

West Virginia Water Gaging Council

Meeting Minutes

September 22, 2011

Department of Environmental Protection (DEP)

Headquarters, Kanawha City

Council Membership Representation

Organization	Present	Proxy	Represented By
WV Conservation Agency (WVCA)	X		Russ Campbell Ed Cox
U.S. Geological Survey (USGS)	X		Hugh Bevans Ron Evaldi Jeremy White Jeff Wiley
WV Department of Environmental Protection (WVDEP)	X		Brian Carr Jason Harmon Nick Schaer
WV Division of Highways (WVDOH)			
WV Division of Homeland Security and Emergency Management (DHSEM)	X		Jim Steele
WV Division of Natural Resources (WVDNR)	X		Danny Bennett
WV Water Research Institute (WVWRI)	X		Nicholas Zegre
National Weather Service (NWS)	X		John Sikora
U.S. Army Corps of Engineers (USACE)	X		
Huntington District			
Pittsburgh District			Robert Yue Werner Loehlein
Baltimore District			
U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)	X		Angela Greene
WV Rivers Coalition (WVRC)	X		Shanda Minney
Canaan Valley Institute (CVI)			
Michael Baker Jr., INC. (MBJ)	X		Mohiuddin Shaik

Other Representation

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Administration

Roll-Call

The Secretary conducted a Roll-Call of the member organizations. Upon conclusion of Roll-Call, the Secretary notified the Council Chair that a Quorum had been established.

Call to Order and Introductions

Russ Campbell, Chair, called the meeting to order at 1:05 P.M.

Agenda Review

Campbell, Chair, asked if there were any additions to the Agenda. Nicholas Zegre asked that a discussion on Marcellus Shale be added. Ron Evaldi informed the Chair that Shaun Wicklein of USGS could not attend the meeting because of flooding in Virginia.

Hugh Bevans moved that the agenda be approved, seconded by Danny Bennett, approved by member vote.

Approval of 1/20/10 Meeting Minutes

Campbell, Chair, asked if there were any additions, corrections, or comments to the minutes. Corrections were offered by the membership. Hugh Bevans moved to approve the amended minutes, seconded, and the minutes were approved by voice vote.

Unfinished Business

1. Chesapeake Bay Program:

Hugh Bevans reported that the Chesapeake Bay Program is funding continuation of the discharge gaging station Rocky Marsh Run at Scrabble, and installation of two additional gages on Warm Springs Run near Berkeley Springs and on Mill Creek at Bunker Hill. Additional gages may be added next year.

2. Reservoirs:

Russ Campbell and Angela Greene reported on the New Creek rehabilitation project at Keyser. The riser will be replaced and the contractor is ready to install the spillway pipe. This is one of the projects for flood control infrastructure rehabilitation. It will be ready in the spring for the auxiliary spillway construction. The project is 10-15% complete at this time and will have a total cost of \$9 million.

Russ suggested that a reservoir gage might be considered for New Creek 14. The original reservoir gage network was based on having 2 or 3 reservoirs gaged in each of the 6 climatic zones of West Virginia. The Council might be asked to evaluate the current network to see if the distribution of the gages meets the State's needs. A gage in New Creek 14 might be considered even if the gage network seems adequate because it is part of Keyser's water supply and rapid drawdown could be a

critical issue. The reservoir will begin filling in early 2013. If the Council deems a gage in New Creek 14 to be worthwhile then Russ will take a proposal to the State Agricultural Commission Committee.

3. Water Use Tool:

Brian Carr reported on DEP efforts to improve the online water withdrawal tool. There is a signed agreement to add a gage on the Buckhannon River near Alexander for a 5-year period to help provide better data for a nearby regional withdrawal facility. There is a potential site for a gage on Laurel Fork or a tributary nearby. John Sikora suggested the Cherry River but the new gage must be on a tributary to the Cranberry River. Another gage is in the works, but no paperwork yet, for Wheeling Creek near another regional withdrawal point. USGS has ordered equipment and will begin gage construction when permits are available.

The governor has issued an Executive Order for WVDEP to review water withdrawal plans and track the water. DEP hopes to have the system in place by December.

New Business

1. ARRA Gage Improvement:

Werner Loehlein and Ron Evaldi reported on upgrades to gage instrumentation in the Monongahela River and Ohio River Basins. Ohio River and Monongahela River dams are undergoing upgrades to provide redundant systems both upstream and downstream to assure data availability for dam operations. Several Pluvio rain gages are being installed to help ground truth NWS NEXRAD radar and improve flood forecasts. Elkins flood control structure gages will soon be installed and will report to the web. These gages will be maintained by USGS thru cooperative agreement with the City of Elkins and the Corps of Engineers. This is one of three local flood protection projects where the Corps helps maintain the gages that are used by the local community to operate their flood protection structures.

2. WVU Programs:

Nicholas Zegre reported that West Virginia University is involved in studies on a watershed scale to assess impacts of Marcellus gas production:

- 1) County scale surface-water vulnerability and water use study in principal Marcellus development regions.
- 2) Watershed environmental impact study of Marcellus development.
- 3) Marcellus impact study in the Monongahela National Forest involving pre-drilling, active operation, and post drilling assessments.
- 4) Study of shallow groundwater contamination in the Richwood area.

Hugh Bevans added that USGS is involved in a shallow groundwater study in the Monongahela River Basin in collaboration with Dr. Shikha Sharma at WVU. The study involves isotope analysis looking at formation impacts, radioactivity, brines, trace elements, and dissolved gasses at about 40 wells this year. Next summer USGS will conduct base-flow discharge sampling.

3. General Discussion:

Hugh Bevans stated that USGS is interested in the water use side of the Marcellas operations. Brian Carr offered to allow WVU access to WVDEP 2010 water use data to compare with their study results. Russ Campbell asked if there is an industry standard amount of water used in Marcellus well development. General consensus was about 5 to 6 million gallons per well for as many as 8 wells per pad. It was also noted that as production drops off, the Marcellus wells may be refracked.

Nicholas Zegre as a follow up of his previous presentation offered that WVU has 3 years of GIS NEXRAD data. The gridded data sets are available thru Jerry Fletcher. Other rain data goes back about 60 years. These data sets should soon be publicly available.

Next Meeting:

Dec. 14, 2011 at WVDEP Headquarters in Kanawha City.

Meeting adjourned at 2:10 P.M.

Respectfully submitted

Ronald D. Evaldi
Acting Secretary