

Playing it Safe on the Tuolumne River

The Tuolumne River provides California residents and visitors a myriad of recreational opportunities. In the upper watershed the River has over 26 miles of commercially-run world class whitewater for rafters and kayakers. For those who prefer a more leisurely trip there is great canoeing and boating along the lower River as it meanders through the valley. Favorite fishing spots and swimming holes abound. And, when temperatures hit the triple digits in the Central Valley, the shady banks and cool water of the Tuolumne can be very inviting.

Rivers such as the Tuolumne are indeed a treasure and should be enjoyed. But rivers also possess certain features that can result in potentially dangerous conditions for recreators. The Trust is dedicated to helping people enjoy the Tuolumne River in a safe and responsible way. So let's look at what makes rivers unique, some of the water hazards associated with rivers, and safety tips to help ensure a safe enjoyable recreational experience.

WHAT MAKES RIVERS UNIQUE

Rivers are always changing

Unlike swimming pools, lakes or reservoirs where water conditions tend to be more stable, conditions on a river are changing constantly. The amount and rate of water flow or the presence of debris can change from one day to the next, particularly after a heavy rain or as a result of water releases from reservoirs.

Floating or submerged debris such as fallen trees or man-made objects, are potential hazards for river recreation because they can entrap an unwary swimmer or boater. Often, the most dangerous hazards in a river cannot be seen as they lie below the surface.

River water can be dangerously cold

Rivers begin as melting snow and ice from mountains so, particularly in the spring, the water can be much colder than we think. Just a few minutes in the Tuolumne's icy water can result in hypothermia (a dangerous drop in body temperature) that can be life threatening and

compromise a person's ability to get themselves out of the water if they fall in. Hypothermia can also set in on land, especially if you have gotten wet.

River banks can be slippery and unstable

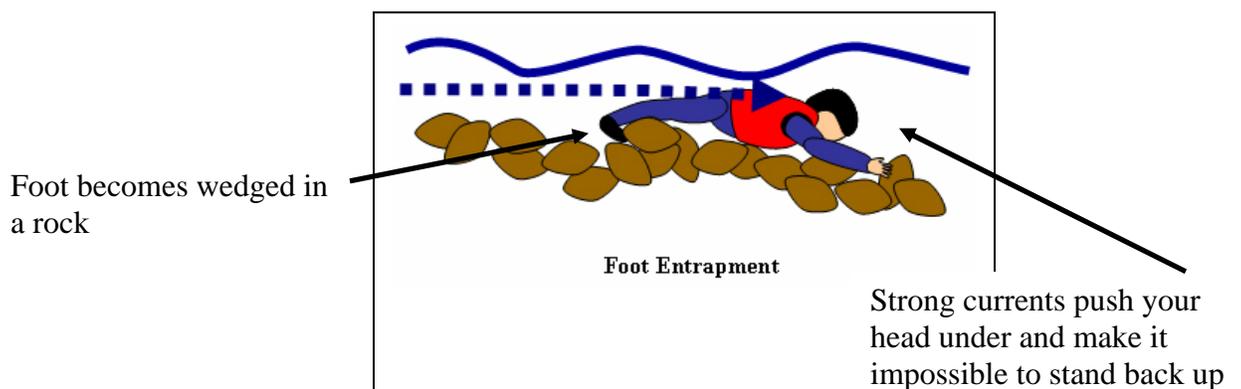
It is important to remember that the banks of a river can be slippery and give way easily after a heavy rain or period of high water. Playing too closely to the bank can result in a person falling into a river unintentionally and being swept away by the current.

River beds are uneven

Rivers often have one bank that is more gradual, where the rate of water flow slows and where sediments such as sand and gravel may settle, creating a "sand bar" that provides a nice place to wade. However, these bars can end abruptly, dropping off into a deeper, fast flowing channel where unsuspecting waders can lose their footing and be swept downstream.

Foot entrapments

River beds are naturally full of submerged objects such as fallen trees and rocks that can become hazards if a person gets a foot caught in them. Foot entrapments are the leading cause of drowning in swift water. A foot entrapment is caused by standing up or pushing off the bottom of the river with your foot. Your foot gets wedged in a rock and your body is pushed forward and under the water by the force of the current. You will not have enough strength to recover from this position.



Sweepers and strainers

Entire trees or branches that have fallen into a river are called sweepers or strainers. These objects can pose a threat because they act like a spaghetti strainer; the water goes through but the noodle (i.e. your body) doesn't. Instead, you get held in a tangled, dangerous position by the strong current.

Man-made entrapments

Bridge pilings, low head dams, junked cars and other objects commonly found in urban rivers can have fast moving currents around them that can pull a person off their feet and then pin them under water. Dams, even small ones, pose a serious drowning threat because of the way water moves around them. When water flows over a dam, recirculating currents, or backwash, can form above or below and can trap a person in a circulating motion, drawing them underwater, pushing them along the river bottom and then drawing them back toward the dam again as they rise to the surface.

SAFETY TIPS

In summary, here are some basic tips to help ensure that our river activities are done safely and responsibly:

- ✓ Always wear a Life Jacket/Personal Floatation Device (PFD) when you are recreating on a river – even a strong swimmer can be pulled under by a strong current. A properly fitting life jacket can help keep you above water.
- ✓ Learn to swim and never swim alone.
- ✓ If you are being swept along with the current, don't try to stop yourself by putting your feet down because one or both feet may become trapped in submerged debris. Instead, let yourself float downstream feet first until you can see the bottom or the water slows down and you can swim to shore.
- ✓ If you are going to be recreating near or on a river, let someone else know where you are going and when you expect to be home.
- ✓ When wading, stay in water knee deep or less.
- ✓ Watch for objects that can capsize a boat and/or trap a swimmer
- ✓ Don't play too close to the river bank – it may be slippery or unstable
- ✓ Stay away from dams and other manmade water structures.