

## HOW TO Construct a ford

Fords can be used as temporary or permanent stream crossings. A ford is appropriate if

- the stream is small, has less than a 2% gradient,
- has a bottom consisting of semi-angular to angular rock (greater than 1 inch diameter) and
- will have minimal traffic (no more than five crossings per day).

Construct fords at right angles to a straight, shallow section of stream. Fords constructed on bends can result in erosion damage or ford failure due to channel movement.

In addition

- Construct a rolling dip or cross ditch at each approach to the ford to divert water that may run down the road. Dips or cross ditches should drain into stable areas to prevent sediment from entering the stream.
- Stabilize approaches and stream banks with angular gravel or pit run material along the entire width of the floodplain, or at least 75 feet on each side of the stream. Rocked approaches provide a suitable running surface, protect stream banks and floodplains and keep soil from sticking to tracks or tires and washing off into streams.
- If the soil type at the approaches is fine grained, it is recommended to install geotextile fabric between the subgrade and the gravel surfacing for added strength and separation.
- For light vehicle traffic, add only enough material to the streambed to level it out. For heavier traffic (including log trucks), evened-out stream bottoms may need to be reinforced with additional rock. However, the added rock should not raise the streambed significantly above the existing level or fish passage problems may result.
- Minimize the removal of vegetation adjacent to the crossing. Revegetate bank cuts immediately following construction.
- During times of salmonid spawning and egg incubation, limit the use of fords to periods of low-water, dry or frozen conditions. This measure will also protect active domestic water diversions.
- Limit hauling or equipment crossings to minimize sediment delivery to streams.



