

**RSC Water Science Forum: Protecting Water Catchments
from Diffuse Pollution – the Emerging Evidence
Birmingham - 21 February 2012**

South West Water – ‘Upstream Thinking’

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Presentation content

1. Upstream Thinking described
2. Emerging benefits
3. Mitigation and output measures
4. Incentives for adopters

1. Upstream Thinking described



2010/15: £4m farmland improvements

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Slurry storage is key to water protection

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SWW funded over-wintering for cattle

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Westcountry
Rivers
Trust

Capital farm improvements
carried out by the
Upstream Thinking Project



Covenanted agreements for 20 years

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Upstream Thinking: *simple but effective measures*





2010/15: £4.1m for Exmoor & Dartmoor

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2,000ha to improve 3,000ha SSSI

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2. Emerging benefits



Slower water release in droughts & floods

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Sphagnum growth in a blocked ditch

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Moss and sphagnum in rewetted areas

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Removing blocks to fish passage

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Improved stream access for watering

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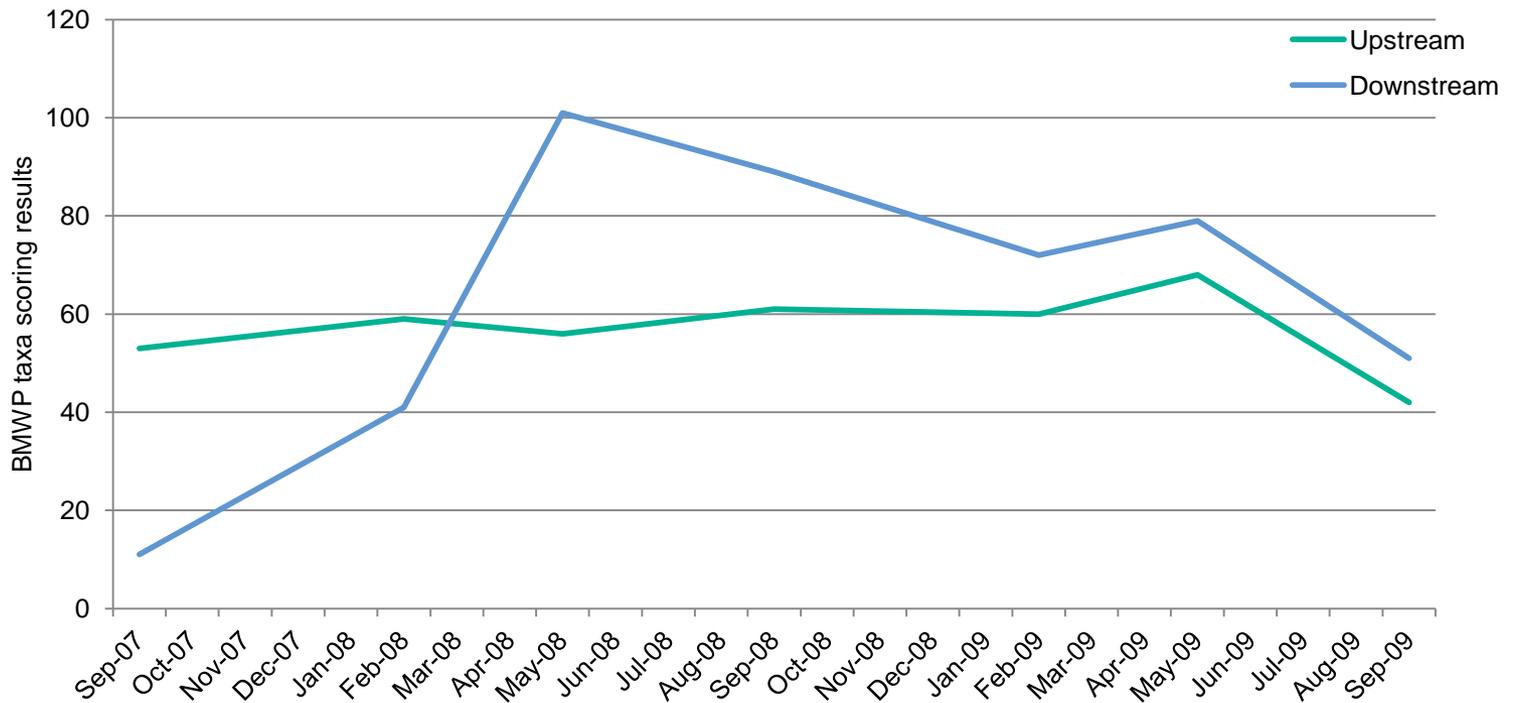


White Park haymeadow management

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Measuring improvements

Upper Tamar WRT Project - BMWP Taxa Scoring Results





Environment Agency



EXMOOR NATIONAL PARK



MINISTRY OF DEFENCE



University of BRISTOL



Our current partners

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3. Mitigation and output measures



Resolving a pollution pathway

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40% grant towards improved tracks

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Remote water quality/quantity monitoring

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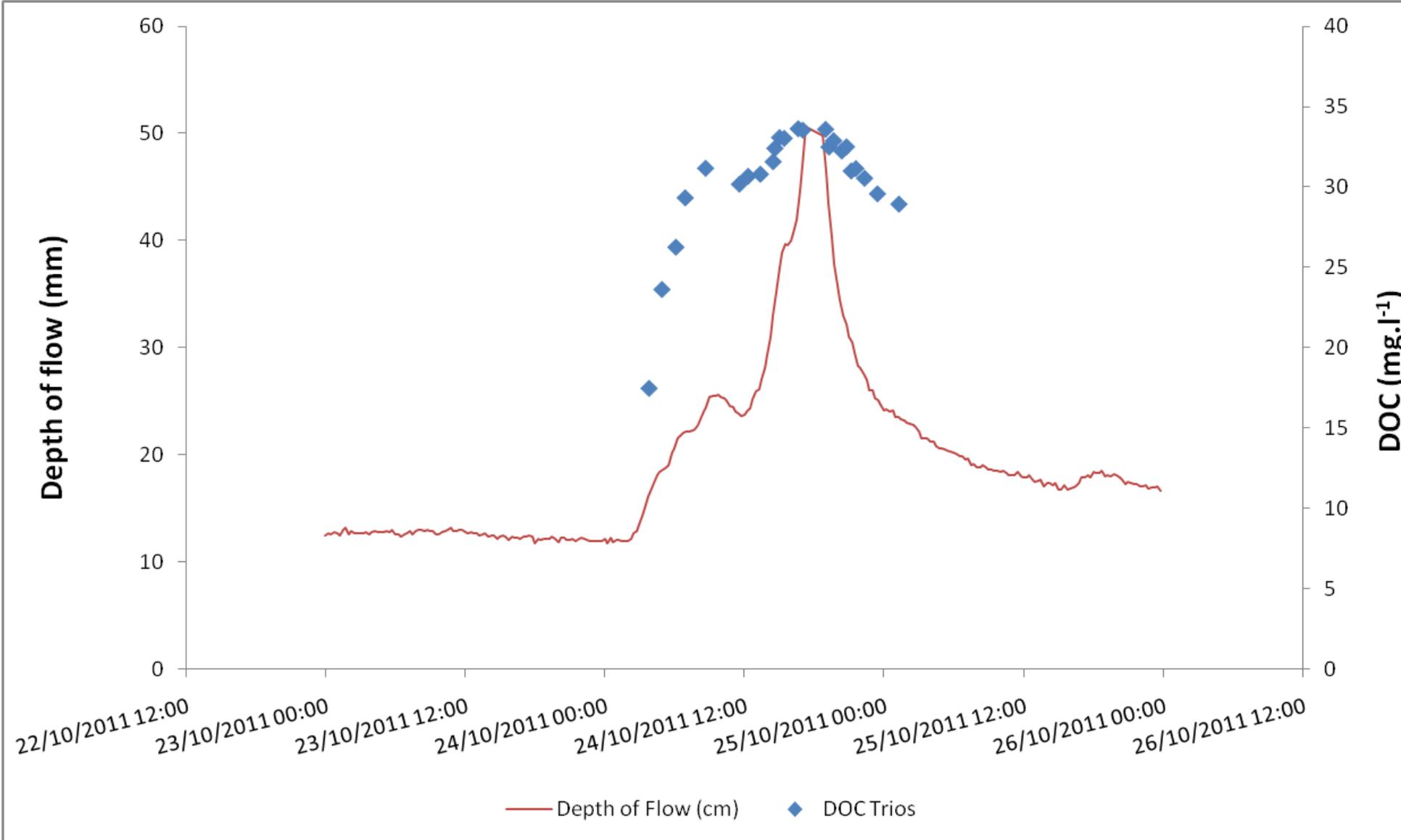

SOUTH WEST WATER



Four PhDs from world-leading research

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Upland data – flow and colour

Measuring outputs in 2011/12

1. Moorland and Culm – 170ha restored
2. Farm visits – 492 completed on 274 farms
3. Fencing – 25km installed
4. Moorland improvements £272K
5. Farmed land grants & inv £719K
6. Matching funds £1.5m from farmers

4. Incentives for adopters



The Paid Ecosystem Services approach

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Valuing grazing to control wildfires

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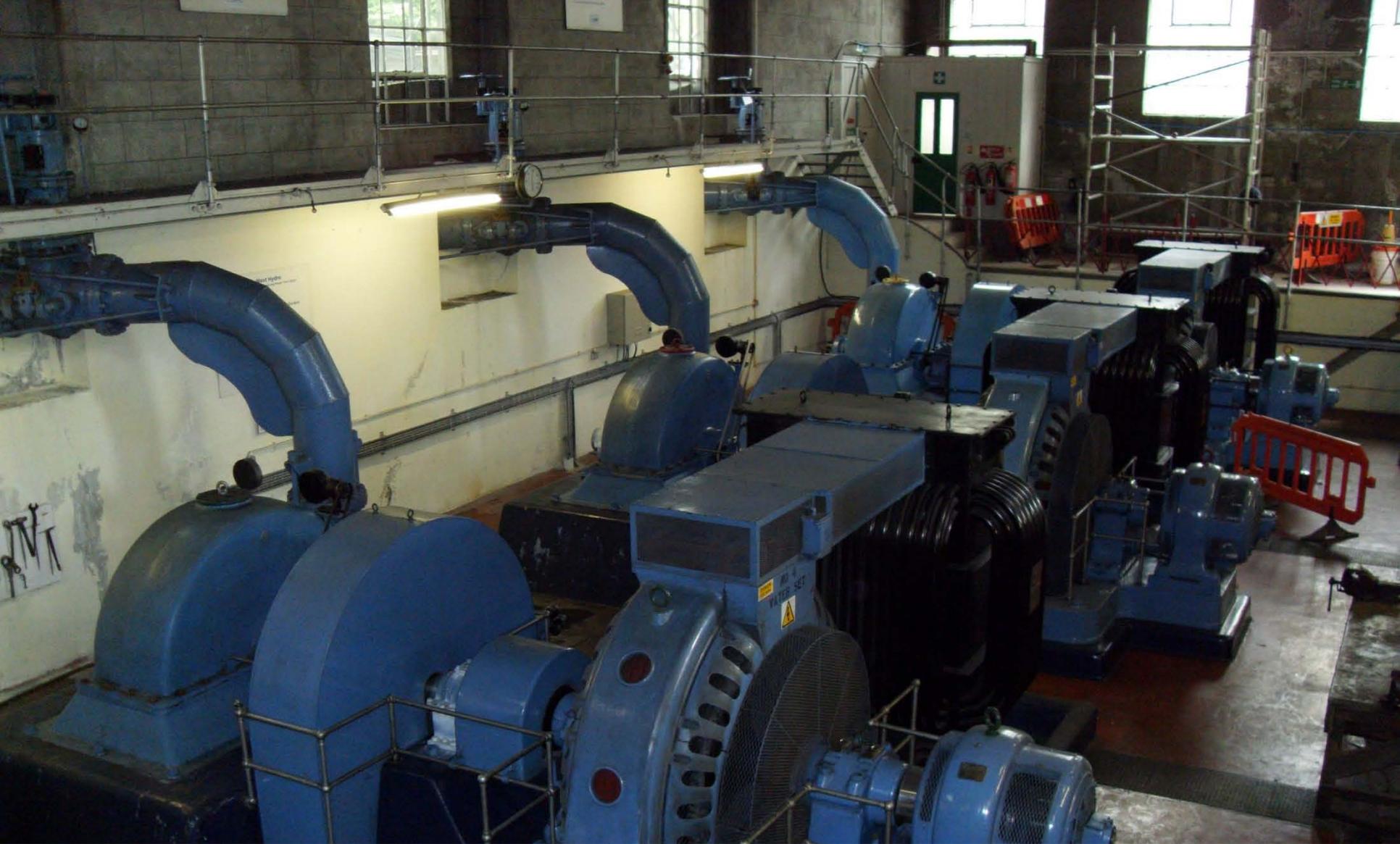
Valuing carbon capture and storage

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Valuing biodiversity as 'free goods'

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Hydro potential from sustainable water

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Upland support for major resources

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Summary

- Upstream Thinking connects the land management and water industries through ecosystem service payments
- It offers improved farming and protects water
- It offers downstream flood protection for urban areas
- It controls water charge increases
- It provides water for diluting sewage works' effluents
- It involves local communities and third sector experts
- It protects river flow regimes for hydropower
- It supports UK and EU sustainability and WFD agendas



Comments, responses, Q&A

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