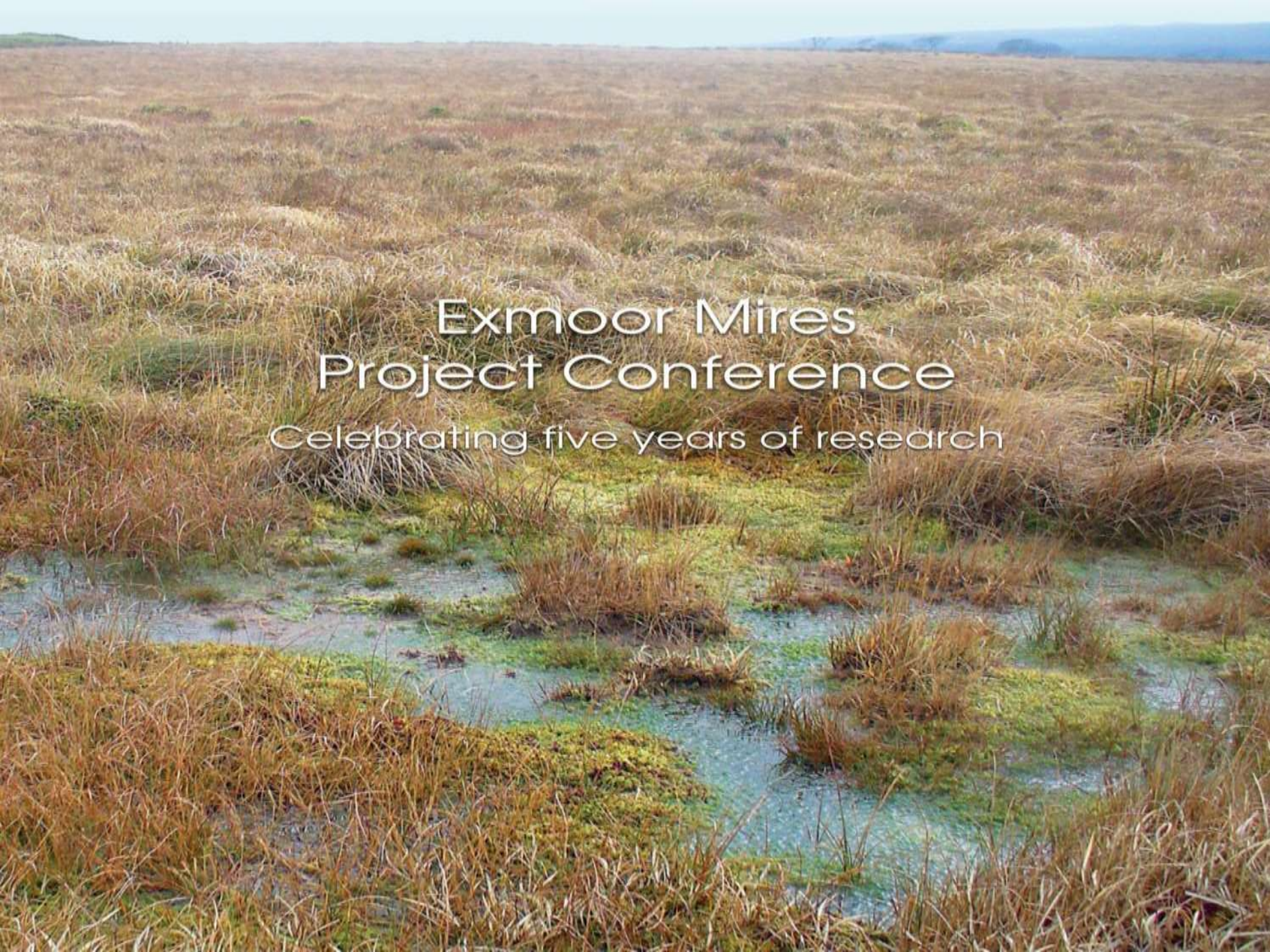

Exmoor Mires
Project Conference
Celebrating five years of research

Upland Hydrology Group

The effect of peatland restoration on baseflow

Kate Bowers – Environment Agency

The effect of peatland restoration on baseflow

Kate Bowers
Hydrologist
18 March 2015

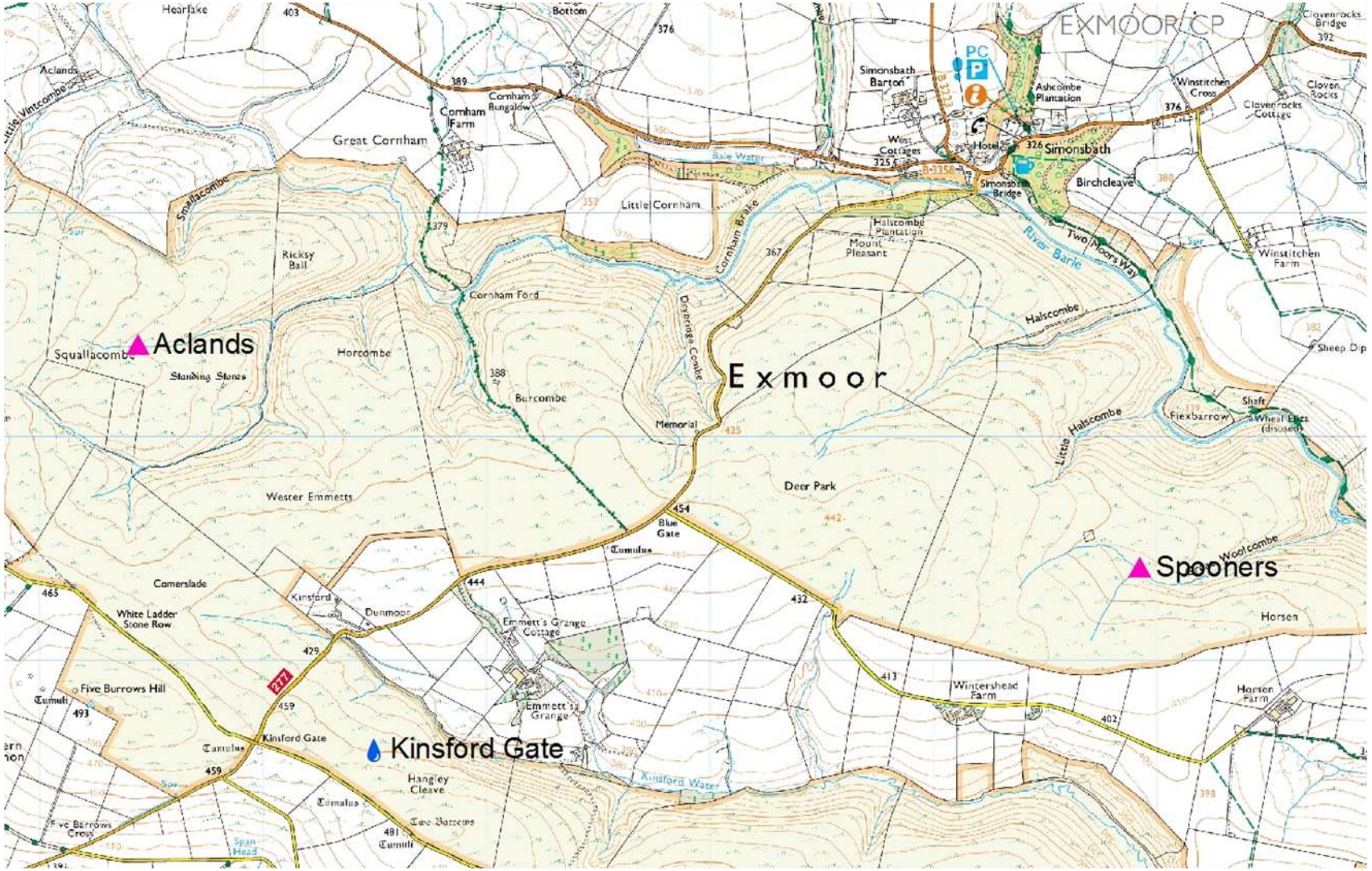
Environment Agency

The effect of peatland restoration on baseflow - introduction

- Monitoring
- Climatic context
- Hydrological response
- Quantifying the response
- Summary

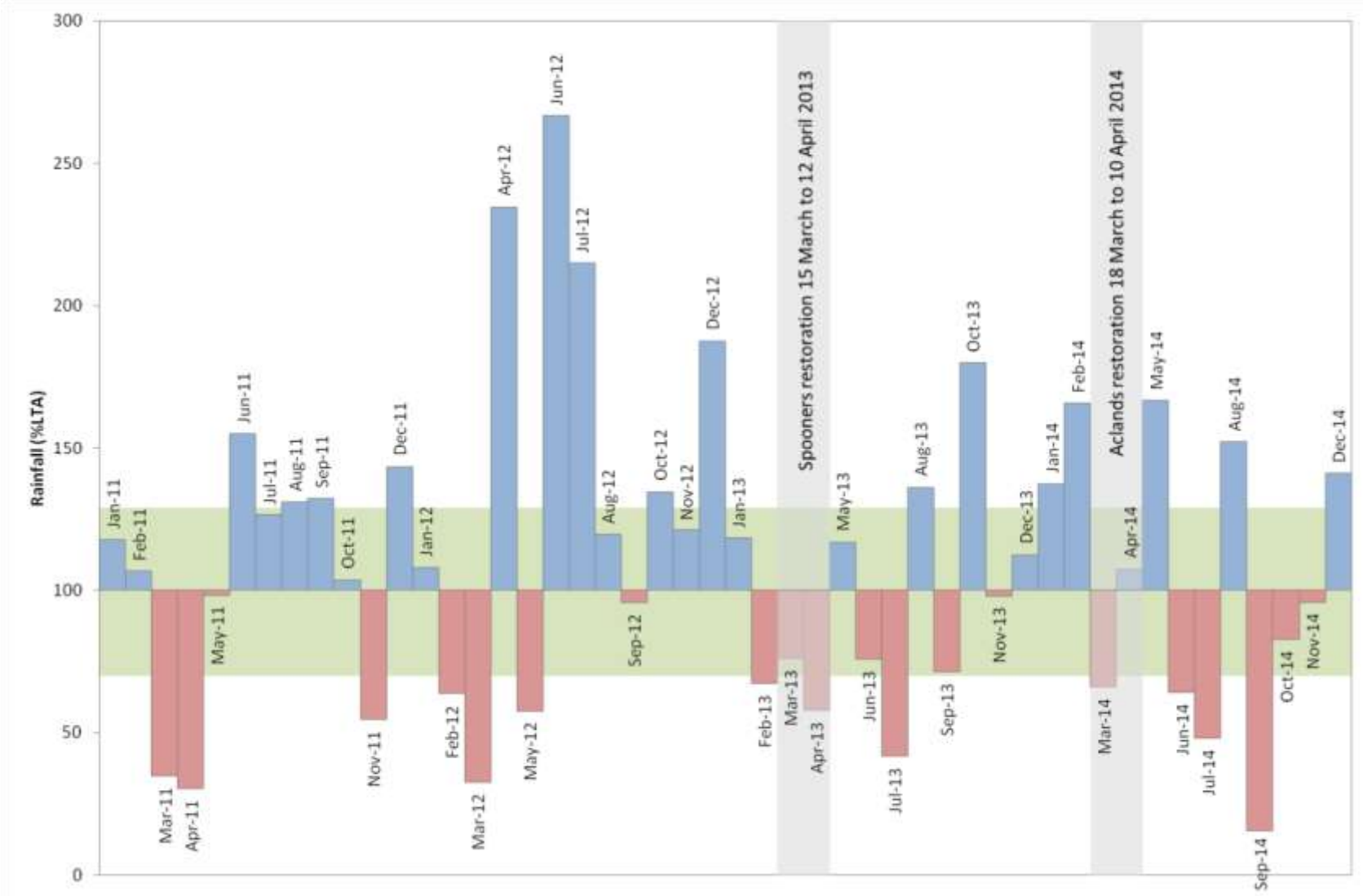
Environment Agency

Hydrological monitoring



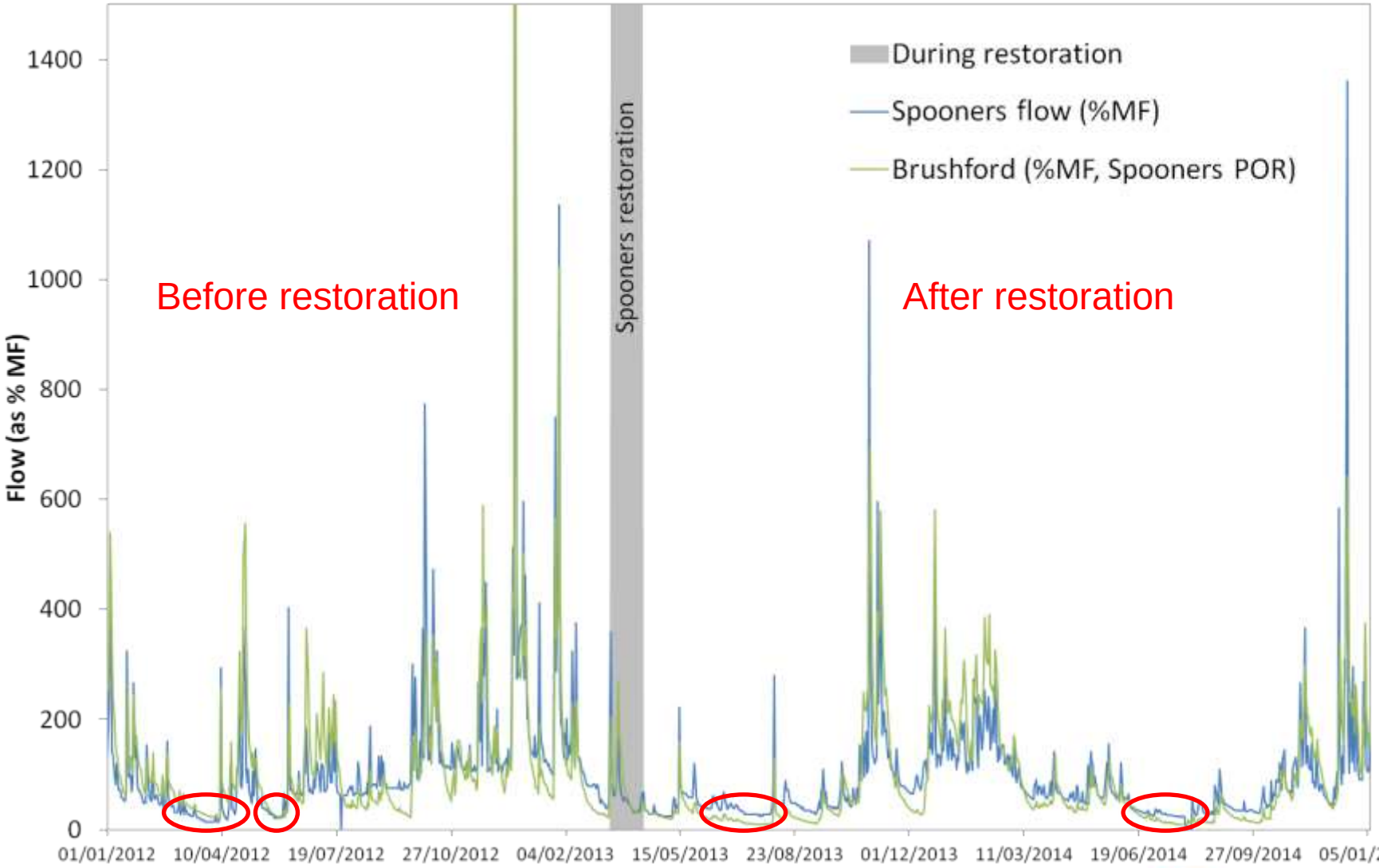
Environment Agency

Rainfall context of restoration periods



Environment Agency

Hydrological response



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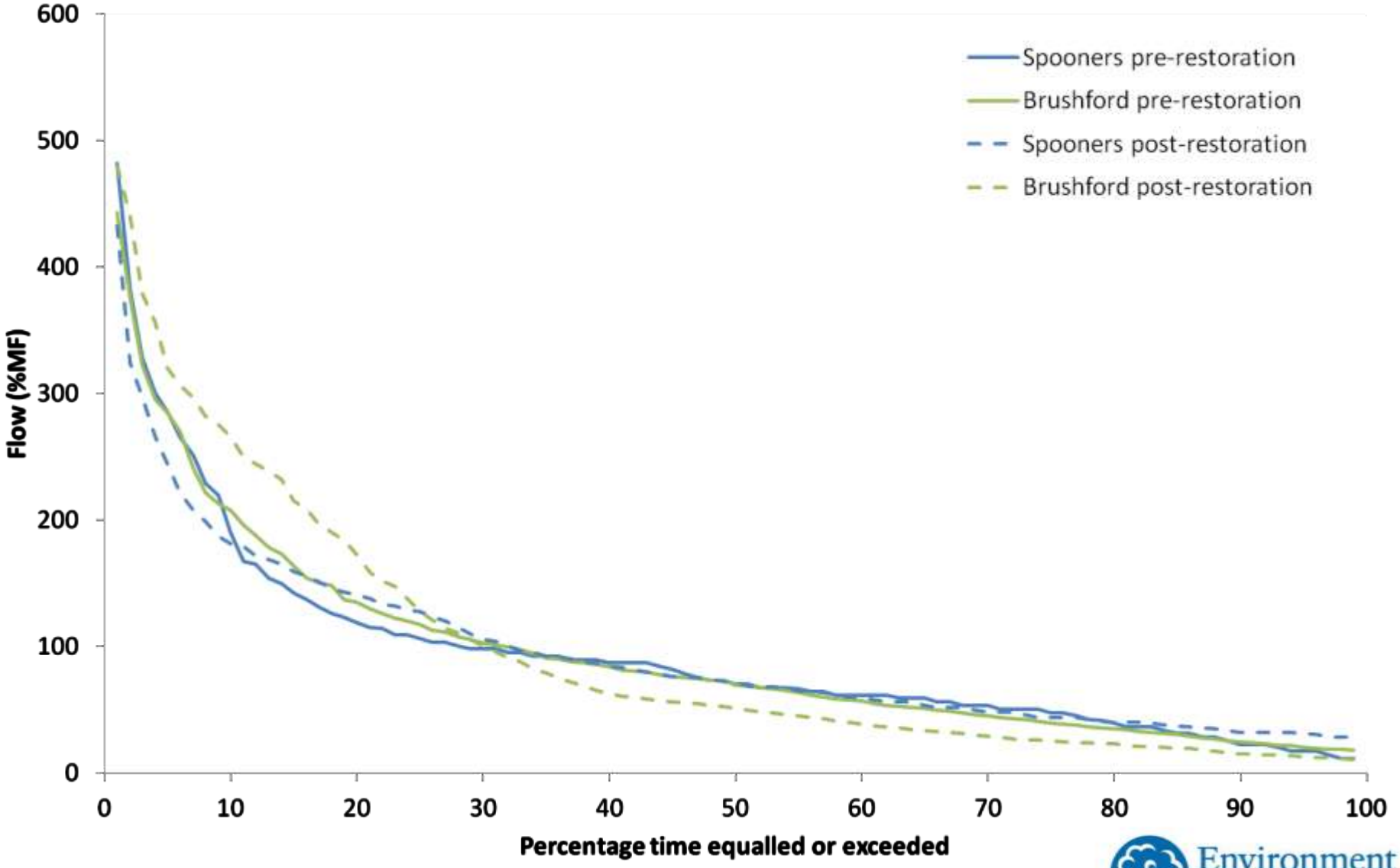
Hydrological response



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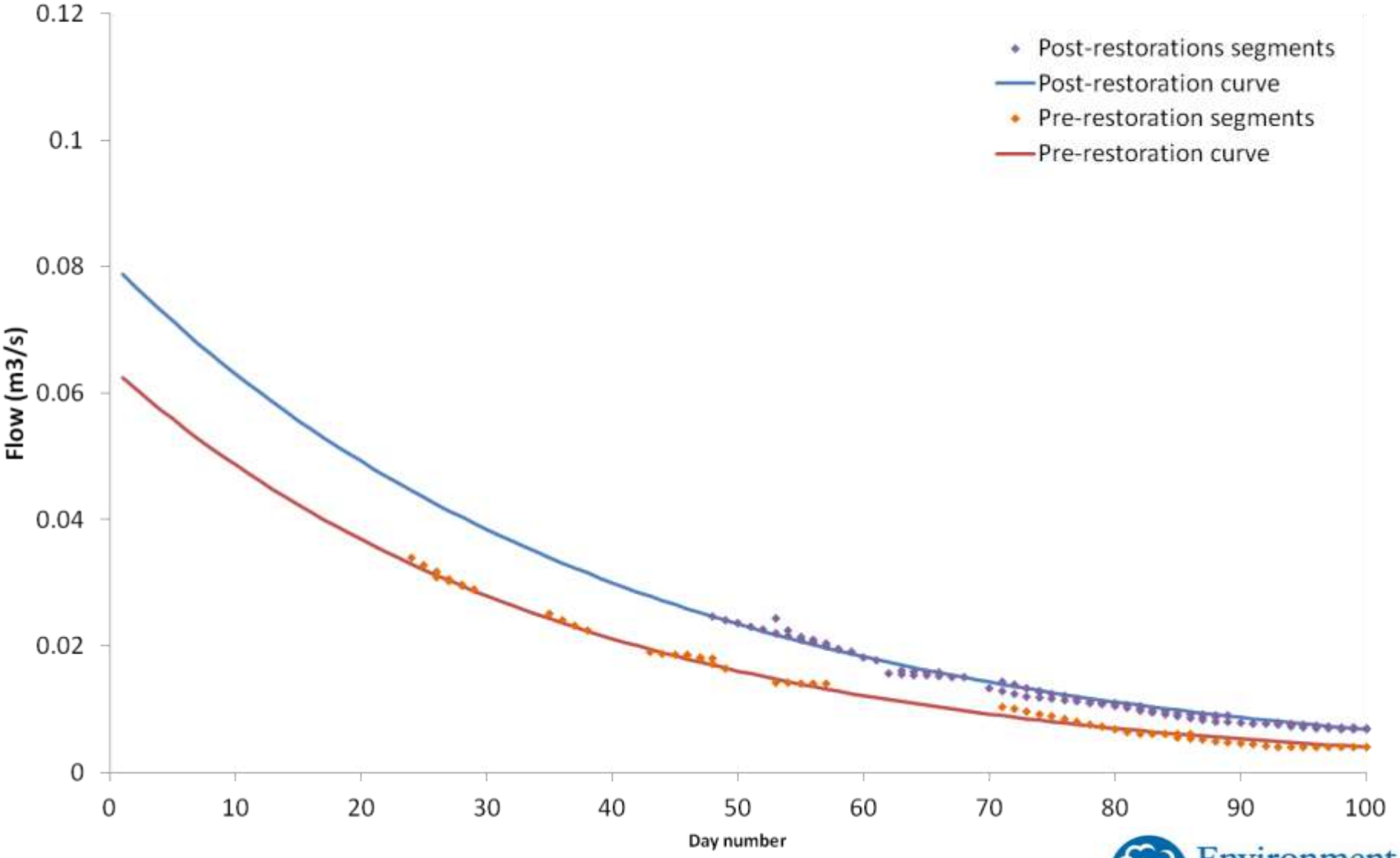
Hydrological response



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Quantifying the response

Higher post-restoration

Site and restoration period		Mean flow (m^3/s)	Post as % pre	Q95 (m^3/s)	Q95 as % MF
Spooners	Pre	0.036		0.006	17
	Post	0.025	70	0.008	32
Brushford	Pre	8.045		1.593	20
	Post	5.436	68	0.705	13

Lower post-restoration

Lower post-restoration

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The effect of peatland restoration on baseflow - summary

- Monitoring before, during and after restoration
- Analysis of effect on baseflow
- Increase in baseflow at Spooners
- Recession is less steep at Spooners
- More data is required at Aclands

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The effect of peatland restoration on baseflow

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