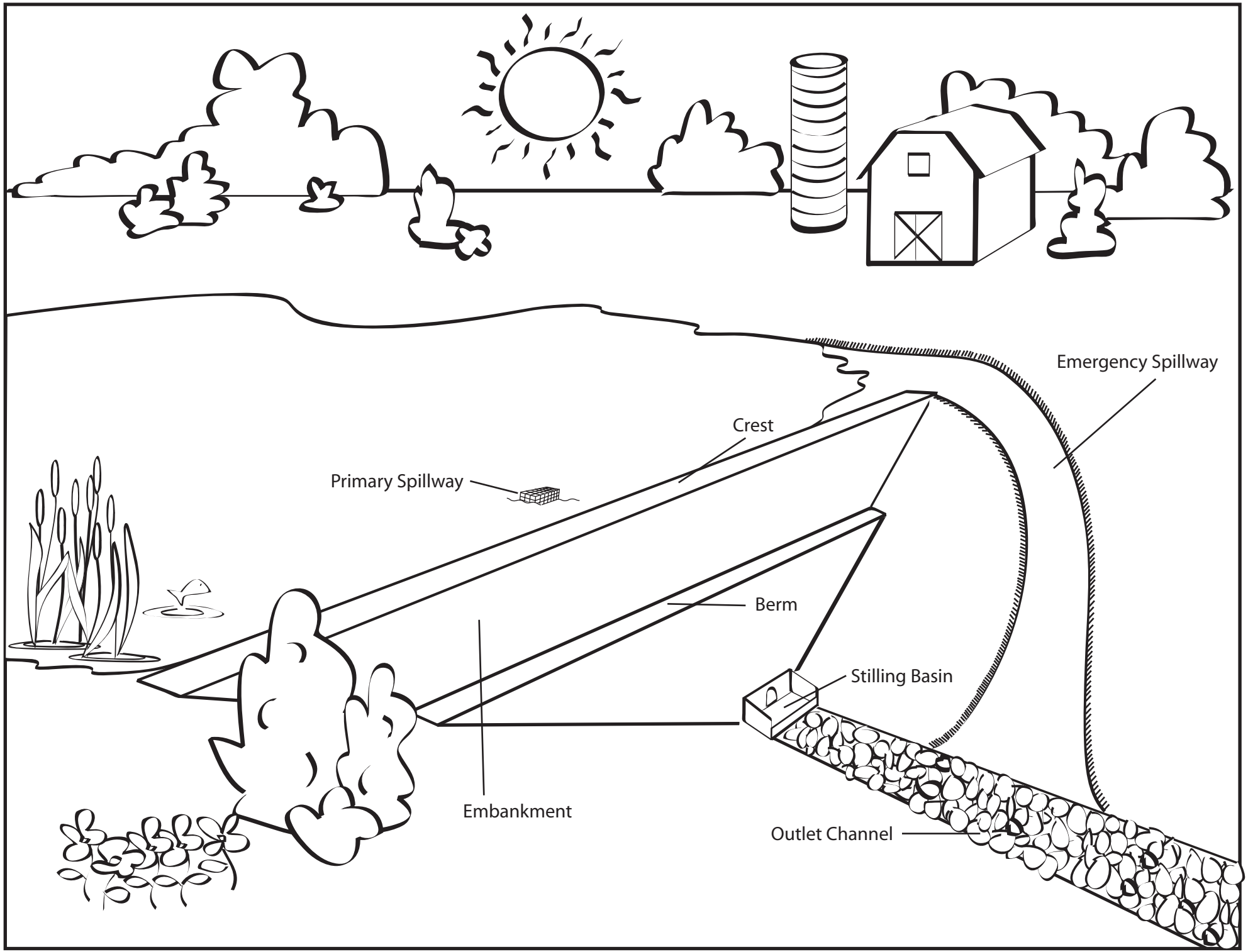
Emergency Spillway
Crest
Primary Spillway
Berm
Stilling Basin
Embankment
Outlet Channel

What Are the Parts of a Dam?

Embankment dam - A barrier across a valley that impounds (backs up) the water of a stream. Embankment dams are usually made from soil and clay.
Berm - This looks like a step in the slope of an embankment dam. The extra soil makes the dam stronger and more stable. Water deep in the lake pushes harder against the dam than does water near the surface.
Crest - The top of a dam. It is usually level and may be crossed by a road.
Primary spillway - Allows the normal flow of water from upstream to leave the lake. The primary spillway is usually a concrete pipe though the embankment. A metal trash rack keeps floating branches from plugging the pipe. The spillway controls the level of the lake.
Emergency spillway – Lots of rain raises the lake level behind a dam, because the extra water cannot flow through the primary spillway. The emergency spillway is a channel on natural ground to carry this flood water. It sits above the normal lake level and is dry most of the time. Water that flows over the crest of an embankment dam erodes (cuts into) the dam and can cause it to fail.
Stilling basin - Water often flows through a spillway faster than it would flow in a stream. Fast-moving water has a lot of energy. The stilling basin slows down the water so its energy will not erode the stream channel.
Outlet channel - Carries water from the primary and emergency spillways to the original stream channel below the dam.