Flood Management - The Landowner's Perspective

Legal responsibilities, constraints and incentives, and natural flood management.

Rob Wise
Environment Adviser
NFU East

Riparian Responsibilities

- Landowners are responsible for ensuring the free flow of water into and from their stretch of ownership ensuring the protection of upstream and downstream owners
- Other responsible authorities may have duties or powers to manage that flow
- The Environment Agency (EA) have powers to maintain 'main rivers'
- Internal Drainage Boards (IDBs) have duties to main their drainage channels
- District authorities have powers to regulate activities on watercourses

The realities of funding river maintenance

- EA powers have been central government budget-backed
- In Anglian region national funding has been supplemented by the General Drainage Charge (GDC)
- In IDB districts farmland is levied alongside revenue from Council tax
- Capital projects have taken the lion's share of central funding

The Norfolk Context

- Flood threats come from both fluvial and coastal influences
- Climate change is exacerbating the threats through increased storminess and sea level rise
- Is this winter the new normal – higher persistent rainfall and tidelocking
- Could the flooding of farmland have been avoided?
- Compensation for farmland flooding?

Looking to the future in Norfolk

- Norfolk Strategic Flooding Alliance – helping the here and now
- Adaptation versus ‘hold the line’
- Funding as the main driver of decision making
- Broadland Futures Initiative (BFI)
- Use all the tools in the box – including natural flood management

Natural Flood Management

- Recent £25 million expansion of central government funding
- The programme aims to:
  - reduce local flood risk using NFM;
  - provide wider benefits to the environment, nature and society;
  - accelerate new and existing opportunities for NFM delivery and financing;
  - Further improve evidence of NFM by filling knowledge gaps.
- Builds on experience of local projects – e.g. Broadland Catchment Partnership

What is funded:

River and floodplain management	Woodland management	Run-off management	Coast and estuary management
River restoration	Catchment woodland	Soil and land management	Saltmarsh and mudflat management
Floodplain/wetland restoration	Cross-slope woodland	Headwater drainage management	Sand dune management
Leaky barriers	Floodplain woodland	Run-off pathway management	Beach nourishment
Offline storage areas	Riparian woodland		

It will not pay for future and on-going maintenance.

Environmental Land Management Scheme (ELMS): Actions for surface and groundwaters

Action	Duration	Annual payment	Action's aim
Manage grassland for flood and drought resilience and water quality	10 years	£938 per ha	Grassland is managed to reduce runoff from rainwater, and store more surface and groundwater through changes such as creating topographical features that will retain water after periods of high rainfall
Manage features on arable land for flood and drought resilience and water quality	5 years	£1,241 per ha	Features on arable land, such as sediment traps, bunds, swales and the area surrounding them, are managed to reduce runoff from rainwater and store more surface and groundwater

ELMS – Actions for rivers, streams and floodplains

Action	Duration	Annual payment	Action's aim
Flood mitigation on arable reversion to grassland	5 years	£740 per ha	There is dense grass sward connected to a watercourse to store water from streams and rivers during flood events, and allow flood water to spread across a floodplain and naturally subside
Flood mitigation on permanent grassland	5 years	£330 per ha	There is a dense grass sward to store water from streams and rivers during flood events, and allow flood water to spread across a floodplain and naturally subside
Supplement: Enhanced floodplain storage	Same as base action	£366 per ha	Floodwater storage within floodplains is increased so that they hold more water for longer by managing features such as swales (channels) and temporary ponds or depressions
Connect river and floodplain habitats	10 years	£1,242 per ha	River habitats are restored to create a mosaic of wetland habitats to connect the river and floodplain
Make room for the river to move	20 years	£1,489 per ha	New and changing areas of river and wet floodplain habitats are restored and created, with water allowed to flood seasonally from and drain back into the river, so the risk of downstream flooding is reduced
Manage riparian and water edge habitats	10 years	£1,186 per ha	There is a 12-24m wide area of water-dependent habitat between the land and the water's edge of rivers and streams (riparian habitats) and lakes and ponds

Conclusions

- Very real existential challenges
- Combination of approaches
- Farming is part of the solution
- Getting multiple benefits

Rob.wise@nfu.org.uk