



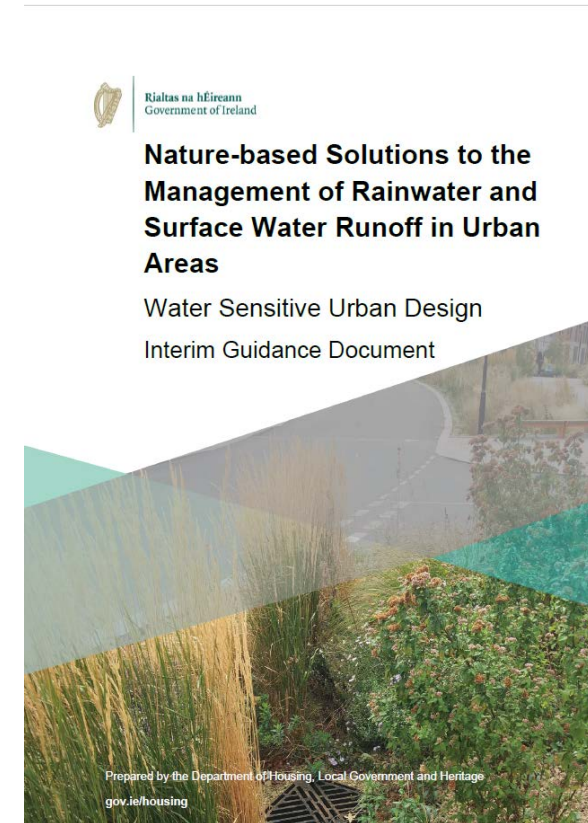
Nature-based Urban Surface Water Management

National Implementation Strategy

Interim Guidance Document

Draft DMURS Advice Note

Webinar 8th. March 2022

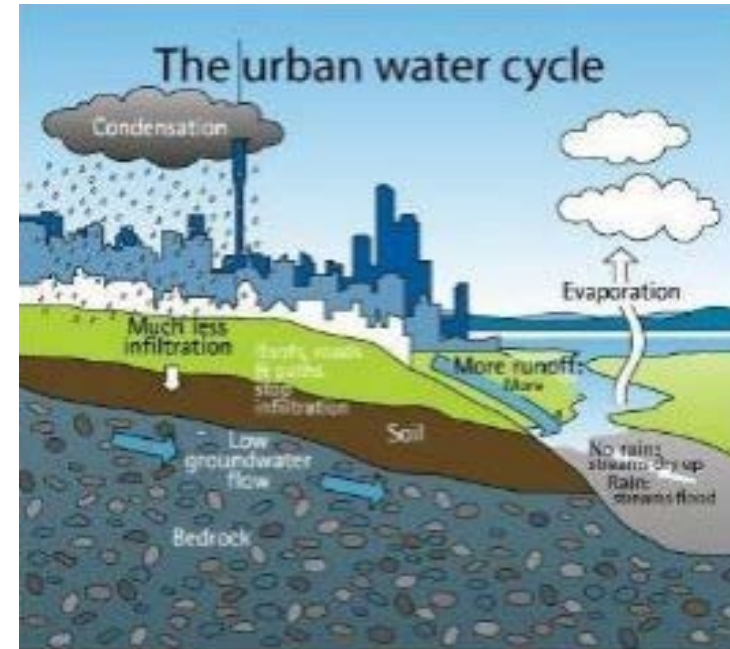


Introduction and Scope

- Regulatory Background – WFD and RBMP (3rd. Cycle)
- Planning Background – NPF 2018 – in particular, National Policy Objectives 57 and 58
- Climate Change and Adaptation
- Integrated Sustainable Urban Design as set out in DMURS
- Use of nature-based solutions to support walking, cycling, placemaking and biodiversity.

Rainfall in Urban Environment

- Natural water cycle compared to Urban
- Urban Creep and Impermeable surfaces
- Environmental Impact of runoff:
 - Direct Impact on water bodies of urban runoff
 - Combined Sewer Areas and CSOs
 - Culverting and channelisation of water bodies
- Pluvial Flood Risk in a changing climate



Urban Water Cycle

- **Climate Change and Rainfall**
 - Impact of Climate Change on existing urban drainage systems based on hydraulic models and “Return Periods”
- **Climate Adaptive and Resilient Urban Design**
 - Climate Adaptive Design: the capacity of an urban area to adapt over time as climate and rainfall patterns continue to change.
 - Climate Resilient Design: the extent to which an urban property or area, having experienced flooding, can be restored to normal use.

Nature Based and Water Sensitive Urban Design

- A Plan and Design-Led Multidisciplinary Approach
- Urban planting and landscaping to manage rainwater and as part of the overall urban design.
- Use planted areas to define space for cyclists and pedestrians
- Use of tree pits as part of urban rainwater management



Nature Based and Water Sensitive Urban Design

- Moving away from hard surfacing to a greener approach in accordance with DMURS philosophy.
- Multiple Functions for Urban Spaces, Public Realm, Open Spaces, Amenity Areas, Car Parks
- DMURS Advice Note being drafted to cover this approach to urban design.



Rain Garden



Channel



Filter Strip



Swale

Implementation

- Identifying Opportunities at an early stage
- The Role of Planning
- The Role of Funding Agencies and Assessment of Projects
- Project Terms of Reference / Brief
- Stakeholder and Community Engagement
- Project Design, Management and Delivery



Care and Maintenance

- Designing For Long Term Care and Maintenance
- Use of Contracted Maintenance Period
- Responsibility For and Funding Of Ongoing Care and Maintenance
- Community Involvement in Care and Maintenance of Green or Planted Areas
- Public Health and Safety



It is now over to each of you to take that first step, identify the opportunities and incorporate appropriate Nature-based management of urban rainwater into your own area and your own projects.

We need Champions and Examples

Guidance Document link. <https://bit.ly/3GQLnrz>

Thank You

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