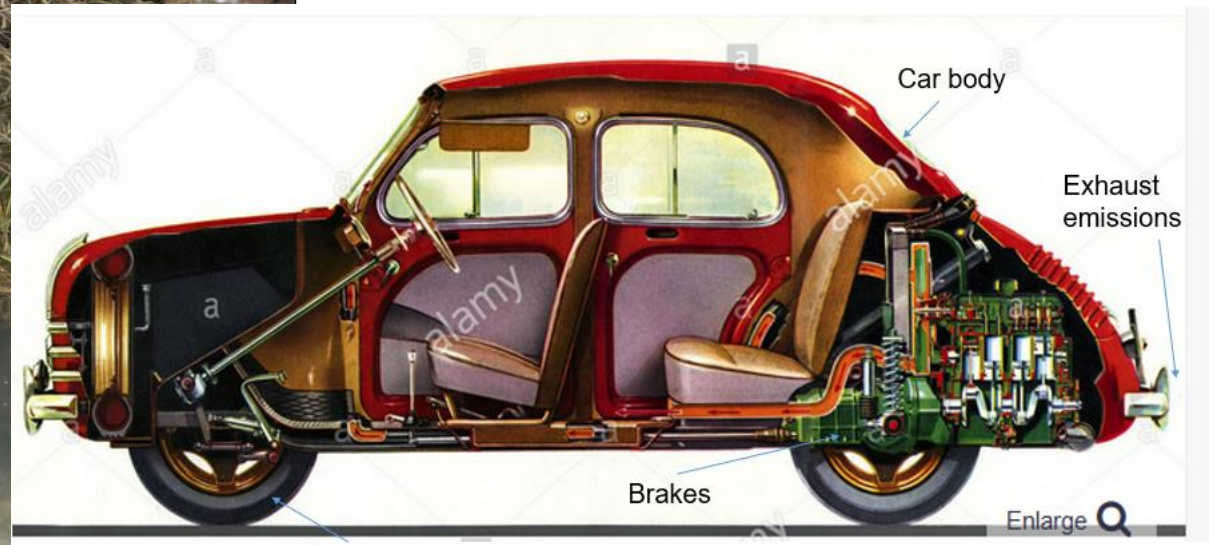
Pollution Remediation using NbS's

John Bryden – Head of Improving Rivers

Road Runoff Pollution



Not just the traffic: road markings, road materials, street furniture, accidental spills, construction erosion

Decision Support Tool for Pollution Solutions

Road Pollution Solutions Tool (bgs.ac.uk)

//mapapps.bgs.ac.uk/road-pollution-solutions/

Political Impact

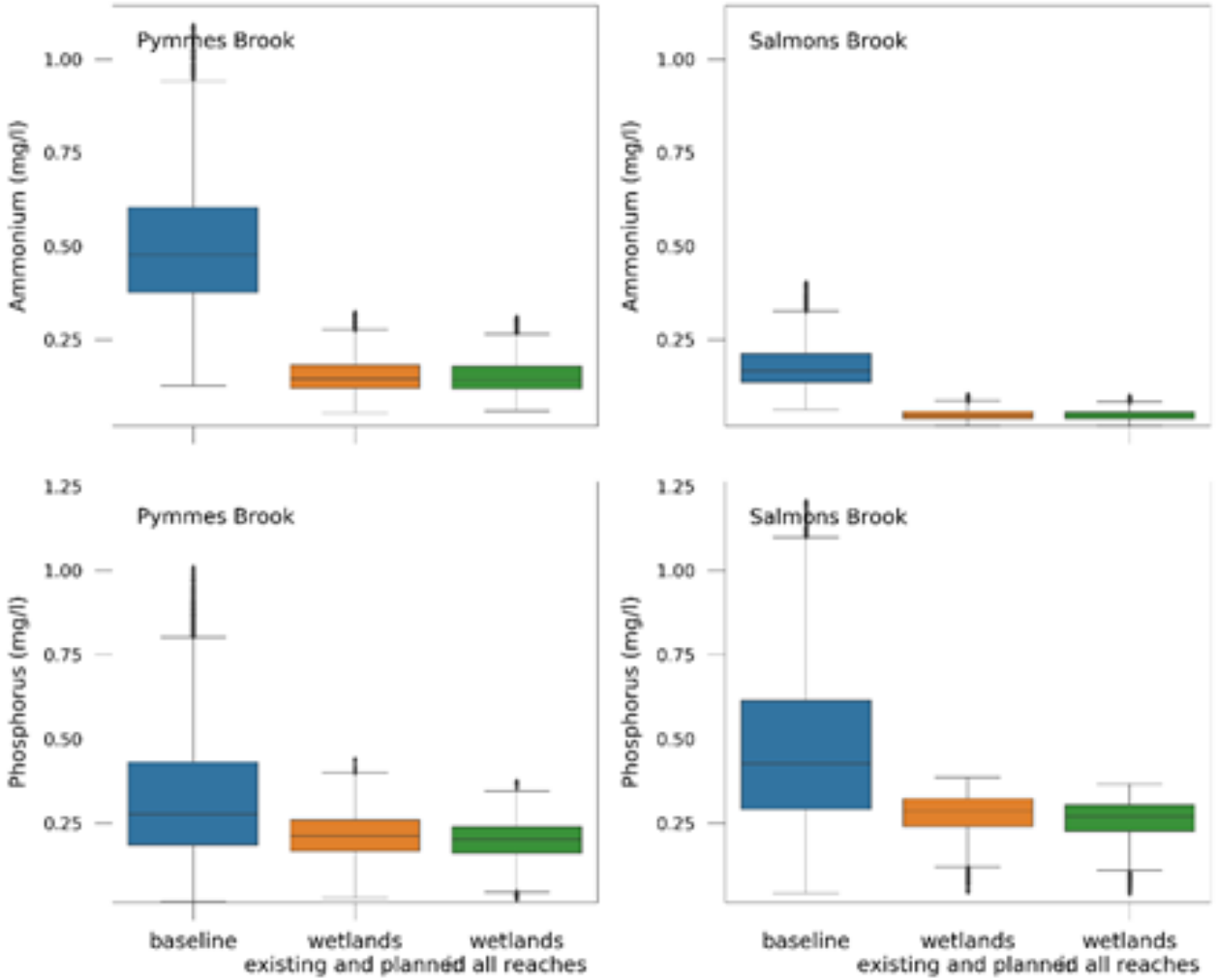
Mayor of London, Sadiq Khan said: "This report provides clear evidence that pollution from the surface of London's roads is posing a significant risk to our rivers. We're working with partners to find solutions that prevent water contamination, but the Government must step up to provide the Environment Agency and highways authorities with the appropriate funding for these measures to properly protect the capital's rivers."

SUPPORTED BY

MAYOR OF LONDON

TRANSPORT FOR LONDON

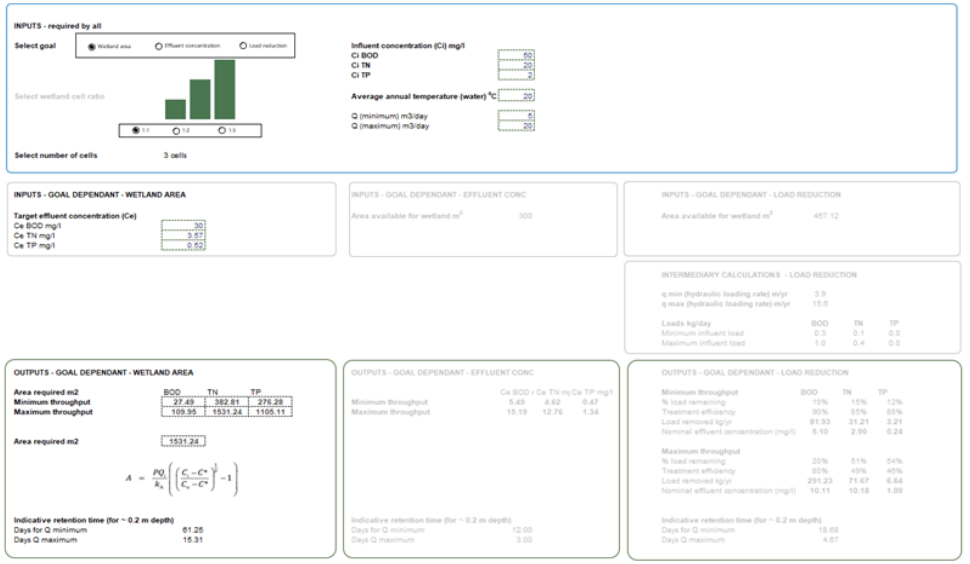
Constructed Wetlands – Water Quality Improvement at Catchment Scale



- Blue = Baseline conditions
- Orange = identified wetlands
- Green = wetlands everywhere

Wetland Pollution Remediation Tool

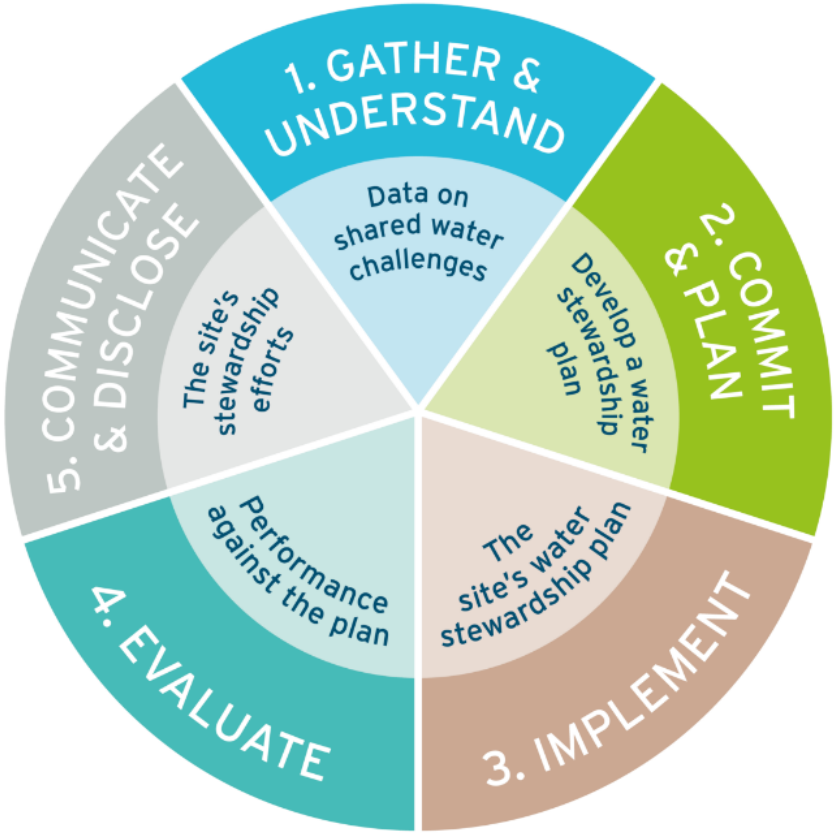
- Rivers Trust with support from Natural England are developing a tool to help size wetland treatment systems.
- Based on work P – K – C model, which is the standard model used for constructed wetlands design (Kadlec and Wallace, 2009)
- Requires several inputs including inflow concentrations, flow and temperature.
- Users can select whether to solve the equation to calculate wetland area, outlet concentrations or load reduction.
  - BOD, Total N and Total P can be modelled..0



Private Sector funding Nature Based Solution

WATER STEWARDSHIP – *'use of water that is socially and culturally equitable process that includes both site- and catchment-based actions*." – Alliance for Water Stewardship

Volumetric Water Benefit Accounting ('VWBA') is the global standardised method for assessing the benefits of water stewardship activities. Otherwise known as 'replenish'



Thank you!