

Disaster (Floods) Risk Management

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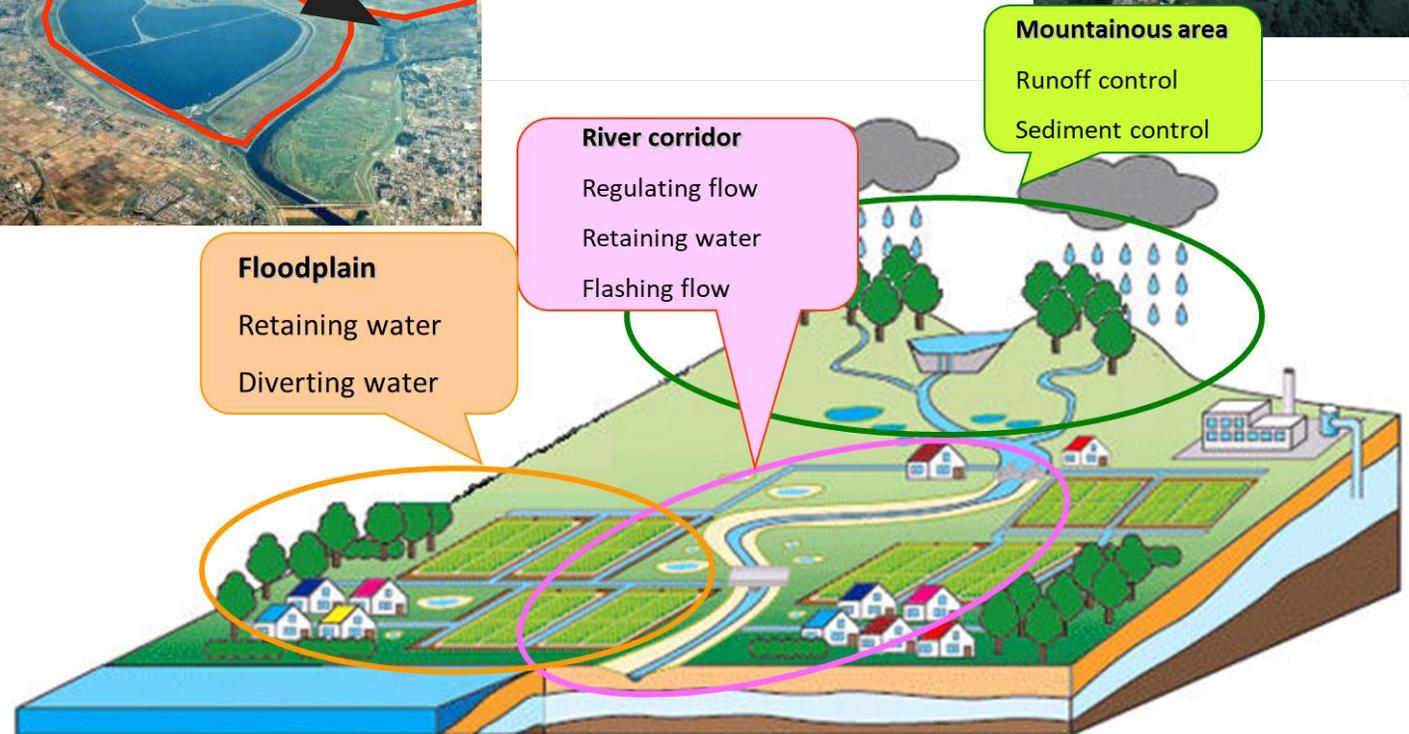
Disaster: Floods

- **Riverine (channel) or fluvial flooding is caused by water overflowing from a lake, pond, river or stream**
 - Pluvial (aerial) flooding – by heavy [rainfall](#) or [snowmelt](#)
 - Coastal (sea) flooding – by rising sea levels
 - Urban flooding – by a drainage system or a storm sewer system that is overwhelmed
 - A flash flood – sudden and rapid flooding of an area that is prone to flooding
 - Catastrophic flooding – infrastructure failure, like the failure of a levee or dam
 - Groundwater flooding
- ❖ The deadliest flood on record – 1931 (Jul-Nov) China floods. Some estimates have the death toll as high as 4 million people. This flood is also considered the deadliest natural disaster in recorded history
 - ❖ The latest severe flood in the Sava River Basin – 2014 (May) with the death toll of 79 people



Mitigation/ Prevention

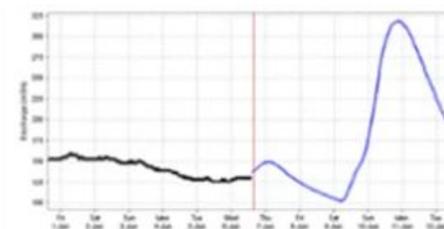
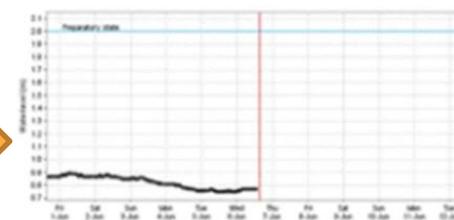
- Construction of dike
- Building of dam
- Forestation
- Construction of flood control basins/
reservoirs
- Construction of erosion control dams
- Construction of retaining walls



Preparedness

- Establishment and operation of hydrological and meteorological observation systems
- Preparation of hazard maps
- Establishment of early warning systems

- Emergency drills
- Education and raising awareness
- Providing access to information and communication
- Food & material stockpiling
- Preparation of emergency kits



Response

- Rescue efforts
- First aid treatment
- Water fighting
- Monitoring of secondary disaster
- Construction of temporary housing
- Establishment of tent villages



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Recovery/Reconstruction

- Disaster resistant reconstruction
- Appropriate land use planning
- Livelihood support
- Industrial rehabilitation planning
- Cultural heritage recovery



Experts dealing with floods

- Civil engineers (hydrotechnical expertise)
- Hydrologists and meteorologists
- Emergency responders
- Environmental engineers
- Architects
- Geophysicists
- Geologists
- Humanistic scientists

- ...



Thank you!

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