



OPW

Oifig na
nOibreacha Poiblí
Office of Public Works

Implementation of the Flood Risk Management Guidelines

27th January 2023

Flood Risk



Kilmainham, October 2011 (journal.ie, 2011)



Cork City, 2009 (OPW stock photo)



Athlone, November 2009 (OPW stock photo)

OPW'S Role



Rialtas na hÉireann
Government of Ireland



OPW Oifig na
nOibreacha Poiblí
Office of Public Works



Three Pillars of FRM

Prevention

- Avoiding or removing a flood risk

Protection

- Reducing the likelihood and/or severity of flood events

Preparedness

- Reducing the consequences of flooding



Flood Protection

€400m



51

flood relief schemes completed



11,900

properties protected

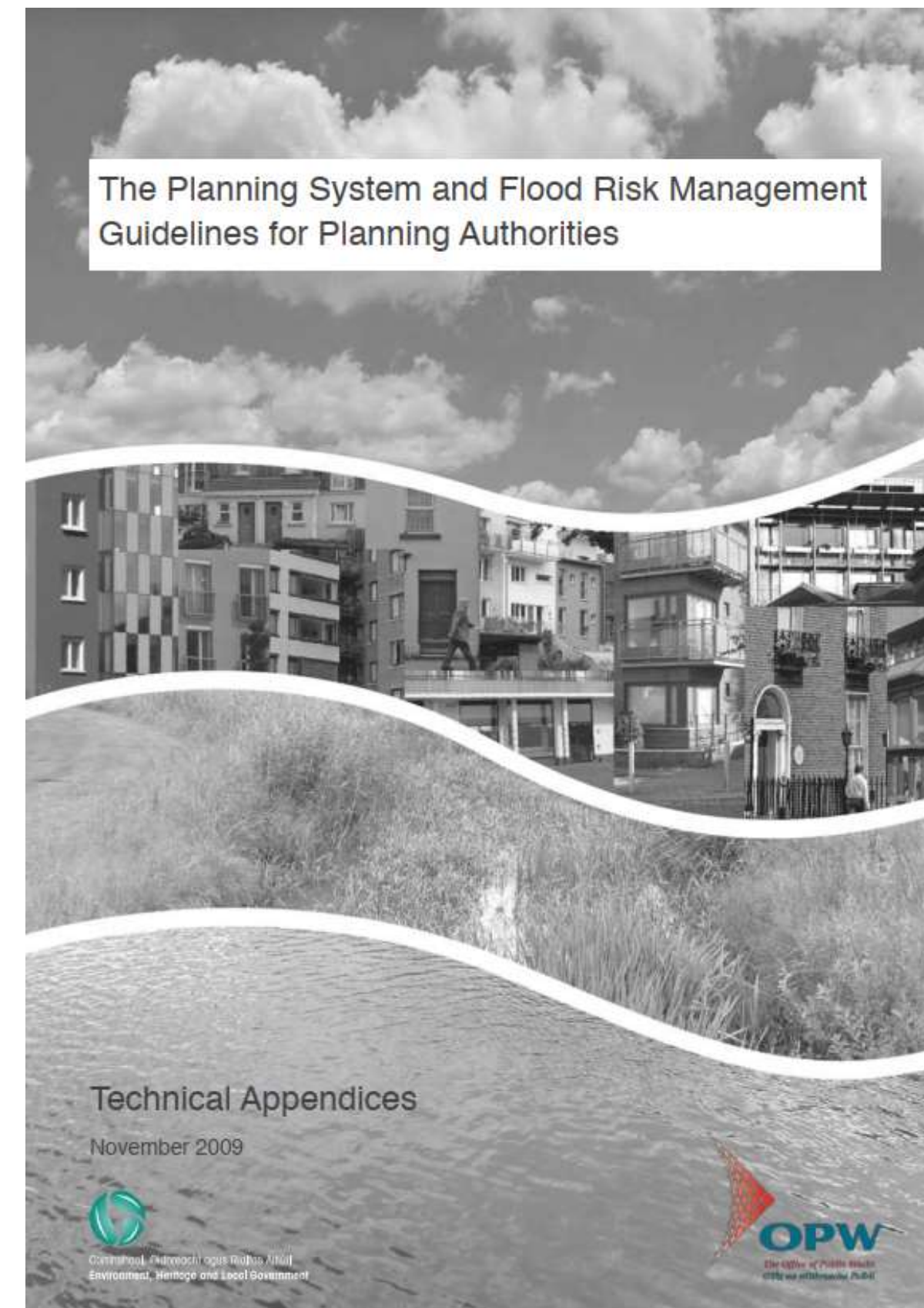
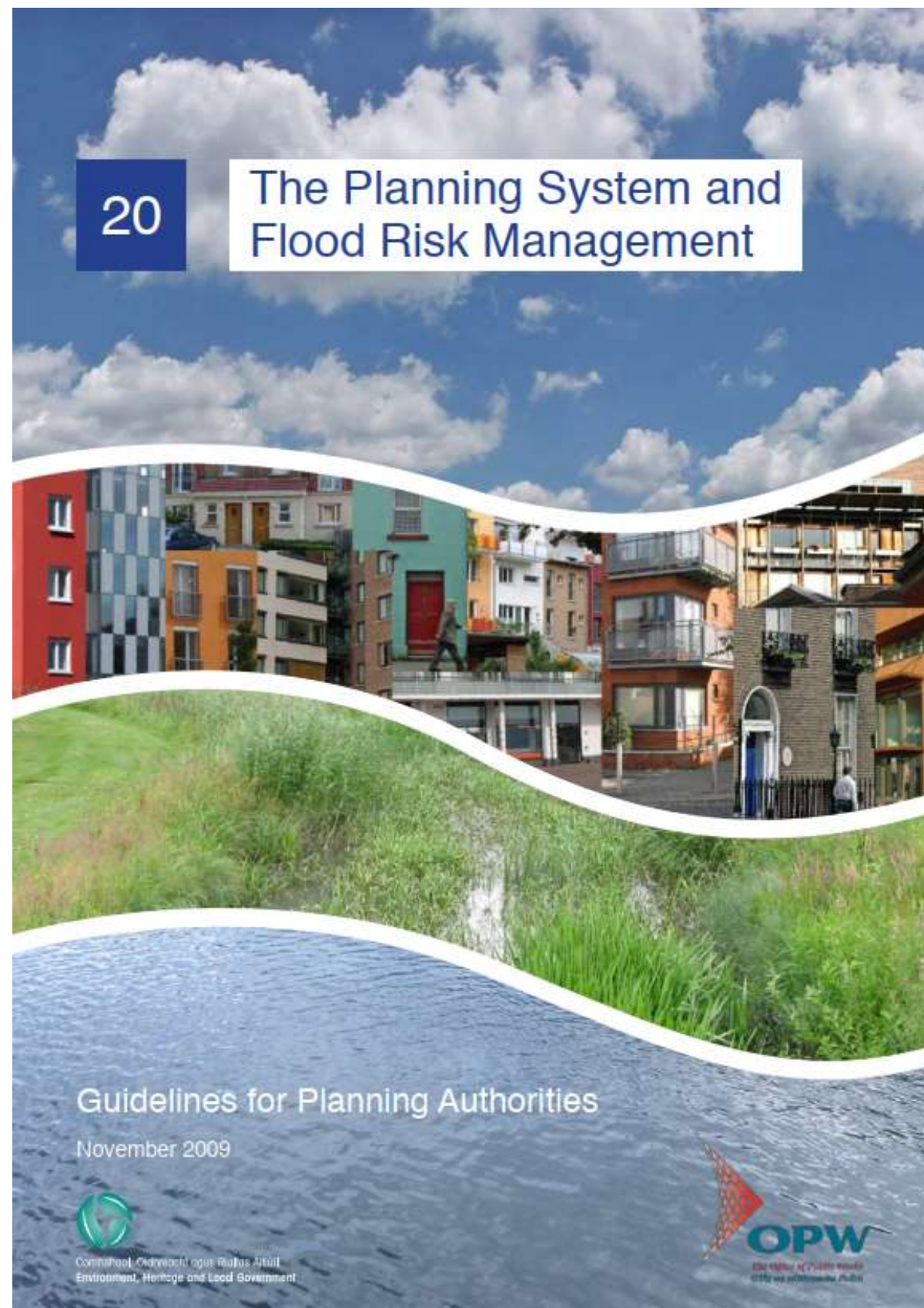
91

flood schemes at design, planning or construction

up from 33 in 2018

€1.3b

Planning Guidelines



Objectives of Guidelines



Avoid inappropriate development in areas at risk of flooding

Avoid increasing flood risk elsewhere

Management of residual risks

Avoid unnecessary restriction



Shannonbridge County Offaly December 2015

Key Principles

1. Earliest stage
2. Avoiding risk
3. No alternatives
4. Appropriate land-use



Key Principles



5. Precautionary Approach

6. *before* development plans have been reviewed:

- i. Vary
- ii. Assess
- iii. Await

Key Principles



7. Safeguard land for flood risk management

8. Manage risk

9. SEA

Flood Zones



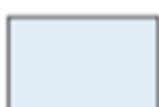
Flood Zone A – High probability ($> 1\%$ or 1 in 100 for river flooding or $> 0.5\%$ or 1 in 200 for coastal flooding)



Flood Zone B – Moderate probability ($> 0.1\%$ or 1 in 1000 for river and coastal flooding)



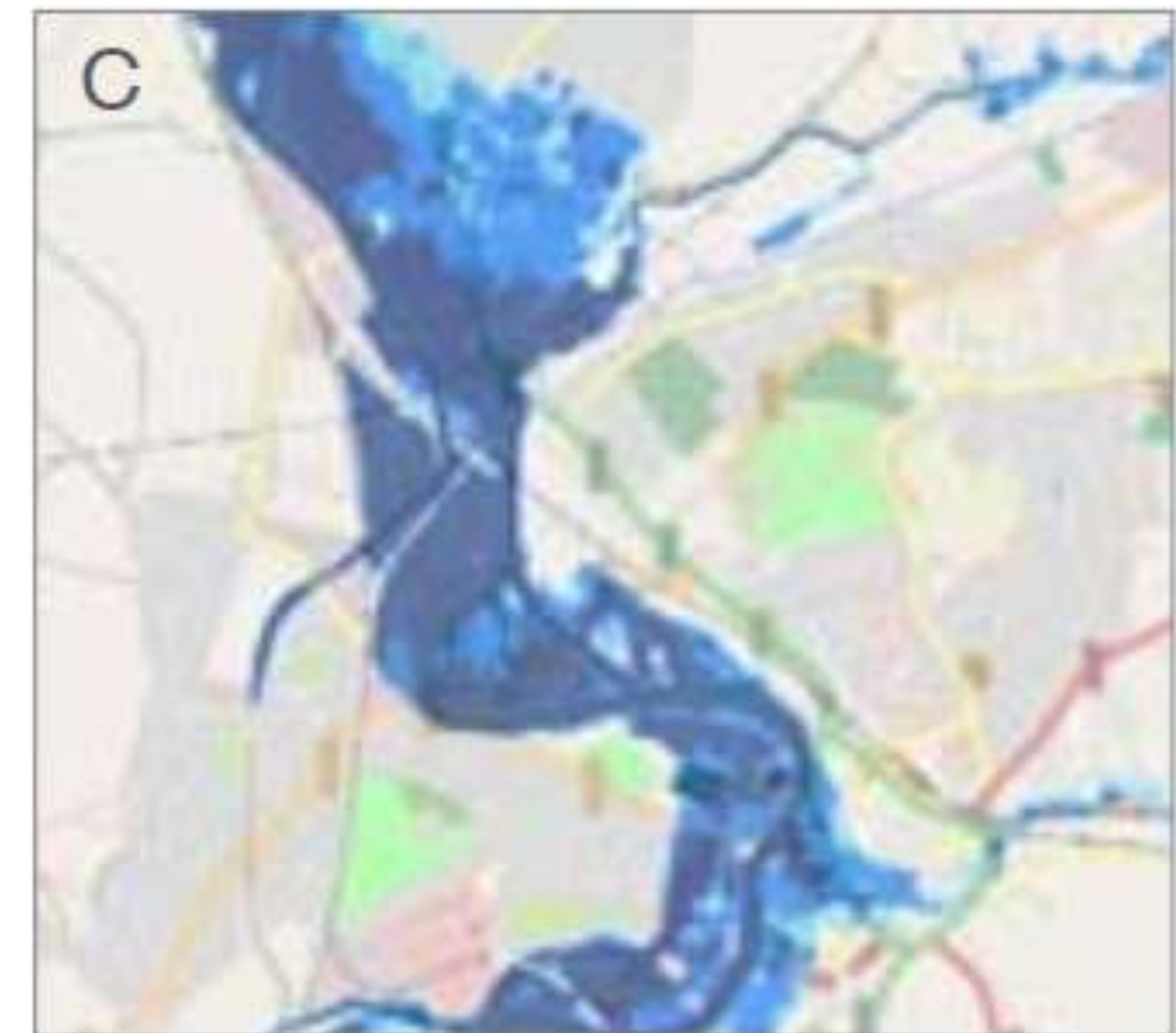
Flood Zone C – Low probability ($< 0.1\%$ or 1 in 1000 for river and coastal flooding - all areas of the plan which are not in Zones A or B)



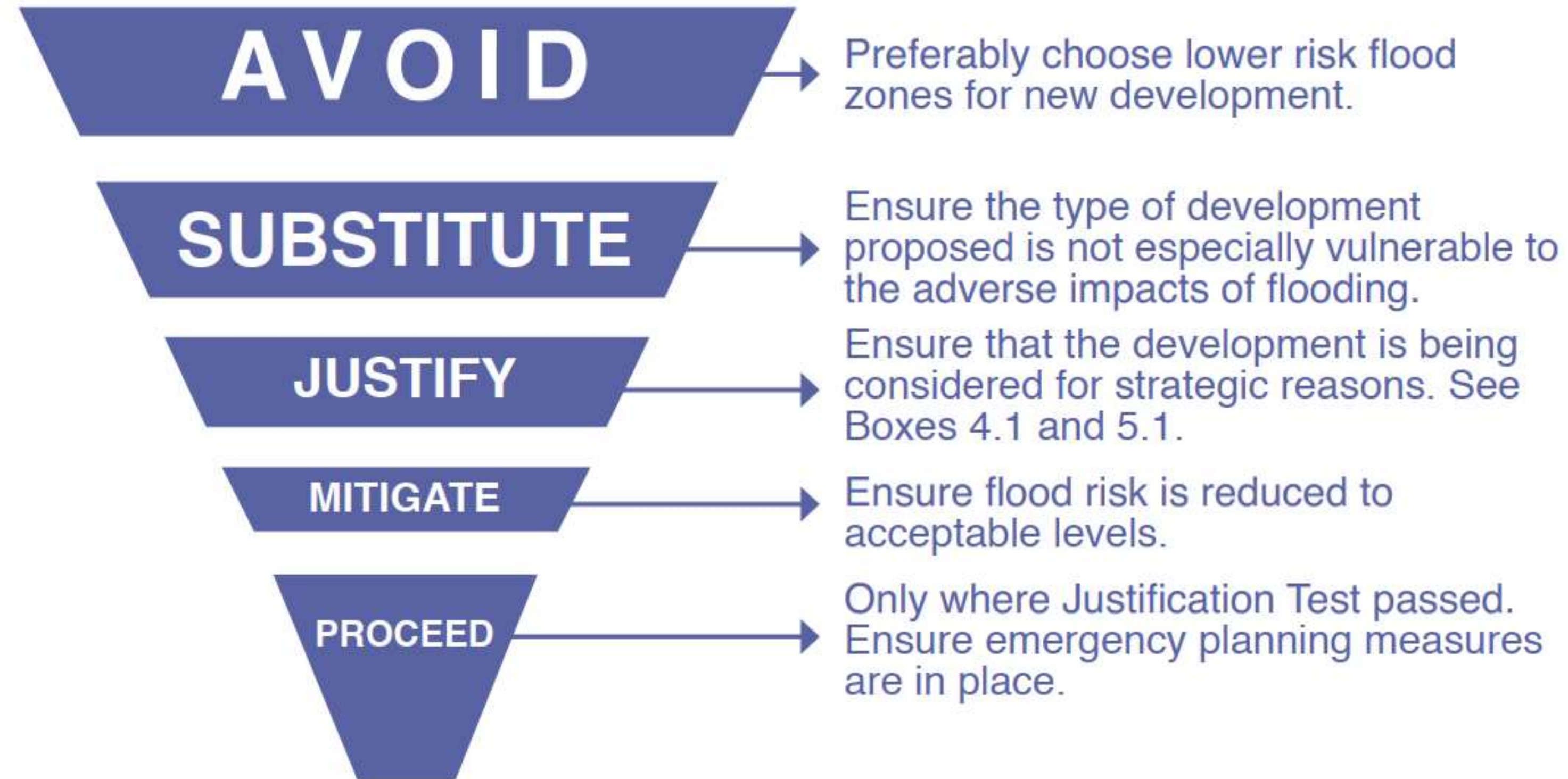
Flood Relief Schemes and Defended Areas



Ignore presence of flood defences - Defended Area Remains Flood Zone A/B



Sequential Approach



Avoid



Avoid areas prone to flooding

Avoid areas that could potentially be prone to flooding in the future

Avoid lands required for current and future flood management





Substitute

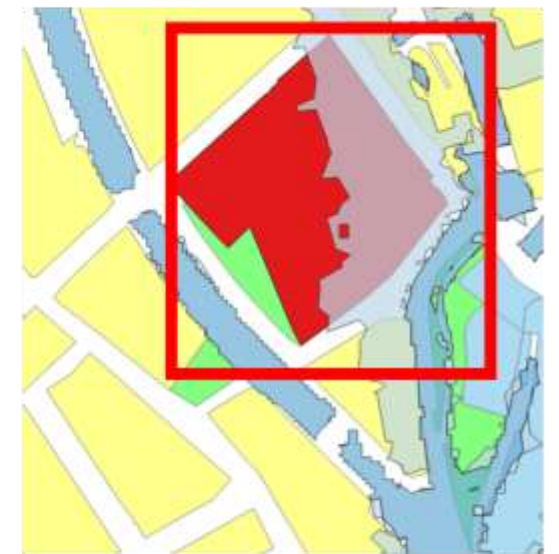
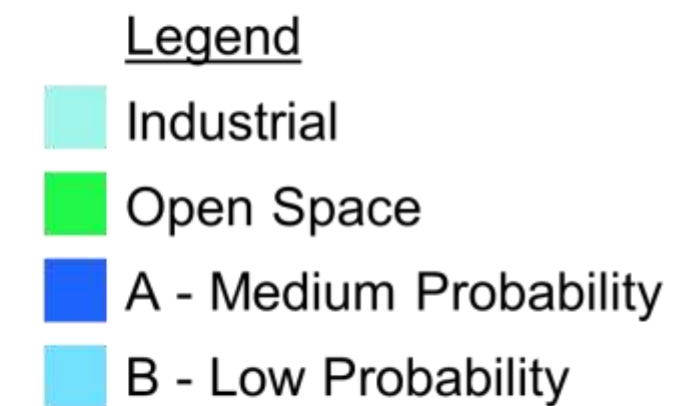
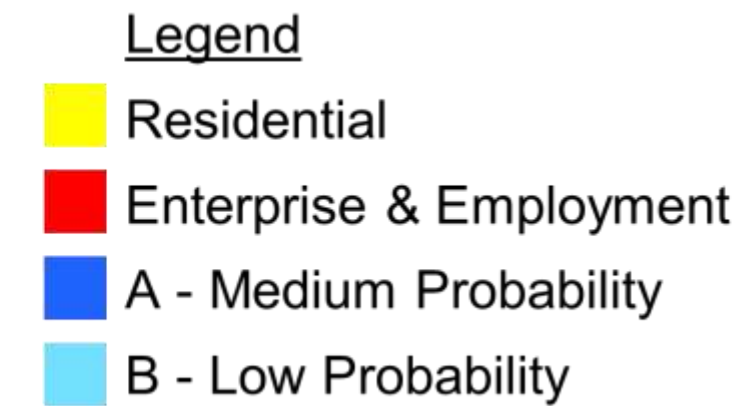
Lower vulnerability land use in high or moderate flood probability areas

Appropriate Development

Zone A - Only water-compatible

Zone B - Water-compatible
- Less vulnerable, only if adequate lands are not available in Zone C

Zone C - All development is appropriate



Justify

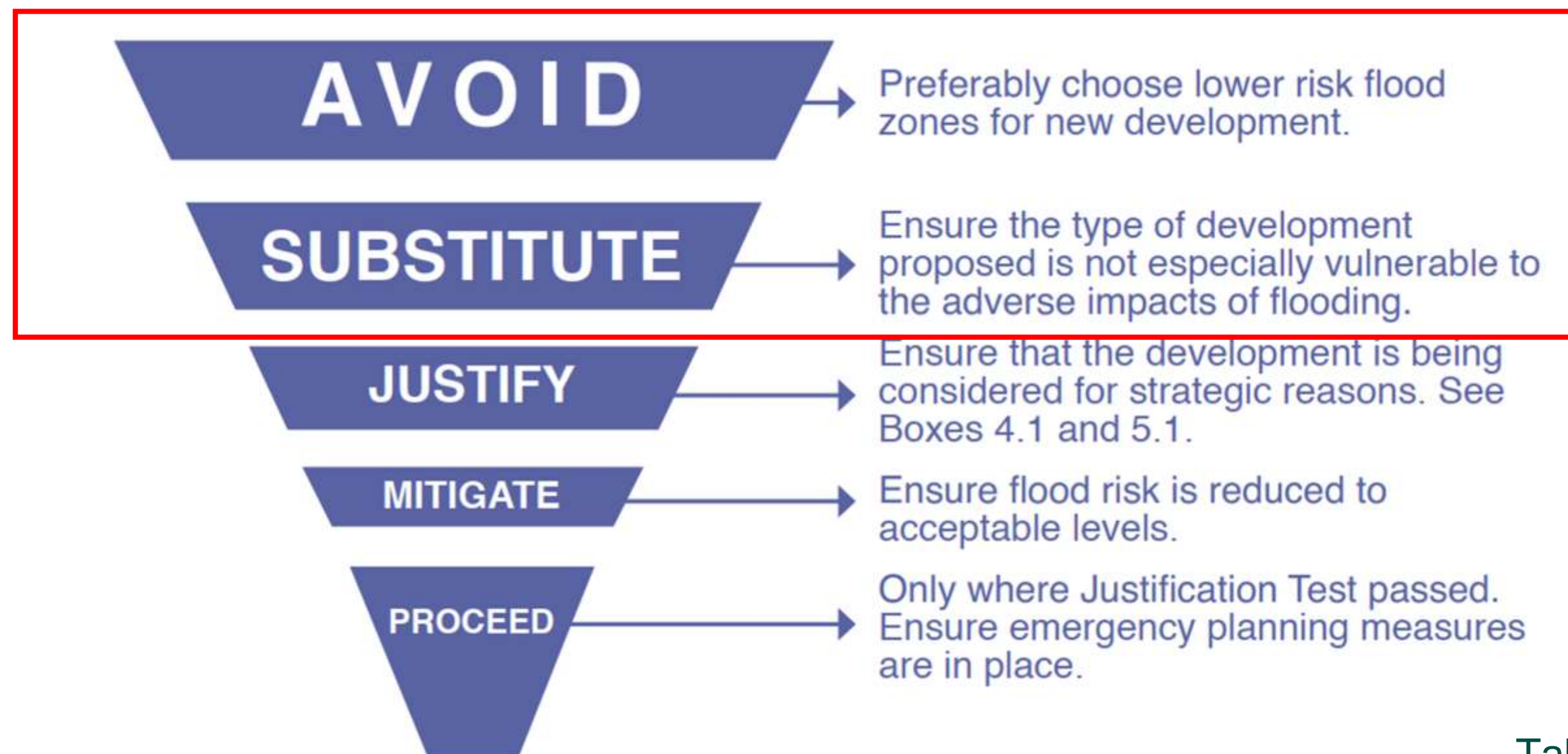


Table 3.2

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

Note: Planning Circular PL 2/2014

Justification Test for Development Plans (Box 4.1)

All Criteria Must be Satisfied



Criterion 1: The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans, or under the Planning Guidelines or Planning and Development Act 2000, as amended



Justification Test for Development Plans



Criterion 2(i): The zoning of the lands for the particular development type is essential to facilitate regeneration and/or expansion of the centre of the urban settlement.



Waterford City Urban Regeneration

Justification Test for Development Plans



Criterion 2(ii): The zoning of the lands for the particular development type comprises significant previously developed and/or under-utilised lands.



Justification Test for Development Plans



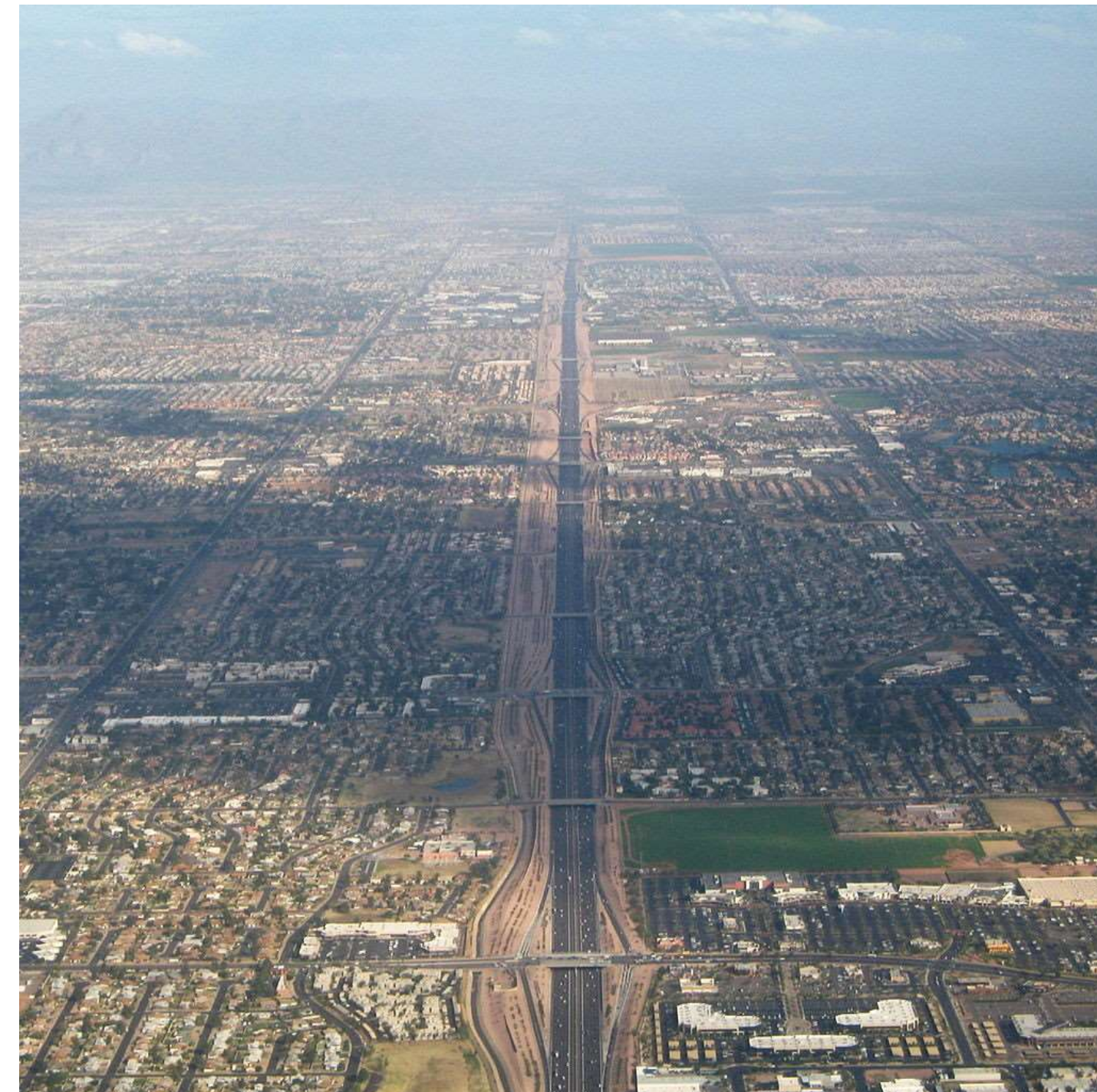
Criterion 2(iii): The zoning of the lands for the particular development type is within or adjoining the core (centre for a broad range of employment, retail, community, residential and transport functions) of an established or designated urban settlement.



Justification Test for Development Plans



Criterion 2(iv): The zoning of the lands for the particular development type will be essential in achieving compact and sustainable urban growth.



Justification Test for Development Plans



Criterion 2(v): There are no suitable alternative lands for the particular development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.



Justification Test for Development Plans



Criterion 3: A flood risk assessment to an appropriate level of detail has been carried out which demonstrates that flood risk to the development can be adequately managed and the development will not cause unacceptable adverse impacts elsewhere.

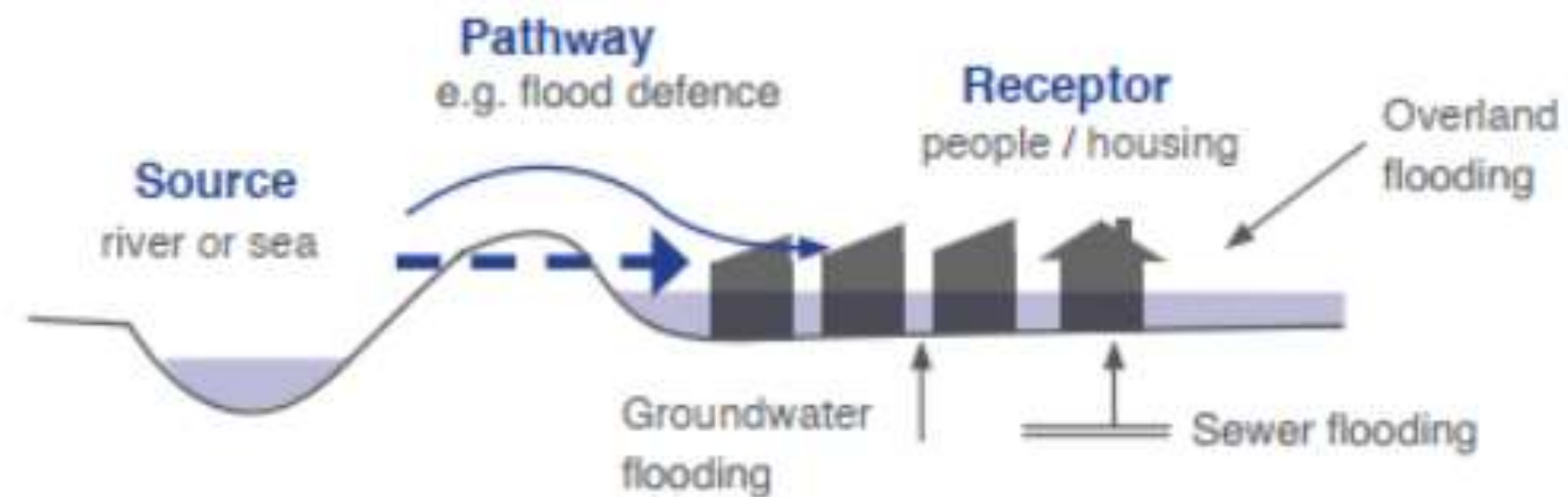


Fig. 2.2: Source-Pathway-Receptor Model

Mitigate

Reduce Risk to / from permitted development and **will not** increase flood hazard and risk to other locations:

Structural measures

embankments, walls, storage reservoirs, diversion channels, land-raising, raising floor levels or individual flood barriers

Non-structural measures –

flood warning, effective flood emergency response, or resilience measures



SuDS



Rialtas na hÉireann
Government of Ireland

Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas

Water Sensitive Urban Design
Best Practice Interim Guidance
Document



Develop strategies for SW

Guidance on SuDS

Identify area based SuDS

lawaters.ie/nature-based-suds/

Contact Us



Planning authorities can contact us for assistance on the implementation of the Guidelines or to arrange consultation meetings on draft plans at:

floodplanning@opw.ie

Other flood risk management queries can be sent to:

floodinfo@opw.ie