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# Using Development Plans to Manage Flood Risk: A Guide for Local Authorities

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Flooding has significant impacts, including extensive economic costs, for individuals, businesses and local authorities within the affected areas. It is therefore in the interests of local authorities to exercise their planning functions in a way that reduces flood risk.

## Development plan policies

Through their development plans, local planning authorities can take a proactive approach to addressing the flood risk associated with development, such as that caused by the pressure on drainage systems, surface water run-off, and building in flood risk areas. Development plan policies can seek to reduce flood risk at both the strategic and individual development level.

Examples of policies for the strategic management of flood risk include:

- Earmarking high flood risk areas for water compatible/less vulnerable development/use (eg amenity open space, water-based recreation)
- Prohibiting vulnerable development/use (eg basement dwellings, caravans for permanent residence) in high flood risk areas
- Earmarking low flood risk for vulnerable development/use
- Encouraging development in low flood risk areas (eg allowing higher density development, less onerous developer requirements)
- Planning for the provision of flood risk management infrastructure (eg flood barriers, drainage systems, flood water storage), including how it will be funded
- Planning for the provision of refuge areas, access and escape routes
- Exploiting the opportunities presented by flooding, such as by encouraging innovative flood risk management industries and the utilisation of flood plains for water dependent activities (eg water sports)

Examples of policies for the management of flood risk in relation to individual developments include requirements for:

- The incorporation of property level resistance and resilience measures (eg flood guards over doors) in development in flood risk areas
- The management of surface water (eg the use of permeable surfacing materials, incorporation of SUDS or other appropriate on-site drainage systems, surface water run-off limits)
- Use restrictions (eg prohibition on habitable use of ground floor/basement level)
- Incorporation of access, escape and refuge areas on larger developments sites
- Developer contributions to flood risk management infrastructure (eg flood barriers, off-site drainage systems)



Planning Resource 7 Nov 2014, Drainage duty: delivering sustainable urban drainage systems (SuDS) | Planning Resource

# Maximising the effectiveness of development plan policies

The effectiveness of the development plan flood risk management policies can be enhanced by:

- Integrating flood risk management into other policy areas, such as health and well-being, housing, social inequality, environmental protection, infrastructure, and economic development
- Taking a long-term approach to reducing flood risk that looks beyond a short-term response to flood events
- Taking account of local circumstances and needs, such as the particular geography and drivers of flood risk in the area and the local development needs
- Including clear quantitative outcomes or indicators that relate to the development plan's flood risk management policy objectives to enable their implementation to be monitored and enforced and their effectiveness evaluated

## Limitations of development plans

There are limitations on the extent to which local planning authorities can use their development plans to manage flood risk, including:

- The current planning policy requirement that development plans be justified, and therefore evidence based, which restricts the ability of local planning authorities to take a precautionary approach to flood risk management. However, the proposed reforms to the National Planning Policy Framework due to take effect from Spring 2023 will remove this requirement.
- The conflict that can arise between policies to manage flood risk and the requirements for local planning authorities to meet housing need. Development plans therefore need to strike a balance between managing flood risk and facilitating development.

# Conclusion

Development plans can be used to prevent, control, mitigate and respond to flooding, facilitate decision-making and send a clear message to developers. However, care needs to be taken to ensure that flood risk management policies do not limit the areas available for development or increase the cost of development to the extent that they prevent local planning authorities from meeting housing need. This will be a particularly difficult exercise for local authorities in areas with a high risk of flooding and high housing demand.

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Anna McClean's research focuses on planning and environmental law



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<https://www.ncl.ac.uk/law/>

McClean, A 'Planning for Floods: An Analysis of Planning Law and Planning Practice in Flood Risk Management' (PhD thesis, Newcastle University 2022)

McClean, A 'Using Legal Planning Tools to Manage Flood Risk: A Guide for Local Authorities' (Research Briefing, 2023)