

Dam up a Creek

Change the course of history (momentarily)



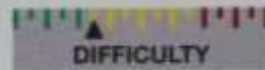
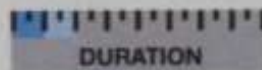
EROSION



PARASITES

REQUIRES

Creek



WARNING

Due to human agriculture and livestock, virtually all watersheds in the United States and Europe are contaminated with water-borne parasites. Unless explicitly told otherwise, do not drink the water in any creek.

Supplementary Data

The Colorado River has seven significant dams restricting and managing its natural flow. So much of the river is diverted to aqueducts that it no longer reaches the Sea of Cortez in Mexico.

The Hoover Dam was the first arch-gravity dam ever built at that scale. The arched shape of the concrete barrier distributes the weight of the water into the canyon walls instead of just resisting through sheer weight alone.

Besides reducing the flow of water in a river, a dam changes the temperature of the water downstream.

HOW-TO

1. Find a suitable creek. Look for water running in a channel that is less than a foot wide. In order to ensure that you don't destroy any significant natural features, look for sections that will be flushed in the next big rain.
2. Pick your spot. Think of the Hoover Dam: a tall concrete wall in a narrow canyon. You want a place where the creek is narrow, but not flowing so swiftly that it will wash away your dam while you are building it.
3. Gather materials to build with. You can use almost anything: leaves, sticks, mud, rocks, sand, gravel. Be sure you only use material that you find in or alongside the creek. The material you find will determine how you construct your dam.
4. Build your dam. If the water backing up is causing trouble, consider a temporary re-routing of the creek somewhere upstream. This is a common step in the construction of large dams. As the reservoir behind your dam fills, the pressure on the base of the dam will increase. This pressure can undermine your dam, causing it to leak or catastrophically blow out. Rocks placed at the base on the dry side of your dam can help prevent that.
5. Deconstruct your dam. Even with a multi-day project, it's important to restore the creek to its original condition when you are done.

By building a dam, you are changing fast running water into standing water. This might be a good thing if you are trying to make a pond for frogs, but you are also making a breeding ground for mosquitoes.

It is possible that your little dam could lead to a major shift in the course of the creek over time, even after you have removed it. This is a responsibility that you must consider when choosing where to build a dam.