



Flood defence and other uses

In the majority of the countries hydromorphological alterations made, at least in part, for **flood risk management** purposes have been identified as placing water bodies at risk

Hydromorphological alterations for **land drainage** purposes (particularly in northern Europe) and for **water supply** (including irrigation in southern Europe) were also mentioned as important

The group focused on flood defence



Synergisms – facilitating restoration goals

Flood risk is increasing

Providing traditional engineering solutions everywhere is becoming uneconomic

Flood managers see making space for river and coastal flooding as a key part of future flood risk management strategies

Such an approach is potentially a ‘win win’ for flood risk management and the water environment (e.g. restoration to good ecological status)



Links to policy integration

To make space for flooding and promote this synergy, we will need supportive agricultural policies and urban land use planning policies

Recommendation

This issue should be taken forward as part of the follow up activity on policy integration



Flood risk management planning

Effective flood risk management planning has to take account of the river basin scale and long-term trends (e.g. in climate)

There are obvious advantages of making use of the national and international river basin planning systems being set up under the WFD

Recommendation

The EU flood management initiative should take account of the potential synergies with river basin management planning



Other synergisms

In some cases, land use policies have increased flood risk and risks to the water environment

e.g. intensive agriculture in upland areas leading to increased rates of rainwater run-off; urban development on flood plains increasing the pressure to provide flood defence

Recommendation

This shared need for synergistic land use and agricultural policies should be addressed in the follow up activity on policy integration



Hierarchy of mitigation measures – in terms of costs

- Change maintenance practice or stop maintenance
- Design improvements within the constraints of existing hard engineering structures
- Design improvements involving replacement of hard engineering structures with softer approaches

Design improvements timed to coincide with planned renewal

Design improvements NOT timed to coincide with planned renewal



Sharing information on mitigation measures

There is a lot of information on mitigation measures at least in some countries

Key recommendation

Want to collate this information into a list of potential mitigation measures for hydromorphological alterations associated with flood risk management



Information on effectiveness of mitigation measures

- The ecological effectiveness of different mitigation measures
- The flood risk management effectiveness of different mitigation measures

e.g. Increase information on effectiveness from case studies; information on the degree of expert consensus

- Timing of effectiveness – the improvements resulting from some mitigation measures (e.g. stop maintenance) will take many years



The list should not be prescriptive

- The choice of appropriate mitigation measures will depend on local circumstances
- Often flood defence structures are multi-purpose
- **Mitigation measures need to be planned at a river basin level**



Link to other activities

The follow up activity should be coordinated with work on the EU flood action programme