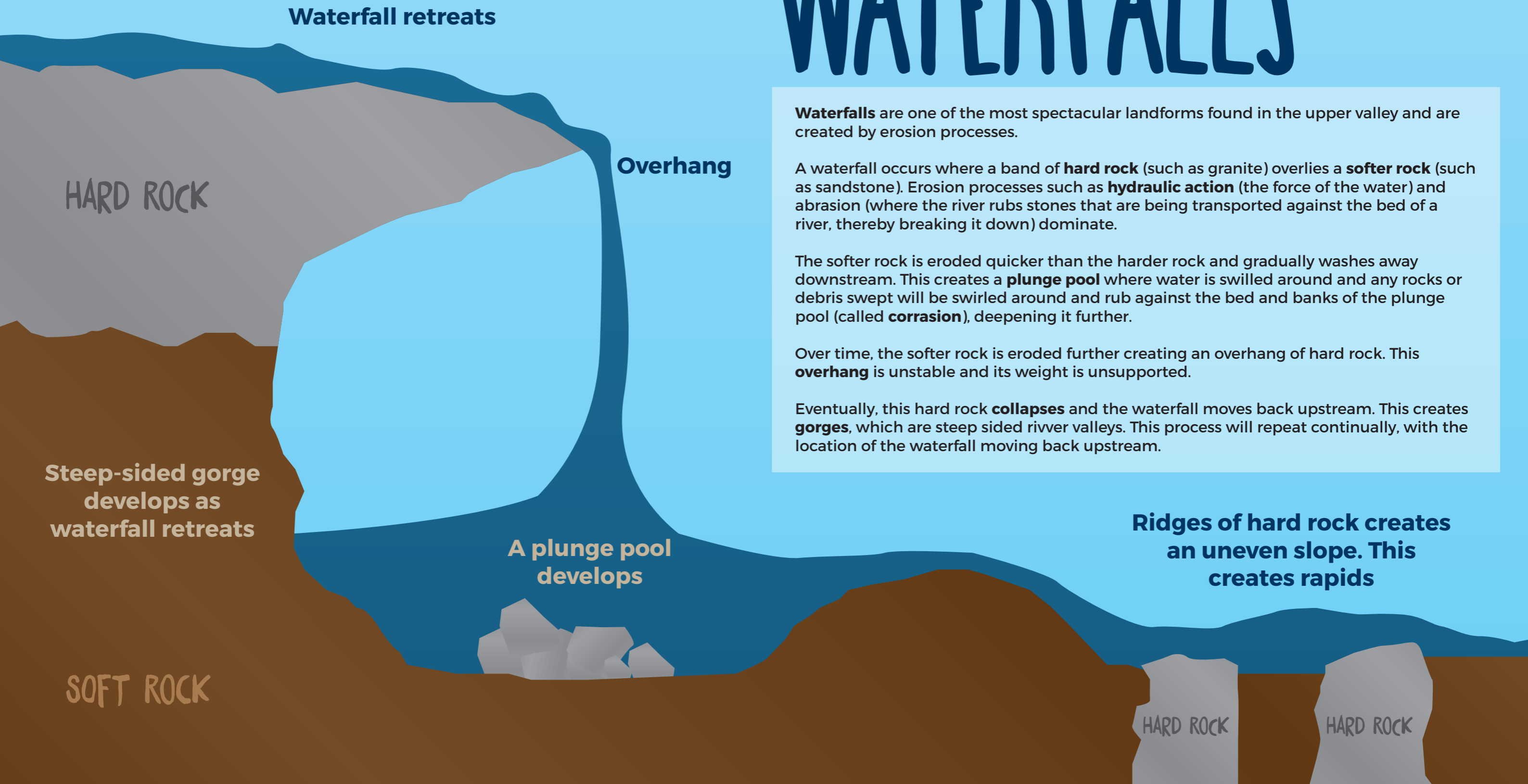


THE FORMATION OF WATERFALLS



Waterfalls are one of the most spectacular landforms found in the upper valley and are created by erosion processes.

A waterfall occurs where a band of **hard rock** (such as granite) overlies a **softer rock** (such as sandstone). Erosion processes such as **hydraulic action** (the force of the water) and abrasion (where the river rubs stones that are being transported against the bed of a river, thereby breaking it down) dominate.

The softer rock is eroded quicker than the harder rock and gradually washes away downstream. This creates a **plunge pool** where water is swilled around and any rocks or debris swept will be swirled around and rub against the bed and banks of the plunge pool (called **corrasion**), deepening it further.

Over time, the softer rock is eroded further creating an overhang of hard rock. This **overhang** is unstable and its weight is unsupported.

Eventually, this hard rock **collapses** and the waterfall moves back upstream. This creates **gorges**, which are steep sided river valleys. This process will repeat continually, with the location of the waterfall moving back upstream.