TECHNISCHE UNIVERSITÄT DRESDEN
Fakultät für Forst-, Geo- und Hydrowissenschaften

01. Juli 18 - 1 Uhr
LANGE NACHT DER WISSENSCHAFTEN
Ein Projekt des Netzwerks Dresden - Stadt der Wissenschaften

FLOODmaster
1st Focus Workshop 2005

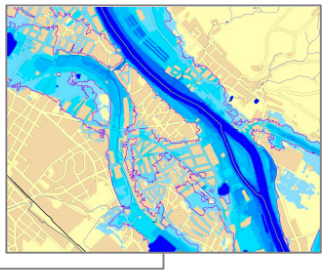
Risk Management of Extreme Flash Floods

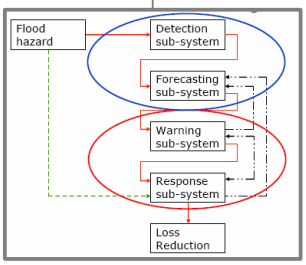
Receptors: Reducing Vulnerability through Communicative Instruments - a Post-/Pre-Event Perspective of the Müglitz Flood 2002 -

Intention

During the flood event within the Müglitz catchments it became clear that the vulnerability of receptors with regard to extreme flash floods is strongly influenced by the preparedness of people. Vulnerability can be reduced through increasing preparedness. To increase citizen preparedness, various communicative instruments should be combined, for instance, (1) flood hazard maps, (2) flood forecasting and warning system, (3) web-based information system, (4) brochures, and (5) workshops / public events. The poster shows these instruments and mentions further aspects of a comprehensive flood protection strategy for the Müglitz.

Flood forecasting and warning system
. semi automatic computer based information system (e.g., via fax, email and SMS)
. fast and flexible way of warning
. DWD ("Deutscher Wetterdienst") and HWZ ("Hochwasserzentrum") co-operate closely because a good flood prognosis depends on a reliable precipitation forecast



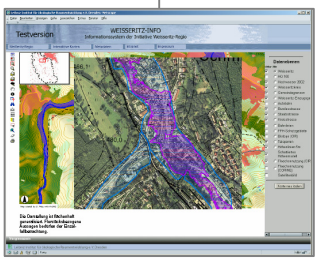


Flood hazard map
. maps with high resolution
. show high risk areas
. help to prevent damages of buildings and infrastructure
. information for investors to find "non risk" areas
. will be available in municipalities

Brochure for citizens
. shows what citizens can do, increases preparedness
. especially for *new* inhabitants of flood risk areas
. contains general information, gives an overview

Workshops / public events
. events to involve and inform citizens
. can be organised for different target groups (elderly people, children, …)
. courses in school, informaton desks on public festivals and also on-site inspections

Web-based information system
. integrates information from diverse sources
. supplies information to the puplic



Possible future aspects for a Müglitz flood prevention strategy

. more reservoirs / retension basins (inflow control)
. deepening of the riverbed to increase the cross-section of the river, to avoid channalisation of the waterflow
. bridges are potential blockades, construction work to increase discharge capacity
. use streets for runoff
. construction rules for building in flood risk areas
. warning of municipality by the "Landeshochwasserzentrale" must be guaranteed in every situation
. puplic flood hazard maps for special gauges
. prepardness of inhabitants in flood risk areas
. new warning system with more gauges
. Construction of a flood ditch in order to increas the capacity of discharge

Bildquellen:
www.mueglitztal-flut.de
www.umwelt.sachsen.de

International Teaching Module
FLOODmaster
Integrated Flood Risk Management of Extreme Events

C-2

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Bundesministerium für Bildung und Forschung