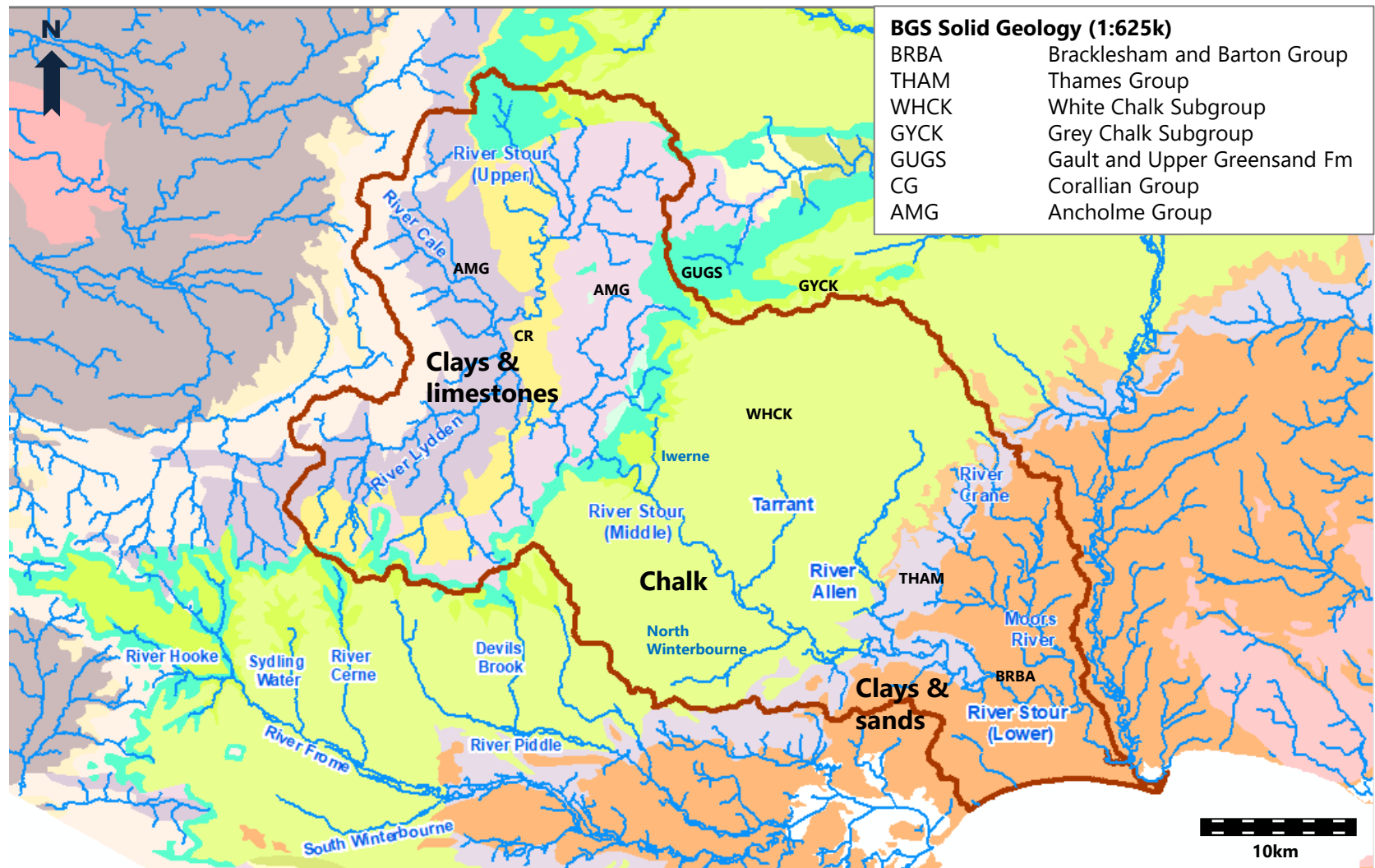




Environmental Destination

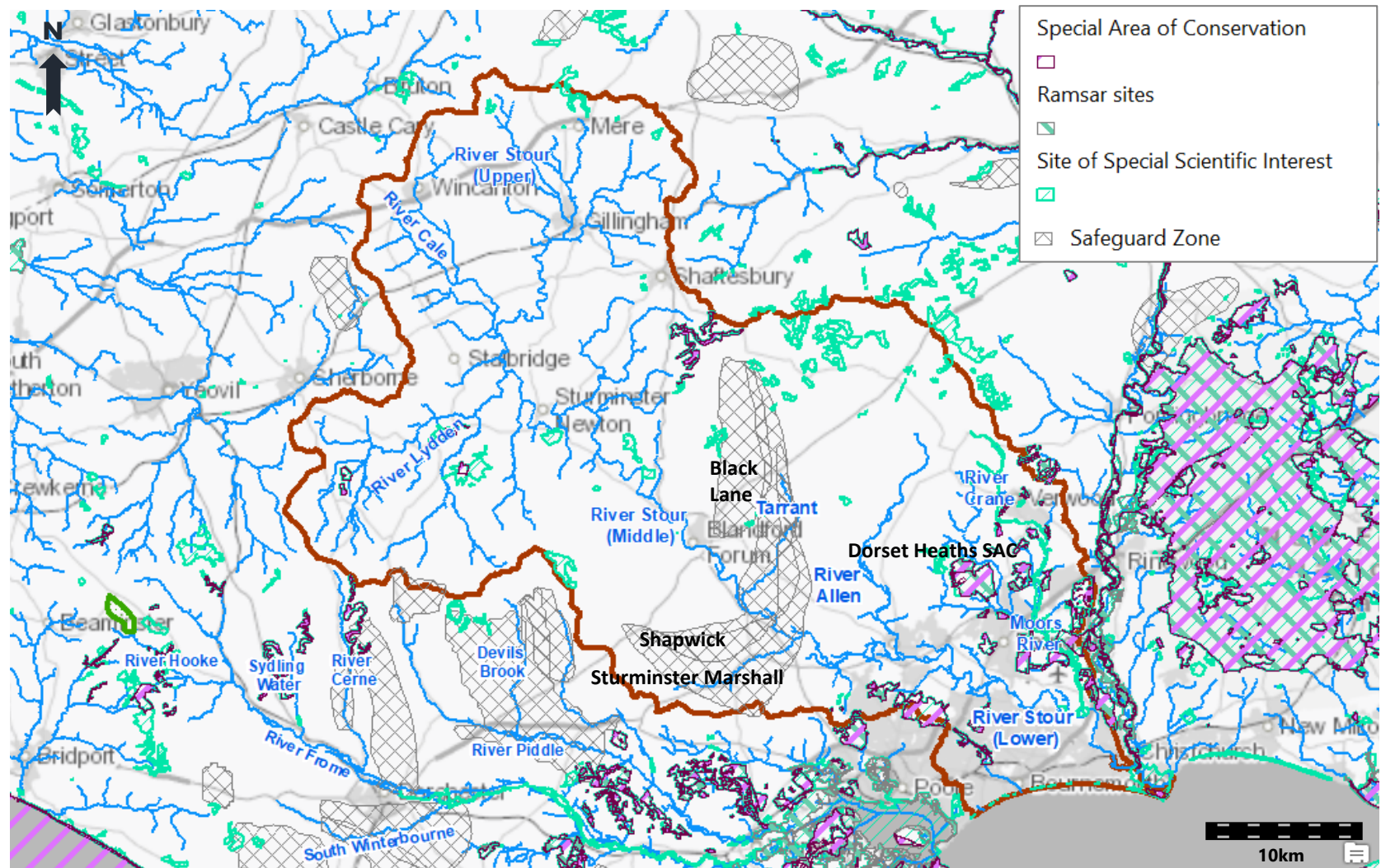
Figures accompanying Annex A: Dorset Stour pilot catchment plan to increase future water supply and low flow environmental resilience

Figure A2.1 Dorset Stour catchment: rivers and geology



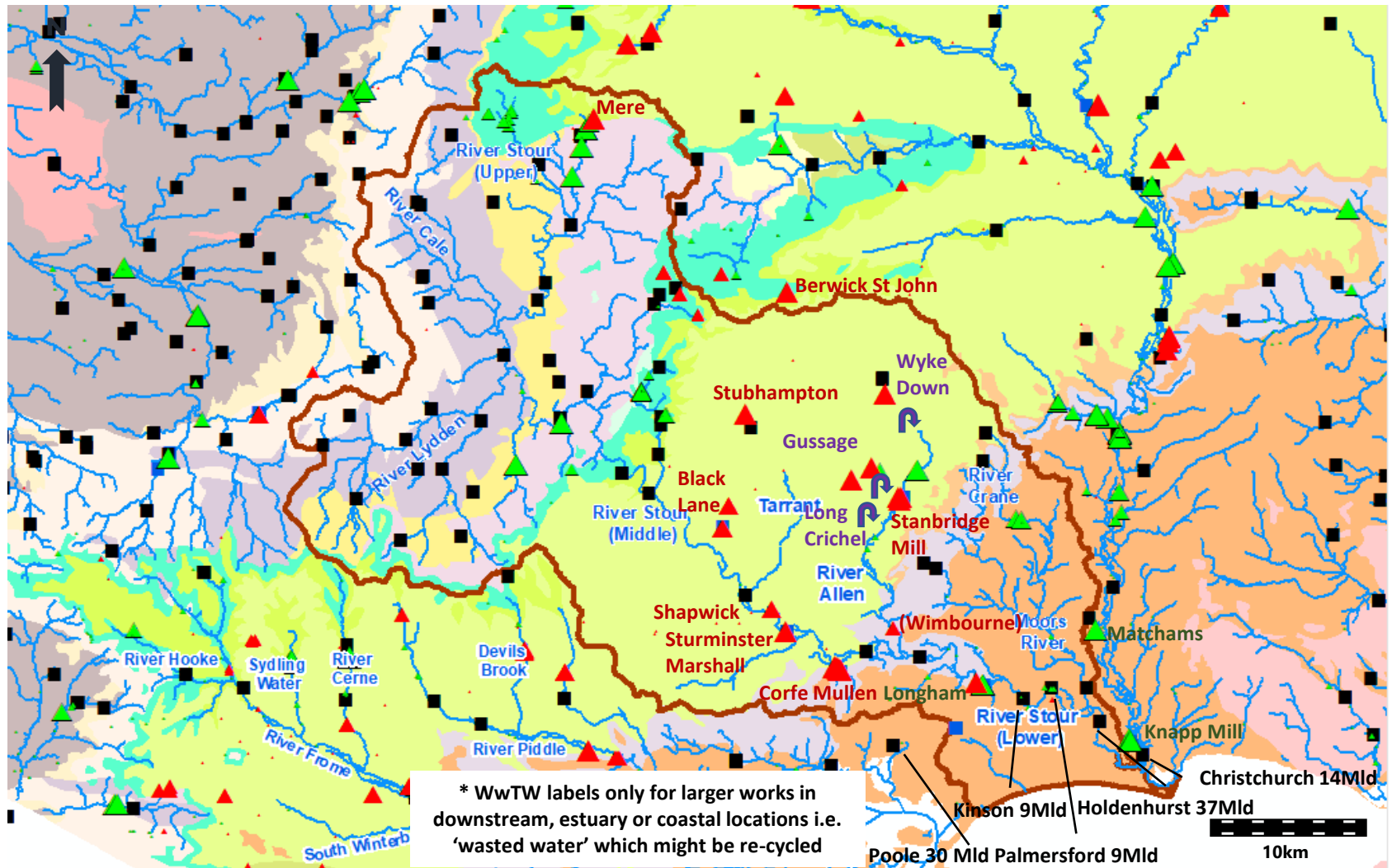
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Figure A2.2 Dorset Stour catchment: Designated sites and Drinking Water Safeguard Zones



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Figure A2.3 Dorset Stour catchment: PWS groundwater abstractions, surface water abstractions, WwTW surface water discharges* & river support schemes



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Annex A: Dorset Stour pilot catchment plan to increase future water supply and low flow environmental resilience
Reference 807434-WOOD-WRG-DS-FG-OW-0001_A_P01.3

Figure A2.4a Stour catchment: Surface Water Abstraction by Sector (total, MI/d)

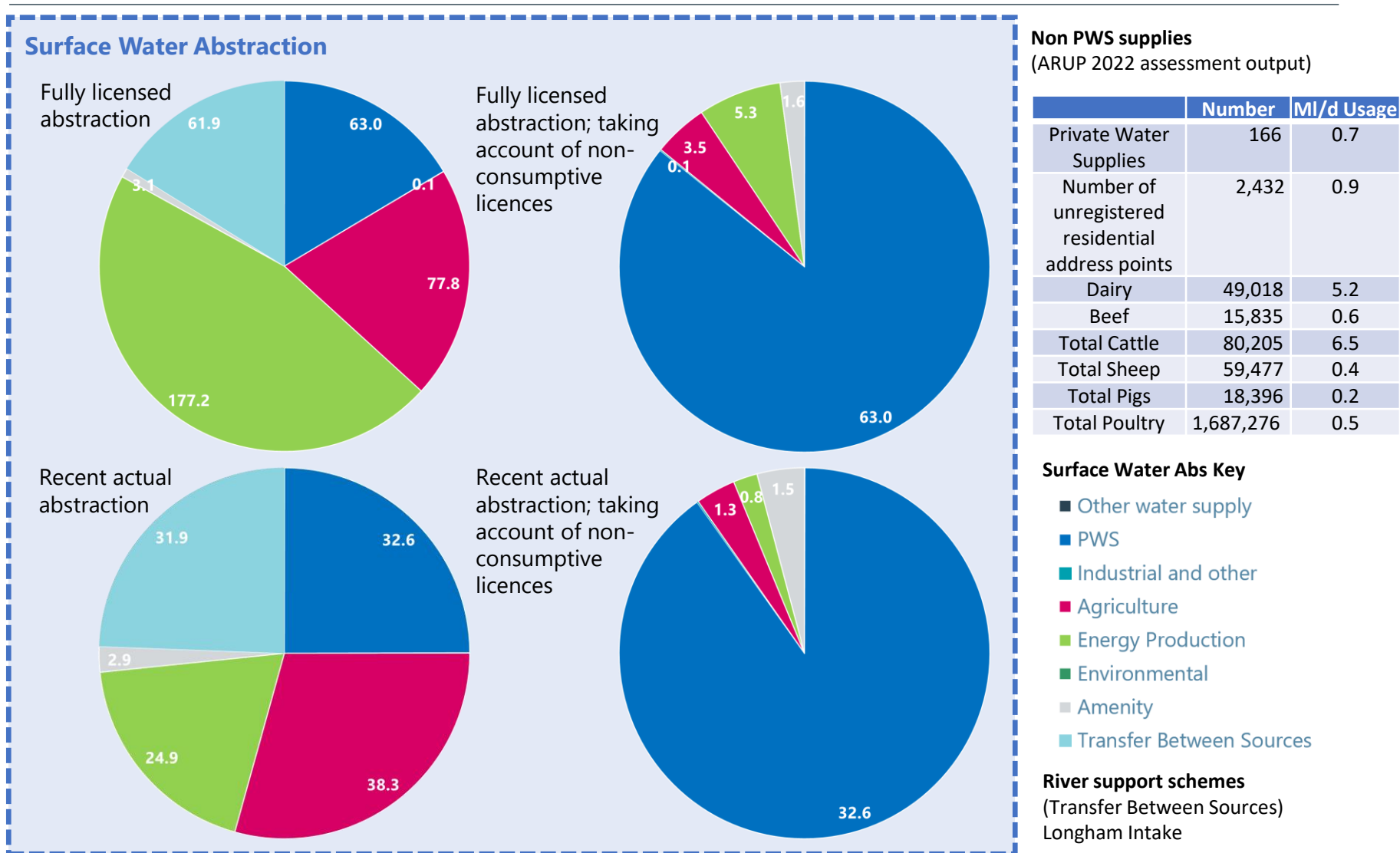


Figure A2.4b Stour catchment: Groundwater Abstraction by Sector (total, MI/d)

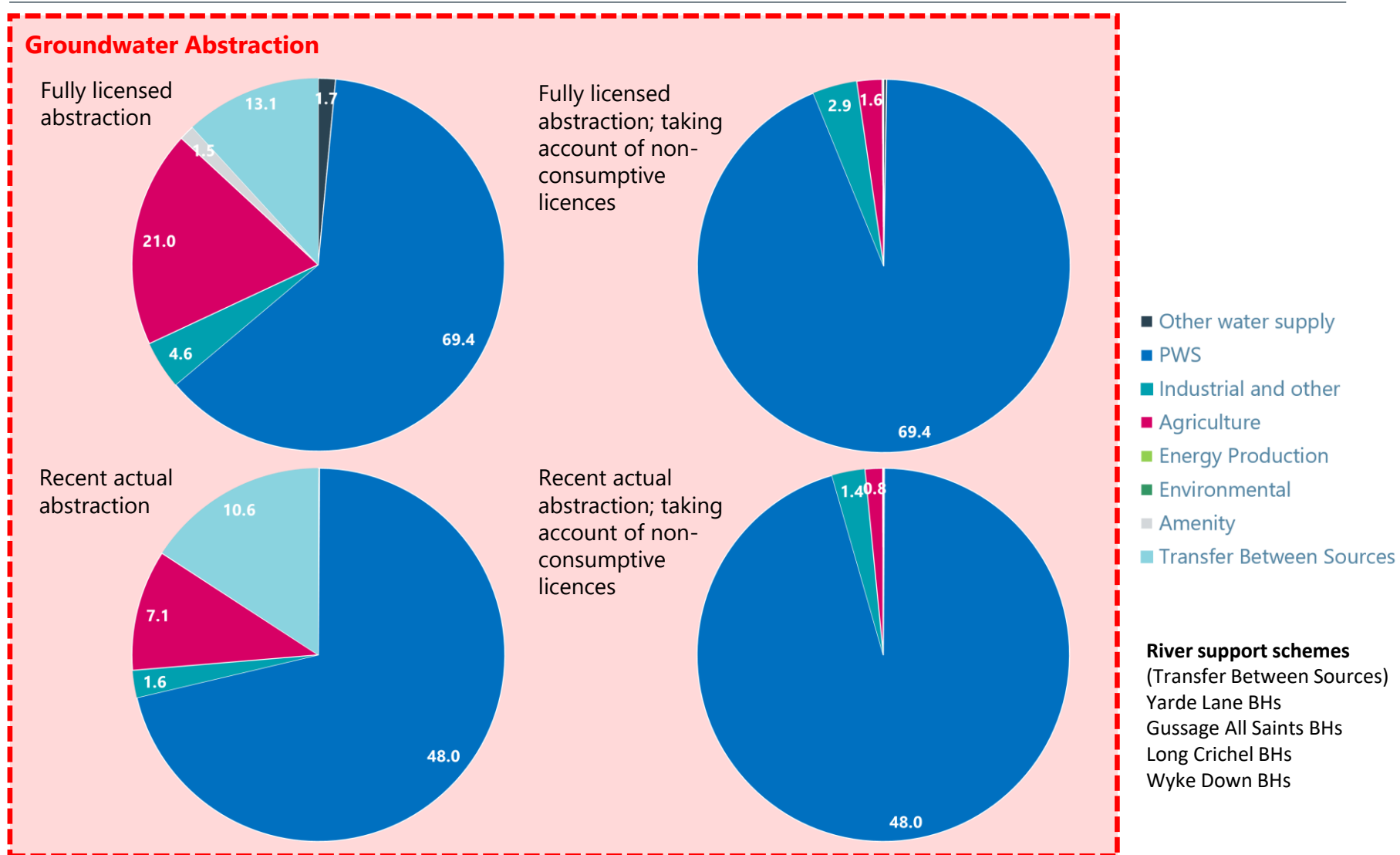
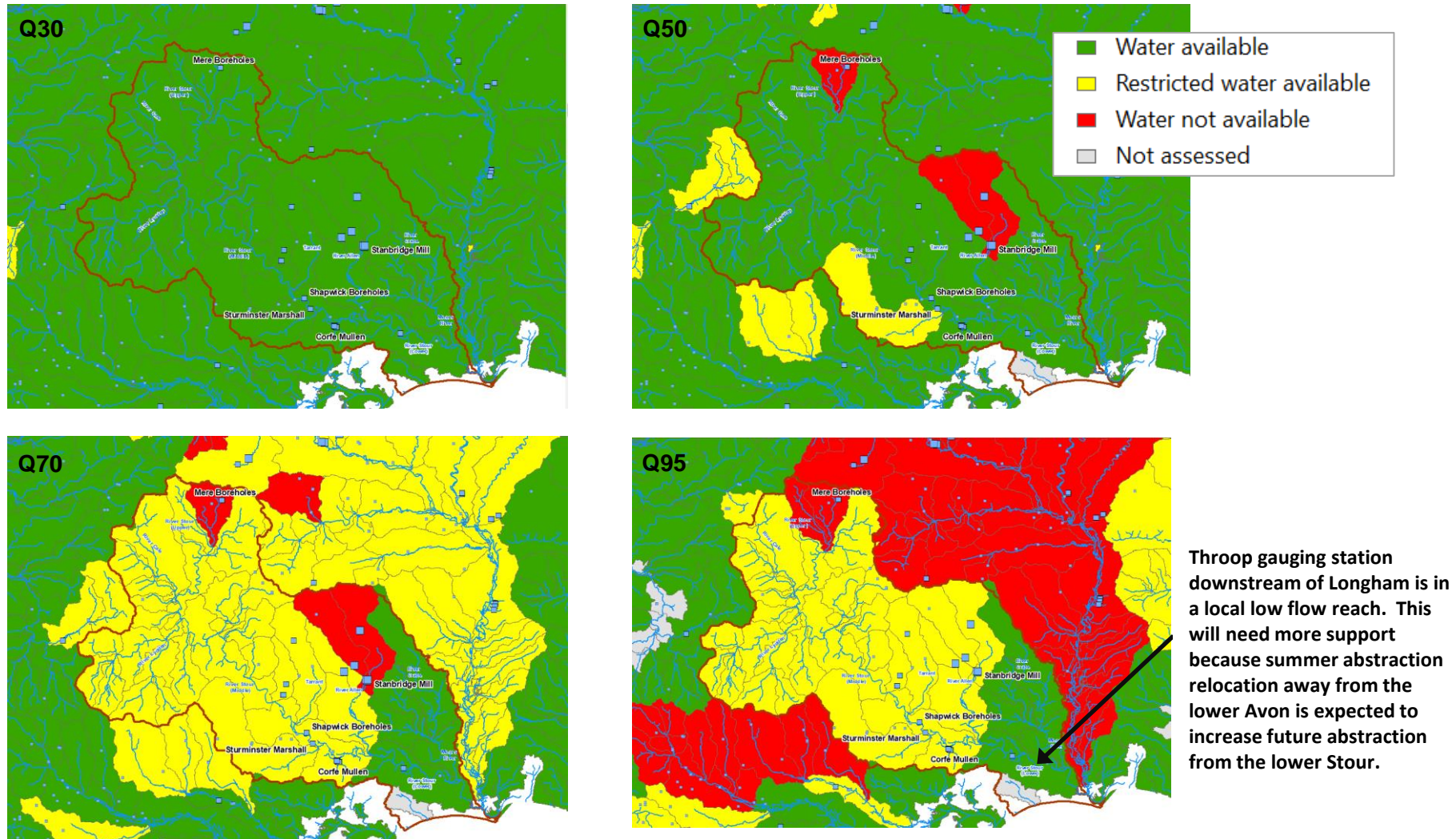
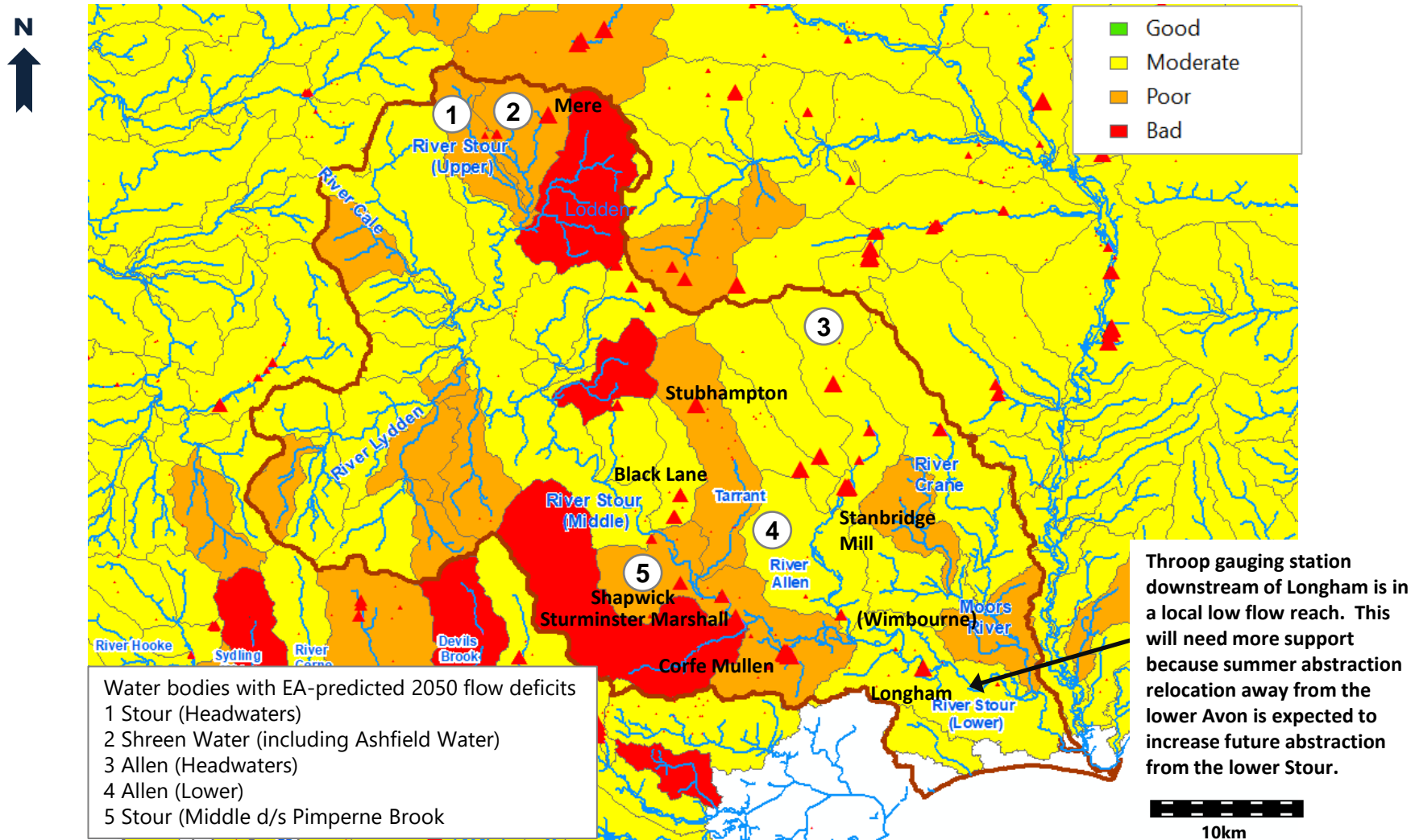


Figure A2.5 Environment Agency water resource availability at Q30, 50, 70, 95 for river water bodies (last updated 16 April 2021)



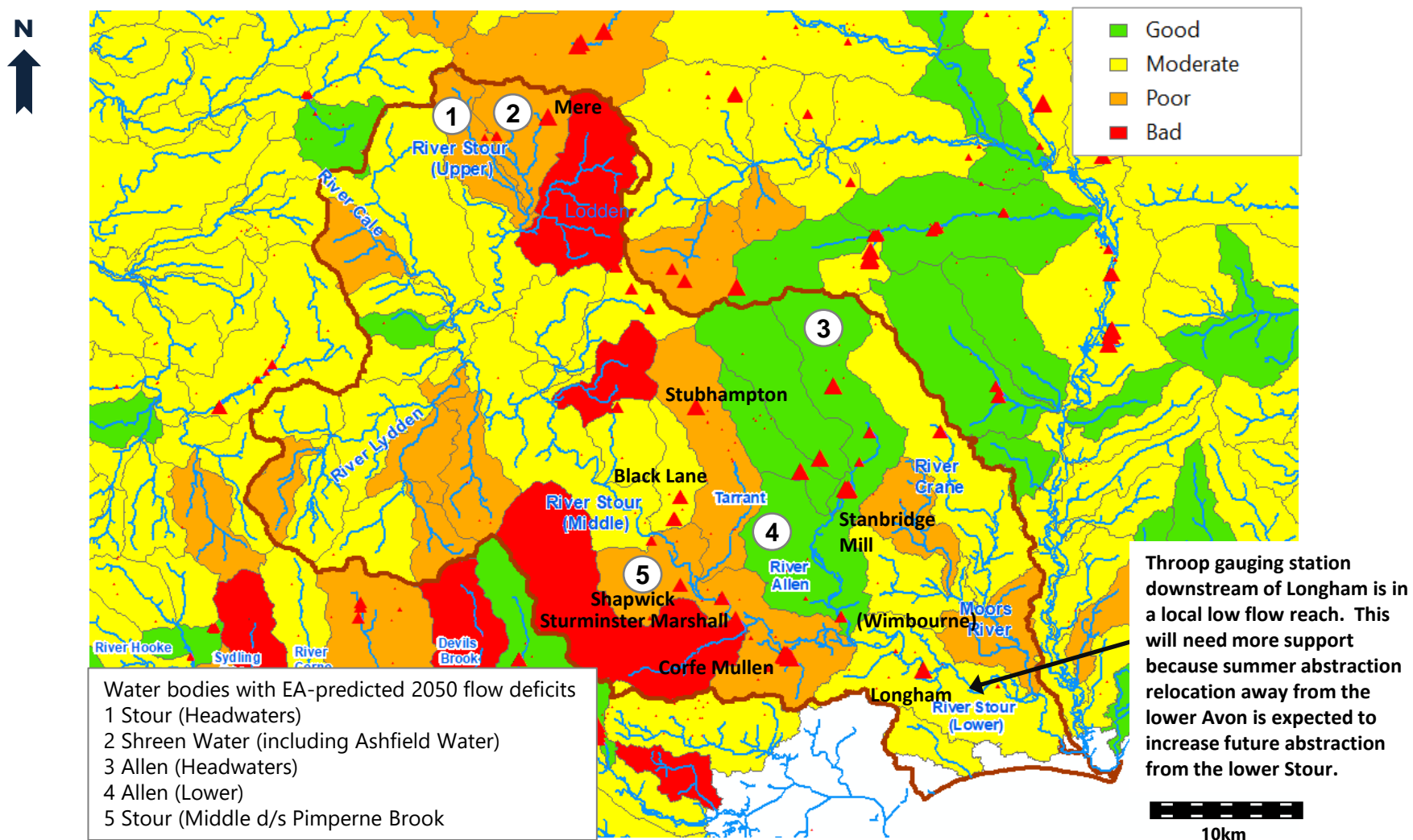
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Figure A2.6 WFD water body overall status (i.e. chemical + ecological, Cycle 2, 2019)



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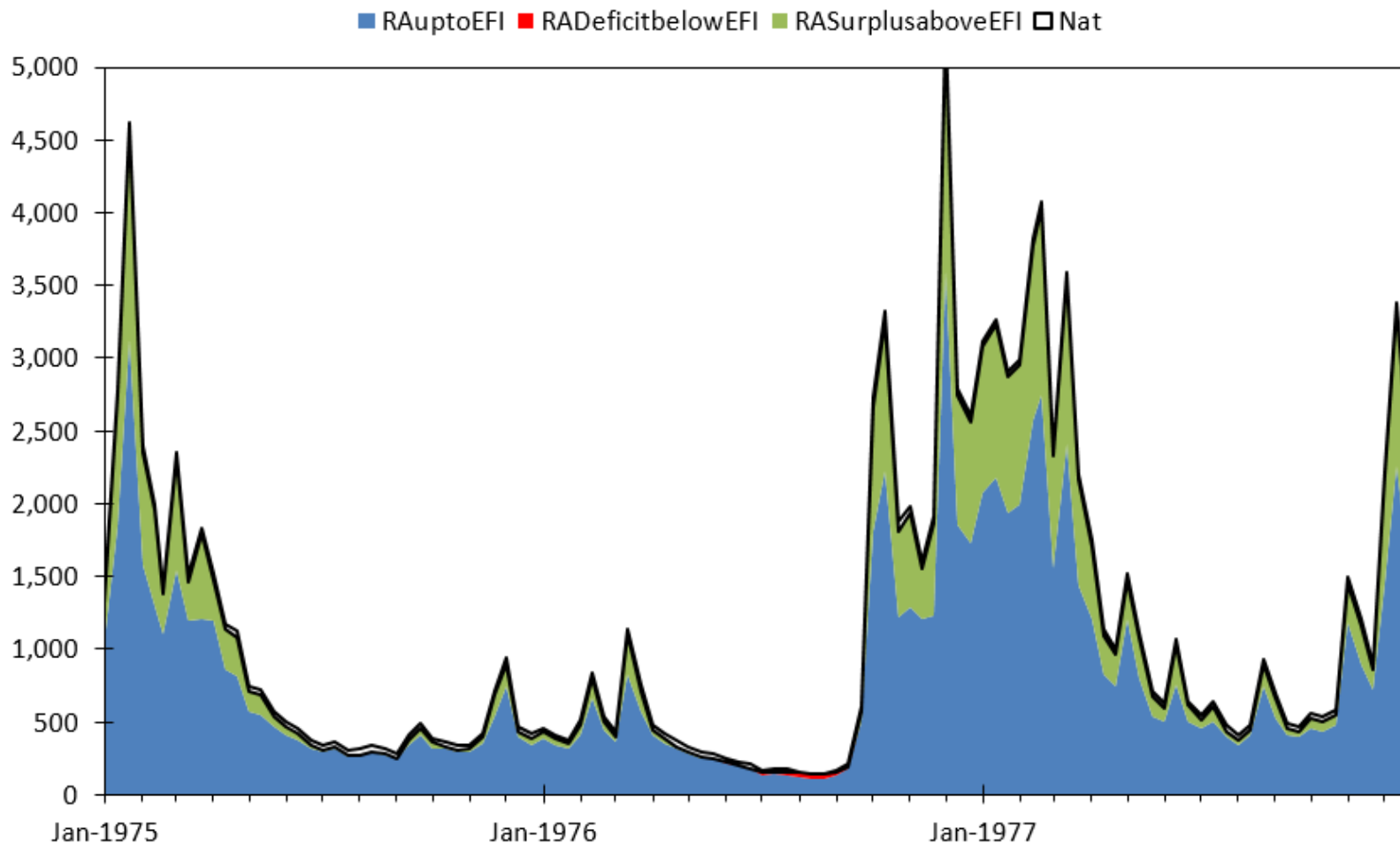
Figure A2.7 WFD water body ecological status (Cycle 2, 2019)



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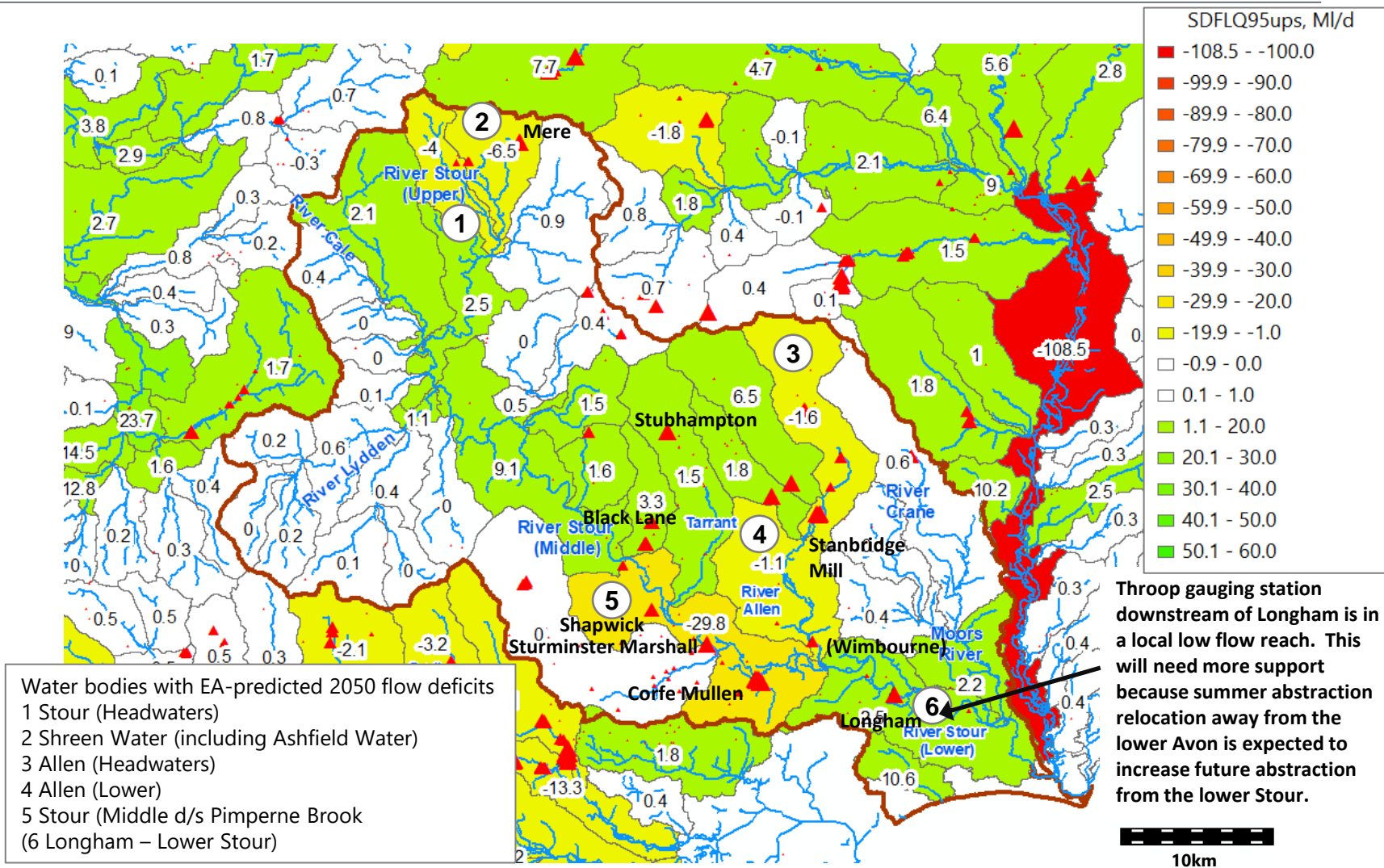
Figure A2.8 Recent Actual environmental flow surpluses & deficits at Throop around the 1976 drought indicating the need for low flow support or seasonal storage

River Stour at Throop Natural and Recent Actual Flows with EFI ASB3 Deficit and Surplus



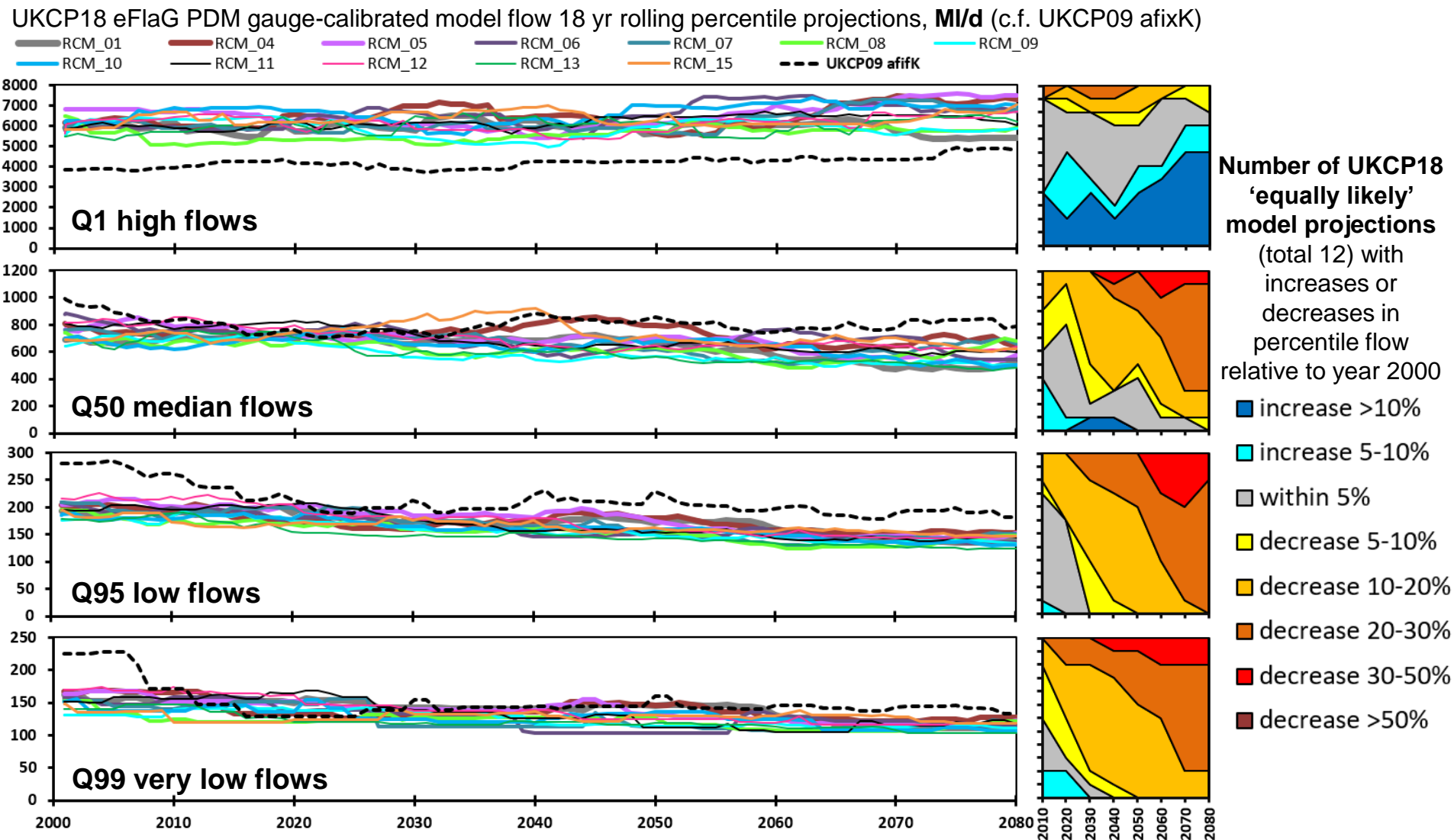
Model stress periods ~10 days, historical climate, Nat run swsx494, RA run swsx518

Figure A3.1 EA predicted fully licensed 2050 flow surpluses and flow deficits (MI/d) for water bodies under Q95 low flow conditions (enhanced scenario)



Data from EA's National Framework modelling in 2020

Figure A3.2 Flow changes expected due to climate (Dorset Stour at Throop): Projections from UKCP18 climate & PDM gauge-calibrated river flow models

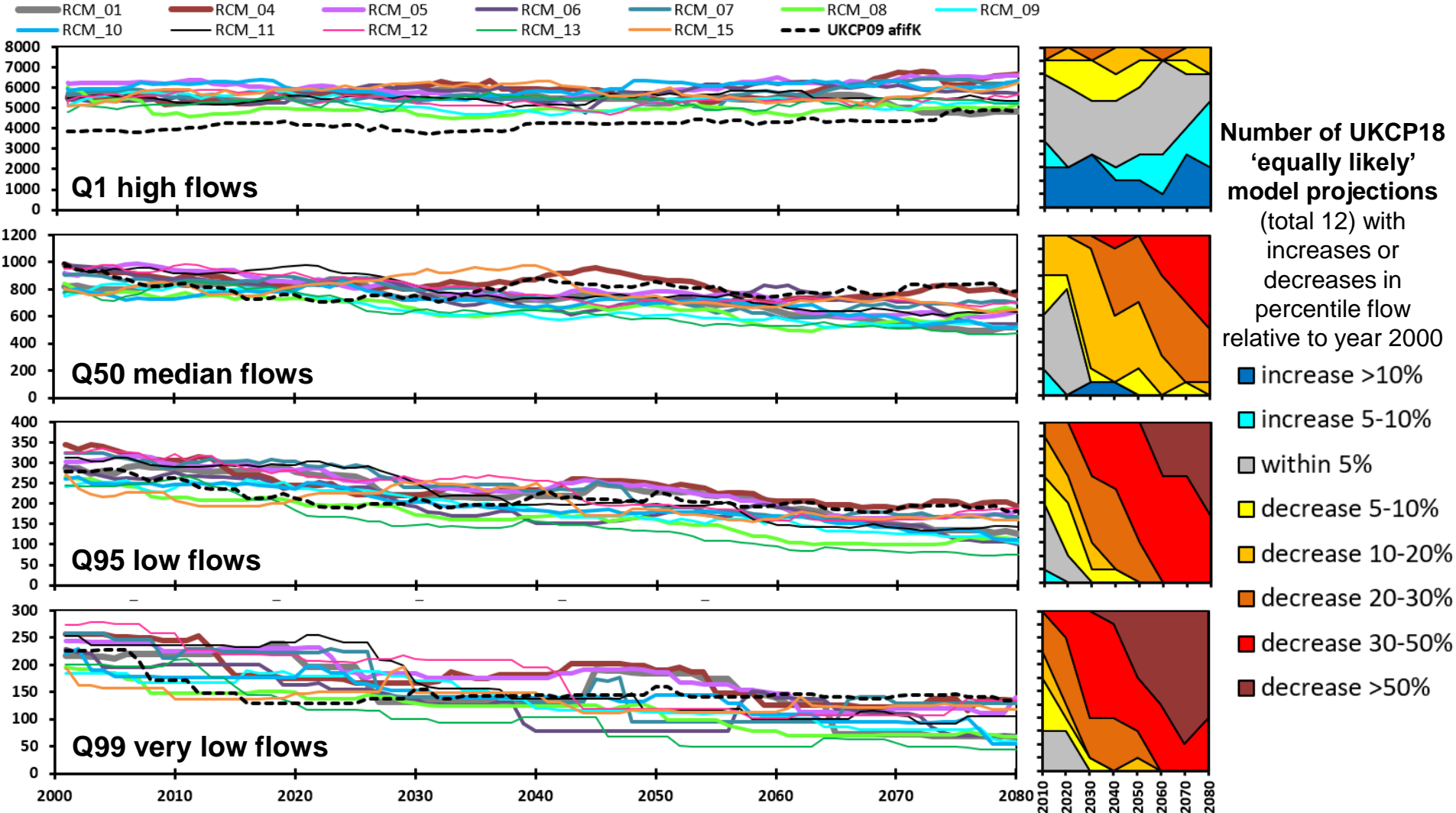


Data source: flows from 12 possible UKCP18 regional climate models (with UKCP09 afixK natural projection for comparison):

Annex A: Dorset Stour pilot catchment plan to increase future water supply and low flow environmental resilience
Reference 807434-WOOD-WRG-DS-FG-OW-0001_A_P01.3

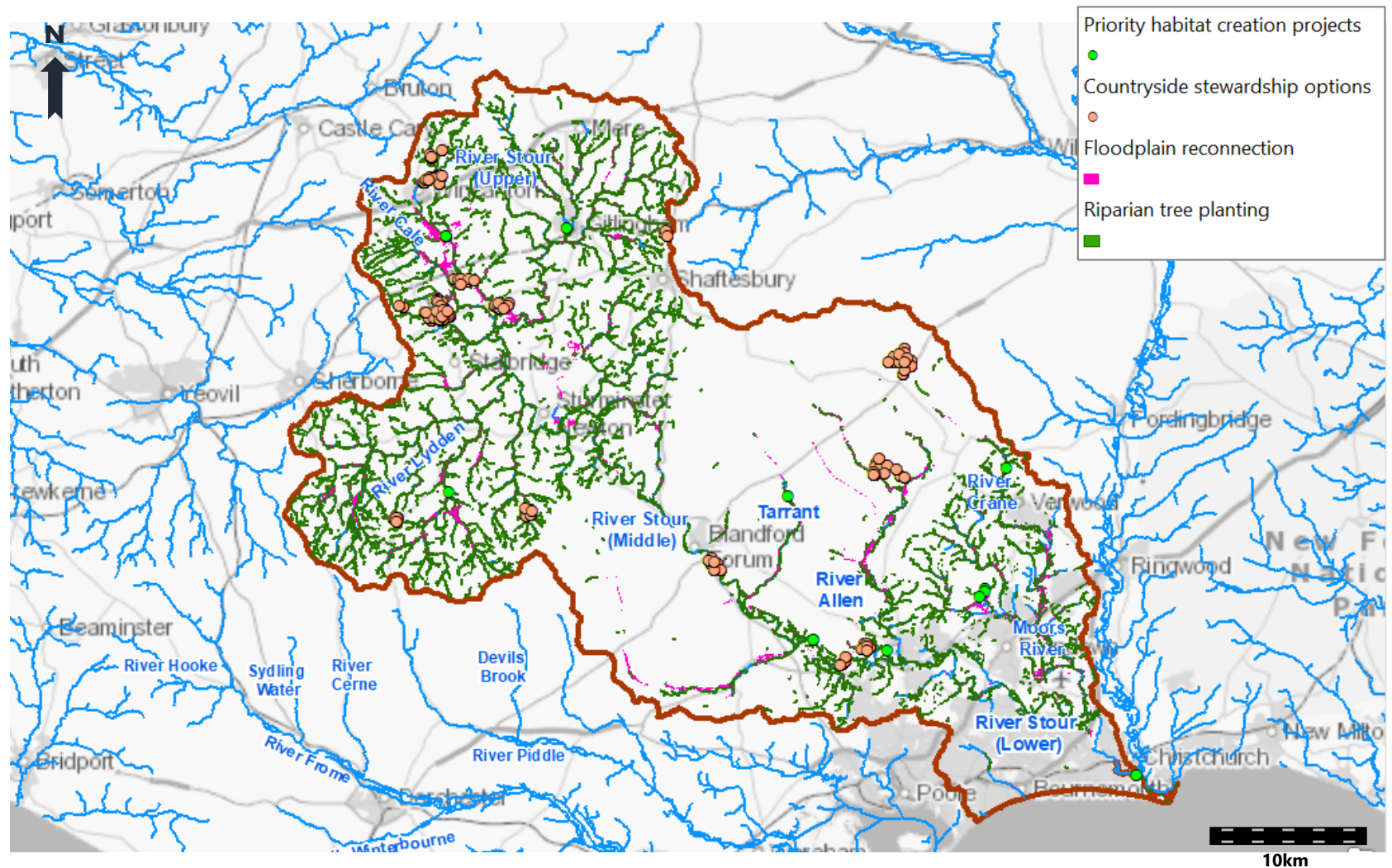
Figure A3.3 Flow changes expected due to climate (Dorset Stour at Throop): Projections from UKCP18 climate & G2G national natural river flow models

UKCP18 eFlaG G2G Model natural flow 18 yr rolling percentile projections, **Ml/d** (c.f. UKCP09 afifK)



Data source: natural flows from 12 possible UKCP18 regional climate models (with UKCP09 afifK natural projection for comparison): <https://eidc.ac.uk/>

Figure A4.1 Dorset Stour catchment CaBA opportunity mapping



Data downloaded June 2021 from Catchment Based Approach Data Hub website

Figure A4.2 Short term 2030 catchment measures: Dorset Stour

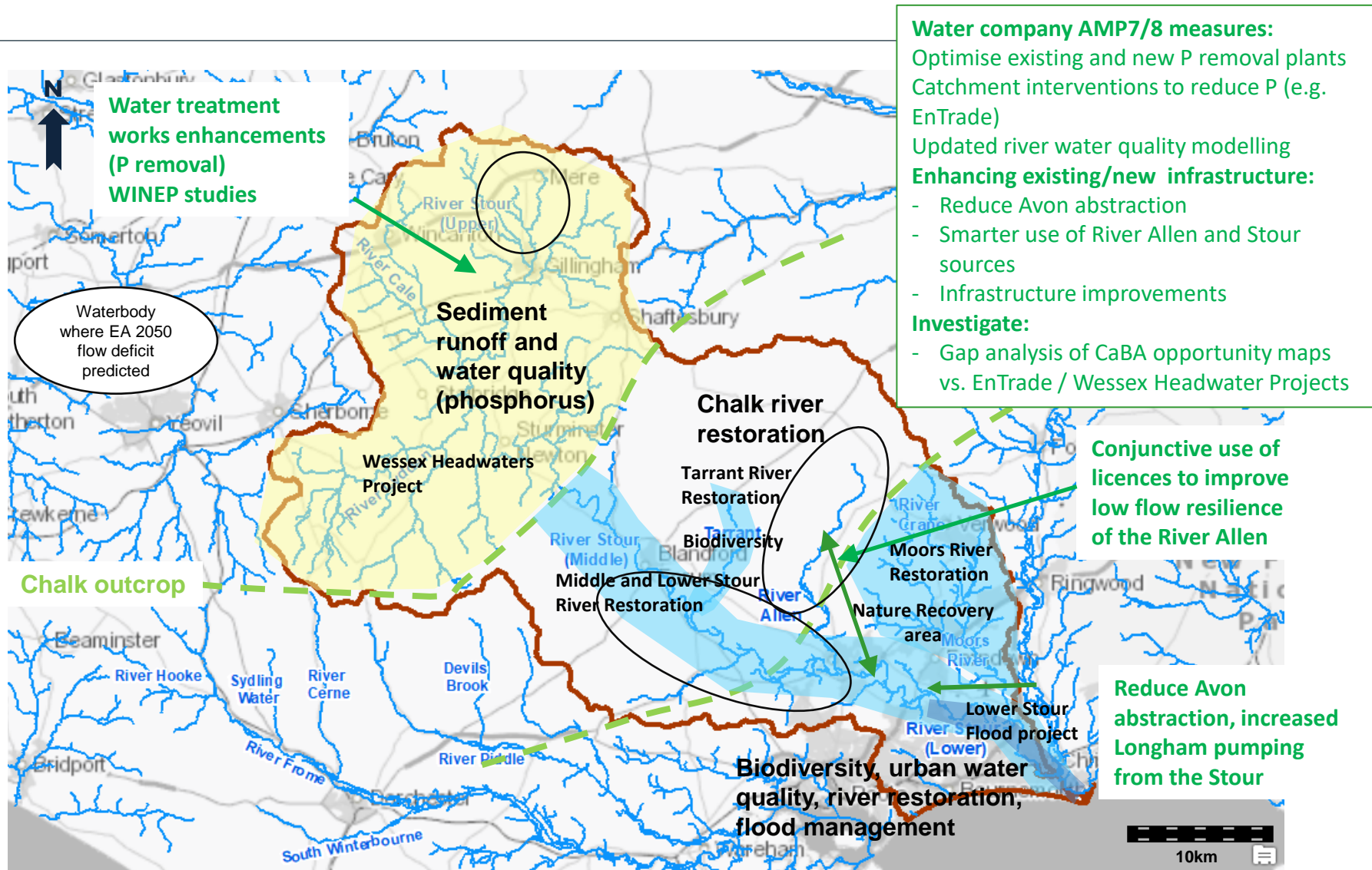


Figure A4.3 Medium term 2040 catchment measures: Dorset Stour

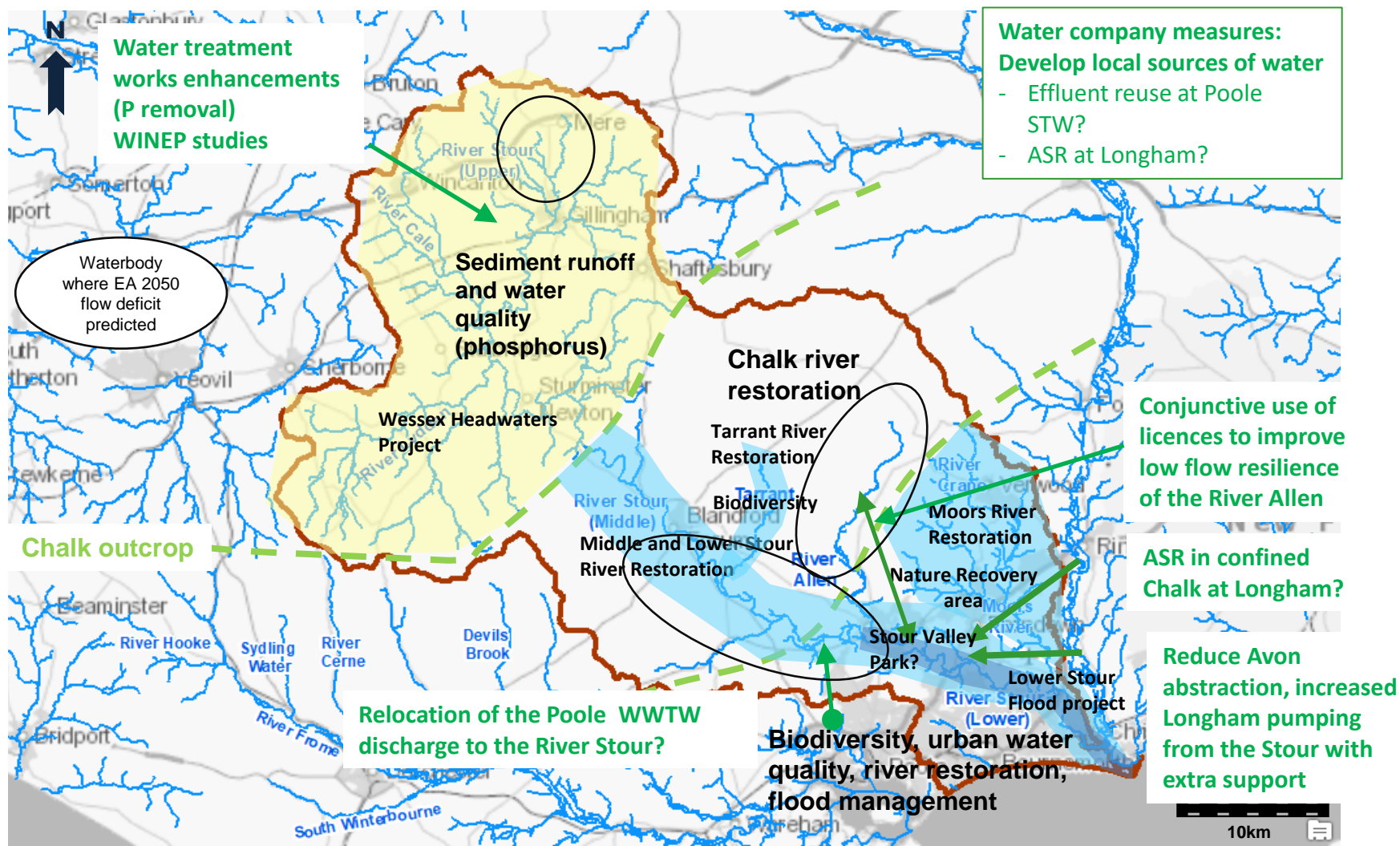


Figure A4.4 Long term 2050 catchment measures: Dorset Stour

