

The flood plain is the land subject to flooding next to a river. It is in this zone that the damage due to flooding arises and flood loss prevention measures are directed at reducing damage from flooding to installations there. This can be done by preventing inundation of the flood plain, or alternatively by controlling development on the flood plain so that flood damage is reduced. This latter alternative has become more popular in recent decades, particularly on environmental grounds, but may not always be practical. Because flood plains are generally flat, located near water and usually fertile they have been attractive places for human settlement and development since the dawn of civilization despite the risk of loss of property and lives from flooding. As an extreme case, consider the delta of the Ganges and Brahmaputra Rivers in Bangladesh. Much of this heavily populated area is frequently flooded, perhaps as often as every year, but there are no alternative areas available to house and feed the population, so development will continue on this flood plain.

In addition to its value to society for development, the flood plain has a number of important functions within the ecology of the river system which need to be preserved, many of which also contribute to reducing flood levels. The resolution of these conflicting demands on the flood plain while reducing losses caused by flooding is the role of flood plain management.

The flood plain must be considered part of the river channel, even though the river occupies it only intermittently. The flood plain is a transition zone between the aquatic ecosystem of the river channel and the terrestrial ecosys-

Floods in Bangladesh, 1988

