The damming of river systems in the northwestern United States has had devastating effects on salmon.

In the spring young salmon, called smolts, drift into rivers from smaller streams. They swim with the current downstream heading for the Pacific Ocean. Before the large-scale construction of dams, the young salmon used the strong flow from melting snows to get to the sea in between six and twenty days. It is necessary to do this because during these days the smolts' bodies undergo the physiological changes for adaptation to salt water.

Unfortunately, the current has become very slow due to the construction of numerous dams. Companies operating the dams also intentionally slow the current. They store the water from the melting snow until the winter, when more electric power is needed. The net result is that many of the young fish do not survive the now sixty-day trip to the sea. Consequently, there are fewer adult salmon to migrate back up the rivers for breeding. When it comes time for the salmon to return, they again face the problem of dams. As fewer adult salmon are able to get back to their cool upstream water, they fail to produce a sufficiently numerous new generation of salmon. This cycle could eventually lead to extinction of the fish.

Attempts are being made to transport the young salmon downriver by barge. However, many scientists think that this artificial method of getting the fish to the sea kills more than it saves.

Another suggestion, recently proposed by environmentalists, is to increase the rate of water flow. This would be a partial solution to the declining salmon numbers. One method of doing this would call for releasing water from upstream reservoirs. This would speed up the downstream movement of the smolts.

Another method would be to reduce the water level in the reservoirs for a period in the spring when the smolts are migrating downstream. This would also increase the flow rate temporarily without requiring massive amounts of water and, thus, enable the young salmon to move downstream faster. Unfortunately, both of these proposals have met with criticism from the power companies.