

# Be River Safe

## River Crossings

### Fact Sheet Selecting a safe place to cross a river

#### Selecting a safe place to cross a river

##### Where do we cross?

Many groups plan their trip so that they can cross rivers using bridges. If a group needs to enter the river they must select a safe place to cross.

Groups must consider the following factors when they are selecting a safe place to cross.

##### Depth of the water

The river at its deepest point should be no deeper than knee or mid thigh depth on the smallest group member.

##### Current or speed of flow of the water

The water should not be fast flowing because the force of the water can make individuals lose their footing and be swept downstream.

The river should not be flowing faster than you can walk beside it. You can test this out by throwing a stick into the river and walking down the bank beside it. If the stick is moving faster than you can comfortably walk, the current is too strong for you to cross.

##### Safe entry and exit points

You need to be able to get into and out of the river easily and safely.

Avoid areas with:

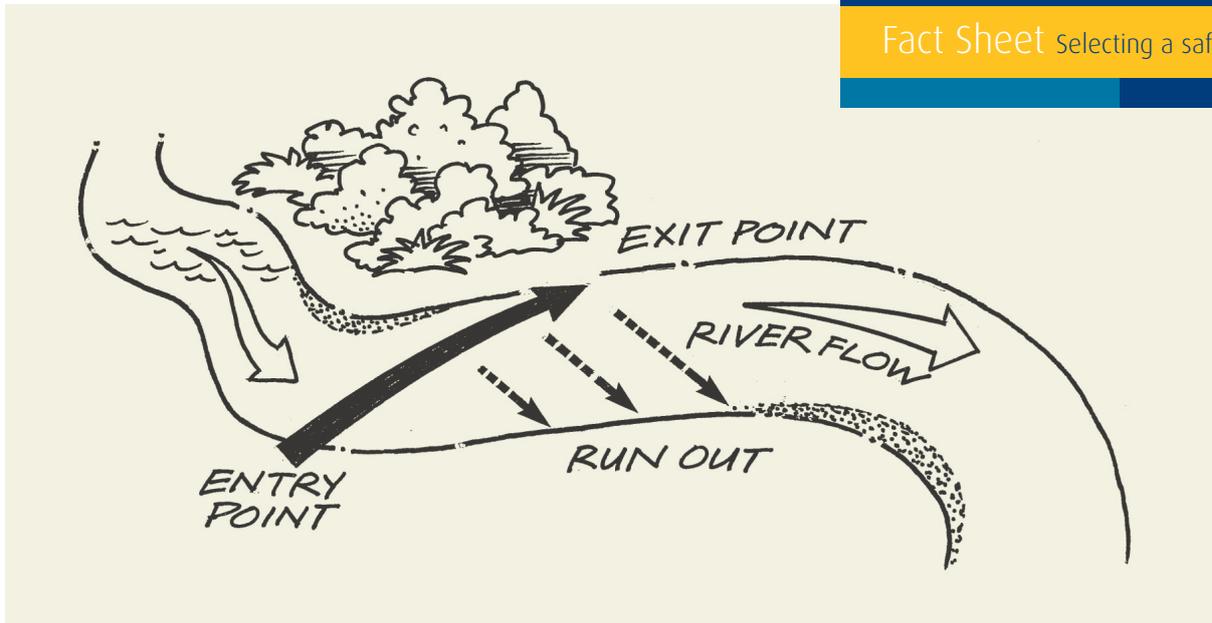
- steep or undercut banks
- edges covered with storm debris, fences or construction debris
- steep shingle banks.



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## River Crossings

Fact Sheet *Selecting a safe place to cross*



### Safe run out

A safe crossing area will have a run out area or a safe area the current will take you to if you need to turn back.

Avoid areas with:

- steep banks, undercut banks or bluffs
- river or stream edges covered with storm debris, fences or construction debris
- rapids or waterfalls
- partially or wholly submerged trees and branches
- steep shingle banks
- side streams feeding water into the river just below the proposed crossing point as these add volume to the river.

### Nature of the river bed and river water

Look for a crossing place:

- with a relatively even bottom
- preferably with a shingle bed
- with smooth, slow-moving water
- without obstacles like rocks and strainers
- where the river flows over a wide area and is not compressed into a narrow fast-flowing channel.

Avoid:

- areas of cloudy or muddy water that mean you cannot see the nature of the bottom
- muddy, sandy or silty areas in rivers that can have quicksand that could trap the trampler
- stretches of the river with boulders and other obstacles like strainers.

Be River Safe... *stop and think before you enter the water*

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## River Crossings

### Fact Sheet The Mutual Support Method

#### The Mutual Support Method

The **Mutual Support Method** is the recommended method for a group of people to cross a river. Mutual Support Method means what it says: it is a way for people to support each other as they cross. If one person lost their footing they would be supported by the others in the group.

The method requires individuals to:

- be close together
- hang on tightly to hip belts or pack straps or pack hand grips
- take a firm hold of the waistband of their neighbour's shorts or pants if they are not wearing packs
- not let go of the grip
- stay together throughout the crossing
- communicate (with the leader and within the group) so that the group acts as one and the leader is immediately aware if someone is having difficulties.

The group links together tightly to provide mutual support and the group functions as a single unit. If someone slips or loses their grip, their companions can support them. Smaller, weaker or less experienced individuals can be supported by their companions.

The group forms up with the strongest and most experienced people on the outside, with the least experienced in the middle and the leader in the best position to help people in the group.

Everyone must hold on tightly to their neighbour and not let go. The water will have some force so individuals need to check they have a firm hold and will not let go.



Be River Safe ... *look out for your buddy*

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## River Crossings

Fact Sheet The Mutual Support Method

The Mutual Support Method continued...

### Crossing the river

Everybody keeps their body side-on to the current to minimise the effect of the water flow on individuals and the group.

Everybody takes small, shuffling steps. This is easier and safer than trying to lift your feet high in the water.

Everyone moves diagonally downstream with the current to conserve energy. This means the group's exit point is not parallel to their entry point.

The upstream person meets the full force of the current. They create a buffer wave that provides slightly calmer water for the rest of the group to walk through.



Be River Safe... *look out for your buddy*

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### Fact Sheet Turning back or retreating out of a river

#### Turning back or retreating out of a river

Sometimes it is necessary to stop a river crossing and retreat out of the river.

There are two methods for getting back out of the river:

- back all the way out of the river or
- back out of the river to a safe area then do a **Caterpillar Turn** and walk out of the river.

#### Backing out of the river

The group will be more stable if they back out of the river. No-one is moving across the current or feeling the full force of the current.

- Anyone in trouble communicates the need to stop the crossing clearly and early.
- The leader directs the group to stop and controls the group backing out.
- The group stays together and moves slowly staying parallel with the current.
- Group members take extra care when placing their feet.
- The group stays together until they leave the water.

Groups often back all the way out of a river if the river is not wide.

If the river is wide, like some South Island braided rivers, the group may choose to back to a safe place in the river ... then complete a Caterpillar Turn.



# Be River Safe

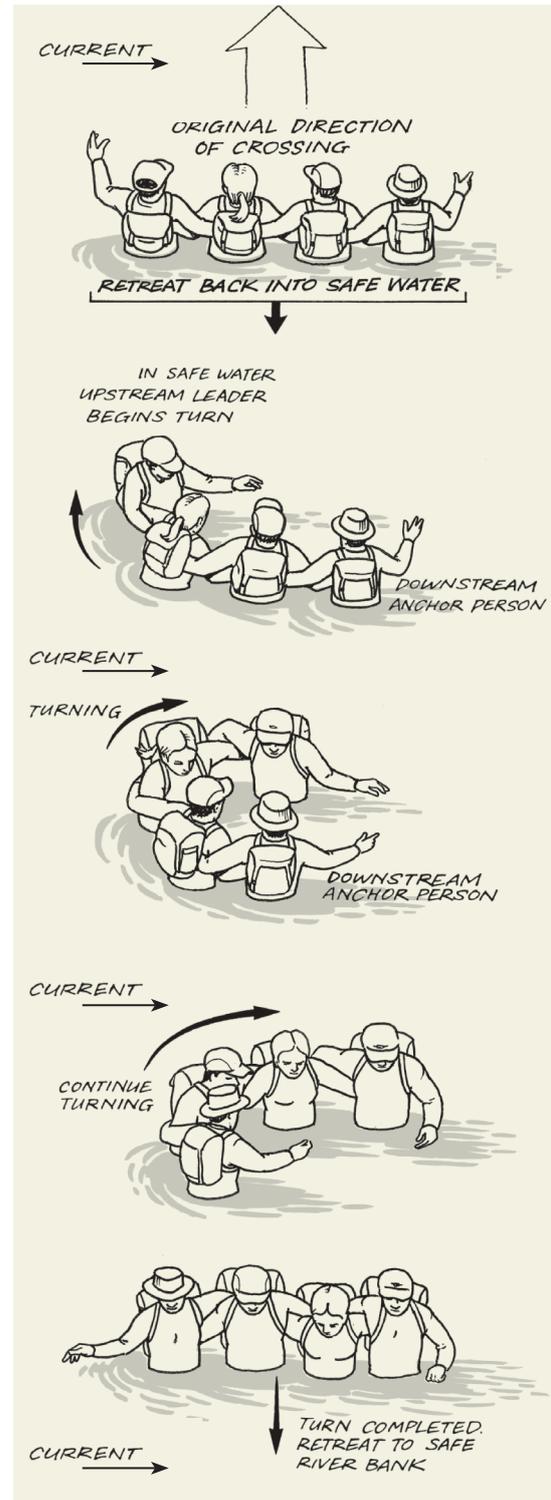
## River Crossings

Fact Sheet Turning back or retreating

### The Caterpillar Turn

During the Caterpillar Turn the group does not remain parallel to the current. At some time all members of the group will feel the full force of the water and there may be an increased risk of someone losing their footing.

- The upstream person begins to turn with the downstream person acting as anchor person.
- The group communicates and executes the turn slowly with each member finding safe footing.
- Each person in the group moves slowly and turns with their back to the current.
- The group continues to turn until the group can retreat back to the river bank, moving parallel to the river current.
- The group stays together until they leave the water.



Be River Safe ... plan your trip

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## River Crossings

### Fact Sheet Pack Float

#### Pack Float

Trampers and walkers need to know what to do if they end up in the river.

No trampler or walker intends to be in the river unless they are crossing it, however sometimes the unexpected happens and they end up in the river being propelled downstream by the force of the current.

If a trampler is wearing a pack it will provide buoyancy and allow the trampler to float either head first or feet first.

#### Getting out of the river

If you are in the water, to get out of the river you:

- flip onto your back moving either head first or feet first in the current
- lift your head and look for a suitable exit point and run out area



Be River Safe... *know your environment*

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## River Crossings

### Fact Sheet Pack Float

#### Pack Float continued...

- angle your body to the run out area and use your arms as oars to scull toward the run out area
- scull hard to cross the eddy line and move into calmer water
- reach the river bank and remove your wet pack
- walk your wet pack up the bank.

*When you are in the river current you need to stay calm and keep your feet up so they do not get trapped in rocks.*

All the time you are in the water you are using up energy and may be being bumped against rocks. Find a suitable exit point as soon as possible, then use a lot of energy to swim across the eddy line to the bank.

If you try to get out of the river wearing a wet pack it will be very heavy and you could fall back into the river. Take your pack off and 'walk' the pack up the bank.

#### After you come out of the river

You will be wet and cold and need to change into dry clothing and warm yourself up. Your fellow trampers may need to assist you.

If you are with someone who has fallen into the river:

- get them into dry clothing and, if required, into a sleeping bag
- provide shelter
- give them warm drinks and high energy foods
- reassure them and assess whether they need further assistance to warm up, further rest time or whether they can continue walking
- monitor them to make sure they do not develop early stages of hypothermia.

*You can find out more about hypothermia and how to prevent it and treat it at: [www.watersafety.org.nz](http://www.watersafety.org.nz)*

#### Head first or feet first

You can float down a river feet first or head first. If you find yourself in a river you may instinctively adopt a feet first position. The technique to get out of the river is exactly the same.



Head first position



Feet first position when pack has no hip belt



Feet first position