It's my intention that this idea should be a part of the public domain and should never be patented.

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This document is approximately 537 words long.

Contrary to the popular misconception, a dam isn't required to provide water for a hydroelectric generator. How, you ask, are you going to get the water high enough up into the air to make it fall through the turbine? Use an aqueduct. How, you ask, are you going to get the water to flow uphill, out of the river, into the aqueduct? You don't. Do it this way.

The upstream end of the aqueduct must be a long way upstream from where you want the hydroelectric generator to be. Exactly how far upstream depends on the terrain. However far that is, the upstream end of the aqueduct must be in the middle of the river and at the river's bottom, right down on the river bed.

The aqueduct must extend downstream, following the course of the river, under water. The slope of the aqueduct must be just sufficient for water to flow in the aqueduct. If that isn't less than the slope of the river bed, then you're using the wrong location. Anyway, the further downstream the aqueduct is from its upstream end, the further above the river bed it will be. Eventually, far enough downstream, it will be above the surface of the river. Nevertheless, it will still have water in it because water will have flowed along the aqueduct from its upstream end, where it was below water level. Even further downstream, the aqueduct will be way up above the surface of the river and still full of water. All you have to do is dump the water out of the end of the aqueduct and into your turbine. It's a very simple idea

There are a good many advantages to using an aqueduct instead of a dam.

If the aqueduct breaks, then the water just falls back into the river. It doesn't destroy everything for miles downstream.

An aqueduct doesn't create a reservoir that destroys everything for miles upstream, the way that a dam does.

An aqueduct can be designed with sections that can be dropped in an emergency or during required maintenance, to redirect flow back down into the river.

An aqueduct doesn't obstruct the progress of fish. They can simply swim around it.

An aqueduct can also be used to supply irrigation water, during seasons of adequate flow. All that you need is branches off of the side, leading to your irrigation ditches.

An aqueduct will satisfy every purpose of a dam, even storage of water for dry seasons. For that purpose, all that you need is branches leading to reservoirs, away from the river. Water can be transferred into small privately owned reservoirs and saved for use during the dry season. You don't even need pumps. The entire system operates using gravity.

The possibilities are almost endless and none of them require the huge and dangerous reservoirs that are formed behind large dams.