Subject: : Conservation
Topic: : Yellow Breeches Dam Removal
Re: Yellow Breeches Dam Removal
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Date: : 2010/3/11 12:04:03
URL:

Most dam removals sites that I have seen in the Mid-Atlantic Piedmont are done in the name of conservation but in reality fail to be an adequate conservation method. The floodplains in this region are very different from what existed naturally 400 years ago. Most floodplains did not have one channel but rather consisted of multiple small, shallow channels intermixed with wetlands and beaver ponds. It is unknown whether these floodplains were a product of beaver populations or whether the beaver populations flourished due to the floodplains that existed. Either way, research has shown that trout in moderate to steep gradient streams benefit from having beaver dams. Trout in low gradient streams do not benefit from beaver dams. In some cases, low head dams are small to begin with or have been lowered from their original height. If the stream gradient is correct, these structures may be of benefit to the trout populations. Another factor to consider is that dam removal often results in significant stream bed sedimentation downstream over the course of many years. Basically, the sediment that is stored in the dam reservoir is slowly washed downstream until it finds the next reservoir or culvert (ex: bridge) and is then deposited there. The biggest problem I have with low head dam removal is the failure to properly address the erosion following the removal. TU is in the habit of removing dams in the name of conservation; however, they removed the dam and do very little to prevent erosion. They call it a success but in reality all they are doing is creating a very unstable system. Most streams in the Piedmont have never transported gravel; however, most streams that have a history of dam removal or dam breech have extensive gravel bars. Pick up a handful of gravel sometime and look at it. It has sharp, pointed margins. Systems that transport gravel tend to have rounded gravel. When a dam is removed and the result is gravel bars with non-rounded gravel, that is a pretty good indicator that the system is far from stable. Sure other factors like development and storm water runoff come into play, but the main problems lies in the fact that the Piedmont (and most other) floodplains are drastically altered. Unless we want to shell out millions to correctly improve floodplains post-dam removal, then I would only support dam removal for safety.