



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Urban Planning and Nature Based Surface Water Management: From Theory to Practice

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Policy and Incorporation of Green & Blue (G&B) Infrastructure

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Environmental challenges in urban catchments



- ***Complex environments and problems***
- ***Decades of development***
- ***Ever increasing pressures***
- ***Challenge to manage water sustainably***
 - ***Precipitation***
 - ***Flowing through and under***
 - ***Waste water generated***
- ***Planning system has a critical role***



Growing interest and demand for Nature-Based Solutions



Nature-based solutions around a long time

Copious guidance, studies and pilots

How widely are such solutions implemented in practice ?

EU Green Deal

Reinvigorated promotion

Driven by Climate adaptation/mitigation

But multiple benefits for Climate-Water-Biodiversity



Programme for Government

Strong commitment

**Programme
for Government**

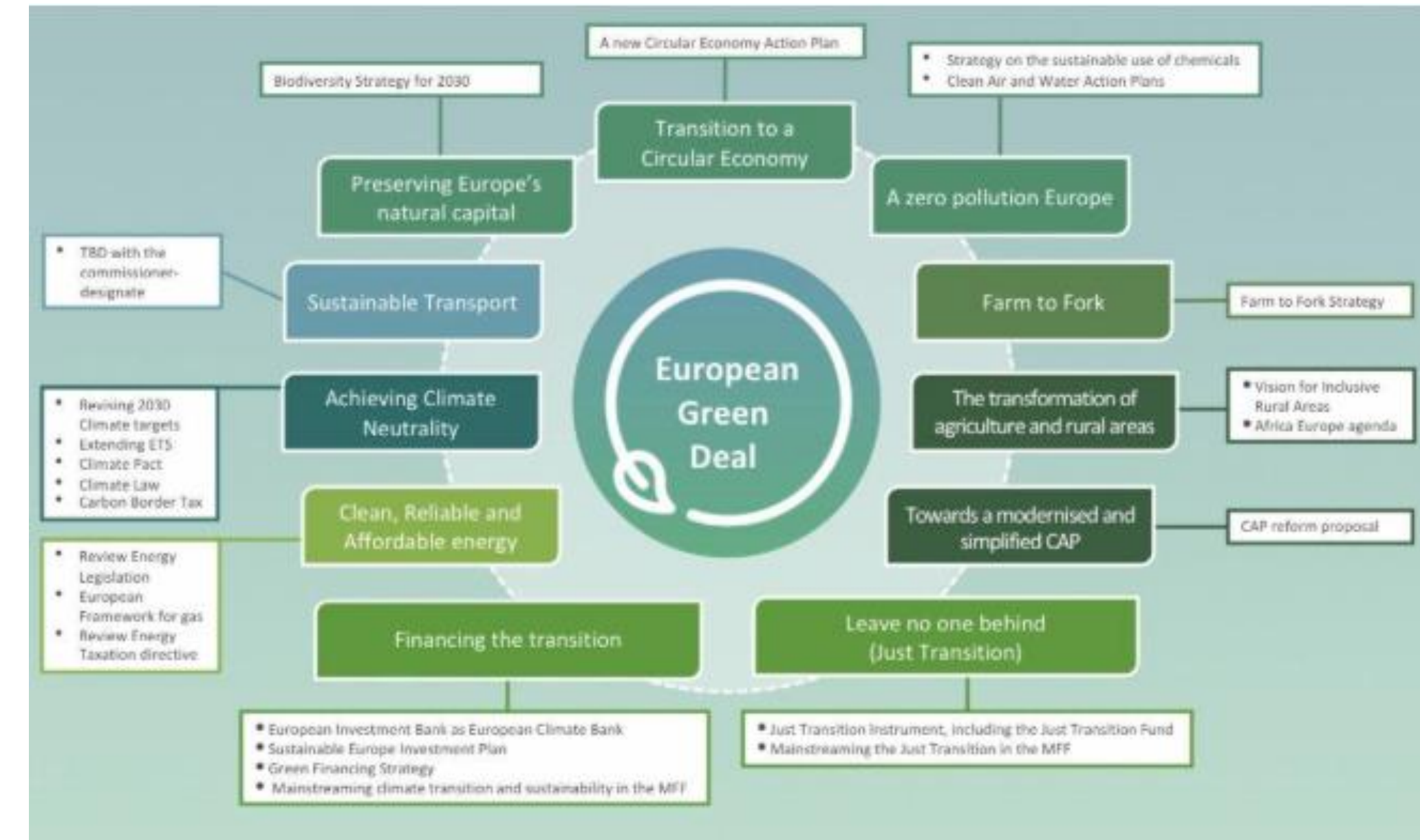
Our Shared Future

European Green Deal

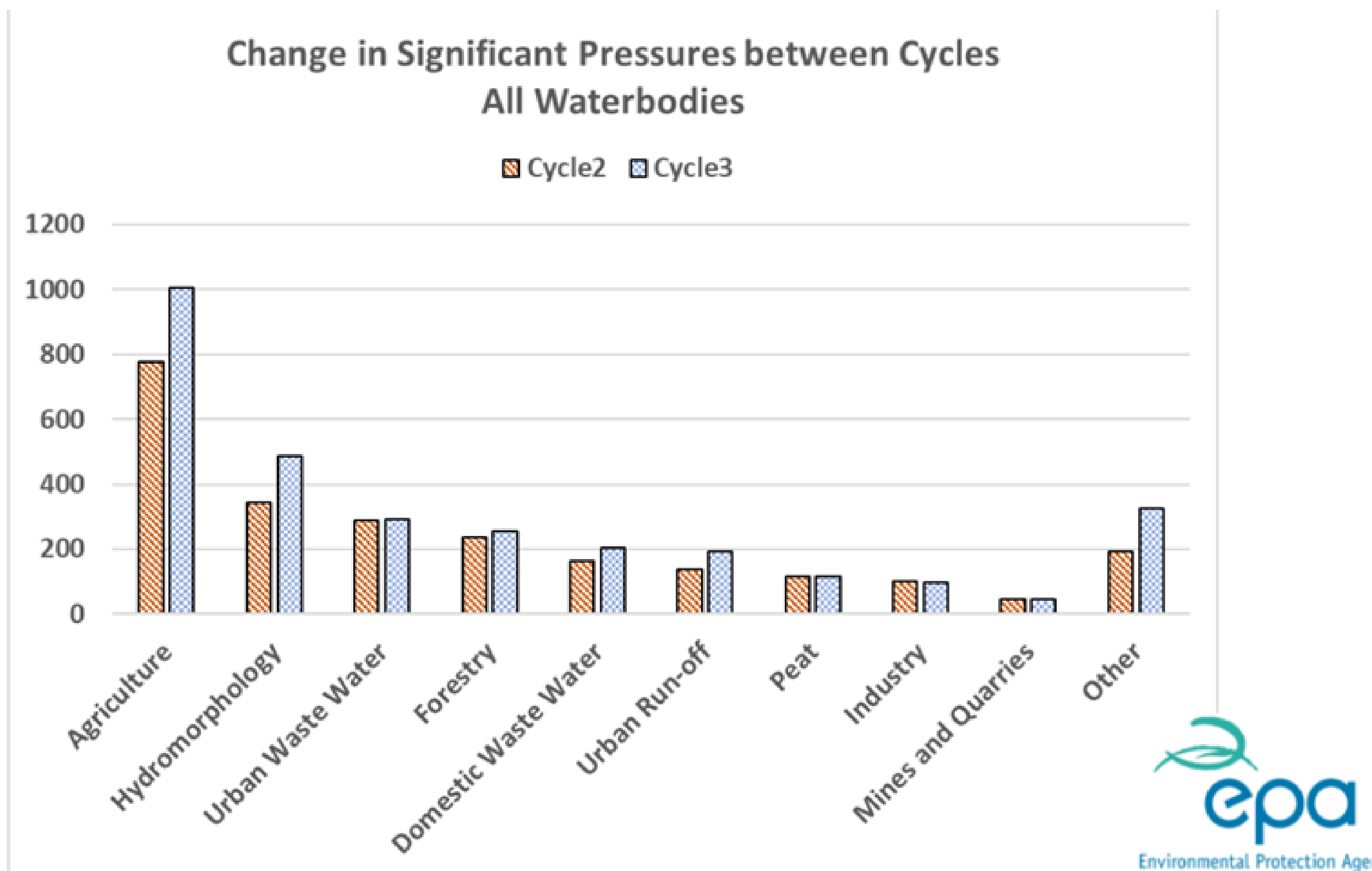


Plan to make the EU's economy sustainable

- by turning climate and environmental challenges into opportunities.
- 25% of the EU budget dedicated to climate action - a significant proportion will be invested in biodiversity and nature-based solutions.

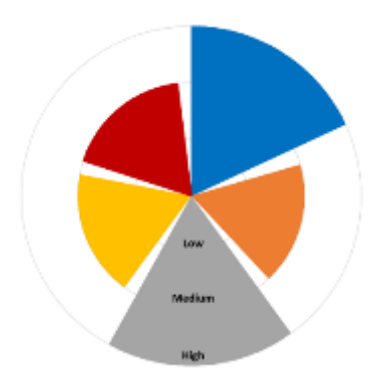


Urban environment and WFD water impacts



Urban pressures

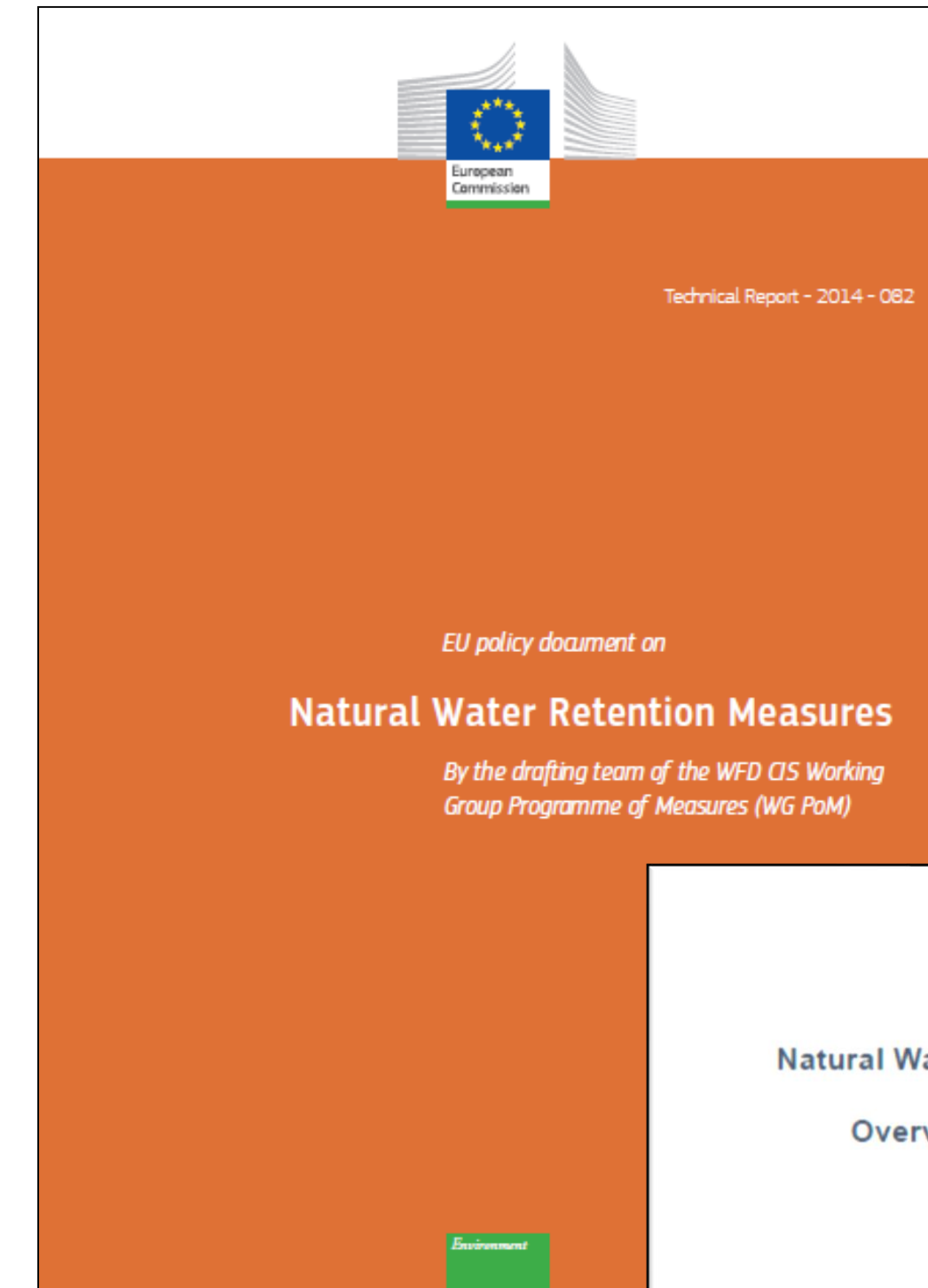
- Misconnections
- Small pipe discharges
- Leaky sewers
- Runoff from paved and unpaved areas
- Contaminated groundwater



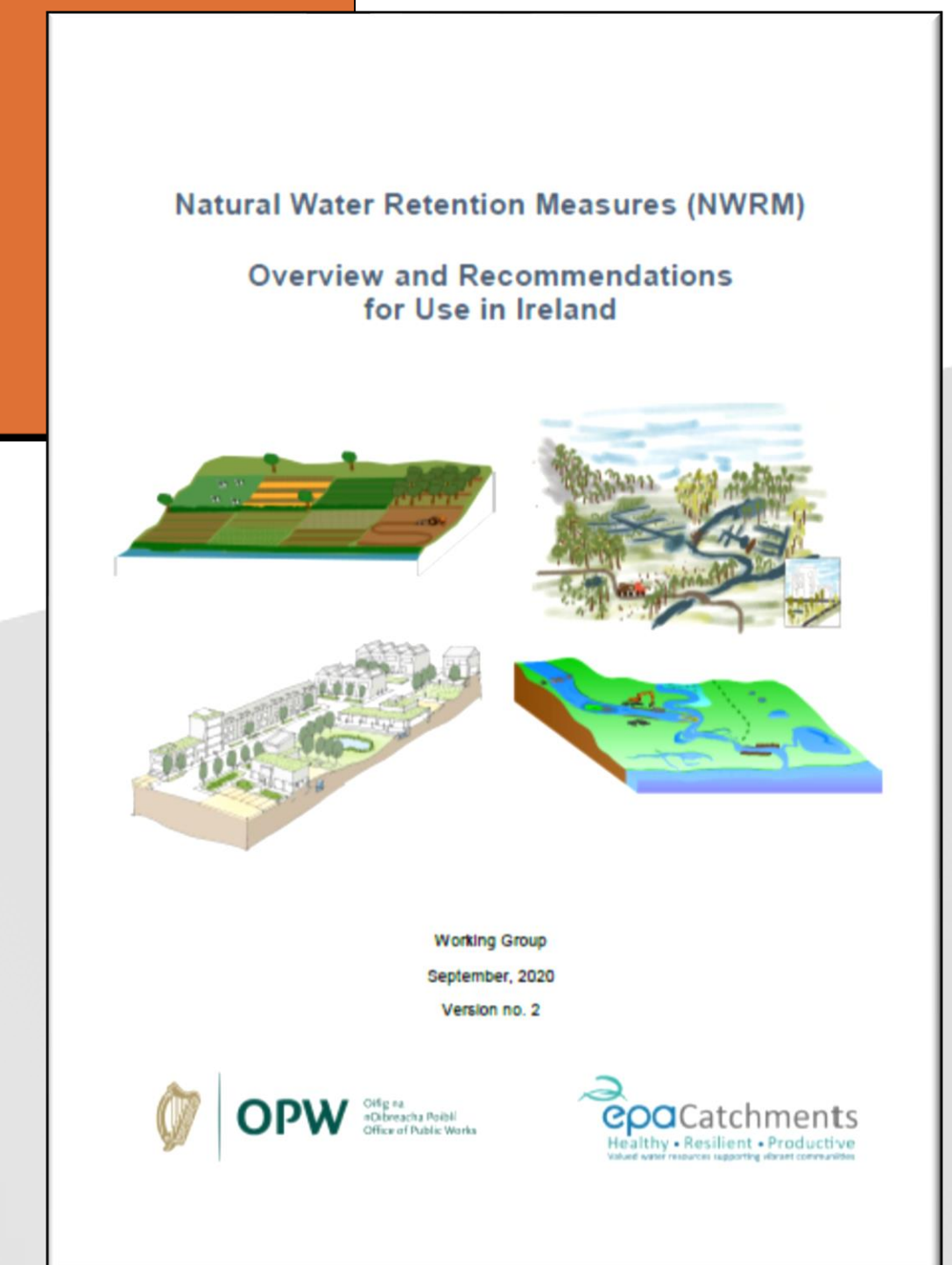
Natural Water Retention Measures



- EU Policy Document (2014)
- National review and recommendations (EPA & OPW) 2020
- Equally relevant to rural and urban catchments



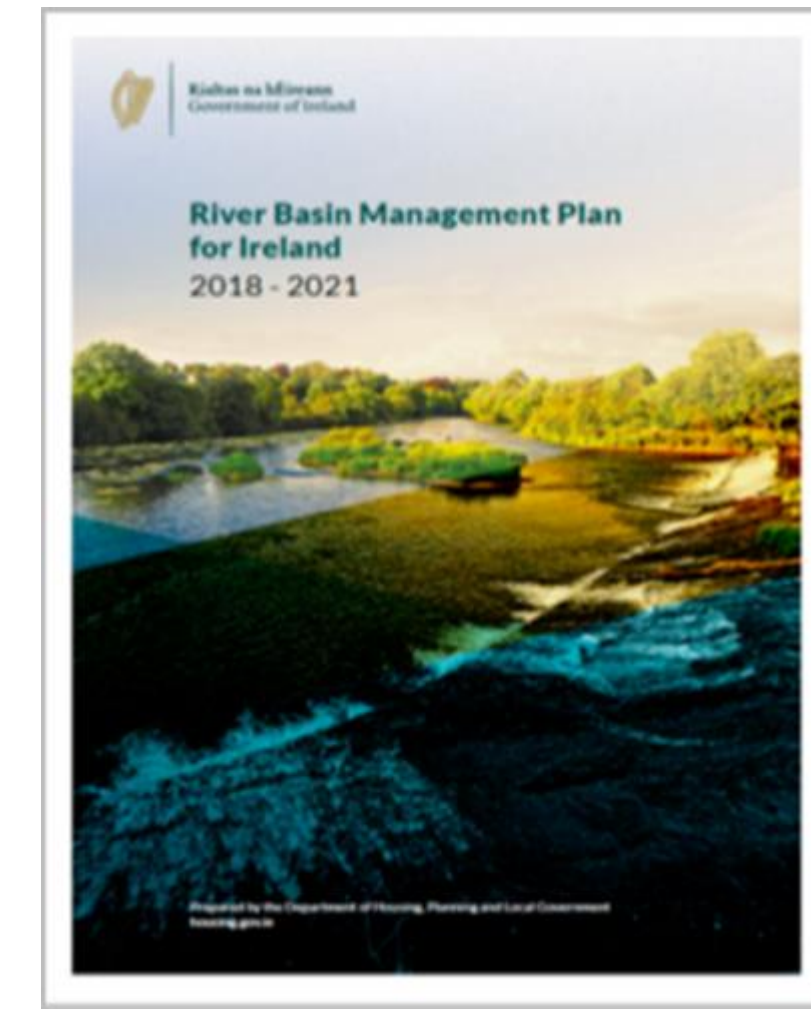
Measure Name	Key Benefits & scoring under the assessment criteria
Engineered basins, ponds & ditches	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <ul style="list-style-type: none"> – Store/Slows runoff – Water storage – Flood risk reduction – Intercept pollution pathways – Reduce erosion and/or sediment delivery – Increase infiltration and/or groundwater recharge </div> <div style="width: 35%; text-align: center;"> </div> </div>



Future Promotion of Natural Water Retention Measures



- Strategic importance
 - *RBMP - Climate Action Plan - Biodiversity Strategy*
- The Planning System & River Basin Management (Guidance)
- Delivery at scale is critical to be effective
- Potential environmental game changer
- Rural catchments
 - *Next Agri-Environment Scheme essential mechanism*
 - Largescale deployment
- Urban catchments
 - *New development and retrofit*



Future deployment of Natural Water Retention Measures in Urban catchments



- Workshop opportunity to explore with practitioners
- Are there shortcomings / challenges with implementing Nature Based SUDS ?
- What is needed ?
 - *Policy ?*
 - *Legislation ?*
 - *Leadership ?*
 - *Governance ?*
 - *Technical Guidance / Training ?*
 - *Local authority capacity ?*
 - *Funding ?*

