

Minutes from NHD TWG meeting Monday, February 25, 2008

Main topic of discussion: Stream Order Classification

Participants: Bart Dudley, AHTD
Doug Hanson, AGC
Mary Barnett, ADEQ
Randy Puckett, ADEQ
Katy Hattenhauer, ADEQ

Katy went through a presentation about Stream Order Classification. The presentation was made of text taken from a document from Doug Hanson with the Arkansas Geological Survey (AGC). This text document described the steps taken to classify streams, starting with the 7-day, 10-year flow values. These would be a great starting point, but there will not be enough flow data for all of Arkansas to do this method by itself. Therefore, we may have to use two or three different methods to do this accurately.

The group decided that we could do stream order classification by watersheds, drainage patterns, and flow values, if applicable. Perennial streams are already on the map, done by flow data. We may be interested in any flow data we can find.

It was also determined that stream order classes could be used to help with nutrient criteria, watershed size, Environmental Resource areas, and to figure out where to build a dam.

There was a handout on Stream Order Classification which contained 4 different methods of determining how to do the classification. The group decided on the possibility of using Method 1 and Method 2. The group also decided on adopting the USGS method of classification. Mary Barnett had another idea to add to the classification process: Using letters along with the order numbers to help determine the classification.

The group will check with universities to see if there are any projects going on (or have been done), where stream order classification may already exist.

Katy will check at the training in Denver this week about which methodology to use in stream order classification. There is a possibility that this training for NHDPlus, which is a specific toolset that could be added to the regular NHD GeoEdit Tool, will actually do the Stream Order Classification for us!

Bart Dudley with the AHTD reported on what he was trying to do, which was spatially join AHTD data to NHD data to sort out the smaller stuff for the classification process. This method did not work; there was not enough computing power to do this.

The group also discussed another part of the naming issue – should we name Artificial Path's in Perennial Streams, or not? And, what about the reach codes – do we have to

give each new artificial path a new reach code? This is a policy decision we need to make soon.

So far, there are two main policy decisions the group needs to decide on: Stream Order Classification and Names issues.

The group scheduled the next meeting for Thursday, March 20, 2008, from 1-4 pm in the ADEQ 2nd floor conference room. Katy will report on the Denver trip, and answer some questions about the Names issues, among a few other things.