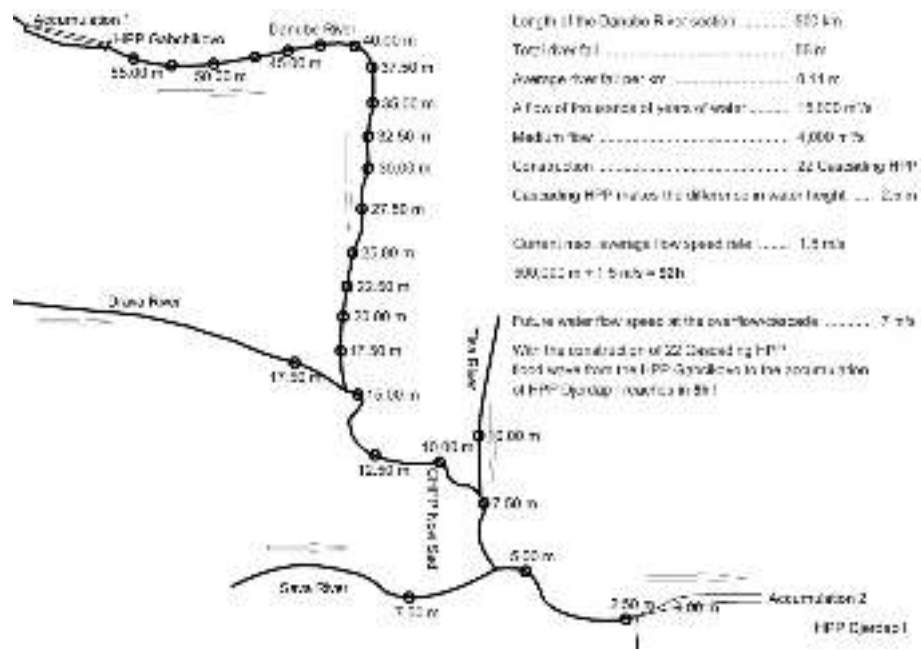


Flood control management



Picture 1. A view from the top of the Danube River Basin, a possible location for the construction of 22 cascading HPPs in the existing river bed, all per the invention. By building 22 artificial waterfalls in the riverbed, the water would be quickly shifted down the river where the use of technology would prevent the formation of a flood wave. The cascading HPP Novi Sad is highlighted, with the detailed description. Such arranged riverbed does not have quick water flow, the eroding of the shoreline and the riverbed meandering is protected. The HPP Grabickovo is now working with a 17.5 m water column, due to future regulation of river beds, the water level further decreases by 1.5 m below the dam. This way Grabickovo HPP would use the existing technology with a water drop of 19 m, where production would increase by 8% or an additional 200 GWh per year. The same is with the HPP Djerdap II, where the increase in electricity generation would be even more significant. The waterway is regulated, land melioration is done, the possibility of channel irrigation and drainage, water stops overnight without the necessary biological minimum flow.

An example of heavy rains in Austria, the Danube River collects water in the reservoir of the Grabickovo HPP. The flood wave is now traveling towards the delta with the max. a speed of 1.5 m/s. On the river length of the 2,000 km, it is approximately 370 hours. By constructing the described 34 cascading hydropower plants, controlling the discharge into three existing reservoirs, the water would immediately be transferred from the cascade waterfalls to the other cascading waterfalls. The flood wave from Austria through the existing river bed in the length of 2,000 km travels to the Danube Black Sea delta in less than 24 hours.