



Yorkshire Integrated Catchment Solutions Programme (iCASP)

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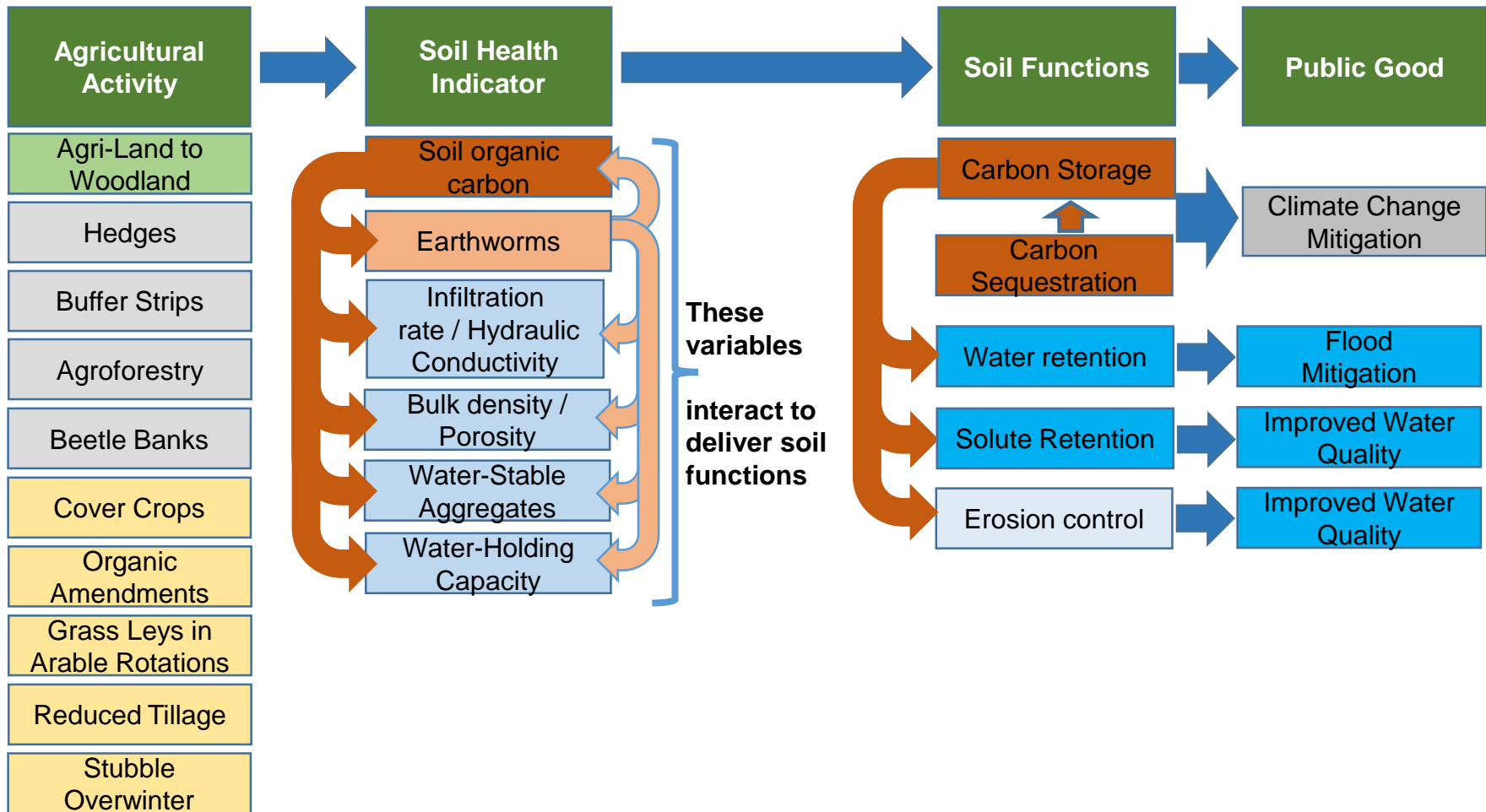
 @YorkshireiCASP

What is iCASP?

- **£6million UKRI-Natural Environment Research Council-funded partnership**
- **Making environmental evidence available to develop innovative solutions to water catchment management**
- **Aims:**
 - £50million benefits to Yorkshire's economy by 2022;
 - Inform regional and national practices and policies, including delivery of 25 Year Environment Plan.
- **After Year1 = >£4million economic/financial benefits**

Agricultural Land Management for Public Goods Delivery:

iCASP Evidence Review on Soil Health



Original synthesis by Jonathan Leake

Key findings

- Soil health is enhanced by:
 - Conservation tillage
 - Addition of organic amendments
 - Grass-clover leys in arable rotations
 - Conversion of arable land to woodland
- More data needed on linear features (hedges, agroforestry)
- Need more quantification of trade-offs



Image courtesy of Mzuri Ltd

Gaps in Knowledge

- Cover crops/ grass leys/ hedges/ trees – What are the optimal species combinations to enhance soil health?
- Impact on crop yield not quantified in majority of studies
- Limited data for soil depths >30cm
- Majority of studies at field scale – need more at landscape scale



Image courtesy of Mzuri Ltd

Recommendations

- Address evidence gaps through ELMS pilots/trials by involving farmers and other land managers to develop the evidence-base for on-farm approaches that are feasible
- Build flexibility into ELMS so that activities can be reviewed/added/removed as evidence becomes available



Image courtesy of Yorkshire Water