

## FACTSHEET RISK REDUCTION MEASURES

### Participative development of a concept for risk reduction and sustainable soil management

Where was it implemented?

Zittau, Saxony, Germany

Fields of action

- Farmland
- Settlement area
- Risk communication

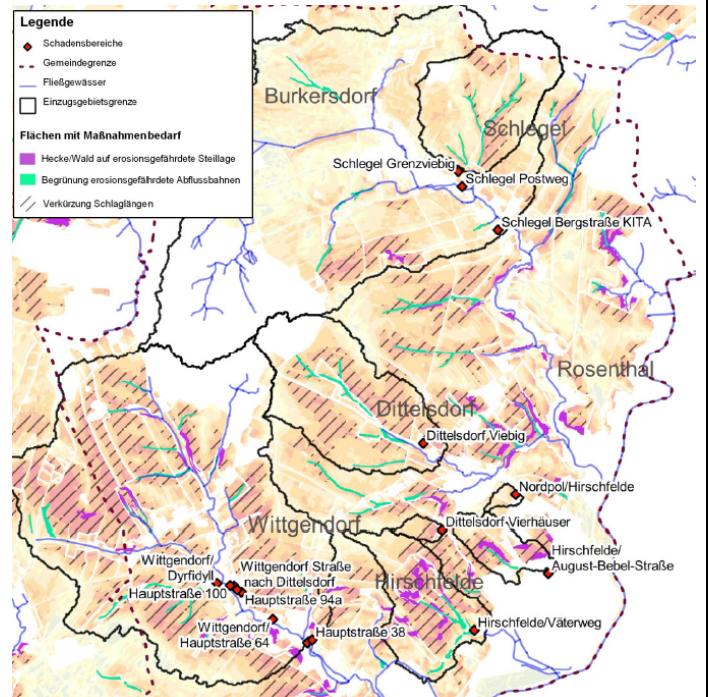
Related to measure from the catalogue of measures

- Strategic documents
- Interactive communication and participation formats
- Event and damage documentation; event analysis

Area characterisation

Area type: urban

Landscape type: hilly, settlement area



Need for measures for erosion protection in Zittau and neighbouring districts.

Source: Project report „Masterplan Anpassung an klimawandelbedingte Starkregenereignisse in Zittau“, GFI Grundwasser-Consulting-Institut GmbH Dresden

Problem

Past heavy rain events caused recurring problems in the urban area of Zittau. Due to the heavy rainfall, the sewer network was partially overloaded that the rainwater could no longer be drained off and the sewage treatment plant was impaired. Erosion material from agricultural land was washed over roads and land into the sewer system, which caused additional cleaning costs. The owners / leaseholders of agricultural land partly contributed to the aggravation of the situation, as land management was not adapted. The reasons for this are seen in a lack of awareness of the problem and responsibility.

Description and aim

The City of Zittau initiated the project "Master Plan Adaptation to Climate Change Caused by Heavy Rainfall Events in Zittau" as part of the project LIFE LOCAL ADAPT with the Saxon State Office for Environment, Agriculture and Geology. It is an → **informal planning** and → **interactive communication and participation process**.

The master plan consisted of the following steps:

1. **basic determination:** data collection, on-site visits, soil sampling and soil analysis
2. **conflict and risk analysis:** terrain analysis, evaluation of historical maps, calculation of runoff paths, analysis of endangered areas and objects, surface runoff and erosion modelling
3. **selection and evaluation of measures:** selection and evaluation of adaptation measures, forecasting of the impact of measures, coordination and prioritisation of measures of the master plan
4. **summary:** final report with key points of the master plan, preparation of factsheets

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| <p>Property owners, leaseholders, residents and other affected parties were called upon to report past damages caused by heavy rain and to actively participate in solving the problem. The provision of photographs was also welcomed and used to document and analyse the damage events.</p> <p>Five key locations were considered, where repeated cases of considerable damages after heavy precipitation due to flooding of roads with water and sludge from adjacent agricultural land, as well as mud discharge into the sewage system occurred. Decision-makers and the general public were involved at an early stage in all steps of the process of identifying, evaluating and selecting measures. This took place in addition to calls for active participation within the framework of public information events with the possibility for discussion and exchange every 1-2 months.</p>  |   |
| <b>Effect of measure</b>   |   |
| <p>In the course of the project, deficits in the urban area were identified and quantified, and stakeholders were encouraged to act together - also by creating an awareness of the problem among those affected and in the public. Ways to reduce the risk were shown, e.g. how adaptation measures can be implemented by means of subsidies or how measures can be implemented in the case of difficult property rights conditions (e.g. through mediation). In order to present planned stages of the project and its results to date, but also for discussion purposes, information events were held with the stakeholders and the public involved. The dialogue with affected citizens and stakeholders interested in climate protection in Zittau leads to a transfer of knowledge and promotes the awareness of problems and responsibility in the public. The master plan itself provides measures that lead to a long-term risk reduction of the erosion problem and thus reduce the costs arising from damage elimination sustainably.</p> |   |
| <b>Description of implementation</b>   |   |
| <b>Implementation:</b> 01/2018 - 08/2019   | <b>Effect horizon:</b> medium-/long-term  |
|  | <b>Costs:</b> 55.000 Euro   |
| <b>Initiator / responsible:</b><br>City of Zittau, TU Dresden, contracted company  | <b>Involved stakeholders:</b><br>City of Zittau, TU Dresden, contracted company, property owners, leaseholders, affected citizens   |
| <b>Lessons-learned</b>   |   |
| <b>Main success factor:</b><br>Active and early involvement of all stakeholders, especially property owners and the public to avoid conflicts and to find best solutions for all affected citizens.  | <b>Main challenge:</b><br>Actors first had to be identified and sensitised. In the following step, the participants were partly activated (sensitisation outside the administration is not yet completed).  |
| <b>Synergies / beneficial aspects:</b><br>Crosslinks to other projects of Life Local Adapt were established to share knowledge and experience.   | <b>Conflicts / constraints:</b><br>Partially limited room for action, as a large part of the arable land is located in the territory of the neighbouring municipality.  |
| <b>Key message to others starting with a similar task</b>  |   |
| <p>Early involvement of stakeholders and the public at all stages of the work is the key to success.</p> <p>The implementation of the measure requires not only the involvement of various interest groups, but also cooperation beyond municipal boundaries.</p>  |   |
| <b>Contact</b>   | <p>City Administration of Zittau, Markt 1, 02763 Zittau</p> <p>E-Mail: <a href="mailto:energie@zittau.de">energie@zittau.de</a></p>   |
| <b>Further information (in German)</b>   | <p>Project description of the EU environmental project "Master Plan Adaptation to Climate Change Caused by Heavy Rainfall Events in Zittau" on the website of the City of Zittau, URL: <a href="https://zittau.de/de/node/137647">https://zittau.de/de/node/137647</a> (18.03.2020).</p> <p>Website of the project LIFE LOCAL ADAPT - Integration of climate change adaptation into the work of local authorities, URL: <a href="https://www.life-local-adapt.eu/de/project/objectives/saxony">https://www.life-local-adapt.eu/de/project/objectives/saxony</a> (03.02.2020).</p> |

