


## FACTSHEET RISK COMMUNICATION MEASURES


### Showing and explaining risk and risk reduction measures in the landscape – Establishment of a flood trail in Oderwitz

<b>Where was it implemented?</b>	
Oderwitz, Saxony, Germany	
<b>Fields of action</b>	
Risk communication	
<b>Related to measure from the catalogue of measures</b>	
<ul style="list-style-type: none"> <li>• Visualisation and explanation of the specific risk situation at site</li> <li>• Culverts - suitable hydraulic design</li> <li>• Furrows</li> </ul>	
<b>Target group</b>	
general public	
<b>Problem</b>	
<p>Risk reduction measures that are implemented in the course of reconstruction after a flood event or as a precautionary measure are often barely visible to a layperson in the landscape, at least if they appear less "technical", e.g. light terrain modelling, changes in land use or land use management practices. Also, after a heavy rainfall event, risk awareness of the population quickly decreases after a certain time interval - the so-called "flood dementia" begins.</p>	

#### Description and aim

In Oderwitz, a large number of small construction measures were carried out after the last flood events. They contributed to the optimization of the discharge conditions and, to a small extent, to the improvement of water retention and interfered hardly with the landscape. For example, an existing bypass (2nd passage) was reactivated in the area of the Dorfstraße, crossing area Fleischergasse at an arched bridge (see figure above). The → **culvert** had already been built a long time ago in order to be able to increase the flow rate in case of flooding at the local water body "Landwasser". However, sediment deposits had impaired its functionality. Before the water even reached the culvert, it had already flooded nearby residential buildings. The formation of a → **furrow** in the inflow structure restored the functionality of the bypass. The coordination and approval process with the state dam administration responsible for the water body, the river engineering department and the lower water authority was lengthy and more costly for the municipality than the construction itself.

In order to make activities such as the one described more visible to local residents in the landscape, RAINMAN took the initiative to install information boards at several locations in Oderwitz, which also remind them of past events and their consequences. They → **visualise the local risk situation**. At selected locations, flood level marks were installed and registered in the LfULG database. The marks and legible information in the landscape help to keep risk awareness alive and remind people that facilities for optimising discharge conditions require regular inspection and maintenance in order to maintain their functionality.

<b>Effect of measure</b>	
Not all structural measures taken after a heavy rainfall event are always visible in the landscape or their functioning needs to be explained to non-expert persons. Information boards contribute to a better understanding of the functioning and objective and, if necessary, acceptance of implemented measures. Signs, monuments, flood level marks, etc. also inform those who are not familiar with the area (new residents/investors) and sensitise them to the risk as they keep it up among local residents.	
<b>Description of implementation</b>	
<b>Effect horizon:</b> short-/medium-/long-term	<b>Involved stakeholders:</b> local public, general public
<b>Initiator / responsible:</b> city/municipal administration, local public authorities/institutions; in case of bypass rehabilitation: state dam administration for the river Spree, property owners	
<b>Lessons-learned</b>	
<p><b>Main success factor:</b></p> <p>Information boards, flood level marks or other explanatory objects in the landscape can be created in different sizes and from different materials. They should be either placed at particularly prominent locations, such as gauging stations or technical objects for flood protection, or - as in Oderwitz - at locations where risk reduction measures are exactly NOT visible - and therefore need explanation. If possible, you should always use historical pictures of the events, eyewitness reports or something similar to keep memories alive and to support the imagination.</p>	<p><b>Main challenge:</b></p> <p>Perhaps, an approval procedure for the information boards is necessary. For the installation of flood level markers several conditions must be fulfilled: the maximum water level of an event must be precisely known, and it is only "worthwhile" to install them at clearly visible places, where the harmful effect of the water is easily imaginable (e.g. on house facades). Especially small measures are not considered as valuable enough to be prominently explained and exhibited.</p>
<p><b>Synergies / beneficial aspects:</b></p> <p>Information boards can also be used to provide information on how to behave when it comes to an incident or on remaining risks. Educational trails can be linked to virtual information or geocaches, for example. This creates an incentive to discover them and to deal with the message.</p>	 <p><b>References in the landscape do not always have to be costly. Even the mention of a retention basin on a hiking trail signpost, such as in the Meissen Kirchsteigbach valley, explicates invisible flood protection measures and their functionality.</b> Source: Sabine Scharfe, LfULG</p>
<p><b>Conflicts / constraints:</b></p> <p>Information boards are prone to vandalism and weathering and need to be renewed from time to time. They should be used sparingly in order to counteract unnecessary "landscape signage".</p>	
<b>Key message to others starting with a similar task</b>	<b>Contact</b>
Make even less spectacular risk reduction measures locally visible! Think carefully about where to place the boards and what messages they should convey.	Municipality of Oderwitz, Straße der Republik 54, 02791 Oderwitz, E-Mail: <a href="mailto:gemeinde@oderwitz.de">gemeinde@oderwitz.de</a>
<b>Further information (in German)</b>	Sächsisches Staatsministerium für Umwelt und Landwirtschaft (2020): Wasser & Wasserwirtschaft - Hochwassermarken, URL: <a href="https://www.umwelt.sachsen.de/umwelt/wasser/15373.htm">https://www.umwelt.sachsen.de/umwelt/wasser/15373.htm</a> (23.02.2020).