

Species Protective Measures for Bridge and Culvert Projects

1. Ensure proper pipe size to handle flow volumes and to adequately pass aquatic organisms.
2. Design bridges to allow fish passage during low flows.
3. Do not force stream into pipe. Instead, use longer pipes placed at an angle in line with the natural flow of the stream.
4. Divert road ditches, where possible, away from stream crossings and outlet water into a stable vegetated buffer (practice referred to as Corman Clearwater Crossing).
5. Minimize natural channel changes and the amount of excavation or fill in the channel.
6. Consider purchasing a larger diameter pipe and embedding the bottom of the pipe in the stream channel, use of multiple pipes or bottomless arch pipes which retain the natural stream bed, transport bed load through structure, and allow for fish passage.

Please note that these avoidance and minimization measures for bridges and culverts adhere to applicable best management practices described in the Arkansas Unpaved Roads Program administered by the Arkansas Department of Agriculture's Natural Resources Division.