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# **The effect of peatland restoration on baseflow**

*Kate Bowers – Environment Agency*

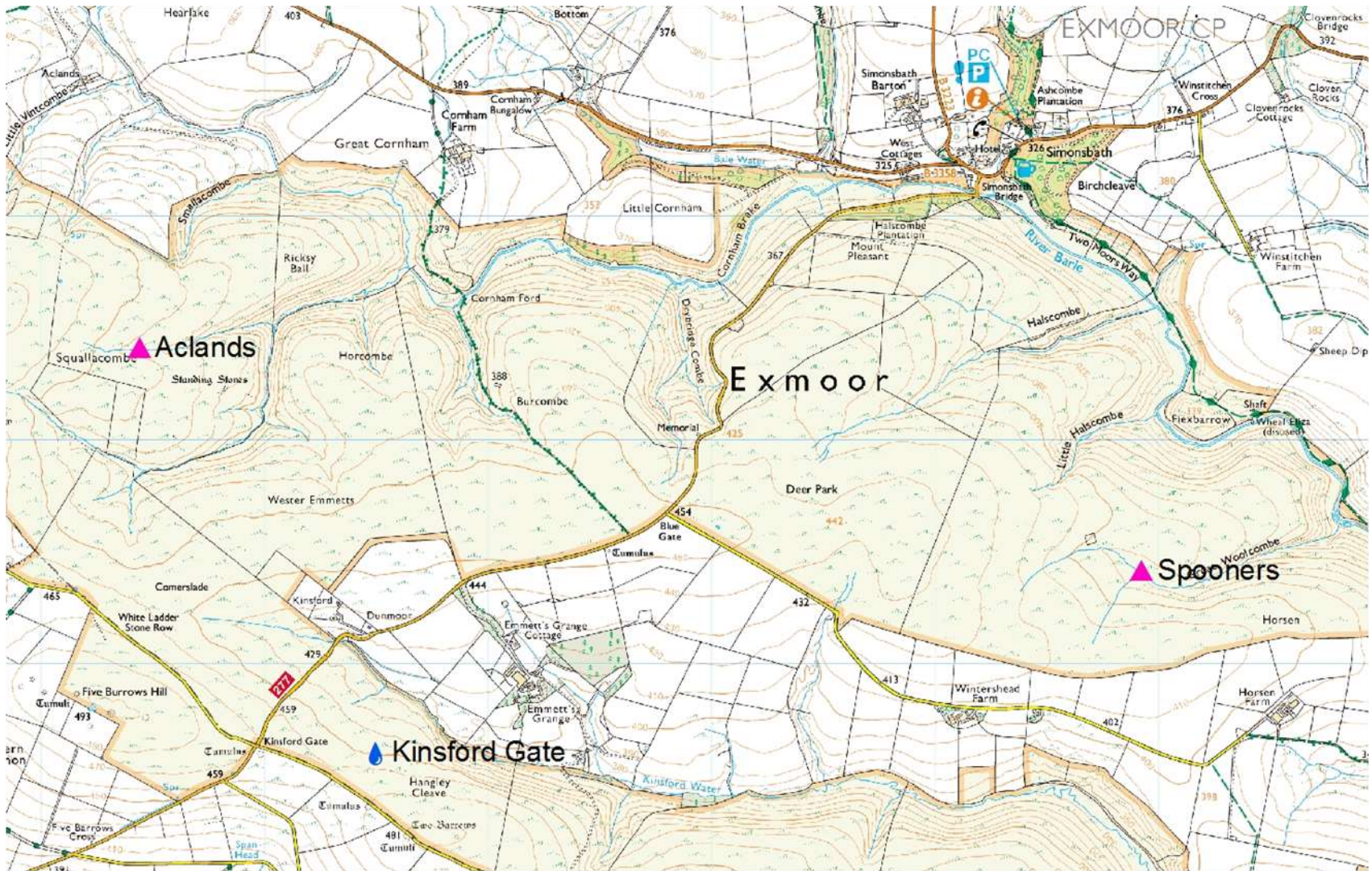
# The effect of peatland restoration on baseflow

Kate Bowers  
Hydrologist  
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# The effect of peatland restoration on baseflow - introduction

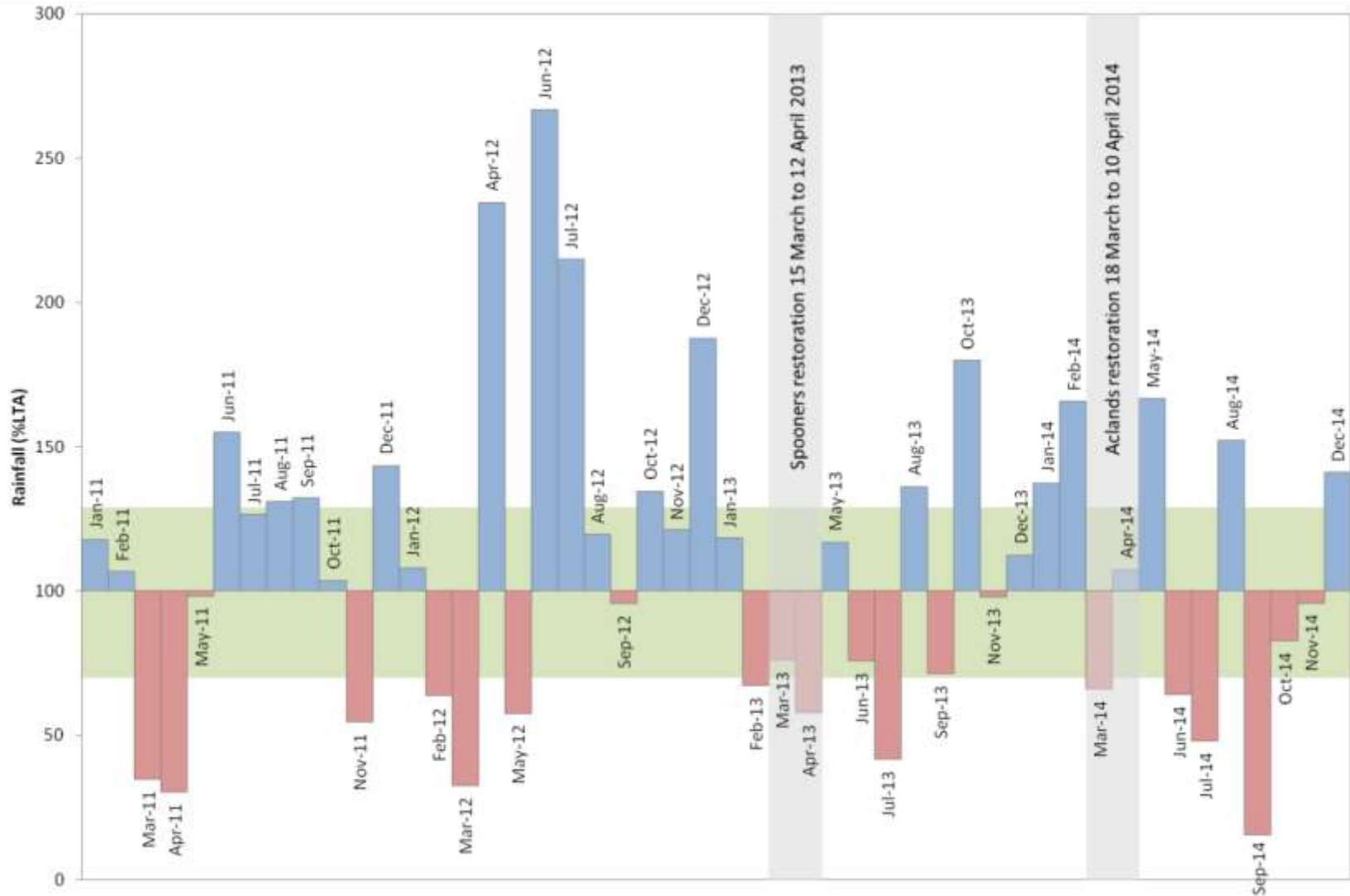
- ⇒ Monitoring
- ⇒ Climatic context
- ⇒ Hydrological response
- ⇒ Quantifying the response
- ⇒ Summary

# Hydrological monitoring

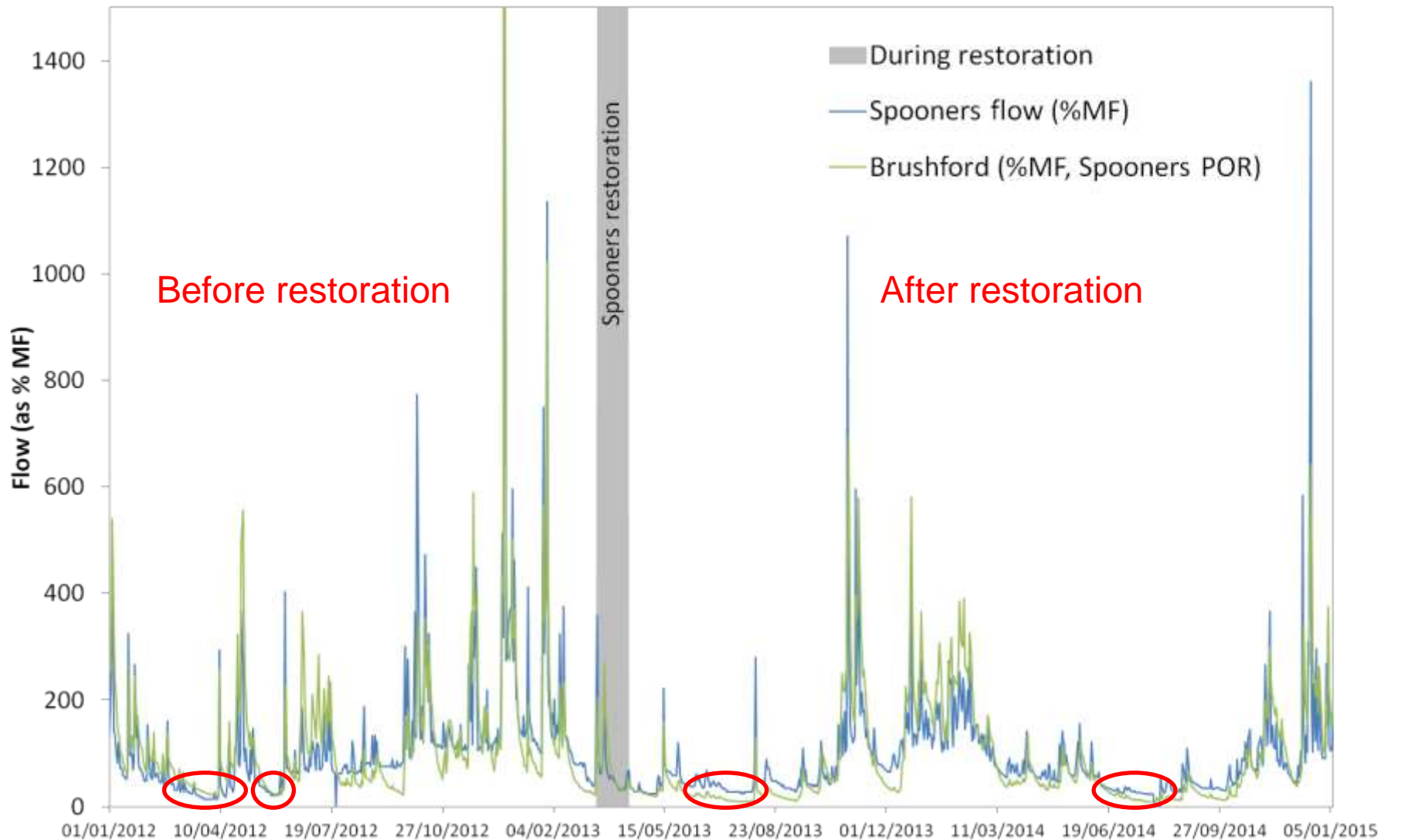




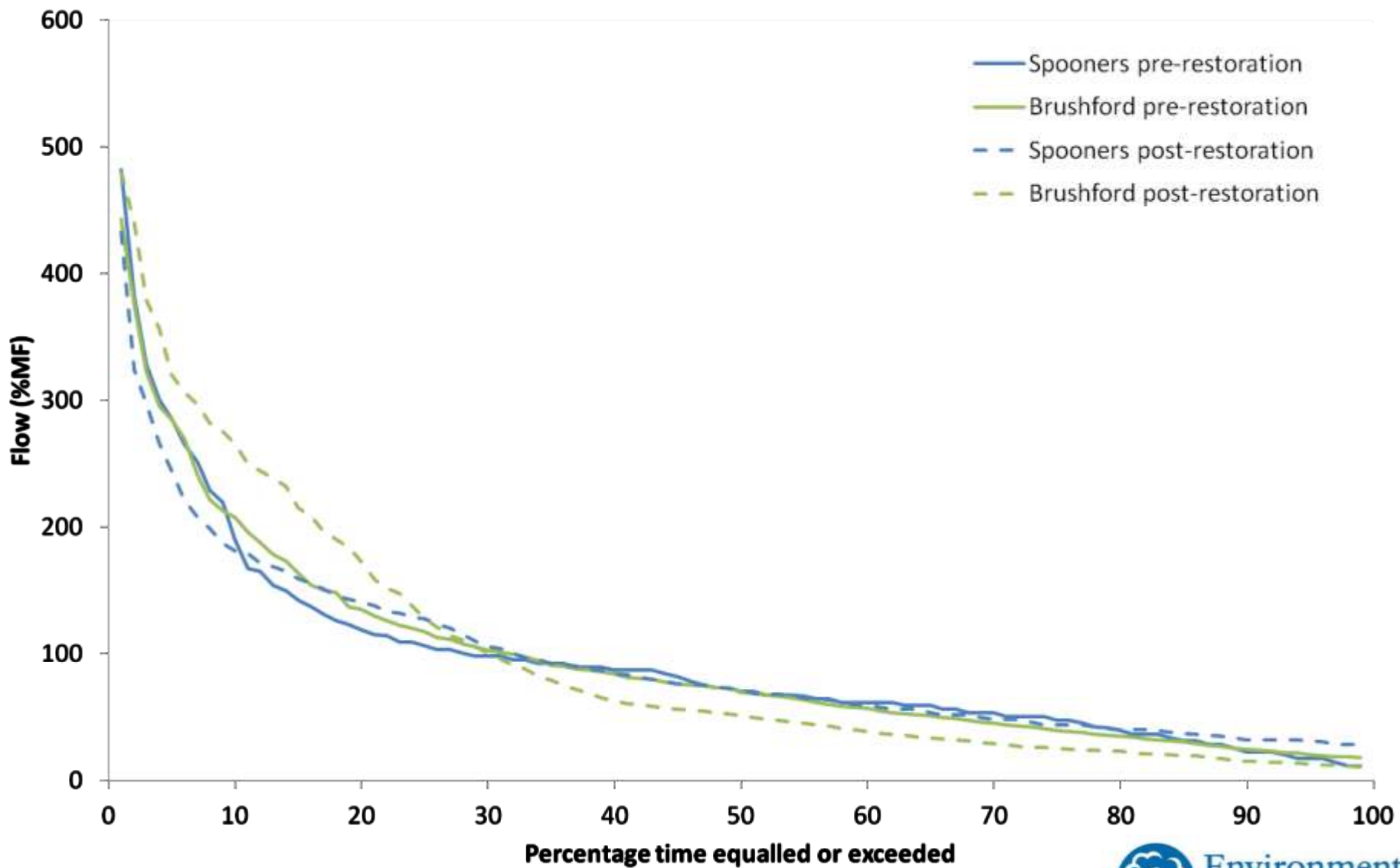
# Rainfall context of restoration periods



# Hydrological response

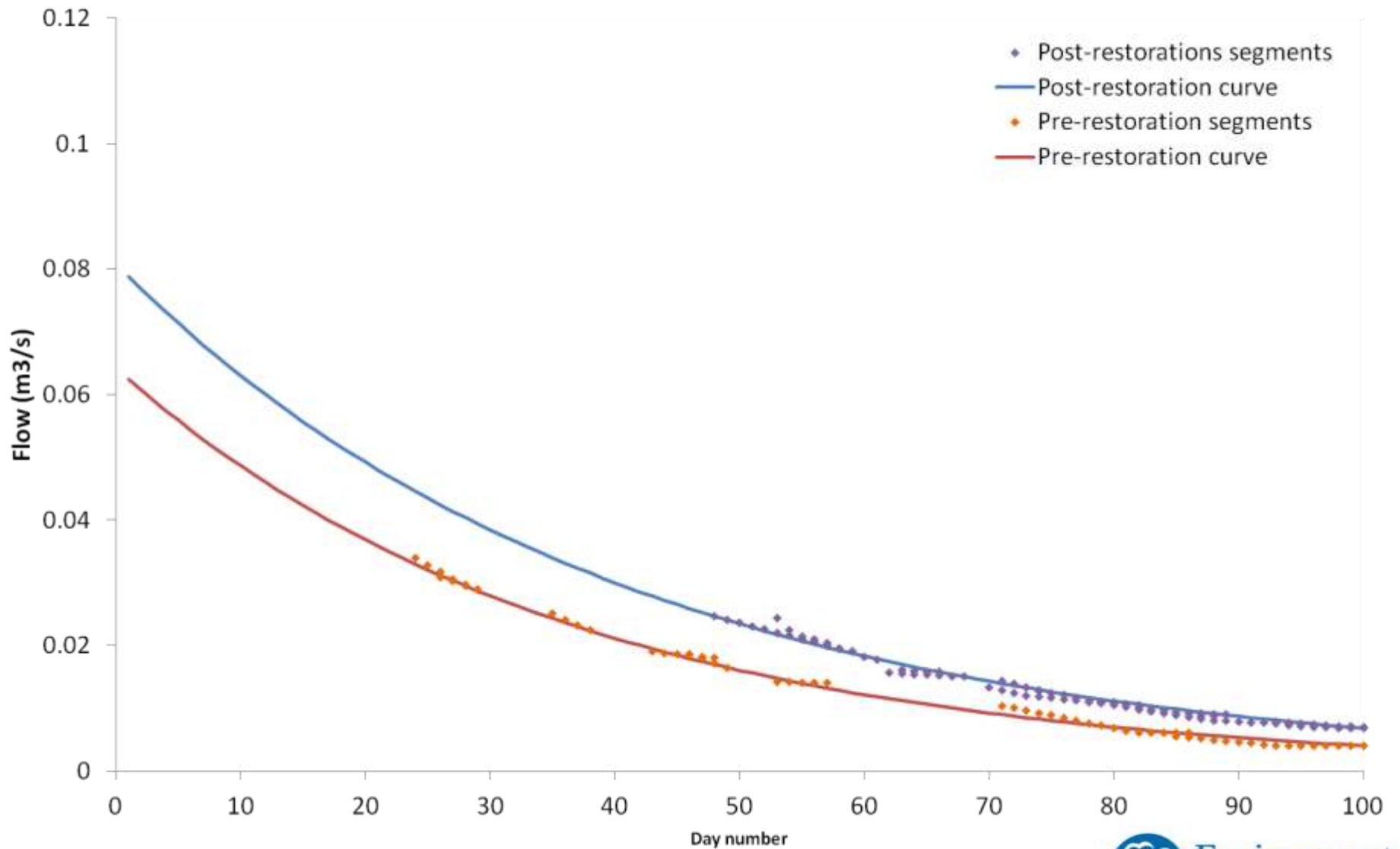


# Hydrological response





# Hydrological response



# Quantifying the response

Higher post-restoration  
↓

Site and restoration period		Mean flow (m <sup>3</sup> /s)	Post as % pre	Q95 (m <sup>3</sup> /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

# 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



# **The effect of peatland restoration on baseflow**

[kate.bowers@environment-agency.gov.uk](mailto:kate.bowers@environment-agency.gov.uk)

