

## MINUTES FROM COE VISIST ON 12/9/99

## ATTENDEES:

Craig Fischenich – COE  
Bill Kurey – US Fish and Wildlife  
Eric Woods – FDF  
Rob Janke – DOE  
Pete Yerace – DOE

Hollis Allen – COE  
Tom Schneider – OEPA  
John Homer – FDF  
Kathi Nickel – DOE  
Randy Hoover – ODNR

The discussions with the COE were interesting and productive. After walking the length of Paddys Run on site Craig Fischenich concluded (based on the limited time spent evaluating the stream) that there were some problems along the stretch, but overall the stream was not in terrible shape. I asked him and Hollis Allen to rate the damage on a scale from one to ten, ten being the worst and they gave Paddys Run an average score of 4.5 (Craig's rating was a 5, Hollis' rating a 4). Given the condition of the stream they stated that a wide range of alternatives were considerable. These alternatives ranged from total stream reconfiguration (not recommended) to letting the stream repair itself (also not recommended). The recommended approach was to take a few actions to promote re-establishment of a more natural stream configuration. Three general topics along this line were discussed.

Creation of Floodplain – Craig and Hollis thought the creation of additional floodplain was a reasonable action, but emphasized the need to maintain the stream's ability to transport sediment through these areas on new floodplain. Any significant reduction to the streams transport capabilities through these newly configured areas could result in an undesirable degree of deposition in the new floodplains and a resultant increase in erosion in the stretches of the streams between the floodplains. Additionally, Craig cautioned that breaching the berm that was created in the late 1960s to move the stream from its original channel where it threatened Paddys Run Road could also result in deposition in the center of the stream channel near the breach and increased erosion on the banks. Craig saw benefit in breaching the berm to create additional floodplain in this area. Additional communication with the COE may be necessary to determine how best to proceed in this area.

Gradient Control – Randy Hoover was a proponent of installing gradient control structures along Paddys Run to re-establish it's natural, gentler gradient and thereby arresting the aggressive erosion that has created some of the unnaturally steep banks along the creek. Although such an approach could be successful, Craig indicated that the gradient would need to be raise 8-10 feet and would therefore require a series of these structures installed at appropriate locations. The structures would need to be secured both to the sides of the channel and in the channel bed to a depth that exceeds the scour depth. Based on some of the scours observed along the creek, this depth could exceed 4 feet.

Slope Stabilization - The need to stabilization of slopes along the stream seemed to be the most subjective topic in Paddys Run repair. Craig thought it reasonable to stabilize some of the most significant slopes such as the one where the weir effort was undertaken. Craig suggested securing the toe of this slope with a hard engineering technique and allowing the upper part of the slope to slump thus creating a more stable slope that could be planted. A more aggressive approach would be the establishment of a terrace at the bottom of the slope that could be immediately planted and, the upper slope again would be allowed to slump. Craig did recommend removing the large logs that were installed to try to arrest erosion. Erosion behind the logs appears to have

been exacerbated. Craig suggested that the decision to secure slope could be based on stakeholder's desires to save key features along the stream bank.

Other topics discussed included:

Riparian corridor plantings are planned and supported by all. A concern was raised about planting close to banks, which will slump over the next several years as the channel re-establishes a more natural configuration.

Video-taping the stream during storm events to provide the COE with additional information. Included in this effort will be the installation of water height gages.

Craig and Hollis are interested in continued involvement as their schedules permit. They will be sending a letter summary of their impressions from this first visit. The summary is expected sometime in January. I asked if the COE would at a minimum review our designs that have impact on the stream channel and they agreed. It will be necessary to provide extra review time (probably a couple of months) to get this support.