



the existing channel meanders, while still allowing flood flows to use the full width of the meander belt. The river was already dyked on both sides of the meander belt and the solution adopted was to build further low dykes inside the meander loops. These would cause low flood flows to follow the meandering channel more closely, but during higher floods they would be overtopped, allowing the river to take a more direct course, but with some flow still being directed down the channel to keep the sediment moving. The dykes had to be designed to withstand overtopping and, as usual, construction costs had to be kept low. Fortunately, a source of very large boulders was available at not too great a distance and the dykes were built from these large boulders, which model tests showed would withstand the flood flows. The dykes formed a series of wide spillways that controlled the high river flows and allowed flow directly down slope with complete safety. A large hydraulic model of the complete meander zone was built to investigate the detailed design and placement of the new dykes and smaller models were built to investigate the flow over the dykes to ensure they would not be eroded.

In both these large river training works care was taken to work with the natural forces shaping the river system so that the river was controlled without serious side-effects and at low cost.

Houses collapsed. Besieged victims waiting for rescue.

*China News Agency*