## **Species Protective Measures for Pipeline and Linear Projects**

- 1. Select pipeline corridors to avoid steeper slopes and minimize stream crossings.
- 2. Avoid paralleling stream channels whenever possible in new construction. If a pipeline must parallel a stream channel, maintain a 100 foot buffer on slopes less than or equal to 15 percent, a 125 foot buffer on slopes 16 to 30 percent, and a 150 foot buffer on slopes greater than 30 percent.
- 3. Incorporate properly installed and maintained erosion and sediment best management practices until all exposed soils are permanently stabilized.
- a. Install and maintain slope breaks at proper spacing to prevent channel formation down slope of outlets. Do not outlet slope breaks into a stream.
- b. Ensure proper use, installation, and maintenance of energy dissipaters (e.g., hay bales, etc.), silt fence, and trench breaks.
- c. Remove temporary sediment barriers when replaced with permanent erosion control or when revegetation is successful.
- d. Stabilize bare, erodible soils with erosion control measures prior to the onset of a 0.5 inch/24 hour forecasted rainfall or when abandoning site for greater than two weeks.
- e. Within 24 hours following precipitation events at project site, all erosion and sediment control measures must be maintained and either repaired or replaced.
- 4. Stage equipment a minimum of 250 feet from stream banks or as far from streambank as the site characteristics allow.
- 5. Wet open cut trenching is not permissible. Open cut trenching in a dry channel (flow temporarily diverted) is allowed.
- 6. No stream channelization.
- 7. The maximum combined temporary/construction and maintained/permanent right-of-way width cannot exceed 50 feet. This restriction begins at the ordinary high water mark on each side of the stream and extends out 50 feet.
- 8. Minimize clearing and excavation of stream banks and bed.
- 9. When possible, use temporary (e.g., hardwood plank bridges, etc.) or permanent bridges to move equipment across streams with flow.
- 10. Application of herbicides, pesticides, and fertilizes must follow label instructions. Use of chemicals in water bodies must be an approved and labeled use.

Upper Little Red River Watershed and Natural Gas Industry only - in addition to the above guidelines

11. Adhere to the U.S. Fish and Wildlife Service's Arkansas Best Management Practices for Natural Gas Pipeline Construction and Maintenance Activities in the Fayetteville Shale Area – Upper Little Red River Watershed (<a href="https://www.fws.gov/arkansas-es/docs/AR\_Natural\_Gas\_Pipeline\_BMPs\_ULRR\_v1\_July\_2009.pdf">https://www.fws.gov/arkansas-es/docs/AR\_Natural\_Gas\_Pipeline\_BMPs\_ULRR\_v1\_July\_2009.pdf</a>).