### Innovation brief



# Lea Catchment Project:

Catchment opportunity mapping to protect water resources



## **Objectives**

- Develop an evidence-led, catchmentscale approach to delivering nature-based solutions (NbS) for increased resilience of water resources in the Upper Lea Identify opportunities for NbS spatially with indicative benefits for water resources
- Work with key catchment partners representing customers including Herts and Middlesex Wildlife Trust; Natural England; Groundworks, Environment Agency (EA) and local stakeholders to develop this, drawing on expert knowledge
- Use the outputs to develop a programme of NbS across our catchment and communities over next 25 years to create sustainable and resilient catchments

#### Challenge

Lea catchment (along with Affinity Water supply area) is in an area of water stress. Chalk streams are not achieving good ecological status due to low flows and pollution (among other issues).

Catchments have significantly changed due to agricultural intensification, population growth and development over time leading to significant challenges, further exacerbated by climate change.

There is a need to understand how nature-based solutions (NbS) to contribute to addressing challenges.

## Solution

- Integrated mapping approach using a GIS system to identify current catchment dynamics and condition, issues, risks, and identify opportunities where NbS could be implemented to promote resilient ecosystems, which would help protect water resources, as well as promote biodiversity
- Utilises and further refines an approach developed by South East Rivers Trust (SERT) through the EU funded ProWater project

#### **Benefits and Outcomes**

- Partnership project with outputs available for all to use: e.g. Informing Local Development Plans, Biodiversity Net Gain opportunities, SFI targeting, Environmental Land Management Schemes (ELMS)
- Methodology used to support development of PR24 Water Industry National Environment Programme schemes with positive feedback from EA and Ofwat
- Identification of "opportunity areas" across the Lea to target further investigations and measures for NbS to support resilient water resources
- Will form the basis of pilot schemes with detailed monitoring to validate the approach
- Enables us to work with catchment partners, landowners, farmers and other to identify appropriate NbS and target future measures more effectively



