

The Danube River

Rivers provide for many human needs: fresh water for drinking, hydroelectricity to power factories and homes, irrigation for crops, transportation for freight and people, and habitats for plants and animals. Rivers also often mark borders between countries. This can lead to power struggles between neighbors. Each may want to control the river for economic, environmental, or political reasons.

A good place to examine the conflicts that can occur when countries share a river is along the Danube River in Europe. There it forms part of the border between Slovakia and Hungary. Starting in the mountains of Germany, the Danube flows 1,770 miles (2,736 km.) and empties out into the Black Sea on the coasts of Romania and Ukraine. The Danube River Basin is the second largest in Europe, after the Volga. Including all its tributaries, the river system covers more than 300,000 square miles (776,966 square km.) and links parts of 19 countries. Its size alone makes the Danube vital to the ecology and economy of central Europe. Historically, it was an important boundary marking the edge of the Roman Empire. Cities that were founded as Roman fortresses along the river have become modern capitals, including Vienna, Budapest, and Belgrade.

The area along the border between Slovakia and Hungary is a large floodplain. Floodplains are ecosystems full of biological diversity. Frequent flooding washes nutrient-rich silt over the land, feeding forests and cropland. Fish and migratory birds are usually abundant in these wetlands, which serve as natural filters, cleaning pollution from upstream out of the water.

Part of the floodplain between Hungary and Slovakia is called Szigetkoz. This area is home to small farms, forests, and about 5,000 species of plants and animals. Underground this area is a large freshwater reservoir. The wetlands above it act as a filter to keep it clean. In 1977, Hungary and what was then the country of Czechoslovakia¹ agreed to build a system of dams and canals in the Szigetkoz area. The Gabč íkovo-Nagymaros Project was named for the towns at each end of the dam system. The decision to build this project led to a major international conflict that is still not resolved.

The Gabč íkovo-Nagymaros Project

In the twentieth century, many countries were searching for ways to modernize and bring electricity, industry, and a higher standard of living to their people. One of the ways they tried to improve people's lives was by building large dams. Dams could produce hydroelectric power, provide jobs, and help stop damaging floods. These kinds of projects are still built today, but much more cautiously. People discovered that benefits like electricity, jobs, and flood control also had environmental and political costs.

¹ In 1993, Czechoslovakia split into the Czech Republic and Slovakia.

The Gabč íkovo-Nagymaros Project was agreed to in 1977. It was abandoned by the Hungarian government in the early 1980s because of worries about its environmental impact and financial problems. The Czechoslovakians finished their side of the project, completing the Gabč íkovo dam in 1992. That was right before the country split in two, and the Slovaks took control of the area. The dam pushed more than 80 percent of the flow of the Danube out of its main riverbed and into a canal on the Slovak side of the river. This led to a huge drop in the Danube's water flow below the dam. The dam and canal system created several problems that upset the Hungarians:

- Fish populations declined as much as 80 percent because of the lower water levels. This causes problem for people who make a living fishing, and threatens entire populations of endangered sturgeon, which can no longer migrate upstream to spawn.
- Other animals and plants, including rare birds, have lost their natural habitat.
- Pesticides, fertilizers, and industrial pollution are concentrated and trapped behind the dam. This creates hazardous situations for the people who live upstream.
- The level of the freshwater reservoir underneath the Szigetkoz area dropped. It became contaminated with the trapped pollution.
- Farmers on the Hungarian side lost access to water for irrigating their crops because the river sank to such low levels.

Hungarians were also upset about the economic impact. Slovaks had built and controlled the dam and canal, so they received all the money from ships that used the canal and all the electricity the hydroelectric plant produced. Hungarians who were living in Slovakia complained they were being squeezed into a small bit of land between the canal and the old riverbed. And the Hungarian government said that, in effect, a new border was being created between the two countries that gave Slovakia more control over the river and its resources.

Slovakia's government believed it had acted according to the original agreement between the two countries. It believed that the Hungarians' problems stemmed from the fact that they had not followed through in building the rest of the project. Slovakia's government pointed out that during massive flooding along the Danube in 2002, the Szigetkoz region escaped disaster because of the flood control provided by the dam and canal.

The two countries agreed to ask international organizations — including the International Court of Justice — to step in to help resolve their problems. But, the countries are still in conflict after years of meetings.