

Economic Advantages

- ⇒ Reusable. A wooden portable bridge should last for 3-5 years depending on amount of use.
- ⇒ Easy to install and remove.
- ⇒ Can be manufactured from locally available timber at a minimal cost.

Environmental Benefits

- ⇒ Less stream bank and stream bed disturbance.
- ⇒ Minimizes soil erosion and sedimentation.
- ⇒ Keeps streams clear of debris compared to poled fords or brushed-in crossings.
- ⇒ Allows for fish passage.
- ⇒ Avoids altering stream channel or restricting flow of water.

Wooden Portable Skidder Bridges Are A Wise Choice Because They:

- ⇒ Are easy to transport, install and remove for re-use at multiple sites.
- ⇒ Are relatively easy to fabricate.
- ⇒ Require little maintenance.

In conclusion, portable skidder bridges allow loggers to harvest timber while following "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs)." They reduce environmental impacts and costs associated with temporary stream crossings. The initial cost for these bridges is an investment that will pay for itself. Clearly, these bridges can be a cost-effective way to protect the environment while improving operational efficiency.

Permitting

An Agency of Natural Resources (ANR) permit is not required for installing portable skidder bridges except under the following conditions:

- ⇒ Located at a point on a stream where the drainage area is greater than one square mile and the structure does not maintain the existing streambed material and elevation.
- ⇒ Located on a stream where the drainage area is greater than one square mile and the structure will not be removed at the time of completion of the current timber harvesting operation.
- ⇒ Not consistent with the AMPs.

If any of these three conditions cannot be met, the stream crossing will require prior approval by a Stream Alteration Engineer, Vermont Department of Environmental Conservation (DEC). Please contact one of these district offices for assistance:

Northeast Vermont: (802) 343-0217

Northwest Vermont: (802) 777-5328

Central Vermont: (802) 279-1143

Southeast Vermont: (802) 345-3510

Southwest Vermont (802) 371-8342

<http://www.vtwaterquality.org/rivers.htm>

Technical Assistance

The Department of Forests, Parks and Recreation (FP&R) provides technical assistance to forest landowners and loggers. Please contact one of these district offices for AMP assistance:

Springfield: (802) 885-8855

Rutland: (802) 786-0060

Essex Junction: (802) 879-6565

Barre: (802) 476-0170

Saint Johnsbury: (802) 751-0110

<http://www.vtfpr.org/>

WOODEN PORTABLE SKIDDER BRIDGE INFORMATION SHEET



Agency of Natural Resources
Department of Forests, Parks and Recreation
103 South Main Street, Building 10 South
Waterbury, Vermont 05671-0601



WOODEN PORTABLE SKIDDER BRIDGES

Using Portable Skidder Bridges for Temporary Stream Crossings on Logging Operations:

Planning

- ⇒ Avoid or minimize number of stream crossings.
- ⇒ Locate crossing site where stream channel is narrow for shortest possible clear span and where stream banks are stable and well defined.
- ⇒ Crossings should be located where the stream channel is straight with an unobstructed flow of water.
- ⇒ Avoid sections of stream where the stream channel has a steep gradient.
- ⇒ Avoid steep approaches! The skid trail approaching the stream should be reasonably level for a distance of 50 feet on each side.



Installation

- ⇒ Keep heavy equipment out of stream!
- ⇒ Use a skidder, excavator or bulldozer to place the bridge over the stream.

- ⇒ Place at an adequate height above water level (2-3 feet) so as not to obstruct stream flow.
- ⇒ Where stream banks are "soft", set a log abutment to place the skidder bridge on. This will minimize potential stream bank disturbance.
- ⇒ Install bridge between "bumper trees" or use "bumper logs" to direct skidded logs across the bridge.
- ⇒ Stabilize the approaches with brush. This helps to keep sediment off the bridge deck and out of the stream.
- ⇒ Install waterbars on approaches to the crossing. Install 25-50 feet away on each side to divert water from the skid trail into the buffer strip. This will filter out sediment preventing it from entering the stream.
- ⇒ Stabilize areas of exposed soil within 25 feet of a stream crossing by seeding and mulching immediately.

Removal

Portable skidder bridges are designed and intended for use as temporary structures for crossing streams during a logging operation. Upon completion of logging, these bridges must be removed.

- ⇒ Remove panels by lifting rather than dragging across the stream channel.
- ⇒ Re-shape stream bank if disturbed.
- ⇒ Install deep waterbars on both approaches to divert any runoff from the skid trail into the buffer strip.
- ⇒ Seed and mulch all areas of exposed mineral soil a minimum of 25 feet from the stream or to the first waterbar.

Use and Maintenance

- ⇒ Keep bridge surface free of soil and logging debris that could enter the stream.
- ⇒ Remove any debris that enters the stream at the crossing location.
- ⇒ As beams dry, the bolts will need to be tightened. Inspect monthly the first year.
- ⇒ Inspect regularly to check for damage and deterioration.
- ⇒ Store on blocks and take precautions to minimize exposure to moisture. This will extend the life of the bridge. A bridge should last for a minimum of three years with average use and proper care.



This document is available upon request in large print, Braille, and audio cassette. VT TDD 1-800-253-0191