



## New Basis for Land Use Management



## living space mountain

### Permanent change!

- Landscape derives from erosion and „hazards“
- Population and settlement
- Infrastruktur and traffic
- econonmy, industry, trade
- tourism, vacation society
- betterment and vulnerability of modern technology
- climate change



## Strategic goals

- Appraisalment of catchment areas
- general and objektiv traceable criteria, regional connections
- holistic examination of present processes (risks and utilisation)
- integretated synopsis of the discrete influences and their mutual effects

## Project goals

- Implementation of an integrated Riverspace-Management as instrument for planning
- Identification of future risk scenarios and floods also considering the climate change
- Concepts for Land- and Biotopmanagement for sustainable developement and transnational cooperations
- riverspace orientated Input for regional developement



# Innovative approach

- Integral synopsis of concerned faculties
- Development of new instruments
- Consideration of a trans-national component
- A transparency and comprehensible assessment of issues for (objective) decisions ("data driven") in consideration of alternatives

**1. Catchement area of the Ybbs (typical foothill and hilly land)**

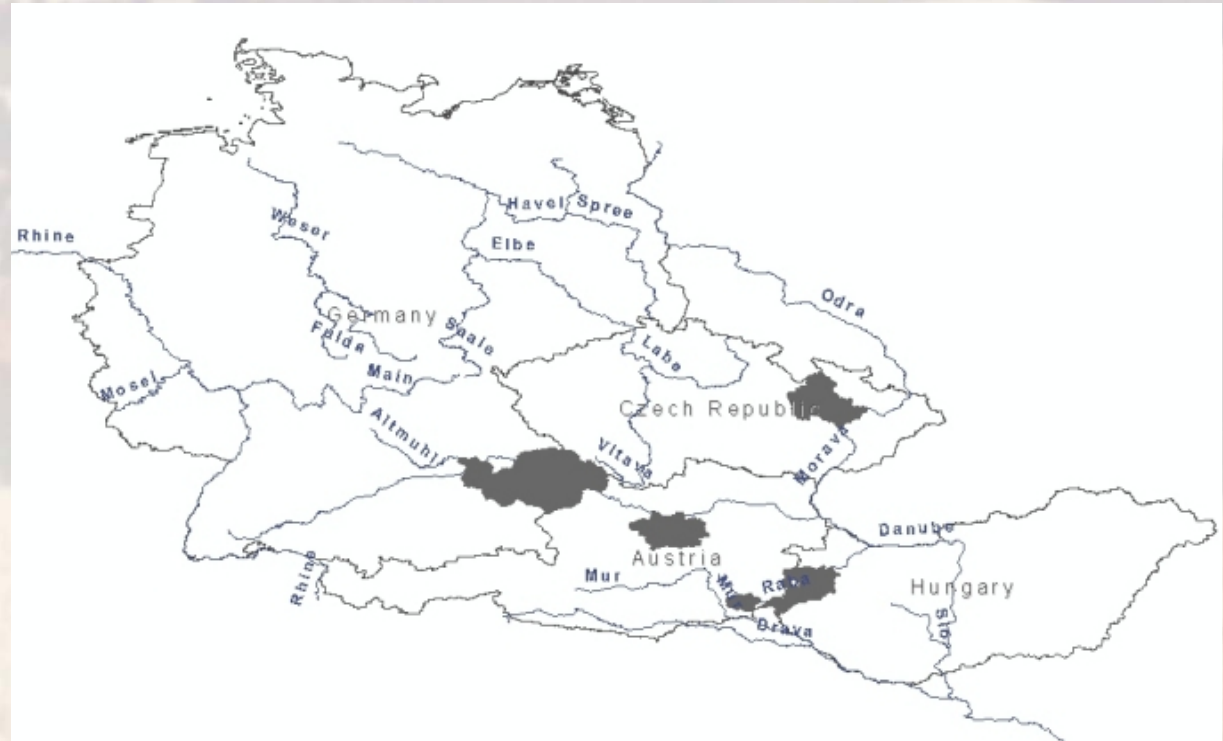
**Catchement basin of the Ybbs (approx. 1370 km<sup>2</sup>)**

**2. District Feldbach (Raab)**

**3. Comparable areas from transnat. projectpartners**

- Czech republic
- Hungary (Raab)
- Germany (Vils, Rott)

## project areas:



# Trans-national Dimension

- Improvement of the Danube is only achievable by an integrated management of the tributaries. The key to success is represented by new land-use strategies and co-operation with Agriculture.
- An effective improvement is a consequence of a close co-operation with countries in the eastern part of the Danube basin. This applies too for tributary-areas when risk management actions takes place.
- Proving of new strategies for land-use possibilities in inundation areas; close co-operation with acceding countries
- Creation of additional retention space requires a trans-national co-ordinated approach



# Partners

- **Lead Partner:** Ministry of Agriculture, Forestry, Water management and Environment
- **National Partners:** BWBV, WLV–Sektion Wien, BFW, BAawi, ABB NÖ, LFD NÖ, K Landesplanung, OÖ Raumplanung
- **Transnational Partners:**
  - **Bavaria:** StMLU
  - **Greece:** Ministry of Agriculture
  - **Che Republic:** Fa. Ekotoxa
  - **Hungary:** North Transdanubian Water Authority





# Austrian Partners:

**Partner**

**Federal Ministry of Agriculture, Forestry, Environment and Watermanagement  
Forest Division**

**Subdepartment  
Landscape Development  
and Risk Prevention**

**Subdepartment  
Forest Spatial Planing**

**Federal Ministry of Agriculture, Forestry, Environment and Watermanagement  
Forest Division**

**Federal Ministry of Agriculture, Forestry, Environment and Watermanagement  
Water Division**

**Forest Technical Service  
Section Lower Austria**

**Federal Departements of Hydraulic Engineering –  
Hydrographic Offices of:**

**Hydrographic  
Office**

**District Office of Southwest Lower Austria**

**Lower  
Austria**

**Upper  
Austria**

**Styria**

**Carinthia**

**Forest Authority**

**Federal Government of Carinthia**

**Federal Government of Upper Austria**

**District Office of Scheibbs**

**Departement of Spatial Planning**

**Departement of Spatial Planning**

**District Office of Amstetten**

**Agricultural Authority**

**Federal Ministry of Agriculture, Forestry, Environment and Watermanagement  
Rural Development Division**

**Federal Ministry of Agriculture, Forestry, Environment and Watermanagement  
Forest Division**

**Departement of Spatial Planning**

**Federal Office and Research Center of Forest**

**Nature Protection Authority**

**Institute of Agronomic Science**

**Institute of Forest Ecology**

**Institute of Wood Inventory**

**Game and Fishing Authority**

**Federal Government of Lower Austria**

# Analysis and Models

- New foundation for the relation of precipitation and run-off
- Risk analysis of geogenic natural risks in mountainous regions
- Transport of solids, hydraulics, erosion & transport
- classification of natural and utilisation potentials regarding functional aspects (soil, site, water- and nutriment balance)



# Model scales

- Process-oriented consideration of the potential of natural hazard
- Assessment of the potential of utilisation regarding the importance for users
- Intersection of natural hazards with the potential of utilisation
- Conflict of objective: representation and assessment concerning the diverse user audience
- Criteria for land-use planning



# Prevention-Implementation-Integration

- Assessment of risk requires adequate process models
- Process models allows an accurate and complete compilation of protection functional aspects of each land utilisation category as well as the identification of their performance
- Operationality of effect relations

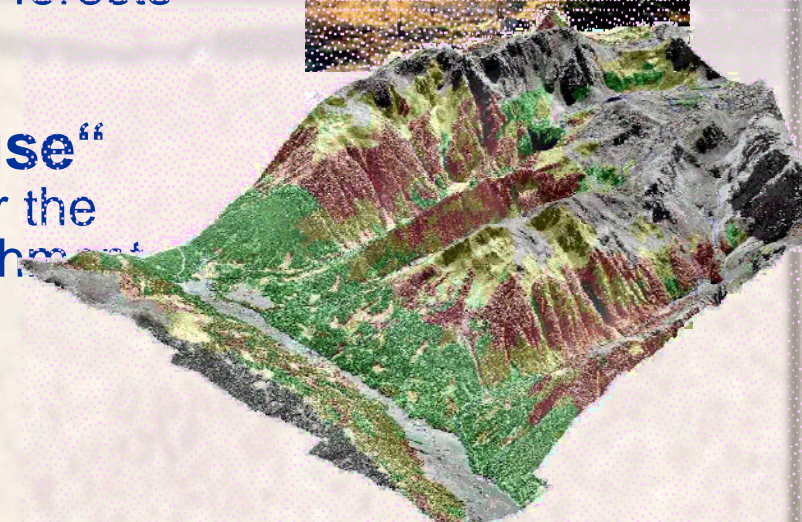
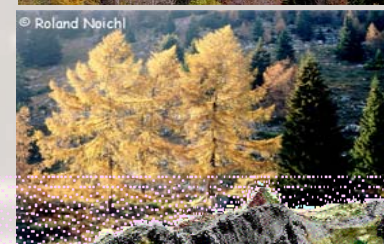
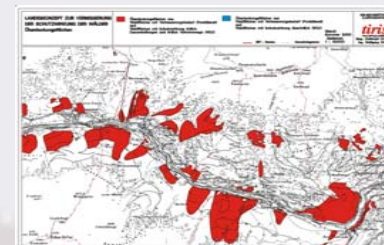
## Expected Results

- direct effects: contouring and determination of areas that need to be sanified urgently
- long-term advantage of regional planning: conflict-regulation
- sustainable developement for the purpose of a preventiv areal management
- synergy.effects: focused acting of all concerned administrative offices.



## ILUP is to answer questions!

- **Modul 1: „Habitat analysis“**  
objective, traceable criteria in order to address procedures concerning natural hazards on local and regional level
- **Modul 2: „Utilisation analysis“**  
ascertainment of goal conflicts
- **Modul 3: „Instruments to optimize utilisation“**  
Areal modelling of soil, vegetation and water balance as basis for a new management of protection-forests
- **Modul 4: „Overall concepts for land use“**  
Elaboration of types of land use objectives for the establishment of a management plan for catchment areas.





# Synthesis

