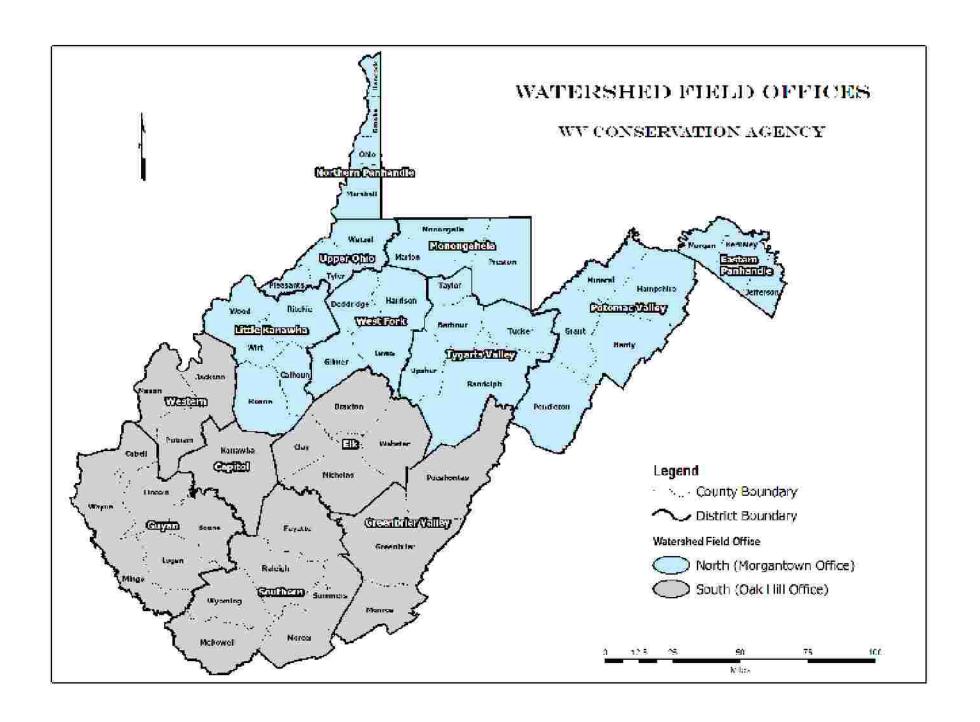
# West Virginia Conservation Agency





#### WVCA

- Ø Watershed Division/Stream Section
  - Programs
  - Staff

#### Issues

- Ø Stream Blockages
- Ø Floodplain Encroachment
- Ø Sedimentation
- Ø Impacts of resource extraction activities
- Ø Impacts of development



#### Site Identification

- Ø Areas of public concern
  - Citizen Contact Reports
  - Stream Access Permits
  - Government
- Ø Types
  - Erosion
  - Sedimentation
  - Flood reduction
  - Agriculture

# Blockage Removal



# Blockage Removal



#### **Stream Restoration**





# Floodplain Restoration





#### Partners

- Ø Landowners
- ø Industry
- Ø Local Partners
  - City Government
  - Boards of Education
  - County Commissions
  - Watershed Associations
- Ø State Partners
  - <sub>1</sub> DEP
  - <sub>I</sub> DNR
  - SHPO
     SHP
- Ø Federal Partners
  - **NRCS**
  - <sub>I</sub> FWS
  - ı ACE
  - **⊢** FEMA

## Industry

- Ø Mitigation
  - Components
  - Environmental Impacts
    - Credits
  - Permitting
  - Monitoring

#### Garrett's Fork

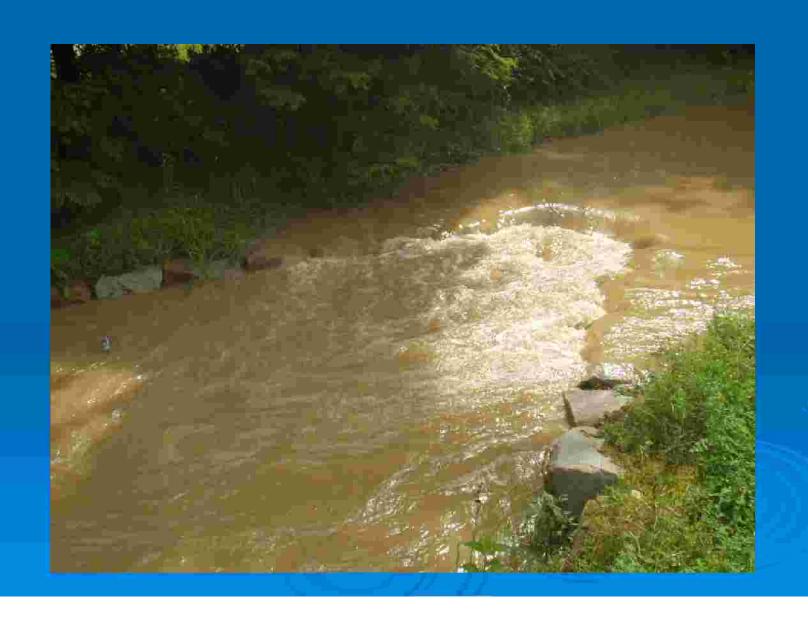
- Ø Industry/Agency Partnership
- Ø Flooding Impacts Reduced
- Ø Bank Stabilization
- Ø Habitat Improvement

#### Garrett's Fork





## Garrett's Fork



## Proactive Approach

C

C

A

P

Conservation

Credit

Assurance

Program

#### Goals

- Ø Bank stabilization
- Ø Improved sediment transport
- Ø Improved water quality
- Ø Enhanced floodplain area
- Ø Increased fish habitat
- Ø Blockage removal
- Ø Riparian area enhancement

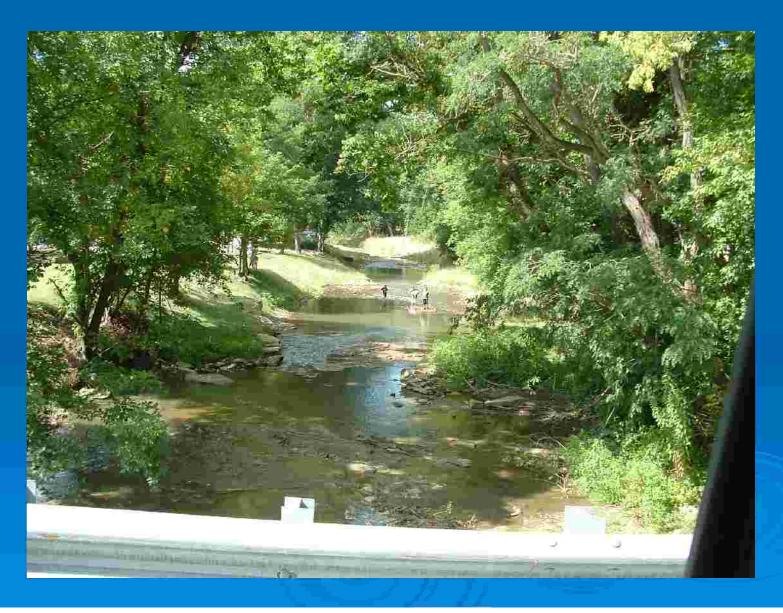
## **CCAP Components**

- Ø Stream Restoration
- Ø Agriculture

#### Stream Restoration

- Ø Bank stabilization
- Ø Sediment transport
- Ø Floodplain Enhancement
- Ø Channel capacity enhancement
- Ø Riparian Area Enhancement

#### **Stream Restoration**



#### Agriculture

- Ø Fencing
- Ø Alternative Water Sources
- Ø Stabilized Stream Crossings
- Ø Ponds
- Ø Lime & Fertilizer
- Ø Pasture Management
- Ø Riparian Area Enhancement

# Agriculture





## Questions?

