Urban Green Infrastructure, Ecosystem Services, and JPI Water RDI Gaps

Water



2017 Water JPI Exploratory Workshop, Dublin 2nd - 3rd November 2017

WssTPWG Ecosystem Services

- WssTP is the European Technology Platform for Water
- Initiated by the European Commission in 2004 for RTD in the water industry
- Members cover the whole value chain of the water sector
- Working Groups within various areas of the water sector, including Ecosystem Services



 WssTP WG Ecosystem Services members were asked which areas within the Ecosystem Services Area that should be highlighted in the JPI Water SRIA:



Urban Ecosystem Services (e.g., those achieved from constructed Urban Green/Blue Infrastructure)



- Economic and ecologic evaluation of ESS from Urban Green/Blue Infrastructure, e.g.,
 - Flood protection,
 - Water treatment,
 - Recreation,
 - Biodiversity
 - CO2 retention in stormwater pond sediments



- Tradeoffs/conflicts between ESS and Urban Green/Blue Infrastructure, e.g.,:
 - Stormwater ponds are serving as biotope for different species, while at the same time being a treatment facility;
 - How species in stormwater ponds get affected by heavy metals;
 - How to perform maintenance without affecting biotope



- Tradeoffs/conflicts between ESS and Urban Green/Blue Infrastructure, contd.:
 - Aesthetics vs. functionality (stormwater retention):





- The identification of key factors needed in order to increase the use of urban green/blue infrastructure, e.g.,
 - How to achieve a planning process that involves all relevant water actors



Link to SRIA Themes

• Subtheme 1.1

Developing approaches for assessing and optimising the value of ecosystem services

 Subtopics do not cover identified RDI Gaps



Link to SRIA Themes

Subtheme I.2

Integrated approaches: developing and applying ecological engineering and ecohydrology

 Subtopics include NBS and GI, but do not cover identified RDI Gaps



Link to SRIA Themes

• Subtheme 1.3

Managing the effects of hydro-climatic extreme events

 Subtopics do not cover identified RDI Gaps



Link to Water JPI

 Water JPI offers a great platform to study the suggested RDI Gaps:

- Many countries participating,
- Different climatic conditions,
- Different cultural conditions
 - \rightarrow combine RDI resources to develop innovative, adapted solutions

Thank you!

Lena Goldkuhl, PhD The Urban Water Research Group Luleå University of Technology, Sweden gold@ltu.se www.ltu.se/water

