

FACTSHEET RISK COMMUNICATION MEASURES

Establishing a (flash) flood early warning system in Saxony by making end users familiar with it

Where was it implemented?

Saxony, Germany

Fields of action

- Early warning and disaster management

Related to measure from the catalogue of measures

- Provision of information as reading materials
- Establishing and operating monitoring systems and forecast models
- Implementation and usage of early warning systems incl. collection and assessment of supplementing information

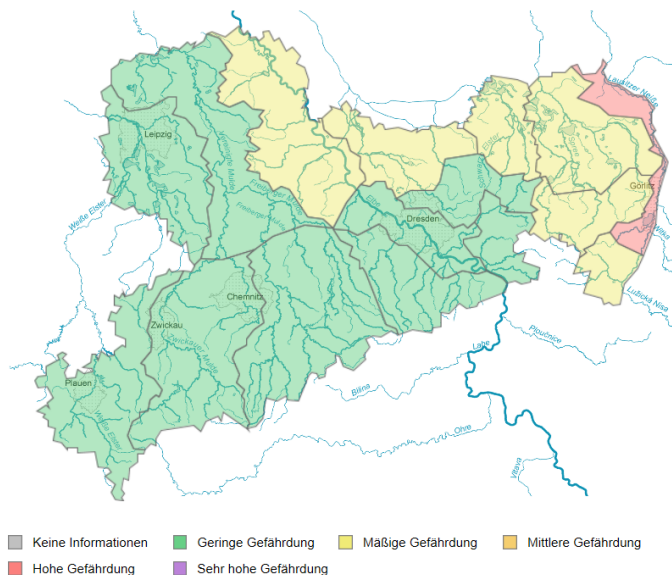
Target group

Local authorities, general public (potentially affected citizens)

Problem

The (flash) flood early warning system (FEWS) of the Saxon State Office for Environment, Agriculture and Geology was launched in early 2018. The target group of the FEWS spans from private persons to local authorities which are responsible for taking emergency response measures. After launch, it was crucial to make the system known and the target group familiar with its skills. It had to be ensured that that they receive the information and interpret warning correctly. Municipalities serve here as multipliers.

Hochwasserfrühwarnung für Einzugsgebiete kleiner 200 km²



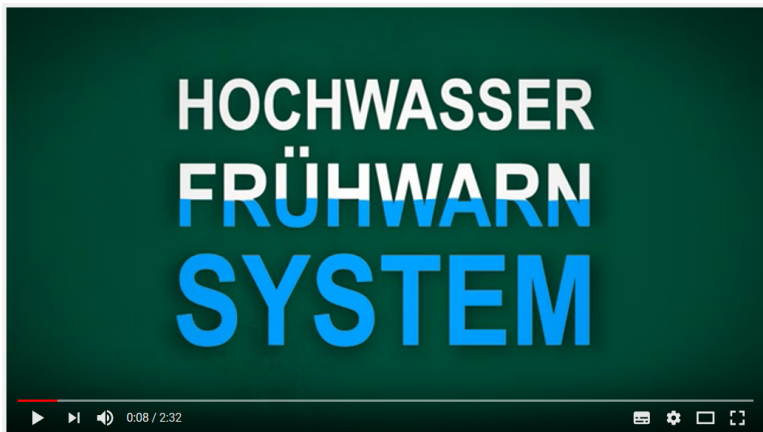
The front end of the FEWS is a traffic light map for 16 warning areas in the Free State of Saxony. A five-color scheme indicates the actual (flash) flood hazard for the next 24h on the website of the Saxon Flood Centre.

Source: Screenshot from the Saxon Flood Centre web page, URL: www.hochwasserzentrum.sachsen.de

Description and aim

To make the FEWS known to the target group, the Saxon Flood Centre promoted the launch via several information channels: media, the Saxon Flood Centre web page as well as presentations in events with the target group. To reach the general public, a press release was published by the State Office, a press meeting was held and two staff members of the Saxon Flood Centre gave interviews for an article in a local newspaper. Local authorities were informed via presentations in annual meetings and via an article in the annual proceedings of the German Association for Water, Wastewater and Waste. Apart from press work, the Saxon Flood Center endeavored to ensure a low level and easy access to the warning information. A guidance video was created and was made available on the Saxon Flood Centre web page www.hochwasserzentrum.sachsen.de, wherein the system and its limitations are explained in easy language and in combination with easy understandable visuals. For a convenient access to warning information a RSS feed was set up and allows users to customize the warning information via e.g. a feed reader. It is additionally planned to make the warning information available over a widely used flood information app.

Additionally, there was a close exchange with the RAINMAN project staff, who also promoted the early warning system in the pilot actions in Saxony, trained municipal personnel and collected and passed on feedback from

<p>users to EWS developers.</p> <p>What turned out to be difficult was the lack of integration of the system into the official flood warning system of the Free State of Saxony.</p>	
<p>Effect of measure</p> <p>On the one hand, all efforts payed off as the Saxon Flood Centre received much positive feedback. On the other hand, it has to be acknowledged that the pure availability of warning information on a website does not mean that the information is taken up by recipients at risk. The target group oriented communication and training of the recipients has to be recognized as an important - probably the most important - part of an early warning SYSTEM itself. Therefore the work will continue.</p>	
<p>Description of implementation</p>	
<p>Implementation: Since 01/2018 (ongoing)</p>	<p>Effect horizon: Medium-/long-term</p>
<p>Initiator / responsible: Saxon State Office for Environment, Agriculture and Geology, Saxon Flood Centre</p>	<p>Involved stakeholders: Municipalities Oderwitz and Leutersdorf (as test users), further municipalities, recipients of official flood warnings in Saxony</p>
<p>Lessons-learned</p>	
<p>Main success factor: Personal contact with end users, clear messages and communication of limitations.</p>	 <p>A 2.5-minutes movie, accessible on the web page of the Saxon Flood Centre explains the system and its limitations. Source: Screenshot from the Saxon Flood Centre web page</p>
<p>Main challenge: Continuous promotion and maintenance of the system in interaction with the target group</p>	
<p>Synergies / beneficial aspects: Effort in making an EWS known to its users can be understood also as risk reduction activity</p>	
<p>Conflicts / constraints: Different systems offer information of varying accuracy. It must be explained very well for which case which system is the right one and which information source suits for whom.</p>	
<p>Key message to others starting with a similar task</p>	<p>Contact</p>
<p>Designing and implementing an EWS is a long-term process and requires a lot of effort in making the end users familiar with the provided information. Training and consultation options are crucial as well a clear communication of the limitations of warning information.</p>	<p>Saxon State Office for Environment, Agriculture and Geology Saxon Flood Centre E-Mail: lhwz.lfulg@smul.sachsen.de</p>

Further information	<p>Kerl, F.; Philipp, A. (2019): Hochwasserfrühwarnung in Sachsen, in: Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V. (DWA) Landesverband Sachsen/Thüringen (Hrsg.): Gewässer-Nachbarschaften DWA-Landesverband Sachsen/Thüringen 2019, S. 185-190.</p> <p>Landesamt für Umwelt, Landwirtschaft und Geologie (Hrsg.) (2017): Hochwasserfrühwarnung für kleine Einzugsgebiete - Möglichkeiten und Grenzen im Lichte operationeller Anforderungen am Beispiel Sachsens, URL: https://publikationen.sachsen.de/bdb/artikel/30155 (25.02.2020).</p> <p>Philipp, A., Kerl, F., Büttner, U., Metzkes, C., Singer, T., Wagner, M., and Schütze, N. (2016): Small-scale (flash) flood early warning in the light of operational requirements: opportunities and limits with regard to user demands, driving data, and hydrologic modeling techniques, Proc. IAHS, 373, 201-208, URL: https://doi.org/10.5194/piahs-373-201-2016.</p>
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