

Catchment Management



Natural Flood Management (NFM)

NFM involves using techniques to restore or mimic natural functions to help store more water in the catchment and slow the flow of water downstream. Methods include leaky dams, peatland restoration, storage areas and tree planting.

Storage Areas

Storing water on the floodplain or in upstream storage areas during heavy rainfall reduces the volume in the river's channel and reduces peak flows downstream. Outlet structures can return the water to the river at a controlled rate.

Sustainable Drainage Systems (SuDS)

SuDS can be used to slow, retain and infiltrate rainwater runoff through water butts, permeable paving, rain gardens and more. On a larger scale, SuDS such as swales, ponds and wetlands can be used.

Agricultural Land Management

Techniques to reduce runoff on farmland include buffer strips, cross drains and contour cultivation across fields instead of up and down. Certain machinery practices help to reduce soil compaction which increases water capacity and soil health.

Gravel Management

Removing gravel from pinch points such as bridges can help watercourses flow more freely. Whilst this can increase channel conveyance, it may also speed up the flow of water downstream.

Property Flood Resilience (PFR)

Individuals can use PFR in their homes and businesses to increase their resilience to flooding. Options include flood barriers on doors, automatic airbricks, non-return valves and pumps.

Flood Risk Management Schemes

Flood schemes combine hard engineering and other techniques to reduce flood risk to communities. Methods include flood walls, embankments, storage areas and coastal management.

Monitoring

Gauge boards and telemetry systems on watercourses help to monitor flood conditions and act as early warning systems.

Highway Maintenance

Gullies on highways and other assets such as soakaways can play a big part in managing surface water runoff. Maintenance of assets is important to ensure they work in heavy rainfall events.

Community Resilience

Working together and forming flood action groups helps communities become more resilient. They can work with key agencies to better understand and manage their flood risk.