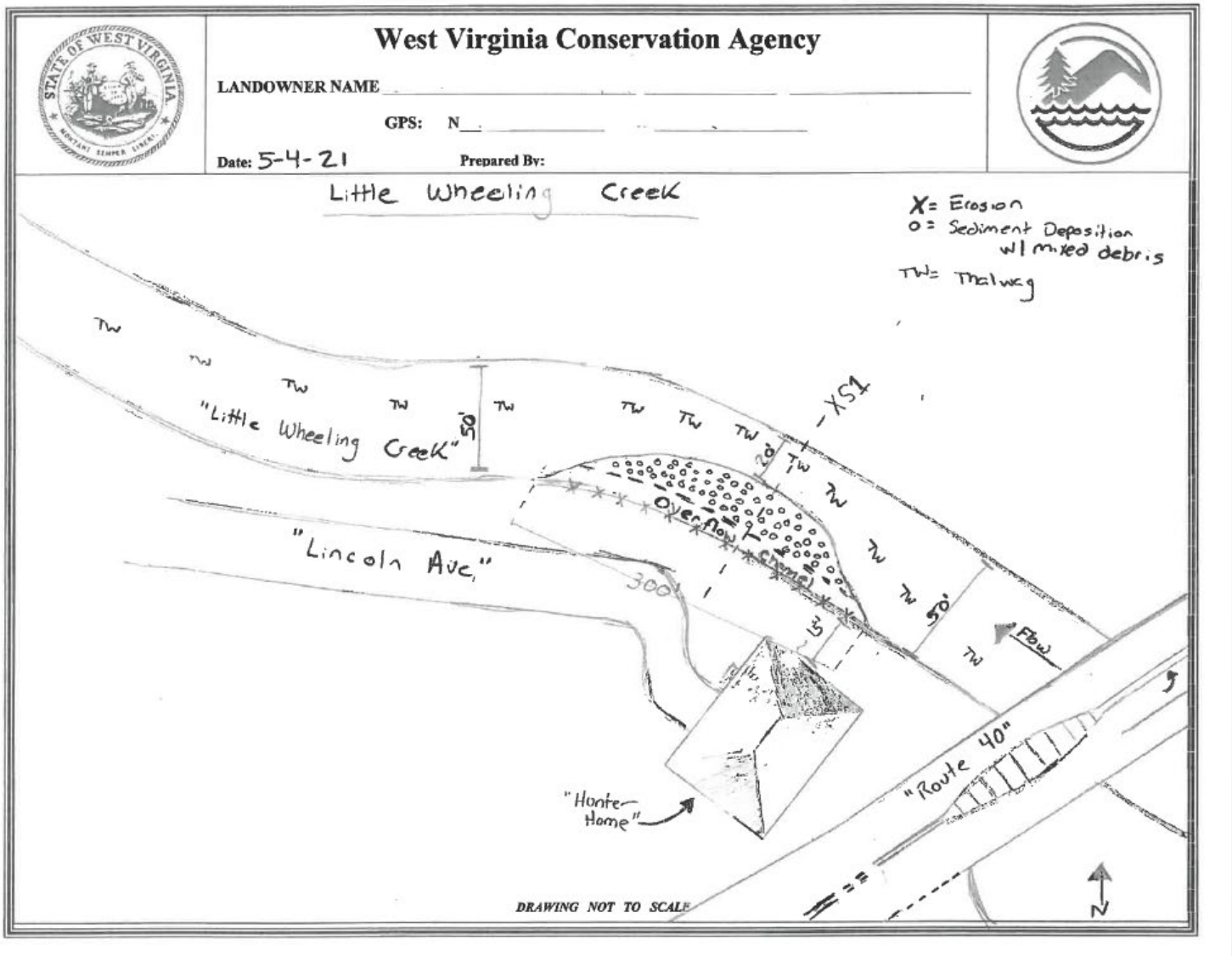
Little Wheeling Creek

Willows or other stabilizing vegetation
12'
2:1
4'
40-50' (matching upstream width)
OHWM
6"
Moved Sediment/Cobble

~250 Cubic Yards of material moved within channel.
0 Cubic Yards of material moved to upland location.

1. Reduce point bars to twelve (12) inches above water level in low flow condition.
2. Foot all materials placed in channel for bank stabilization.
3. Seed and mulch disturbed areas when work is completed.
4. Perform work during low flow conditions.
5. Maintain original channel dimensions.
6. Maintain a low flow channel.
7. _____
8. _____
9. _____

Stream Management Plans



Local Partnering

- 7-1-3u Agreements: utilizes authority of local counties and municipalities.

- Combines technical, financial and administrative resources to complete common goals.

WV Code §7-1-3u

Authority of counties and municipalities to treat streams to prevent floods

To protect people and property from floods, counties and municipalities are hereby ***empowered to rechannel and dredge streams; remove accumulated debris, snags, sandbars, rocks and any other kinds of obstructions from streams; straighten stream channels; and carry out erosion and sedimentation control measures and programs.***

Current 7-1-3u Agreements

1. Braxton County
2. City of Princeton
3. Doddridge County
4. Fayette County
5. Greenbrier County
6. Hancock County
7. Hardy County
8. Kanawha County
9. Marshall County
10. Mason County
11. McDowell County
12. Mercer County
13. Mingo County
14. Morgan County
15. Ohio County
16. Pendleton County
17. Pocahontas County
18. Preston County
19. Putnam County
20. Randolph County
21. Summers County
22. Town of Bath
23. Wayne County
24. Wetzel County
25. Webster County
26. Wyoming County

Agreement

7-1-3U AGREEMENT
BETWEEN
THE WEST VIRGINIA CONSERVATION AGENCY AND
THE XXX COUNTY COMMISSION
CONCERNING STREAM RESTORATION, BANK STABILIZATION AND
BLOCKAGE REMOVAL WORK

THIS 7-1-3U Agreement (Agreement) is made this ____ day of _____, 2020 by and between the West Virginia Conservation Agency (WVCA) and the XXX County Commission, a political subdivision of the State of West Virginia, (XCC). Authority to enter into this Agreement is found in W.Va. Code §19-21A-4 and W.Va. Code §7-1-3u.

WHEREAS, West Virginia has experienced disastrous flood events that have devastated the state and her citizenry; and

WHEREAS, there exists a substantial need to protect people and property from floods, to respond to the effects of flooding, to minimize stream bank erosion and engage in flood

Sub Agreement

7-1-3U SUB-AGREEMENT
XXXX COUNTY EWP FLOOD EVENT
BETWEEN
THE WEST VIRGINIA CONSERVATION AGENCY, THE XXXX CONSERVATION DISTRICT AND
THE XXXX COUNTY COMMISSION

Agreement #

THIS SUB-AGREEMENT is by and between the West Virginia Conservation Agency, (WVCA), the **XXXX** Conservation District, (XCD) and the **XXXX** County Commission (XCC) and incorporates by reference that Agreement currently existing between the parties dated _____, 20__.

Whereas, XCC is empowered by the legislature under West Virginia Code §7-1-3u to undertake work to prevent flooding and to respond to flooding, including the removal of accumulated debris, snags, sandbars, rocks and any other kinds of obstructions from streams, and

Whereas, WVCA is empowered under West Virginia Code §19-21A-4(11) to provide assistance as a result of gubernatorial declared natural disasters, and

Whereas, XCD is empowered under West Virginia Code §19-21A-8(3) in preventative and control measures within the district, and

Little Grave Creek - Marshall County

Harman Creek

Harman Creek

Watershed Section Contact Number

304-872-4302


Questions?