

PROGRAM GRAZ STREAMS: FLOOD MANAGEMENT IN URBAN AREAS

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Abstract

The Graz urban area counts more than 50 streams. Along the lower course, flood catchment areas are disappearing while discharge cross sections are falling rather than rising. Tubing and covers as well as canalisation out of the depth contour compound the situation by utterly separating run off from the stream bed and leaving water masses to flow off uncontrolled through the urban area.

Calculations revealed that there are about 1000 flood-endangered objects in Graz. The flooding of many streams in 2005 and 2009 caused by flush flood reached such a scale that a state of civil emergency had to be for the Graz urban area.

A study carried out yielded a strategic paper called "Graz Streams Program". The objective: "To achieve sustainable flood protection of endangered objects in the City of Graz".

And yet, notwithstanding the widest possible exploitation of local possibilities and extensive acquisition of land, it will not be possible to guarantee HQ_{100} protection for all settlement areas at risk. As compared to the present state, though, clear improvements will be made everywhere. For those segments where technical defence is not going to suffice to grant adequate flood protection, integrative measures are to be

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adopted directly at the objects' sites and further detailed alert and intervention plans are to be worked out for civil defence forces.

The total cost of this ten-year programme has been estimated at \in 65.0 million. Parallel to the first implementation schemes, preliminary work has begun for the drawing up of individual stream management plans, flood prediction models, analyses of residual risk as well as alert and intervention plans. Particular attention is being devoted to public relations. Citizens are to be shown how each and every one who is affected by the problem can contribute to enhance public protection measures through their own initiatives.