

**Elk Headwaters Comprehensive Watershed Plan  
Stakeholder Meeting #3  
Slatyfork Community Center  
March 3, 2009  
MINUTES**

**Agenda**

1. Introduction and review
  - a. Progress so far, what's left to do
  - b. Update: Public Service District plant siting decision
  - c. Update: Pocahontas County Water Resources Task Force
  - d. Forum: [www.elkheadwaters.org/Forum](http://www.elkheadwaters.org/Forum)
2. Presentation: Ryan Gaujot, Geologist, Canaan Valley Institute  
Sedimentation in Streams: Causes, Effects, and Solutions
  - a. Presentation
  - b. Questions and answers
3. Stakeholder discussion: Common vision for the future
  - a. Review discussion so far
  - b. Facilitated discussion: Move forward with common vision
4. Next steps
  - a. Meeting dates
  - b. Presentation topics
  - c. Action items: Tasks and deadlines

**Attending**

George Bell, Elk Headwaters Watershed Association  
David Litsey, Land Holder  
Gil Willis, Elk Headwaters Watershed Association  
Michael Hughes, RE/MAX  
Suzanne Stewart, Pocahontas Times  
Heather Niday, Allegheny Mountain Radio  
Evan Hansen, Downstream Strategies  
Tom Shipley, Sharp Farm, Elk Headwaters Watershed Association  
David Fleming, Pocahontas County Commission  
David Strom, Land Owner  
Leon Brown, Beckwith Lumber Company  
JD Morgan, Snowshoe  
Tolly Peuleche, Elk Headwaters Watershed Association  
Mary Willis, Elk River Touring Center and Inn  
Fritz Boettner, Downstream Strategies

## **Introduction and review**

George Bell (GB): Opening remarks and introductions

Fritz Boettner (FB): West Virginia Department of Environmental Protection (WVDEP) grant to be submitted soon. Received funds from Trout Unlimited. Well on our way to get funding to finish this plan. This is third of four meetings to develop a common vision for the watershed.

PSD siting update: Chose Site 7 Variation 12, which is the same as the one chosen in summer 2008. Thrasher Engineering said it would not be fully enclosed, and the SBR tank would be uncovered. No membranes would be installed, but space would be allowed. It would have chillers. It would not have additional pipe down the Route 219 valley. The cost would be about \$25 million.

Dave Fleming (DF): Pocahontas County Commission voted today to ask the Infrastructure and Jobs Development Council (IJDC) to NOT provide funding for the project. He spoke with WD Smith, Region 4 director, and believes that IJDC will follow the will of the Commission and honor their request. This is most of funding for project. The Commission thought it's time to reevaluate from serious new perspective.

DF: Water Resources Task Force update: Next meeting Wednesday, March 11, 10am, Marlinton library. Identified steps going forward. Revising mission statement. Revising plan so far. General consensus that we can do a great job and be the first county to achieve such a plan. At the next meeting, a speaker from Division of Forestry or Division of Natural Resources will talk about available data. Looking into getting VISTA worker.

FB: The Elk Headwaters Forum has been getting a lot of hits, and some people have been posting feedback.

## **Presentation—Sedimentation in Streams: Causes, Effects, and Solutions** **Ryan Gaujot (RG), Geologist, Canaan Valley Institute**

Ryan is a Geologist at CVI, part of the aquatics team for eight years. Works on stream restoration projects and natural stream design (NSD) to fix sediment issues. The presentation covers problems, traditional fixes, NSD examples, and how to get projects in watershed.

Sedimentation problems:

- Head cuts
- Sediment depositional bars
- Streambank erosion (a lot below stream crossings and in agricultural areas due to cattle access)
- Mowing to bank
- Culvert crossings and culvert outflows with shotgun effects

Traditional fixes in the past:

- Rip rap for bank erosion, which armors the bank
- Concrete, but still get undercutting
- Manmade channels, overwidened for 25 year flood. But the two-year flood (bankfull) delivers the most sediment to the river. These floods are what we're most worried about. If the channel

is oversized, it doesn't have the proper geometry and velocity to handle the two-year flood and route the sediment, so the sediment settles out.

- Channel straightening
- Gabion baskets
- Checkdams
- Dredging, which also overwidens the streams. So sediment falls out and creates a new channel within the dredge area. Doesn't work unless the river is adjusted to the right hydraulic geometry.

DF: Marlinton is looking at flood wall project, flooding issues and considering dredging.

RG: This is a very complicated issue.

#### Natural Stream Design (NSD)

- Study impaired reach, compare it with nice, stable reference streams, use numbers from reference streams as templates to overlay on impaired reach, build that hydraulic geometry on the impaired reach
- Build a floodplain
- Build natural structures—boulders, wood, rock—to turn the water instead of just armoring the bank and to maintain the hydraulic geometry
- Have riffles and pools to dissipate the energy
- Need some land from riparian landowners
- Need native riparian vegetation to lock in the structures

GB: What agency oversees this process?

RG: West Virginia Conservation Agency (WVCA) does some of this work but recently changed its focus to agricultural and upland projects. So now would need private consultant or CVI. Regarding funding, in-lieu funds (coal and non-coal) can be used for NSD projects. Agencies try to keep these funds within the same basin from which they are generated. There is not much coal in the Elk headwaters, but there's a lot of non-coal in-lieu funds too.

Tom Shipley (TS): Does meandering path cause water to back up?

RG: No, it should move water through quicker. If stream is straight and bankfull, it has very high energy. The options are to dissipate energy on the floodplain or with steps in a pool.

TS: When built Route 219 in 1926, they dredged a new river for many miles across from Tom's store. Now you can see whitecaps in the river.

RG continued:

- They have put in about 10 miles of projects. Some work better than others. Need proper construction oversight and good contractor.
- Permits reviewed by United States Army Corps of Engineers (USACE), which require forms that must be filled out with proper training.
- Reference stream examples
- Impaired stream example – overgrazing, no fencing, full cattle access. Project reroutes stream, adds ponds for cattle watering.
- Landowner willingness is most important. Need access, right of entry agreement.

DF: How much does it cost?

RG: Landowner can make money on project. Landowner may pay for the fence, but there are programs such as WHIP and CREP that get landowner share down to 5 or 10%. The stream project is usually free to landowners. They likely must give up some land to grazing. The Natural Resources Conservation Service (NRCS) requires a 15-year minimum. Landowners can make money by surveying the protected acreage and getting tax write-offs if the land is placed in conservation easements or deed restrictions. A conservation bank may buy the deed restrictions from the landowners, even while they still own the property.

RG continued:

- Creates habitat, riffles, pools, fish cover
- Sediment sluice: bury perforated pipe in stream to take fines
- Native seed mix
- Brush mattress on bend—live cuttings, tack town with wire mesh

Options for funding :

- In-lieu fees
- Section 319 program

Steps for getting projects on the ground:

- Identify projects with willing landowners and enough stream length to work with
- Get permit reviewer down here from WVDEP or USACE, show it to them, and make sure they'll approve it
- Put together a cost estimate
- Then go back for formal agreement with landowner
- Elk headwaters at a good stage—if do assessments now, can probably identify projects to design in 2009. Probably the soonest construction could occur would be in 2010.
- The best strategy is to work with willing landowners first. Start by identifying willing landowners.

Gil Willis (GW): The watershed has second home developments and parking lots. How to deal with water that's coming from these developments?

RG: Will have faster time of concentration—runoff will be more flashy. In terms of sediment, it's hard to quantify some of these problems associated with upland development. Best bet is to quantify streambank problems rather than upland problems. But expect more bankfull flows and flashier events.

GW: Would upland pour-overs work that slow down streams?

RG: Yes, this can work. But will develop fans of sediment in woody debris.

JD Morgan (JD): What about building pools?

RG: What are we seeing here?

GB: Streams are jumping up way faster than before.

RG: Need to enhance flood plains. Hard to solve upland problems once the paving is done.

## Stakeholder discussion: Common vision for the future

Evan Hansen (EH): Introduces the outcomes from the previous two stakeholder meetings, and outlines the forum topics that were developed and commented on. We'll try to brainstorm one last time on each of these categories. Then after this meeting, Downstream Strategies will compile these new ideas and all past ideas into a draft document.

The following portions of the minutes capture the new ideas that were presented at this meeting.

### Linking environmental protection with economic development

- Brand the watershed, market it, develop a slogan. It was noted that an article on a roadkill festival served to brand West Virginia as a hillbilly state. What's not known is that the state is actually an environmental paradise.
- Create a trail system that links Snowshoe's trails to Monongahela National Forest trail system, creating one of the largest trail networks on the east coast. Part of the historical Highway 219.
- Fishing, opportunity to create more fishing access, habitat enhancement.
- Farming, eating local, living light on the land. Home-grown, locally produced meat, produce, and fish.
- Community understanding of using the land in a appropriate and sustainable way. Recognize the "gems" of the watershed. Don't build trophy homes next to these gems because they won't be gems anymore. Buy into the sustainable planning concepts. More thought to infrastructure development.
- Working with state Division of Highways, so that there is way to work together for long-term economic future. Issues with ice melting.
- Recognize that there is one big system: surface water and groundwater are connected
- Need retention ponds for new development
- Strategies to apply these practices in the future
- Continue to find ways for Public Service District, County Commission to promote development with best practices and with community input
- Have agencies assess cumulative impacts. May require the local community to do this. Consider vulnerability of different areas.
- Install a demonstration project on the ground
- We want to work in cooperation with local businesses and new developments to "green" the practices
- Looking at a broadband proposal for fiber infrastructure to the county. Bring infrastructure for technology that businesses need to flourish. A proposal will be submitted soon, to bring fiber optics to the region.

### Unique natural features

- Diversity of flora and fauna in this watershed: Benthic macroinvertebrates, bacteria, mushrooms, ramps, birds, types of trees (river bottom hardwoods up to spruce at high elevation). Unique spruce forest ecology on top of the mountain. Salamanders and crayfish.
- Incredible undisturbed viewsheds
- The watershed is home to the peak with the second-highest elevation in West Virginia (Thorny Flats on Snowshoe Mountain)
- Pocahontas County has the highest average elevation east of the Mississippi (fact check)

- Maintain its visual beauty. During any project, this beauty must be maintained. Restore the visual beauty by restoring streams.

### History and heritage

This category was not in the original list to be discussed, but stakeholders brought it up so we brainstormed on this topic.

- Old spruce logging operations
- Old churches (Slatyfork Methodist church, Presbyterian church on Route 66 near Snowshoe)
- Cemeteries
- Old schools: Beckwith building, Valley Fork
- Old railroad grades from early logging
- Tourist train potential
- Pioneer farm families with history and houses. Including Sharp farm with log home that Robert E. Lee visited, country store
- Civil War history: get a better handle on historic Civil War features
- Should we focus on other items in the county, beyond the watershed boundaries, and think of the Elk Headwaters as a hub?
- Non-timber species: Harvest ramps, ginseng, moss from the woods. The Forest Service is starting to regulate the gathering of some species due to overharvesting.

### Environmental “marketing plan”

Due to time constraints, the group skipped past this category

### Initial ideas for technologies, policies, and management strategies

- Team up with Water Resources Task Force
- Create educational materials to be distributed
- More presentations. For example, repeat Ryan Gaujot’s presentation on NSD to key landowners
- Implement it somehow, get it off the shelf
- Wild and Scenic Rivers
- Need a menu of projects, and a cost estimate for each one. These projects need to be ready. Five-to-ten shovel-ready projects ahead of any funding.
- Give Ryan’s presentation to land owners, then go to the sites of those landowners and explain how it would apply there. Need to show the landowners how the projects would look.
- Use GoogleEarth and GIS to visualize these projects. Preview the possibilities.
- EHWA to play a role: Links on Web site for information, direct land owners to resources regarding permits, help with the process, hire and share VISTAs
- Ask County Commission to link its site to EHWA
- Institutionalize new ideas with Division of Highways and developers

### Land management practices

Due to time constraints, the group skipped past this category

### Broad stakeholder involvement

Due to time constraints, the group skipped past this category

### Summary

EH: Downstream Strategies' job is to compile everything we have heard so far—including at today's meeting and previous meetings—into a draft document. We'll post the draft on the Forum well ahead of the next meeting to start gathering final feedback. Then at the next meeting, we'll make any final adjustments and finalize the document. This will be a standalone document that describes the common vision for the future, and will also be a core part of the final Comprehensive Watershed Plan.

TS: Can we use this information to decide what to do next? We need to do more studying.

EH: We hope to start some additional studies very soon, should we get the WVDEP grant. Eventually, everything we have done will be compiled into the final Comprehensive Watershed Plan.

### Next steps

**Next meeting: April 27, 7:00 pm, Slatyfork Community Center**

The group discussed speaker ideas, including a planner with experience in small communities, a person familiar with implementing comprehensive watershed plans, someone familiar with the unique natural features of the watershed, someone familiar with the Wild and Scenic River program, or someone to explain how the system in Charleston works.

It was agreed that the first choice is a planner with experience in small communities. Downstream Strategies will look for this speaker.

Downstream Strategies will post minutes to the forum.

Downstream Strategies will compile a draft document that outlines the common vision for the future. We'll post the draft on the Forum well ahead of the next meeting to start gathering final feedback.