Involving local authorities in Flood Risk Management

Documentation of the Workshop
held May 19, 2010 by the State Directorate Dresden

STAATSMINISTERIUM DES INNERN | Freistaat SACHSEN

Regionaler Planungsverband Oberes Elbtal / Osterzgebirge

LANDESDIREKTION DRESDEN | Freistaat SACHSEN

The workshop was conducted within the framework of a pilot action within the project LABEL. LABEL is co-financed by the European Regional Development Fund in the INTERREG CENTRAL EUROPE Program.

Lead Partner of the Project LABEL:

STAATSMINISTERIUM DES INNERN | Freistaat SACHSEN

Andreas Kühl
Division 45 – European Spatial/Regional Planning, Technical Planning
Tel.: 0049 (0)351-564 3454
Email: fachplanung-eu@smi-sachsen.de

Project coordination and professional revision:

INFRASTRUKTUR & UMWELT
Professor Böhm und Partner

Dr. Peter Heiland, Uwe Seibel, Stefanie Greis
Tel.: 0049 (0)6151-8130 0
Email: label@iu-info.de

www.label-eu.eu

Editorial Office

INFRASTRUCTURE & ENVIRONMENT, Professor Böhm and Partners

Photos

Andreas Kühl, Saxon State Ministry of the Interior

Content

Annexes

1 Welcoming address and introduction

The president of the State Directorate Dresden, Dr. Henry Hasenpflug, greeted the participants of the workshop and particularly the Czech guests from the project LABEL. He outlined that in addition to the technical aspects of flood protection, the precautionary measures to be taken represent a high priority task which lies primarily in the hands of the municipalities. The State Directorate, in its position as the intermediate level of government, can make a significant contribution to ensure that the aspects of flood protection can be appropriately taken into consideration in every respect, but particularly in relation to zoning and building plans.

Dr. Fritz Schnabel, Head of the Division for European Regional Planning, Technical Planning in the Saxon State Ministry of the Interior, also greeted the workshop participants. The Saxon Ministry of the Interior has already been concerned with transnational flood management for many years. Much basic groundwork has been achieved up to the present. Now the interchange with the municipalities, such as in this workshop, will have to move into the foreground.

2 Communal planning and risk provisioning: Past investigations and the results

2.1 The central significance of communal planning for flood prevention management

In his presentation, Peter Seifert, Regional Planning Association Upper Elbe Valley / Eastern Erz Mountains, clearly demonstrated the correlation between the heavily increased settlement activity in the flooding areas and the growing economic flood damage. The connection becomes evident in the developed area of the flooded region: the illustration shows this for around 1800 and in 2006 as well as the inundated surface areas at an HQ100 (2004) for a segment of the urban area occupied by the city of Dresden.

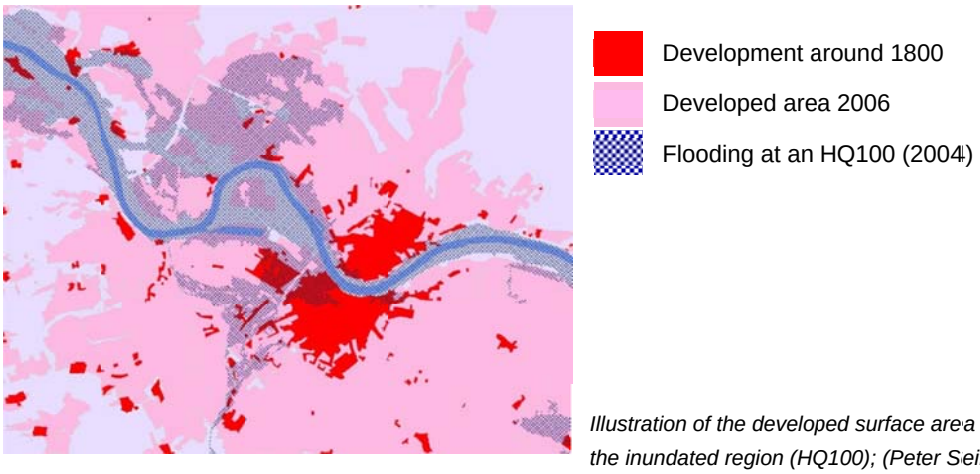


Illustration of the developed surface area of Dresden and the inundated region (HQ100); (Peter Seifert, 2010)

Thus one cause for the increasing flood damage is the unadjusted human settlement in areas at risk. Solving the flooding problems by means of hydrological measures alone will therefore prove unsuccessful unless construction and development plans also take into account hazard adaptation measures. The local authorities hold the key to success in their hands.

2.2 Development plans in flood areas

Birgit Weber, head of the department of "Infrastructure and Transport, Spatial Planning, Building and Housing" in the State Directorate Dresden, presented her administration's research on the subject of building in flood-prone areas. The research is intended to work out an overview of construction planning in areas of flooding. Another of its goals is to protect the municipalities from having to pay indemnification claims, because communities are obligated by law to repeal or amend construction plans in areas of flooding (adaptation requirement). Failure to administer the test may result in public liability claims. To begin with, all existing zoning or development plans in flood areas within Saxon municipalities were identified and classified. The respective plans were to be subjected to detailed testing.

In assessing which development plans should be given priority in the adaptation process, a categorization method was adopted which used the criteria "location within the flooded area", "degree of implementation", "intensity as indicated in the risk map" and others. The plans in question were divided into the following four categories:

- Category I: immediate need for action
- Category II: preexisting need for action
- Category III: testing needed
- Category IV: no testing needed

In the district of the Dresden Directorate, 155 zoning plans were identified which extended into the newly declared areas of flooding with 34 of them being classified as Category I and II. With the involvement of the affected communities and the respective water authorities, tests are currently being performed on a case-by-case basis to determine how the zoning plans can be adapted.

The research presented also forms the basis for the approach to be taken in the LABEL pilot action and was incorporated into the preparations for the discussions with the local authorities and thus also into those taking place in the workshop.

2.3 The project LABEL and the pilot project "Involving local authorities in flood risk management"

Dr. Peter Heiland of INFRASTRUCTURE & ENVIRONMMENT, Prof. Böhm and Partners presented the background information, the objectives and the tasks of the project LABEL and of the pilot action "Involving local authorities in flood risk management."

Since as early as 2003, the transnational partnership along the Elbe has concerned itself with the subject of precautionary flood protection in the preceding project ELLA: The legal bases for spatial planning and flood protection as well as the related fields of activity have been assembled and recommendations for water resources management, for spatial planning and for an increased awareness of the problems have been worked out (see also www.ella-intereg.org).

The follow-on project LABEL puts the focus on the adaptation to flooding risks. 20 project partners from Germany (from the states of Saxony, Saxony-Anhalt and Thuringia, and from the federal level), the Czech Republic, Austria and Hungary are working together on a transnational strategy for adaptation to flood risks and a sustainable development of the Elbe region. Specific measures and actions are to be implemented in the regions by means of pilot actions that are to serve as models.

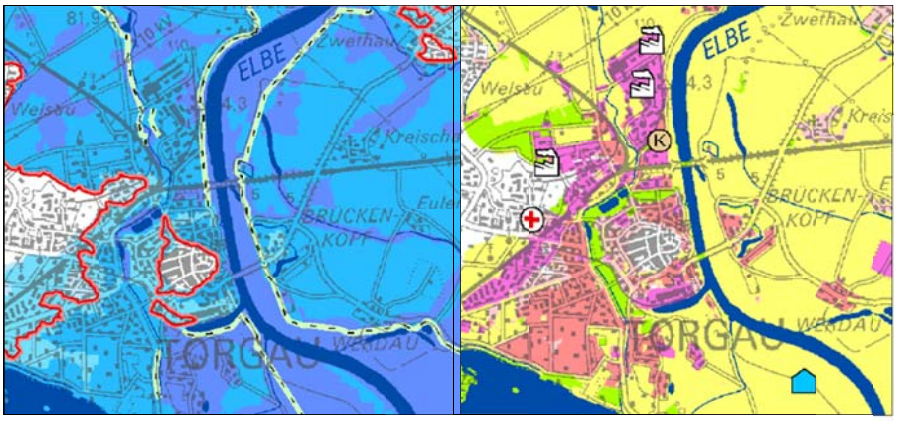
Pilot Action 8, Involving local authorities in flood risk management, hopes to identify utilization conflicts, detect the various options for adaptation and thus lower flooding risks of the river by influencing

the planning practices on the municipal level. This process began with an evaluation of the municipal planning practices and the identification of the need for action with regard to development plans. Meetings with a selected number of local authorities followed and their specific problems and possible solutions were discussed. Conclusions drawn from these discussions were compiled in the resulting hypotheses, which are to be discussed, tested and supplemented in this workshop (see point 5).

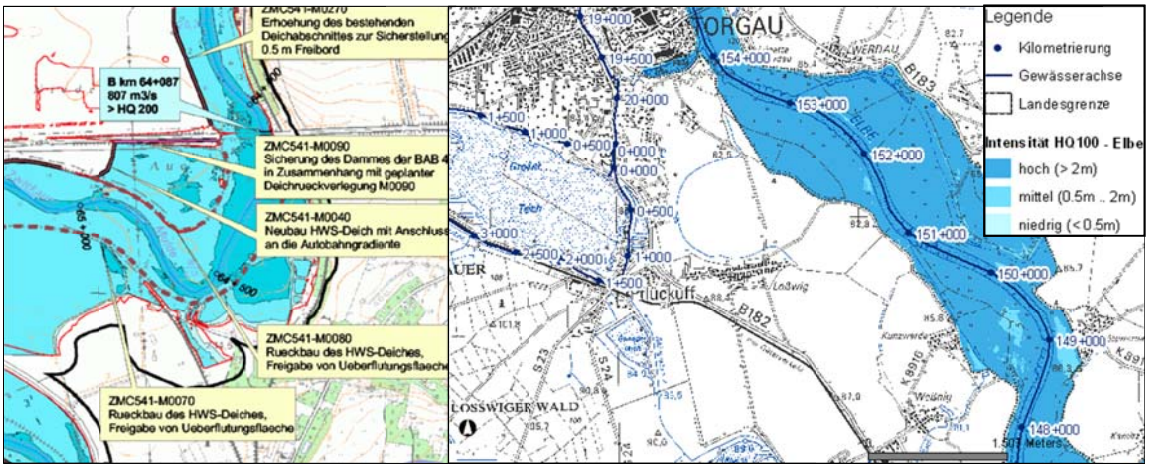
3 Hazard and risk maps for communal planning: Current status, shortcomings, future challenges

An overview for the existing map information regarding floodwater was provided by Matthias Grafe, Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie (LfULG) [Saxon State Agency for Environment, Agriculture and Geology]. He presented hazard indication maps, flood protection concepts including flood contingency planning / action plan maps, HQ100 intensity maps, risk maps and communal maps for flood protection. These have been assembled in the following synoptical table and are illustrated in the map excerpts.

In addition, the legal bases for officially recognized flood-prone areas and the safety regulations were explained to the participants.



*Excerpts **Hazard indication map Saxony** in the Torgau region; flooding hazard at HQ100 and HQextreme with no dykes (left); damage potential at extreme flooding (right); Source: LfULG*



***Flood Protection Concept**; Map excerpt of action plan Zwickauer Mulde (left) and intensity map HQ100 (right); Source: LfULG*

	Contents	Scale	Targets	Use
Hazard indication map	• Flooding hazard at hundred year flood levels and extreme floods with no dykes • Damage potential at extreme flood	Overview (1:100.000)	Disaster Management Agencies, Spatial Planning	Basis for the identification of conflicts of interest and the key elements of flood protection & flood defense measures, basis for regional planning allocations
Flood protec-	• Analysis of historical	Report & map	Providers of	In accordance with the

	Contents	Scale	Targets	Use
Hazard indication map	• Flooding hazard at hundred year flood levels and extreme floods with no dykes • Damage potential at extreme flood	Overview (1:100,000)	Disaster Management Agencies, Spatial Planning	Basis for the identification of conflicts of interest and the key elements of flood protection & flood defense measures, basis for regional planning identifications
Flood protection concepts	• Analysis of historical flooding events • Representation of protection level in use then • Arriving at deductions of measures for def. protection levels	Report & map representation for all flood-related matters (1:10,000)	Providers of flood protection measures, approving authorities, affected persons	In accordance with the Water Management Act of Saxony, section 99 b; Integrated basis for the planning of all flood protection
HQ100 Intensity map	The map illustrates the flooded area at HQ100 around first order waterways and the Elbe, whereby the intensity is shown by indicating the water's depth.	Scale: 1:10,000	Providers of flood protection measures, Approving authorities, affected persons	Basis for land-use planning, developing protective measures, operative flood defense
Officially recognized high-flood areas	For first order waterways reoccurrence interval generally at HQ100, variable for second order waterways.	Scale: 1:25000; Representation at larger scale is not meaningful	Approving authorities, affected persons, spatial planning / land-use planning	Identification of flood plains that are to be preserved as retention areas by means of restrictions
Hazard map	• Flooding hazard at reoccurrence intervals of 20 resp. 25, 50, 100, 200 resp. 300 years • detailed description of hazard processes	Large scale representation (1:5.000)	Municipalities, flood emergency services, rural districts, the general population, businesses, public authorities, the media	Basis for land-use planning, developing protective measures, operative flood defense
Communal map for flood information	Development based on hazard maps and information from flood protection concepts as well as data from the hazard indication map; no new hydraulic modeling	Large scale representation (1:5,000)	Municipalities, flood emergency services	Community-specific flood information maps as resource material for the planning and operative application, not legally binding
Communal map showing hazard zones	• Development based on hazard maps and data from hazard indication map • Resource material for land-use planning • Intersections to the individual hazard zones • Preparation of community-specific recommendations for action	Large-scale representation (1:5,000)	Municipalities, land-use planning	Resource material for communal zoning and land-use planning

4 Incentive programs for regional development: What are the roles of the aspects of flood risk precaution?

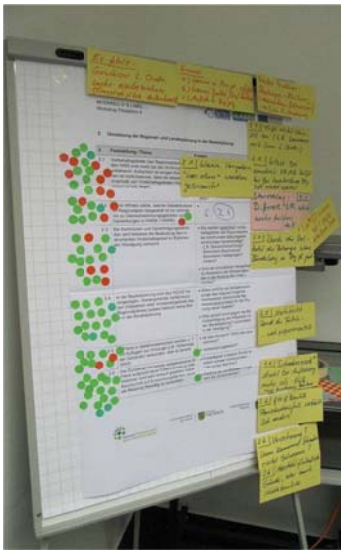
Michael Holzweißig of the Regional Planning Association Upper Elbe Valley / Eastern Erz Mountains clearly illustrated the relationship between incentive programs for rural development and flood risk precaution.

Based on the *Richtlinie zur Integrierten Ländlichen Entwicklung* (RL ILE) [directive for the promotion of integrated rural development] in Saxony, building measures for the restructuring, reuse or maintenance of rural building fabric for private use are being promoted along with other projects. This idea is particularly attractive for young families that may be eligible for subsidies of up to 45% in ILE areas and 50% in LEADER areas. The directive, however, also makes it clear that any measures taken may not be counter to the objectives of spatial planning, to flood protection efforts and those of NATURA 2000 (2.5.3). In addition, the specifications for precautionary flood protection in the regional plan must be taken into consideration. On the other hand, the measures necessary for conversion and reuse generally do not have an impact on spatial development and there are no targeted land planning provisions in existence for flood protection in the settlement areas. In a number of cases, these sites are located in regions prone to flooding. Even if an intervention from the perspective of spatial planning is not possible for the above-mentioned reasons, the question remains whether public funding here supports an increase in the potential for damage.

One option would be, for example, to provide counseling for construction methods that are adapted to flooding. Other possibilities were also suggested, such as the provision of more stringent objectives in the regional plan or further incidental provisions in the ILE directive. The regions could also commit themselves on their own responsibility.

5 Results of the working groups

The participants divided themselves into two working groups: one was to focus mainly on water management issues, information and maps, while the other group was to place the main emphasis on instruments of spatial planning and building regulations, in particular land-use planning and building in outlying areas. In both working groups, working hypotheses which had been gained as interim conclusions based on previous analyses were put forward for discussion.



After a one-hour discussion, the two working groups switched sides, so that all participants were able to spend another 30 minutes intensively taking a stand on the discussion results of the other group.

The results of the working groups are summarized below in brief, content-specific statements. These will be correlated with the theses resulting from discussions with the Saxon municipal authorities. This will make it obvious that in some cases the discussions brought forth new or additional aspects, but that at the same time they confirmed a number of working hypotheses.

❖ Risk information, hazard and risk maps

Hypothesis 1.1. Flood hazard maps and flood protection concepts are familiar resources in communal planning.

A consensus could not be reached regarding this idea, since the practical work performed in communities and even in individual cases frequently proceeds along very different lines. However, work tends to mainly take place in the flooded areas governed by applicable water legislation, while representations going beyond these often take on a minor role or none at all when it comes to land-use planning.

- Local authorities take quite varying approaches to hazard information, but hazard indication maps are rarely used; the legally binding maps are used exclusively most of the time;
- Hazard map HQ100 is used in communal planning in instances where no information is available for the legally designated flood areas
- Too many different maps exist in Saxony
- In the larger communities, e.g. in the urban districts constituting counties in their own right, the use of water management maps is less of a problem. Experts are available who know how to apply the maps appropriately.

Hypothesis 1.2. The terms and definitions and various effects in flood hazard maps, flood plains so designated under water legislation and areas identified in regional planning are not always fully known.

The discussions show that it is indeed often difficult to work in the public domain with the concepts and specialized background material, in particular with the significance of the statistical values the designations are based on.

- There is to some extent a lack of understanding of the statistical magnitude HQ; it is also very difficult to communicate this to the general population as water levels or water lines are the only familiar concepts of magnitude
- The references made on all hazard maps to flood markers with the related water level indications is frequently an unfamiliar notion
- An increase in the specialized knowledge now lacking in the local communities with regard to water management related terms and descriptions and their significance would be desirable and could be achieved by means of greater familiarity through training and further education

Hypothesis 1.3. The majority of municipal authorities are satisfied with the existing hazard information. In individual cases, doubts exist regarding the reliability (plausibility) of the flood risk maps. In these cases, their applicability in land-use planning is being questioned.

This hypothesis regarding the general level of satisfaction was for the most part rejected. A number of requirements and suggestions for improvement were compiled along with other ideas:

- Maps that also show very frequent events are needed for flood defense (HQ 2 or HQ 5),
- The communication between the municipalities and federal (technical) authorities with respect to working with the intensities represented on maps (e.g. water depths) must be continued and intensified.
- The correlation to the legal bases is lacking, or the legal situation is not known and the expertise with regard to water management and spatial planning is absent to some extent.

- Maps are not updated promptly after measures have been implemented and this leads to their being challenged with regard to the flood plains illustrated on them. Better communication between technical authorities regarding the effects of measures implemented and the need to update them regularly would be advisable.
- The focus on the magnitude in HQ is generally not practicable for use in municipalities – references to flood levels / water lines are more useful (see also Hypothesis 1.2.)
- Water management related hydrological bases for second order water bodies are not available for the drafting of hazard maps or concepts
- Legally binding danger zone maps would be helpful – similar to the "active zone" in the Czech Republic
- Financial problems continue to form the backdrop for the reluctance on the part of local authorities when it comes to flood risk management (staffing, follow-up costs maintenance and updating)
- Taking into consideration regional conditions in water management planning is an important factor. They should be included to a greater extent for increased understanding and thus increased acceptance by the authorities
- Better, more frequent communication between all administrative levels on the subject of flood risk management is worth striving for. Better cooperation between the technical authorities on the level of administrative districts and the municipal level would be helpful

❖ **The realization of regional and federal state level planning in land-use planning**

Hypothesis 2.1. Retention areas (in the regional plans) for flood protection are mostly unknown among local authorities. In addition, some communities are not aware that they may in part be situated within retention areas under flood protection.

The discussions show that this hypothesis applies in principle. It is to be noted, however, that some communities with second order water bodies are not at all affected by priority zones or retention areas. The challenge arises to include second order waterways and also other types of water such as slope water resulting from heavy precipitation etc. more effectively in the flood risk management planning, since great risks can often originate from them. This could be reviewed within the framework of flood risk management planning.

It is further determined:

- Clear terms of reference "from above" provide not only a hindrance, but also some useful assistance in the critical decision-making processes on the municipal level.
- It is being debated whether concrete plans could be optimized even with awareness of the priority zones / retention areas; the opinion has been expressed that perhaps it is possible to make only "either/or" decisions in these instances and that the scale levels are insufficiently concrete or too vague to allow for optimization. Regional planning, on the other hand, sees in the retention area the aim to integrate a mandatory optimization within the process of planning and assessing.
- Suggestion: a differentiation of the priority zones and retention areas might be more useful - targeted differentiation with optimization possibilities.
- It is, however, controversially under discussion whether a differentiation of the retention areas would actually help the local authorities. A representative

from a local district questions the need for differentiation of the priority zones / retention areas, since flood protection concepts have already produced sufficient information about flood hazards.

- Numerous participants see an advantage in the regional planning representation, however, because due to the multiplicity of specialized interests touched by the decisions, the consolidation in the regional plan is of help in the planning process.

Hypothesis 2.2. It is often unclear, which regional scenario is represented in the regional plan (in relation to the flood areas and the representations in flood protection concepts / flood risk maps).

This hypothesis is discussed only briefly as a complement to 2.1, since the most significant arguments have already been reviewed there. A high level of transparency of the concepts, scenarios and effects is, of course, necessary for the work with these specifications in the development planning.

Hypothesis 2.3. Municipalities and approving authorities to some extent underestimate the significance of the instrument of retention area in their considerations.

The working group had only very little knowledge in this area.

However, the assessments generally indicate that the retention area in fact does not play a very significant part or perhaps no part at all in the considerations. It is necessary here to keep emphasizing more clearly and to demand that the concurrent planning in the retention area at least requires the testing for alternatives in order to be sufficiently included in the considerations. Alternate planning options must have been examined beforehand in the planning of retention area flood protection without increasing the risks, or perhaps outside of the priority zones.

Then the regional plan would have achieved the intended effect with its decision (information, assessment considerations).

Hypothesis 2.4. In development planning, HQ100 is used as a basis. More advanced risk zones (Hqextreme or the retention zone in the regional plan) in effect have no application.

The discussion of this hypothesis took place in conjunction with the preceding points. This is usually the case because up to HQ100, the effects are clearly regulated (ban); at HQ>100 (risk areas with less frequent events or with extreme floods) the results are often unclear for the planner. Here the discussion concludes in favor of the retention area or a differentiation of the priority zones (see above).

Hypothesis 2.5. B-plans [binding land-use plans] in risk areas are often connected with precautionary provisions (e.g. building height/elevation); this already commonly takes place.

This is where pragmatists disagree. Although this point may arise for discussion in the planning schemes, this procedure is absolutely not yet standard practice. In individual cases it may more likely be a question of an "experimental" approach. In part, the solutions that can be found in the reference material cannot be meaningfully implemented or lead to solutions not desirable from the point of view of urban development.

Thus the general consensus is that this hypothesis should be reformulated.

Hypothesis 2.6. The idea of revoking already approved land-use plans based on new insights gained with respect to flood risks is regarded with great skepticism; development areas are not likely to be relinquished voluntarily (even if they are to be used as reserves).

There is general agreement regarding this observation. The municipalities are not likely to be able "to afford often" to take back permits, since possibly hefty compensation claims would result from this.

The economic damage exacted by compensation requests based on prior assurances of land being designated for development is thus often more costly for a municipality than the potential flood damage. In this respect, the assessment is justified mostly for fiscal reasons, but sometimes also for reasons based on urban development concepts.

It is debated whether it is legally unavoidable that a municipality can be held liable in any event, when new circumstances arise that would make the planning appear no longer meaningful. This possibility is clearly answered in the affirmative in this case by the legal representatives. The situation would be different if the damage were caused by planning decisions as pursuant to sections 42 ff of the Federal Building Code [*Baugesetzbuch/BauGB].*

The question arises whether the municipalities are protected by liability/indemnity insurance if they repeal existing building laws [withdraw building permits] due to new insights into flood risks. The question remains unanswered.

❖ **Practices in the development pursuant to section 34 BauGB**

Hypothesis 3.1. In most cases, risk and hazard management is handled and decided upon individually (and discussed with the supervisory control); no general system for the planning of risk management is recognizable in the planning offices of the municipalities.

This hypothesis is supported in the discussion. The reasons are as follows:

- Technically, the effects of individual schemes or projects are often not sufficiently significant and are thus not verifiable.
- Individual cases are often not significant – even though the combined effect may be negative (but this does not have an influence on the assessment).
- Negative answers from the water authorities cannot be provided in individual cases due to the lack of professional evidence (in the event that such is available, fearing the loss of retention areas or the inadmissible increase in the damage potential) and building applications could be refused.
- Answers from the water authorities are generally positive, see above.
- The legal situation / flood precautions for permits pursuant to section 34 and with permits in the undesignated outlying areas are not effectively regulated (section 34 does not take into account flood protection).
- Building applications often do not show the damage potential (here the opinion is also expressed that this, too, is the developer's private responsibility)

Permits pursuant to section 34 in the regulatory floodway region, however, are generally preventable.

Hypothesis 3.2. True enough, the pressure for development is mostly minor in rural areas; that is exactly the reason the enforcement of development bans should be very stringently kept up in risk areas respective of the requests submitted.

The opinions could not be accurately gauged here.

Hypothesis 3.3. Matters relating to urban planning, and economic and social issues are for the most part more important to consider than flood damage precaution because of local needs

This hypothesis was confirmed; for the discussion see 3.1.

Hypothesis 3.4. Permits in risk areas are often connected with precautionary provisions (e.g. building height/elevation); this already commonly takes place.

The opinions could not be accurately gauged here.

6 Summary, conclusion

To conclude the workshop, the participants of the pilot action, Peter Seifert (Regional Planning Association Upper Elbe Valley / Eastern Erz Mountains) and Matthias Grafe (Saxon State Agency for Environment, Agriculture and Geology) discussed some of the implications for regional planning and water management.

The conclusion from the point of view of regional planning was that measures for the prevention of floods affect much of the population and that the discussions on that subject must be continued. Supporting opinions were offered for the idea of differentiated designation of priority flood plain and retention areas in the regional plan and the envisaged separation of the designations from the statistical probability of recurrence (HQ 100), so that this approach can be further pursued in the RPV [Regionaler Planungsverband/Regional Planning Association]. The opinion expressed in the discussion that more stringent specifications may also make the work easier for local authorities would support the regional planning procedures. As a new field of activity, the Regional Planning Association has registered the discussion surrounding the handling of slope water, of second order waters and the increasing risk-intensifying cultivation of agricultural areas and will test to find out whether in future new fields of activity for regional planning will result from these.

From the perspective of water management, it can be established that the existing information is known and for the most part being applied. Even so, communication with the users must be improved in order to eliminate ambiguities and uncertainties. There is also a need for improvement and completion where maps are concerned.

In conclusion, Dr. Heidemarie Russig, Manager of the Branch Office of the Regional Planning Association Upper Elbe Valley / Eastern Erz Mountains expressed her thanks to all involved parties, the organizers and the participants for the pleasant and productive workshop.

Annex 1: Workshop Program

Program May 19, 2010

10:00 Welcome address and introduction

Dr. Henry Hasenpflug, President of the State Directorate Dresden

Dr. Fritz Schnabel, Saxon State Ministry of the Interior

10:15 Communal planning and risk provisioning:
Past investigations and the results

Peter Seifert, RPV OE / OE [Upper Elbe Valley / Eastern Erz Mountains]

Birgit Weber, State Directorate Dresden

Dr. Peter Heiland, INFRASTRUCTURE & ENVIRONMENT, Prof. Böhm and Partners

11:00 Commentaries, explanations, supplementary observations by various participants

Hazard and risk maps for communal planning:
Current status, shortcomings, future challenges
Matthias Grafe, Saxon State Agency for the Environment, Agriculture and Geology

Incentive programs for regional development: What are the roles of the aspects of flood risk precaution?

Michael Holzweißig, RPV OE / OE

Problems and perspectives of communal planning in risk areas
Statements by local authorities

Questions, discussion

12:15 Introduction to the working groups

12:30 Lunch

13:30 Workgroups for the results

WG 1: Risk information, hazard and risk maps:
What challenges do water management authorities and municipalities present to one another?

WG 2: Risk management in land-use planning and construction developments in the inner regions:
Can we put a stop to the growing risk? Do changes have to be made to the planning? Do we have challenges for regional planning?

15:15 Presentation and discussion of the results

Reports from the working groups (recommendations)

Summary and prospects (inter alia):
- What must be done concretely in the implementation process?
- Is the equipment adequate?
- Are there shortcomings in cooperation / communication?
- For which questions do we not have answers?
- Who must have stronger involvement in the process?

16:00 Conclusion, farewell

Workshop moderation:
Dr. Peter Heiland, INFRASTRUCTURE & ENVIRONMENT Professor Böhm and Partners (Project LABEL)

Annex 2: Presentations

The presentations shown at the workshop can be downloaded on the LABEL Website at

http://www.label-eu.eu/de/projekt/pilotprojekte/pilot-action-8.html

The following presentations are available:

- The central significance of communal planning for flood prevention management

  Peter Seifert, Regional Planning Association Upper Elbe Valley / Eastern Erz Mountains
- Specific land-use areas in flood regions

  Birgit Weber, State Directorate Dresden
- The project LABEL and the pilot project “Involving local authorities in flood risk management”

  Dr. Peter Heiland, INFRASTRUCTURE & ENVIRONMENT, Prof. Böhm and Partners
- Hazard and risk maps for communal planning: Current status, shortcomings, future challenges

  Matthias Grafe, Saxon State Agency for Environment, Agriculture and Geology
- Incentive programs for regional development: What are the roles of the aspects of flood risk precaution?

  Michael Holzweißig, Regional Planning Association Upper Elbe Valley / Eastern Erz Mountains

Annex 3: List of participation

WORKSHOP

„Einbindung von Kommunen in das Hochwasserrisikomanagement"

Mittwoch, 19.05.2010 in der Landesdirektion Dresden

Teilnehmer

Name	Institution	Unterschrift
Bloch, Wolfgang	Regionaler Planungsverband Oberlausitz-Niederschlesien	
Börner, André	Stadtverwaltung Wilsdruff	
Damme, Jürgen	Gemeinde Käbschütztal	
Doleschal, Gerhard	Gemeinde Leuben-Schleinitz	
Flörke-Kempe, Matthias	Landeshauptstadt Dresden	
Gallschütz, Christine	Gemeinde Hirschstein	
Grafe, Matthias	Landesamt für Umwelt, Landwirtschaft und Geologie	
Greis, Stefanie	INFRASTRUKTUR & UMWELT, Prof. Böhm und Partner	
Grübler, Lutz	Gemeinde Ketzerbachtal	
Haase, Kerstin	Gemeinde Röderaue	
Händel, Josephine	Landratsamt Sächsische Schweiz-Osterzgebirge	
Dr. Hasenpflug, Henry	Landesdirektion Dresden	
Dr. Heiland, Peter	INFRASTRUKTUR & UMWELT, Prof. Böhm und Partner	
Dr. Hertzog, Birgit	Landratsamt Sächsische Schweiz-Osterzgebirge	
Herm, Thomas	Landeshauptstadt Dresden	
Hille, Regina	Sächsisches Staatsministerium des Innern	
Holthaus, Olaf	Stadt Heidenau	

Regionaler Planungsverband Oberes Elbtal / Osterzgebirge | STAATSMINISTERIUM DES INNERN | Freistaat SACHSEN | LANDESDIREKTION DRESDEN | Freistaat SACHSEN

WORKSHOP

„Einbindung von Kommunen in das Hochwasserrisikomanagement"

Mittwoch, 19.05.2010 in der Landesdirektion Dresden

Name	Institution	Unterschrift
Holzweißig, Michael	Regionaler Planungsverband OE OE	
Illig, Alexander	Landkreis Görlitz - Landratsamt	
Jakob, Holger	Stadtverwaltung Tharandt	
John, Irene	Sächsisches Staatsministerium des Innern	
Kaiser, Birgit	Stadtverwaltung Gröditz	
Kohl, Bernd	Stadtverwaltung Dippoldiswalde	
Kopsch, Ines	Landeshauptstadt Dresden	
Kühl, Andreas	Sächsisches Staatsministerium des Innern	
Kutschank, Petra	Gemeinde Kreischa	
Layher, Sylke	Stadt Bad Gottleuba	
Lehmann, Janett	Sächsischer Städte- und Gemeindetag	
Lehnert, Bernd	Landratsamt Bautzen	
Markwardt, Hermann	Landratsamt Sächsische Schweiz-Osterzgebirge	
Marschner, Romy	Landratsamt Meißen	
Maucher, Kanut	Sächsisches Staatsministerium des Innern	
Mayr-Bednarz, Barbara	Sächsisches Staatsministerium des Innern	
Meier, Karl-Heinz	Landesdirektion Dresden	
Ing.Minichová, Helena	Central Bohemia Region	
Dr. Müller, Ralf	Stadt Dohna	

Regionaler Planungsverband Oberes Elbtal / Osterzgebirge | STAATSMINISTERIUM DES INNERN | Freistaat SACHSEN | LANDESDIREKTION DRESDEN | Freistaat SACHSEN

WORKSHOP

„Einbindung von Kommunen in das Hochwasserrisikomanagement“

Mittwoch, 19.05.2010 in der Landesdirektion Dresden

Name	Institution	Unterschrift
Dr. Müller, Uwe	Landesamt für Umwelt, Landwirtschaft und Geologie	—
Oeburg, Gabriela	Dolmetscherin	
Ing.Reidinger, Josef	Ministry of the Environment of the Czech Republic	—
Rendke, Ernst-Georg	Gemeindeverwaltung Priestewitz	
Richter, Mathias	Landesdirektion Dresden	
Dr. Russig, Heidemarie	Regionaler Planungsverband OE OE	
Schernikau, Stefanie	Koordinierungsstelle ELBETAL bei der Landgesellschaft Sachsen-Anhalt mbH	
Dr. Schnabel, Fritz	Sächsisches Staatsministerium des Innern	
Schneider, Beate	Stadt Bad Gottleuba	
Schwarz, Michaela	Gemeinde Quitzdorf am See	
Seifert, Peter	Regionaler Planungsverband OE OE	
Ing. Skálová, Helena	Ministry of the Environment of the Czech Republic	
Prof. Dr. Socher, Martin	Sächsisches Staatsministerium für Umwelt und Landwirtschaft	—
Steglich, Uwe	Stadt Stolpen	
Stephan, Nicole	Gemeindeverwaltung Malschwitz	—
Stepputtis, Doris	Landeshauptstadt Dresden	
Tomeit, Michael	Landratsamt Meißen	
Dr. Treml, Václav	Region Pilsen	
Tröger, Kerstin	Gemeinde Röderaue	—

WORKSHOP

„Einbindung von Kommunen in das Hochwasserrisikomanagement“

Mittwoch, 19.06.2010 in der Landesdirektion Dresden

Name	Institution	Unterschrift
Uhlig, Birgit	Stadtverwaltung Bautzen	
Wache, Frank	Landeshauptstadt Dresden	
Weber, Birgit	Landesdirektion Dresden	
Wehnert, Torsten	Stadt Radeburg	
Yanan, Wu	Regionaler Planungsverband OE OE	
Schober, Anja	Regionalplanungsstelle Bautzen – Görlitz – Dresden	
Fischer, Heidlen	Reg. Planungsverb. OE OE	
Lux, Lutz	LTV Sachsen	
Rühr, Michaela	RH Dresdner Heidebogen	