



West Virginia Emergency Watershed Program



West Virginia Conservation Agency

WV Quick Facts

- **40,000 stream miles***
- **10,000 named streams***
- **1.65 miles of stream for every square mile of land***
- **WV has one of the highest stream densities in North America***

*WV Encyclopedia



WV Quick Facts

- **78 percent covered by forest***
- **12 million of the state's 15.4 million acres***
- **4 of every 5 acres is covered by forest***
- **3rd most heavily forested state in the nation***

*WV Division of Forestry, WV Encyclopedia



Key WV Flood Facts

- “Flash Flood Season” runs from May through August.*
- Peak of flash flood occurrence is in the afternoon and early evening.
- Over half (29) of WV counties have experienced at least one death attributed to flooding over the past 30 years.
- Almost half of those fatalities were the result of people driving into flood waters.

*National Weather Service



WV Emergency & Disaster Declarations by Hazard since 1954*

• Severe storms/flooding/landslides	42
• Flooding	10
• Winter Storms/Flooding/Blizzard	7
• Hurricane (including Sandy)	4
• Drought	2
• Chemical Spill	1

*National Weather Service



Recovery Costs since 2000*

\$587,628,787.56

*FEMA







WVCA and EWP



- State law was changed in 2006 to grant WVCA the authority to enter private property and waters of the state during times of declared emergencies to remove flood debris.
- EWP is activated only when the governor issues a disaster/emergency declaration.
- All EWP work shall be conducted within areas covered under the declaration.
- WVCA created a policy to address response to EWP events.



WVCA and EWP

- WVCA negotiated U.S. Army Corps of Engineers regional permit to cover EWP-related stream activities.
- WVCA's EWP program implemented by agreement with the 14 Conservation Districts.
- WVCA is working to involve county/city governments in recovery process.
- To qualify for WVCA EWP, a project must:
 - *Pose an immediate threat to life, public health or safety; or*
 - *Eliminate a threat to improved public or private property; and*
 - *Restore the waterway to pass a 5-year storm event.*



WVCA 5-Tier System

Stream-related debris cleanup activities are prioritized based on a 5-tier system:

- **Tier 1** _ Immediate (Exigency) Threat (More than 75 percent blockage needing immediate action.)
- **Tier 2** _ When the debris accumulation would impound water during a 5-year storm event. The accumulated debris could cause flooding to improved public or private property.
- **Tier 3** The accumulation does not currently present a flood hazard, but future debris accumulation has the potential to impound water during future 5-year storm events.
- **Tier 4** _ Debris in the water or deposited on the bank could become dislodged and create choke points during a 100-year storm event.
- **Tier 5** _ No Concern.



WVCA 5-Tier System

Debris not covered under this system include:

- Debris from a previous emergency event.
- Fallen trees in a forest.
- Debris on public/private golf courses, farm fields, cemeteries and private property.
- Stump removal.
- Pre-event sediment from engineered channels.



WV Code §7-1-3u

County/City authority to treat streams to prevent flooding

*“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.***

Any county or municipality which exercises any power or authority set forth in this section shall comply with all applicable provisions of federal and state laws and rules and regulations...



§7-1-3u Agreements

Local government agrees to:

- Identify and prioritize potential sites.
- Provide an agreed upon portion of cost-share funding, as determined by the negotiated funding formula for each project and contracting services associated with each project.
- Local governments may provide “in-kind” services or goods in lieu of cash payments, and projects contemplated under the agreement involves the taking of land through eminent domain.
- Obtain all necessary land rights and permits to complete the identified project.
- Advertise and award contracts to complete the agreed upon projects.
- Identify temporary and permanent disposal sites in the county.



§7-1-3u Agreements

WVCA agrees to:

- Work with local government to identify potential sites, project suitability and funding availability.
- Provide technical assistance for the permit, design and construction oversight.
- Provide an agreed upon portion of cost-share funding, as determined by the negotiated funding formula for each project.



Issues and Concerns

- FEMA oversight has changed.
- FEMA says NRCS is primary for watershed-based recovery.
- NRCS isn't nimble enough to respond to exigency needs. (72 hours after event)
- NRCS requires ongoing maintenance of EWP sites.
- NRCS does not have set budget for EWP funding.





Questions?

