

Forest Management Sheet

Best Management Practices

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Stream Crossings

Reliable access to forestland is essential to carry out forest management activities. This often requires crossing a stream. However, if not done properly, stream crossings can be a major source of sediment because of their close proximity to water and the interaction of traffic on exposed dirt roads. Therefore, it is always best to avoid stream crossings whenever practical alternatives exist. Properly implemented stream crossings enable traffic to traverse streams, drains, and ditches when necessary, while protecting water quality. Stream crossings can be permanent or temporary depending on the intended traffic type and frequency. Some crossings are designed specifically for skidding, some for truck and vehicular traffic only, while some can handle both. Be sure you select the crossing type most suited for the situation, correctly install it in the best location, and follow all appropriate BMPs.

BMP Guidelines for Stream Crossings

- Choose proper stream crossing depending on purpose and intended traffic type and level.
- The number of stream crossings should be kept to a minimum.
- Stream crossings should be constructed to minimize the disturbance to stream banks and existing stream channels.
- Equipment should be kept out of the stream bed.
- Stream crossings should be installed perpendicular to the stream channel.
- Approaches should be constructed at a 90 degree angle to the stream crossing.
- All culverts should be of adequate size to carry the normal water flow anticipated during heavy rains (see culvert sizing chart in BMP Handbook).
- Culvert crossings should be routinely inspected to ensure the pipe is open, allowing proper water flow.
- Temporary crossings should be removed immediately once they are no longer needed.
- Stream banks and approaches should be properly restored and stabilized.
- Legacy stream crossings are not always the best option and should be thoroughly inspected before reactivating them.
- Dirt crossings should never be used and are never recommended.



Bridgemats provide a good alternative for temporary stream crossings with minimal impacts to water quality.



Culvert crossings should be properly sized and armored to prevent them from washing out..

More information regarding choosing and installing proper stream crossings can be found in the BMP Handbook. For a copy of the BMP Handbook please visit http://tfsweb.tamu.edu or your local Texas Forest Service office.