



Mitigation planning in Province Forlì-Cesena

Thematic seminar Thesprotia -Epirus
21-22 September 2011





The Plan of the Hydrogeological Layout (HL) of the Basin Authority of the Romagna Rivers in the Province Forlì-Cesena area

The Plan of the Hydrogeological Layout includes the mitigation plan for the hydrogeological risk in the Province Forlì-Cesena area.

- 1) **Lead partner:** Basin Authority of the Romagna Rivers
- 2) **Partners:** the Authority is composed by two Committees:

Political Committee

- Region Emilia-Romagna politician
- Province Forlì-Cesena politician
- Province Ravenna politician

Technical Committee: technical representatives of

- Region Emilia-Romagna (Soil Defense and Basin Technical Services)
- Ministry for Agriculture and Forestry
- Ministry for Public Infrastructures and Works
- Ministry for the Environment
- Province Forlì-Cesena
- Province Ravenna
- Water management bodies
- Regional Agency for Environment

- 3) **Scope/subject:** The Plan of the Hydrogeological Layout is addressed to hydrogeological risk (landslide and flood) and doesn't include any emergency plan.





The Plan of the Hydrogeological Layout (HL) of the Basin Authority of the Romagna Rivers in the Province Forlì-Cesena area

- 4) **Steps:** the process of risk assessment leads to the definition of an intervention priority list by the Technical Committee. The Political Committee drafts a plan of the mitigation measures according to the available resources based on the list of the interventions formerly given. The mitigation plan is included in the Plan of the HL and it includes also a series of regulations that limits the land use in order to reduce the impacts that can determine further risk phenomena.
- 5) **Contents:**
 - 1) The territory of the Basin Authority of the Romagna Rivers (general features of the territory and environmental emergencies)
 - 2) General considerations about the environment state
 - 3) The Regional and Provincial programming
 - 4) The legal framework
 - 5) Methodological hypothesis for the basin plan drafting
 - 6) The plan extract for the hydro-geological risk
- 6) **Decision process:** The Basin Authority internal technicians make the risk analysis and a definition of the hydraulic and geomorphologic risks. The Technical Committee, taking into account the results outlined by the risk assessment, elaborates an intervention priority list. The list includes priorities and costs. Finally the document is analysed by the Political Committee that eventually approves it with modifications on the basis of further political objectives and priorities.





The Province Forlì-Cesena's Civil Protection Emergency Plan

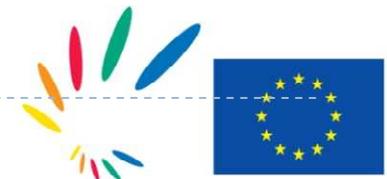
The Province Forlì-Cesena's Civil Protection Emergency Plan includes some mitigation measures (mitigation plan). The Plan was drafted in 2008 and it will be updated next year.

1) **Lead partner:** Province Forlì-Cesena – Civil Protection Unit

2) **Partners (forest fire risk):**

- Prefecture (central government provincial office)
- Civil Protection Agency of Emilia-Romagna Region
- Fire Brigades
- National Forest Service
- Volunteering Associations for Civil Protection

Scope/subject: the Emergency Plan is a multi hazard plan. It deals with seismic, forest fire, hydro-geological and industrial risk. Starting from different risk analyses (some of them can be included in other plans), this plan defines the response of civil protection system in case of disasters.





The Province Forlì-Cesena's Civil Protection Emergency Plan

4) **Steps:** starting from regional guidelines, the Province Forlì-Cesena elaborated a specific thematic map in which the provincial forest areas are classified according to their potential fire risk (fire susceptibility). The map includes also the exposed elements (villages, hospitals, schools, infrastructures, productive sites, etc.) in order to define emergency mitigation measures in case of fire. Fire-fighting is therefore considered as a measure to protect the exposed elements through fire intervention teams. Other measures include rules and regulations aimed to reduce fire risk in high risk periods; i.e. mayors can forbid to set fires in certain areas in certain periods.

5) **Contents:**

Introduction: legal framework

1) Forecasting: state-of-the-art of the territory, forest fire classification according to typology*, risk maps**

2) Prevention

3) Resources (infrastructures, means, human)

4) Rules and regulations

5) Updated map of the burnt areas***

6) Model of intervention



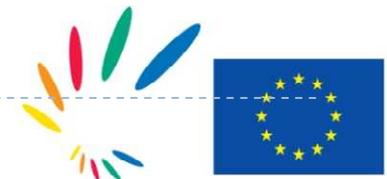


The Province Forlì-Cesena's Civil Protection Emergency Plan

* Civil Protection makes a distinction between a PURE forest fire and an INTERFACING forest fire. The latter can threaten isolated houses or villages, so Civil Protection must intervene to prevent people safety. In case of pure forest fire, the National Forest Service must intervene.

** In the next Plan's updating, a risk map of the interfacing forest fires will be added.

*** This map is updated by National Forest Service on the basis of the information collected by Municipalities.





The Province Forlì-Cesena's Civil Protection Emergency Plan

6) Decision process:

The technicians of Provincial Civil Protection Unit prepares a draft document with data and submits it to a Technical Committee made up of representatives by Province Forlì-Cesena and the local Prefecture for further analyses and approbation.

After that the document is submitted to the Civil Protection Provincial Committee, composed by Municipalities, Mountain Unions, and all the public bodies managing safety at various level.



7. Lessons: necessary steps in the process

- Creation of a technical working group made up of representatives of the different bodies and organisations dealing with the subject
- Checking the risk analysis results
- Identifying the works and measures needed to reduce or eliminate the risk
- Definition of a technical priority list of the mitigation instruments (in order to make an area safe after a disastrous event)
- Identification of the political priority list of intervention according to the territorial needs, balances and available resources
- Before being published, the draft of the plan **should** be at disposal for suggestions, recommendations, enquiries by local authorities, citizens, lobbies and associations and unions of the sector

8. Lessons: necessary contents of the plan

- Correct identification of the mitigation measures
- Technical rules setting limits on land use in order to reduce the risk sources or the exposed elements risk
- Regional and municipal regulations aimed to the implementation of both active and passive mitigation measures. The regulations shift the burdens and costs of mitigation measures from the public to the private part (citizens, companies).
- Identification of the specific tasks of the different subjects involved (who does what)
- As the programme of intervention can foresee the realisation of the works in a long-term period, the mitigation plan should have a hint to the emergency plan defining the main emergency measures that must be taken for people safety.

9. Lessons: further considerations

- The creation of a technical working group made up of representatives of the different bodies and organisations dealing with the subject allows a synergy of action that helps to shorten the time and to gain immediate access to the information necessary to draft the plans.
- The legal framework of the plan is widely shared and decided upon by the different public bodies managing safety at different levels after having shared the draft with the affected subjects (local authorities, citizens, lobbies, associations, etc.). In this way rules and limitations are introduced gradually and with the previous information of the interested categories.
- Sometimes the political priority list does not match the technical priority list as political choices take into account different issues from technical reasons.