

Building a floodgate

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After a prolonged drought, there will be little vegetation on catchment areas for creeks and gullies. This means that after significant rainfall, water will be running in the waterway faster than usual. This water will pick up debris from the creek bed and deposit it against any fence crossing the waterway. The force of the water pushing on the debris can easily demolish a normal fence, so a floodgate will be needed at this point.

There is no single way to build a floodgate, but there are some important points to remember.

- The more flexible the floodgate, the better its chances of survival.
- The section of fence crossing the creek, river or gully should be independent from the rest of the fence.
- Use separate assemblies, so only the floodgate (and not the rest of the fence) is damaged or lost in severe flooding.
- Design the floodgate so that it will lift up and float when water rushes through.
- Routinely check the floodgate to ensure it is not buried or weighed down by logs. This is particularly advisable if you are expecting a rush of water through the gate after a flood.
- Put the in-line posts on the upstream side of the wire strands, so they are not pushed out by a load of debris on the wire.
- Attach droppers between the posts and only tie them off at the top wire. This allows the debris to pass beneath the wires.
- In some cases, you may lose your gate in a flood. Therefore, you should build your floodgate to be expendable, using the smallest possible amount of material – for example, droppers or sheets of iron or netting, attached to plain wires.

- The top of the floodgate should be at the same height as the top of the fence; extend the lower part of the gate with suitable netting, such as prefabricated fence netting.

Making a floodgate from roofing iron

Constructing a floodgate from old roofing iron is quite difficult, but the gate makes up for this by being almost maintenance free, and much more effective than a conventional floodgate. Each run of iron is separate and overlaps at the back, meaning no debris will gather on the gate – it will simply flow through. This will prevent the following problems:

- accumulation of debris on the flood crossing
- erosion of the stream bed and bank
- development of water holes on the downstream side of the floodgate.

As an added advantage, the iron is opaque; if stock cannot see through the floodgate, they are less likely to put pressure on it.

Ideas for placing posts in gullies

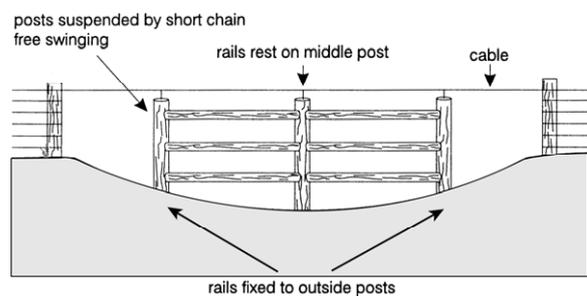


Figure 1. When the creek runs, the outside posts and rails dislodge from the middle post. The rails pivot around to the creek bank. It only takes five minutes to put the rails back after flooding. No debris is caught.

Make your own cable

It is much cheaper to make your own floodgate cable than it is to buy one.

- Use three to five strands of 2.5 mm high-tensile wire.
- Tie off the ends with wire or hose clamps.
- Walk along the length of the cable and fasten with ring clips about every 2 m.

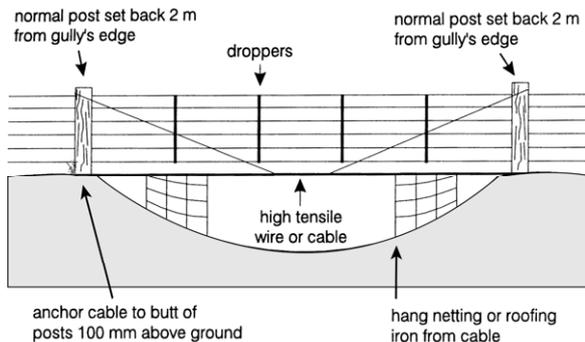


Figure 2. Do not connect the cable to the fence, or water flow and debris will load the whole fence. Carry the fence straight across the gully, especially if there is a short strain (less than 100 m) on one side.

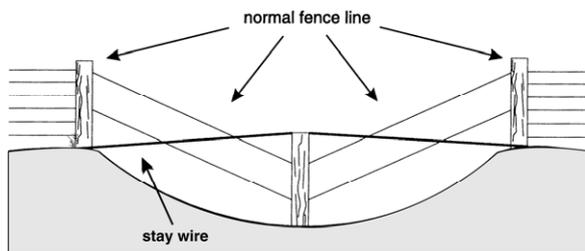


Figure 3. An alternative gully crossing.

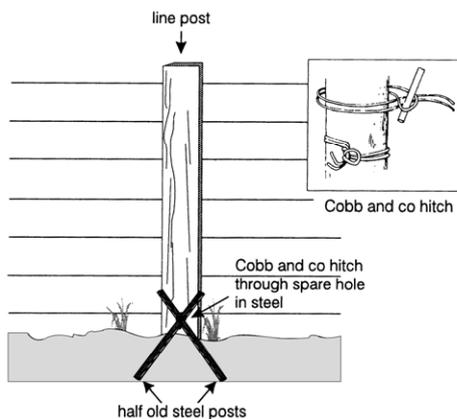


Figure 4. Posts placed diagonally to anchor the line post in the gully.

Placing the cable

Anchor the cable to the butt of solid fence posts (see Figure 2) using strainer knots. Strong, deep-

rooted trees may be a suitable alternative for anchoring the cable, but attach the cable in a way that will not kill the tree.

Slip rails

If you need a gate into a wet area, you can use slip rails (Figure 5).

Sit the rails on the pegs at a slight angle, so that when the water level gets higher, the rails lift off the pegs one at a time. The Cobb & Co hitch holds on to the other end, and the rail can float around the side of the fence in the direction of the flow.

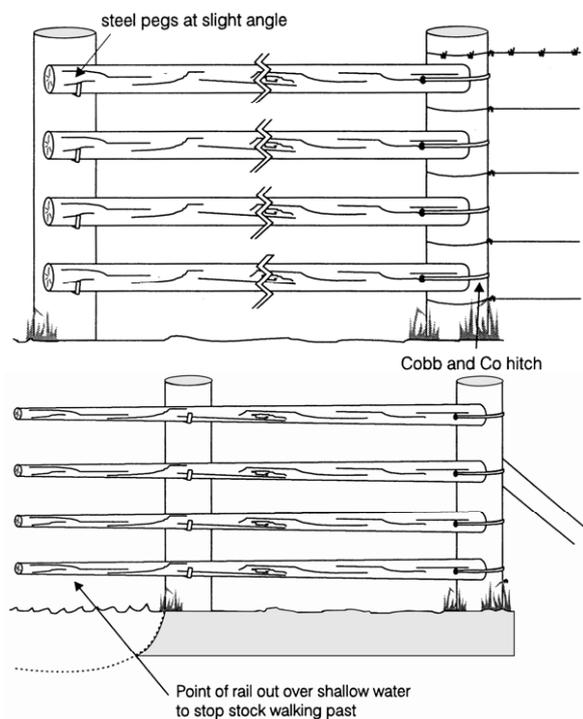


Figure 5. Slip rails.

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