Catchment Scale Water Resource Planning

Broadland CaBA Water Resource Training

Presented by: Sam Westwood

Date:



The Role of CaBA and Catchment Partnerships

CaBA in action addressing water resource challenges at both national and catchment scales.

CaBA and Water Resources

CaBA Partnerships principal role is that of a convenor, bringing together key stakeholders to move towards a more holistic approach to water resources management at the catchment scale.

Water company plans, and therefore also the regional plan, are heavily reliant on demand reduction and Catchment Partnerships have a role in the messaging on this.

Nationally, CaBA and The Rivers Trust work to remove barriers preventing catchment organisations & partnerships from engaging in water resource planning and the national planning framework, which is traditionally a very structured, top-down process.

CaBA & RT exert this convener/influencing power to this ends on national groups including:

- National CaBA Water Resources Working Group (https://catchmentbasedapproach.org/about/caba-working-groups/)
- Water Resources Blueprint Group (https://www.wcl.org.uk/water.asp)



CaBA Water Resources Engagement & Collaboration Fund

The fund aims to 'bridge the gap' and remove barriers through training & facilitating events to increase engagement and participation.

Other examples of partnerships/groups funded in the East of England:

- River Lark Catchment Partnership – Lark Abstraction Pilot. Exploring abstraction efficiency opportunities in a farm cluster group in the Lark. It is this year funding the running of the Lark Water Summit which brings together abstractors across different sectors.

- Upper Bedford Ouse Catchment Partnership – 'Water Water Everywhere' Conference

- East Suffolk Catchment Partnership





The Rivers Trust working with others

Addressing water resource challenges with corporates and the water industry.

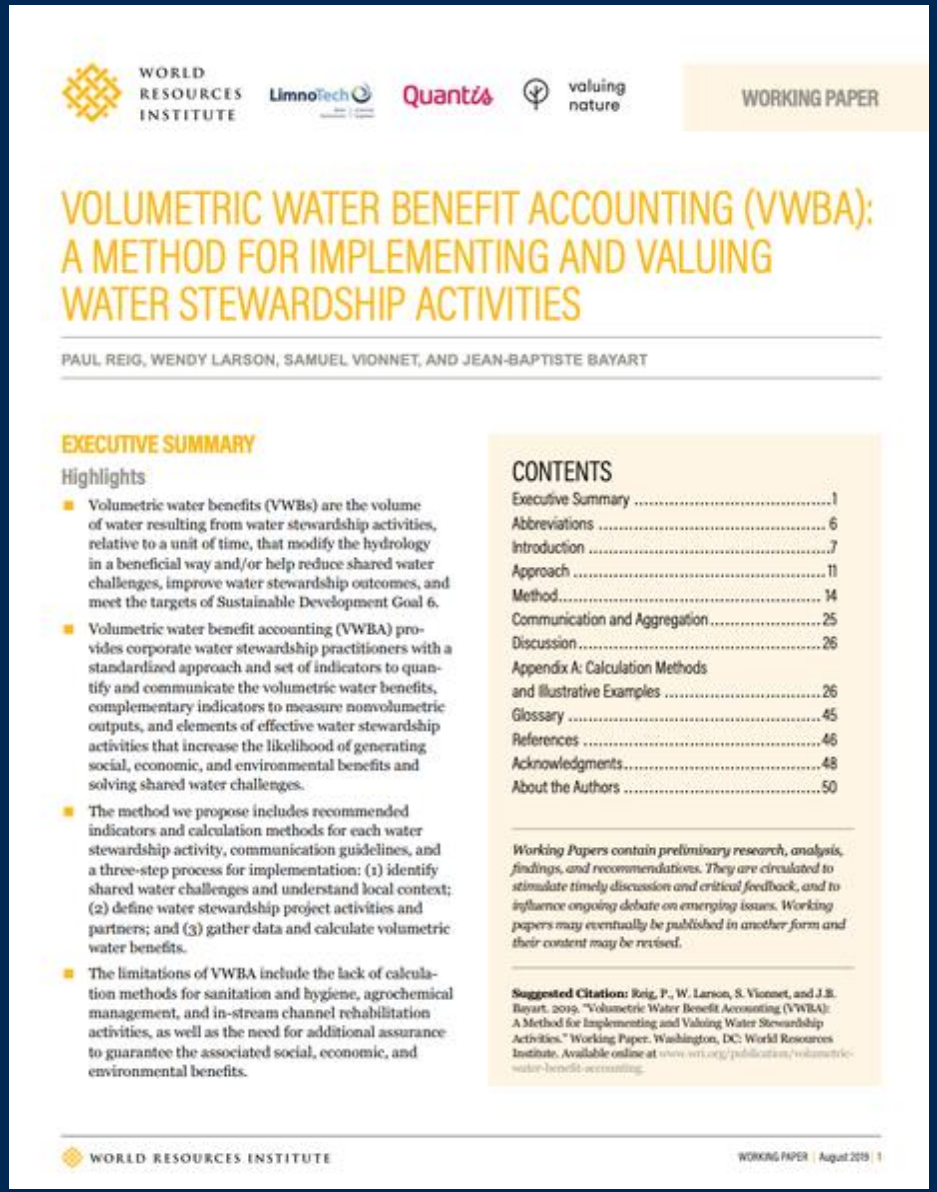
Replenish : Volumetric Water Benefit Accounting

“A method for implementing and valuing water stewardship activities “

“WRI and partners at Quantis, LimnoTech and Valuing Nature have developed a new approach for implementing and valuing water stewardship activities.

VWBA empowers companies with a comprehensive, standardized and science-based methodology to calculate and valuate the benefits of water stewardship activities. This new method enables businesses and other key stakeholders to better tackle shared water risks at catchment-scale”

[Volumetric Water Benefit Accounting (VWBA): A Method For Implementing and Valuing Water Stewardship Activities | World Resources Institute (wri.org)]



WORLD RESOURCES INSTITUTE LimnoTech Quantis valuing nature WORKING PAPER

VOLUMETRIC WATER BENEFIT ACCOUNTING (VWBA): A METHOD FOR IMPLEMENTING AND VALUING WATER STEWARDSHIP ACTIVITIES

PAUL REIG, WENDY LARSON, SAMUEL VIONNET, AND JEAN-BAPTISTE BAYART

EXECUTIVE SUMMARY

Highlights

- Volumetric water benefits (VWBs) are the volume of water resulting from water stewardship activities, relative to a unit of time, that modify the hydrology in a beneficial way and/or help reduce shared water challenges, improve water stewardship outcomes, and meet the targets of Sustainable Development Goal 6.
- Volumetric water benefit accounting (VWBA) provides corporate water stewardship practitioners with a standardized approach and set of indicators to quantify and communicate the volumetric water benefits, complementary indicators to measure nonvolumetric outputs, and elements of effective water stewardship activities that increase the likelihood of generating social, economic, and environmental benefits and solving shared water challenges.
- The method we propose includes recommended indicators and calculation methods for each water stewardship activity, communication guidelines, and a three-step process for implementation: (1) identify shared water challenges and understand local context; (2) define water stewardship project activities and partners; and (3) gather data and calculate volumetric water benefits.
- The limitations of VWBA include the lack of calculation methods for sanitation and hygiene, agrochemical management, and in-stream channel rehabilitation activities, as well as the need for additional assurance to guarantee the associated social, economic, and environmental benefits.

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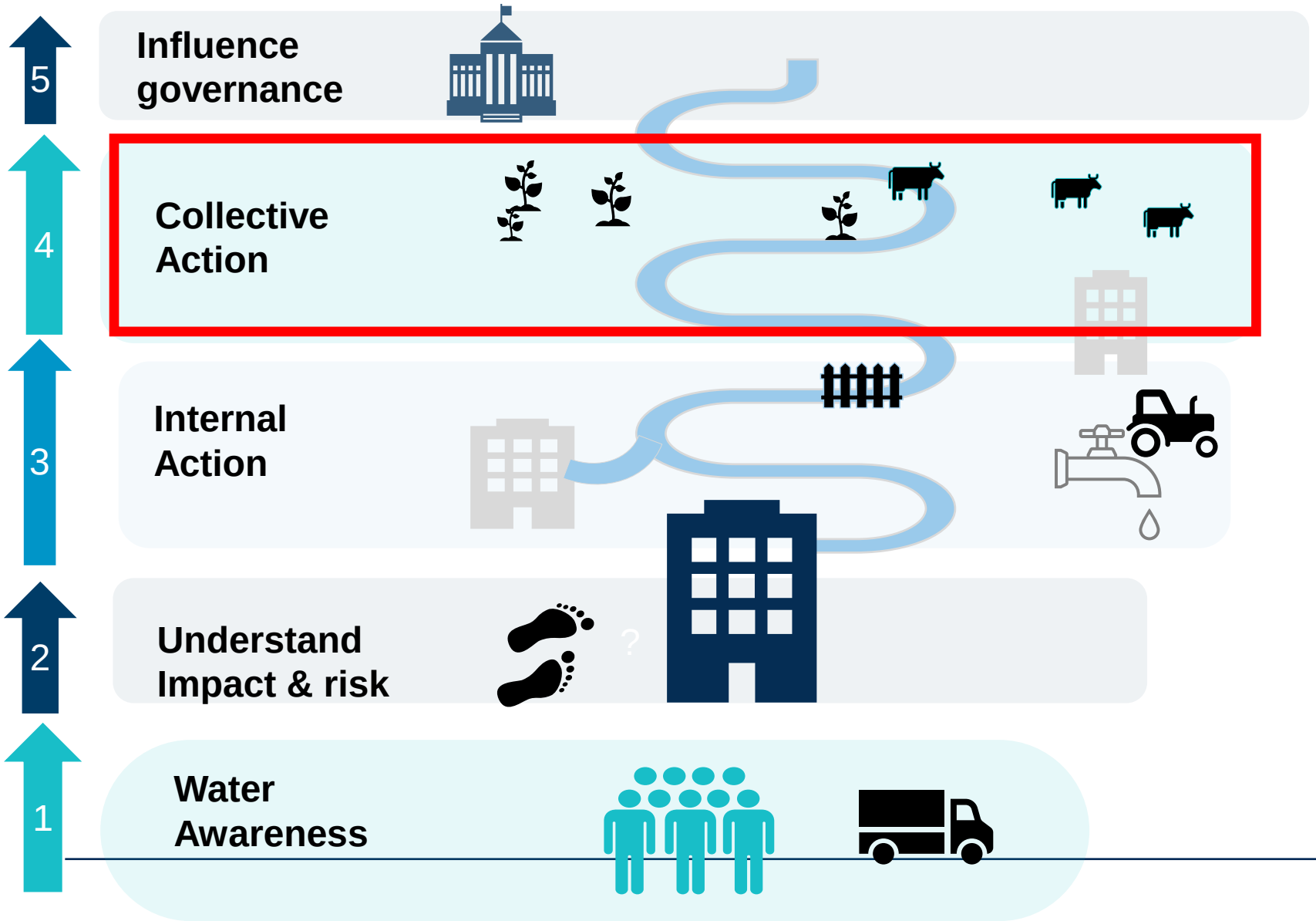
Working Papers contain preliminary research, analysis, findings, and recommendations. They are circulated to stimulate timely discussion and critical feedback, and to influence ongoing debate on emerging issues. Working papers may eventually be published in another form and their content may be revised.

Suggested Citation: Reig, P., W. Larson, S. Vionnet, and J.B. Bayart. 2019. "Volumetric Water Benefit Accounting (VWBA): A Method for Implementing and Valuing Water Stewardship Activities." Working Paper. Washington, DC: World Resources Institute. Available online at www.wri.org/publication/volumetric-water-benefit-accounting.

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UN GLOBAL COMPACT CEO WATER MANDATE WORLD RESOURCES INSTITUTE WWF FOR YOUR WORLD

A little about Water Stewardship



Water Stewardship Definition:

The use of water that is socially and culturally equitable, environmentally sustainable and economically beneficial.

Achieved through a stakeholder-inclusive process that includes both site- and catchment-based actions.

(Alliance for Water Stewardship)

REPLENISHING NATURE

MAKING IT SIMPLE FOR BUSINESSES TO INVEST IN WATER

WATER REPLENISHED: 4,725,090M3 PER YEAR*



Coca-Cola & Northumberland Rivers Trust
9000 trees planted and 21 small wetlands created

Coca-Cola & Calder and Colne Rivers Trust
Wetland restoration and catchment resilience

Britvic & Aire Rivers Trust
Wetland restoration and habitat improvement

Sainsbury's & Wyre Rivers Trust
Supporting catchment scale natural flood risk management

Britvic & Thames 21
Wetland and river restoration

Coca-Cola & South East Rivers Trust
Intercepting road runoff and creating wetlands

Coca-Cola & Norfolk Rivers Trust
Water sensitive farm advice, wetland creation and land management



ASDA & Norfolk Rivers Trust
Wetland creation



Coca-Cola & Thames21
Creation of five urban wetlands

Amazon Web Services
Creation of two rural wetlands

Coca-Cola & Kent Wildlife Trust
Ancient fenland and peat restoration and habitat enhancement

The Rivers Trust

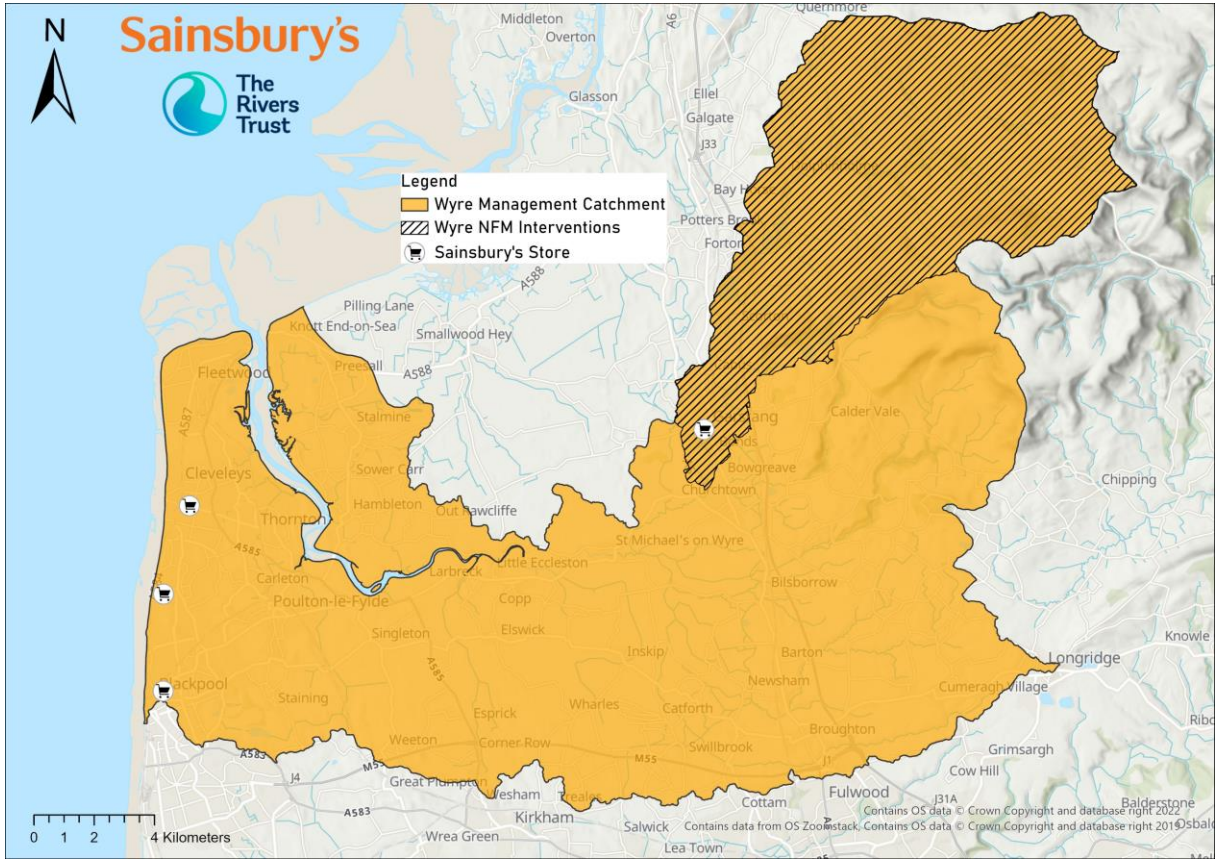
www.theriverstrust.org/our-work/water-stewardship

*Yearly replenish figure across all projects. Some of these projects are set to come online in 2024

Replenish and Sainsbury's

Sainsbury's are aiming to become **water neutral** by **2040**. This includes piloting the **VWBA** methodology (**Replenish**) to help achieve this.

The Wyre NFM Replenish volumes are relevant to 4 stores in the Wyre Management Catchment.



Interventions must be addressing a shared water challenge

- Wyre NFM - Extreme weather events – Flood Risk

Others could be:

- Water Quality
- Water Quantity
- Water Governance
- Important water related ecosystems

Estimating Replenish Volumes

The Wyre NFM project had an estimated delivery for each intervention in hectares.

To estimate the potential Replenish benefit of the project, multiple sources were used:

- Existing interventions
- NFM hub
- Literature

Sainsbury's can only claim the Replenish benefit of **delivered interventions**.

It is estimated that their 4 stores in the Wyre Management Catchment will be water neutral by **2025**.

Intervention	Annual Replenish m^3 (**min**)	Annual Replenish m^3 (**max**)
Ponds	37,851	52,992
Leaky Dams	30,400	38,000
Floodplain reconnection	7,200	10,800
Peat restoration	20,000	40,000
Riparian buffer strips	1,677	2,237
Woodland	20,024	20,024




WYRE RIVERS TRUST
"from Bowland to Bay"



Monitoring and Reporting

Sainsburys will receive 3 annual reports and access to the Wyre NFM dashboard, information included in the agreement:

- Interventions delivered
- Maintenance reports
- Updated Replenish volumes
- Photographs of interventions

Also, the opportunity to attend stakeholder and partner site visits to see interventions in the ground.






WYRE RIVERS TRUST
"from Bowland to Bay"





Working with Water Companies on Water Resources

The Rivers Trust work with the water industry on water resources is indirect in many cases.

All of the work delivered through the strategic partnerships with water companies contributes, including: the development of partnership opportunities, CaSTCo and a building a shared evidence base and member trusts delivering specific projects such as river restoration and NFM.

The Rivers Trust have strategic partnerships with:

- Anglian Water
- United Utilities
- Northumbrian Water
- Yorkshire Water
- Thames Water

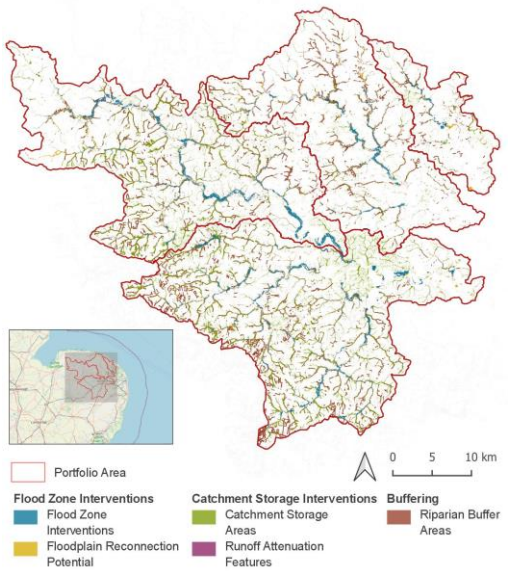


Environmental Destination & Water Resource Mapping

A partnership project is ongoing between The Rivers Trust, Anglian Water, WRE and The Norfolk Water Strategy Programme looking at NbS suitability within the East of England for the purpose of water resources.

Ambition is to create an open-source layer, presenting modelled opportunities for NbS interventions across the landscape such as run-off attenuation features, leaky dams etc. which provides an assessment of opportunity from high to low.







Thank you.
Any questions?

Insert contact number here