



Natural Capital in our Catchments

Developing natural capital accounts
for all 11 of our catchments

Appendix



from
**Southern
Water** 

in partnership with
AECOM

Contents

2	Contents
3	Introduction
4	Operational area summary
6	Adur and Ouse catchment summary
8	Arun and Western Streams catchment summary
10	Cuckmere and Pevensey Levels catchment summary
12	East Hampshire catchment summary
14	Isle of Wight catchment summary
16	Kent North catchment summary
18	Medway catchment summary
20	New Forest catchment summary
22	Rother catchment summary
24	Stour catchment summary
26	Test and Itchen catchment summary

Appendices

Natural Capital in our Catchments

The following appendices support our report on the ‘Natural Capital in our Catchments - Developing natural capital accounts for all 11 catchments in our operating area’¹.

In summary, we conducted natural capital accounts for our operating area, encompassing 11 catchments we work within:

- Adur and Ouse
- Arun and Western Streams
- Cuckmere and Pevensey Levels
- East Hampshire
- Isle of Wight
- Kent North
- Medway
- New Forest
- Rother
- Stour
- Test and Itchen

We measured the state of natural capital in each catchment in terms of the quantity and quality of habitats, and the ecosystem services they deliver. The flows of these ecosystem services from habitats were quantified (presented in a ‘physical flow account’) and valued in monetary terms (presented in a ‘monetary flow account’), where appropriate.

The baseline year for data reporting was set at 2021, and the monetary values expressed in 2020 prices. As a baseline account, the findings for each catchment provide a starting point from which future accounts can be compared. This will help us monitor change in our impacts and dependencies on nature².



Each appendix presents headline summary findings for one catchment, in alphabetical order, and includes:

- Total catchment area and area owned by Southern Water (freehold), as well as total volume of carbon sequestered by habitats;
- A land cover map;
- **A1:** Proportion of land cover by habitat type;
- **A2:** Biodiversity units provided by habitat measured using Natural England’s Biodiversity Metric 3.1;
- **A3:** The status of waterbodies under the Water Framework Directive (WFD); and
- **A4:** The proportion of annual monetary value delivered by ecosystem service.

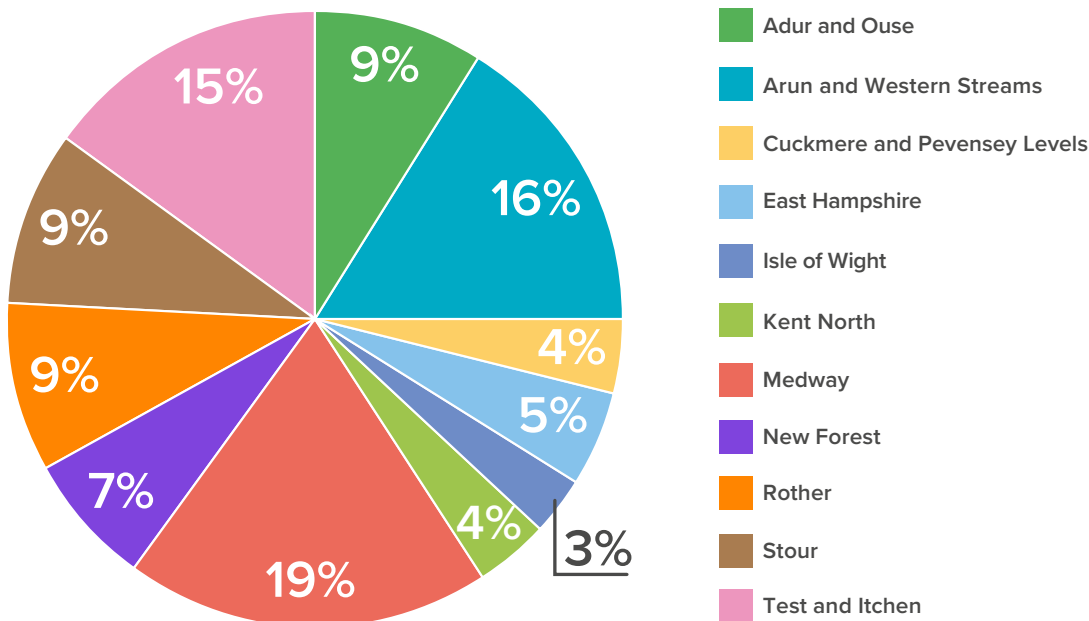
¹ [Natural Capital in our Catchments report](#)

² Please contact Southern Water for the full technical report, asset register, physical and monetary flow accounts, methodology, and data information behind these results.

Operational area

Summary

Total area	1,150,103ha
Area owned by Southern Water (freehold)	2,353ha
Carbon sequestered by habitats	1434,445 tCO ₂ e/yr
Total visit numbers	12,036,550 visits
Total volume of public water supplied	223,359,587m ³ /yr
Total number of biodiversity units	6,153,565

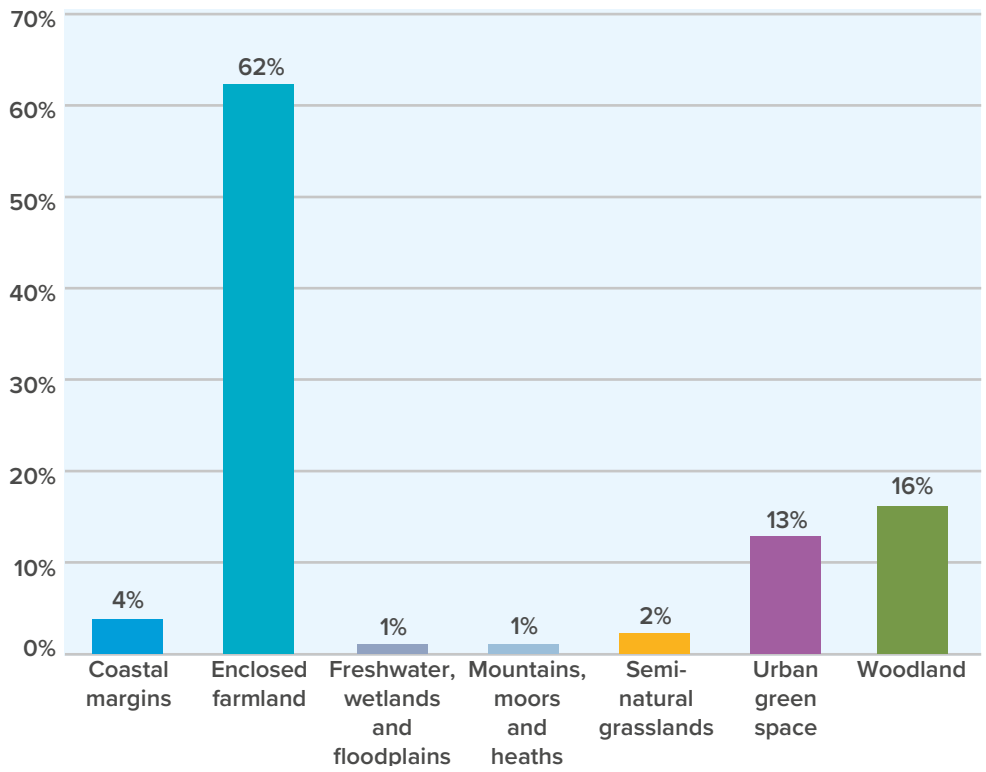


(Percentages reflect area of catchment)

Total monetary flows of ecosystem services (2021)*

Ecosystem service	Value type	Monetary flows (£k/year)
Food (crops and livestock)	Private	399,760
Water supply	Societal	191,420
Global climate regulation	Societal	351,440
Air quality regulation	Societal	2,361,300
Flood regulation	Societal	145,640
Water purification	Societal	89,530
Recreation	Societal	51,200
Total private value		399,760
Total societal value		3,190,520
Grand total		3,590,280

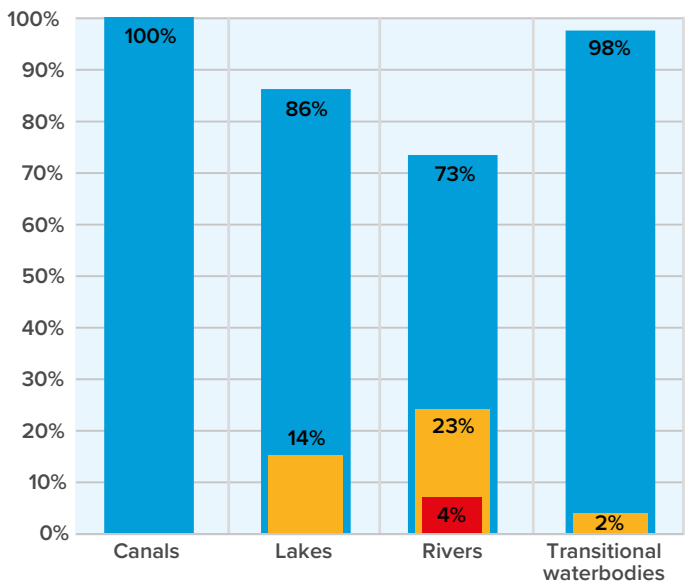
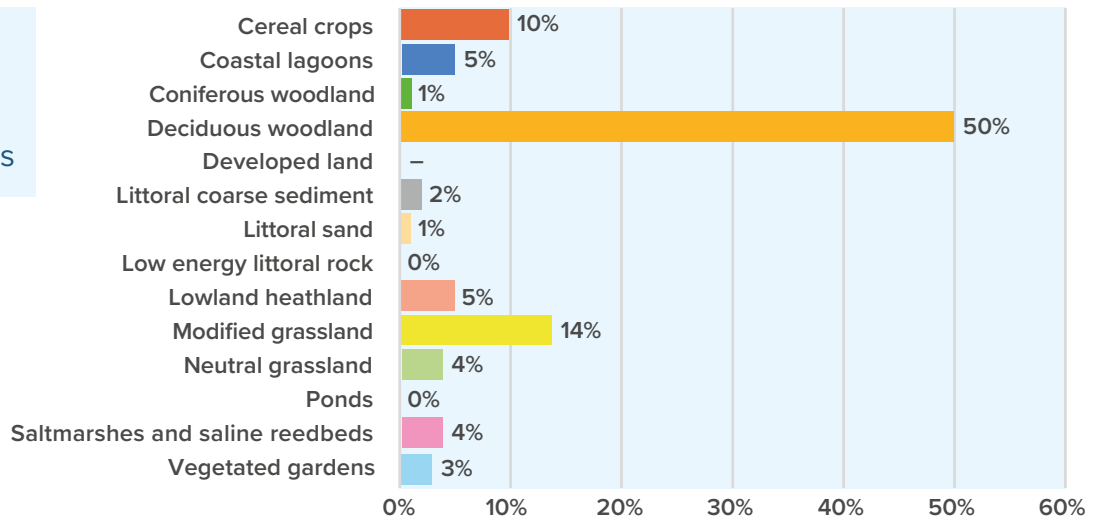
*Rounded to the nearest 10



Land cover by habitat type (catchment area = 1,150,103ha)

Baseline biodiversity units for area-based habitats (total units = 6,153,565)

Note:
 0% signifies less than zero
 – signifies no units



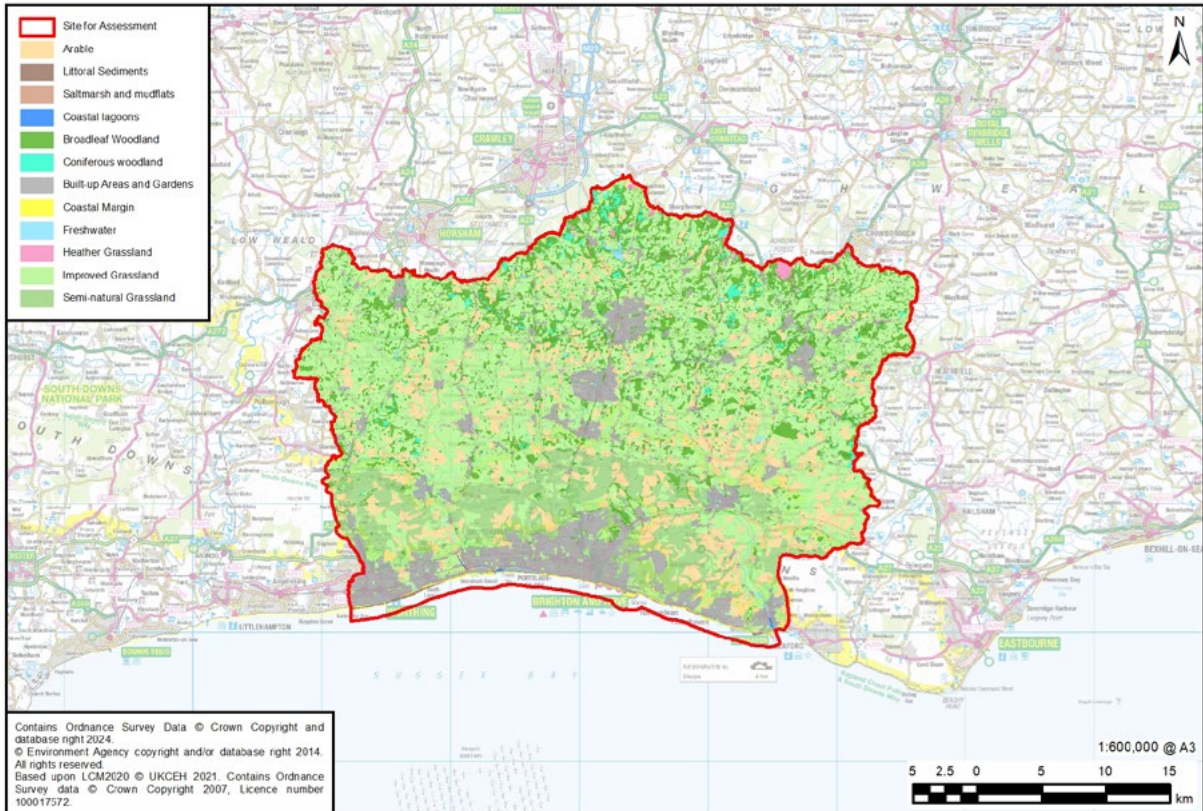
WFD status by waterbody type

■ Good
■ Poor
■ Bad
■ Moderate

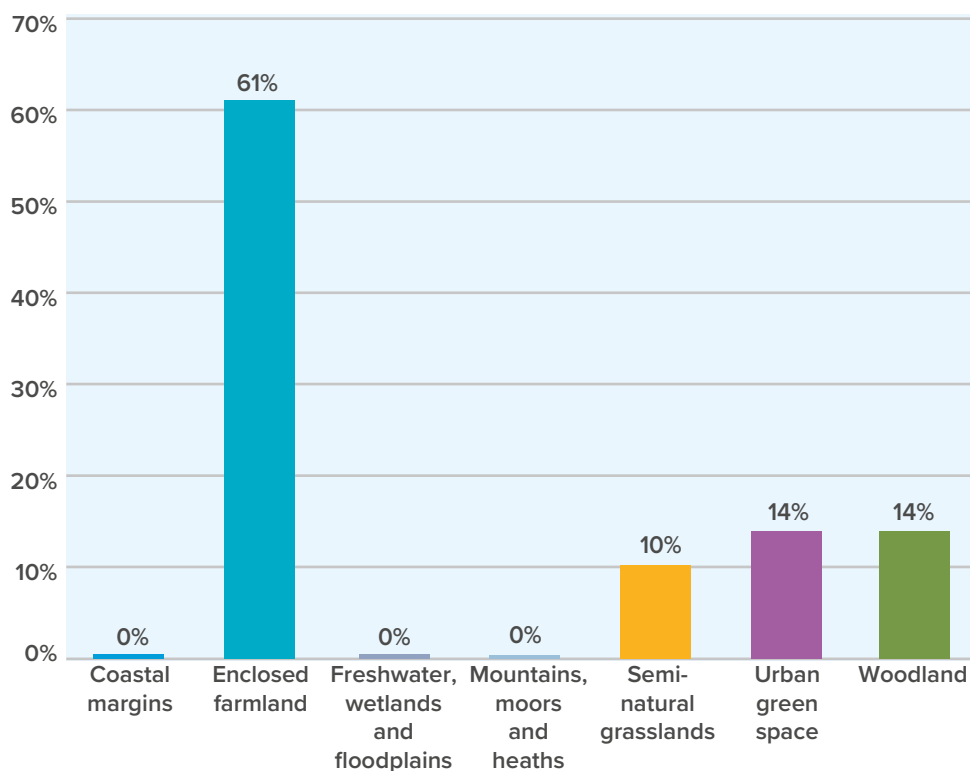
Appendix A

Adur and Ouse

Catchment summary



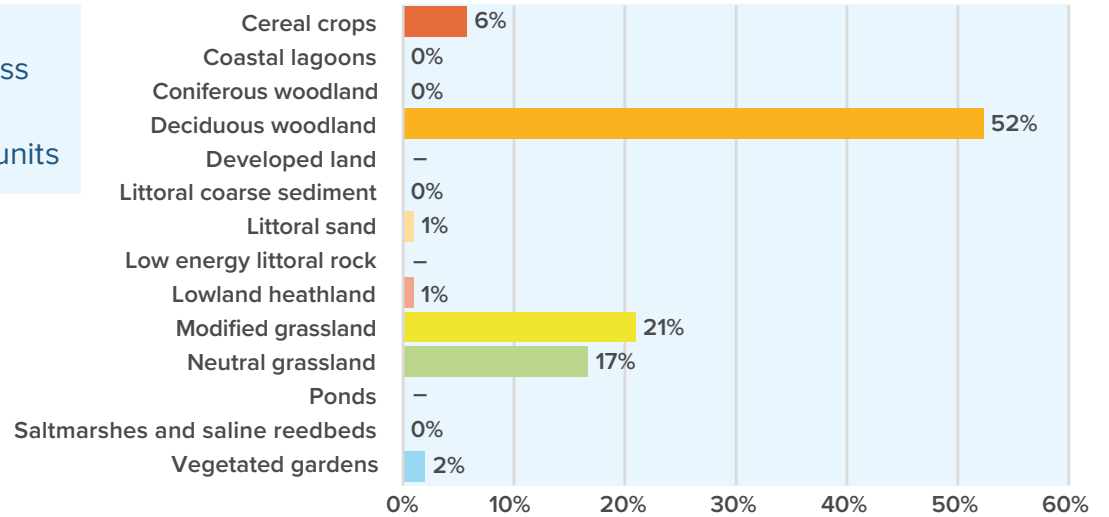
A1: Land cover by habitat type (catchment area = 117,977ha)



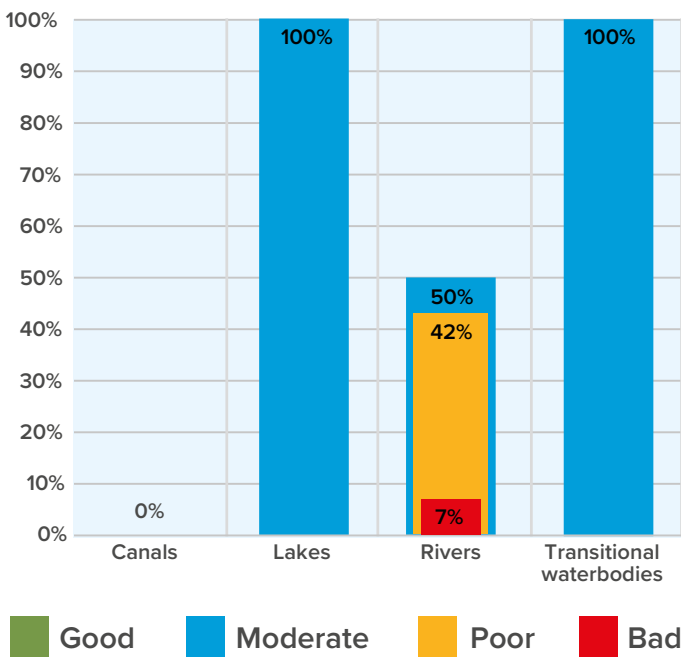
Total area	117,997ha
Area owned by Southern Water (freehold)	181ha
Carbon sequestered by habitats	125,731 tCO ₂ e/yr

A2: Baseline biodiversity units for area-based habitats (total units = 577,644)

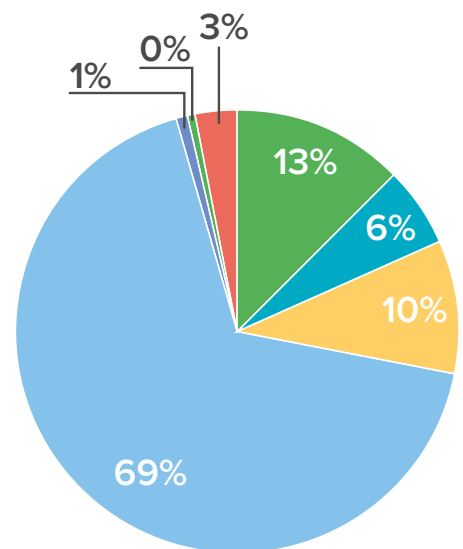
Note:
 0% signifies less than zero
 – signifies no units



A3: WFD status by waterbody type



A4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

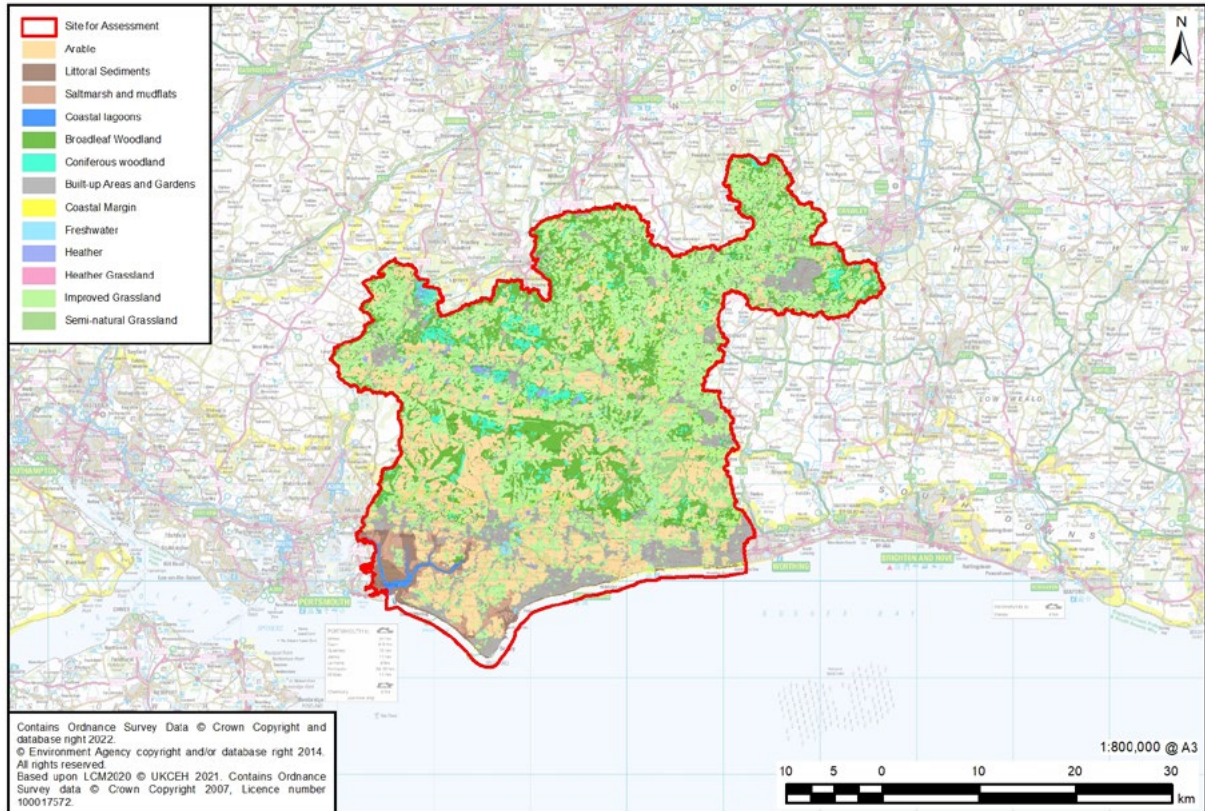


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

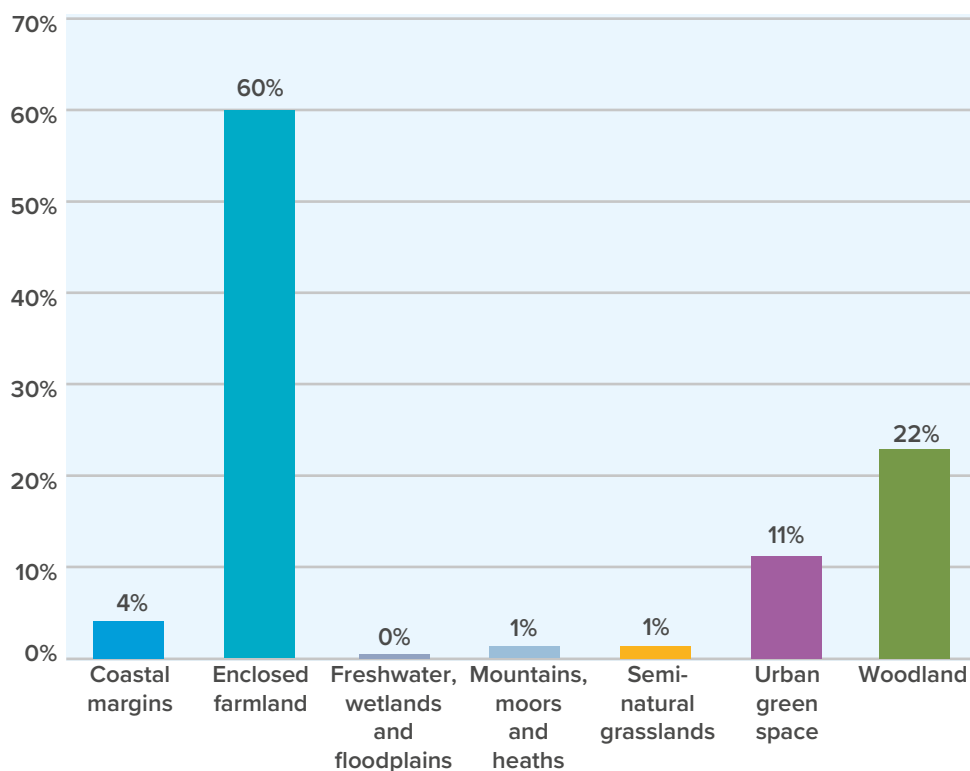
Appendix B

Arun and Western Streams

Catchment summary



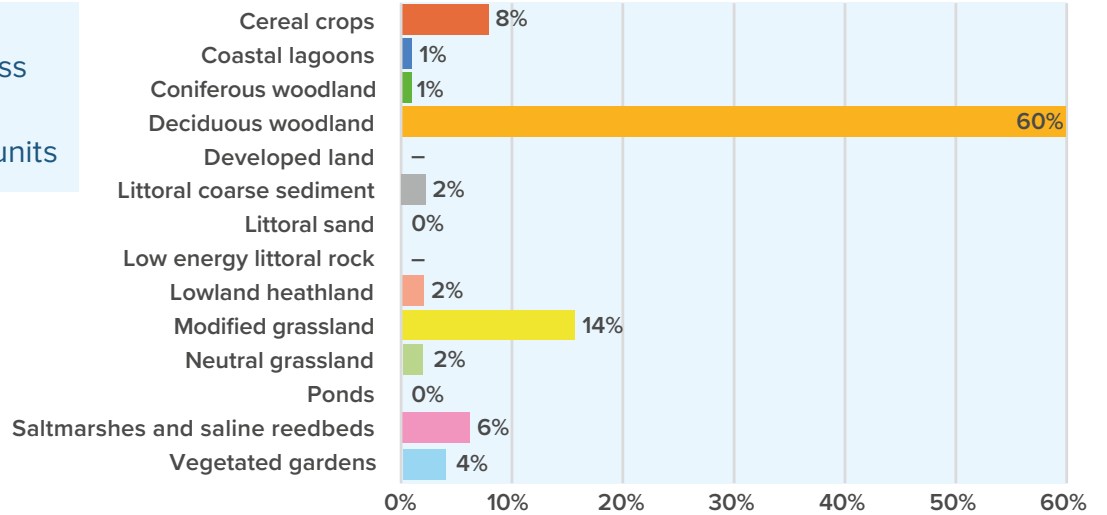
B1: Land cover by habitat type (catchment area = 151,001ha)



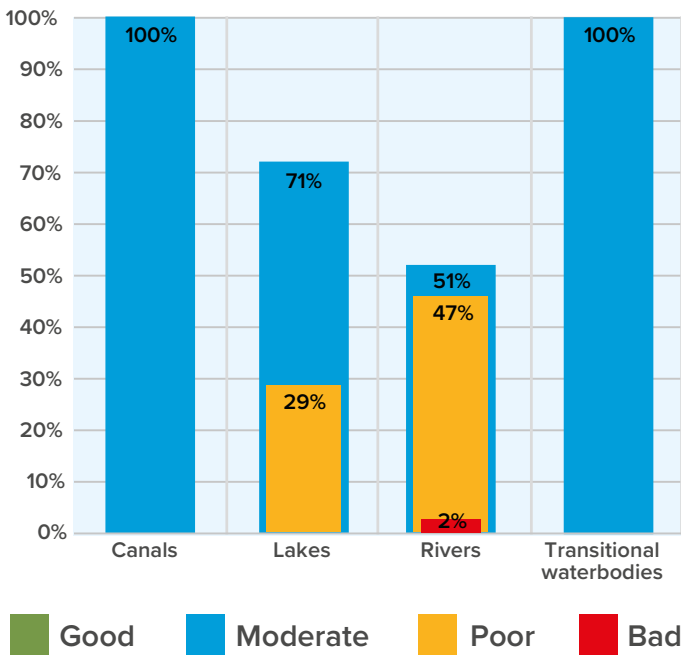
Total area	151,001ha
Area owned by Southern Water (freehold)	154ha
Carbon sequestered by habitats	259,463 tCO ₂ e/yr

B2: Baseline biodiversity units for area-based habitats (total units = 577,644)

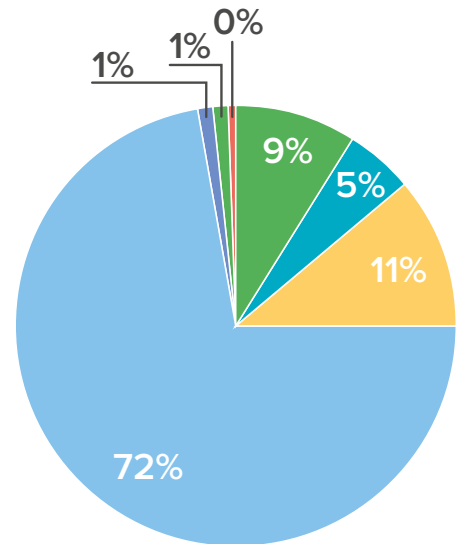
Note:
 0% signifies less than zero
 – signifies no units



B3: WFD status by waterbody type



B4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

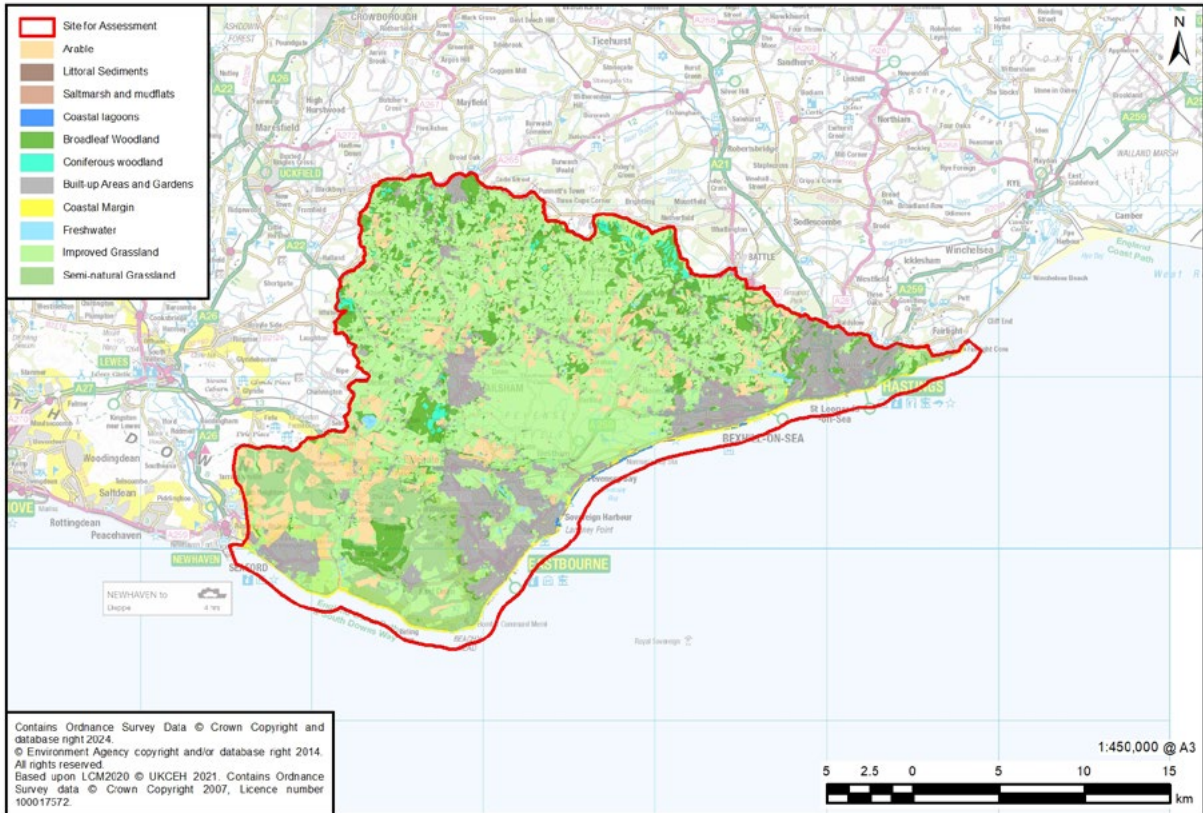


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

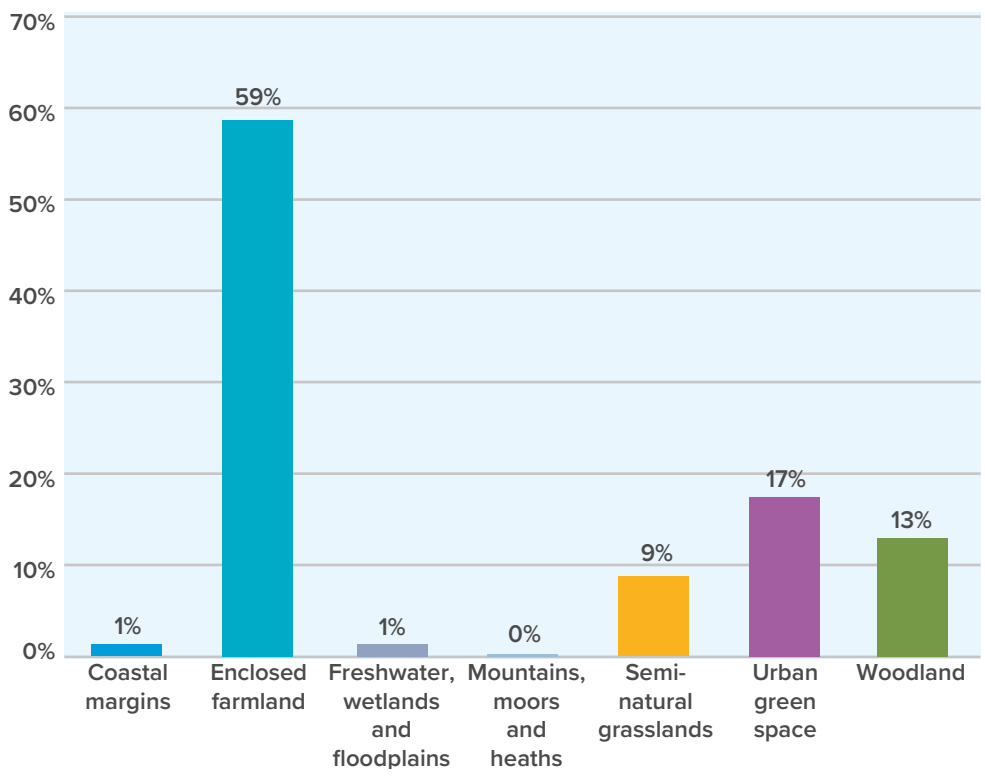
Appendix C

Cuckmere and Pevensy Levels

Catchment Areas summary



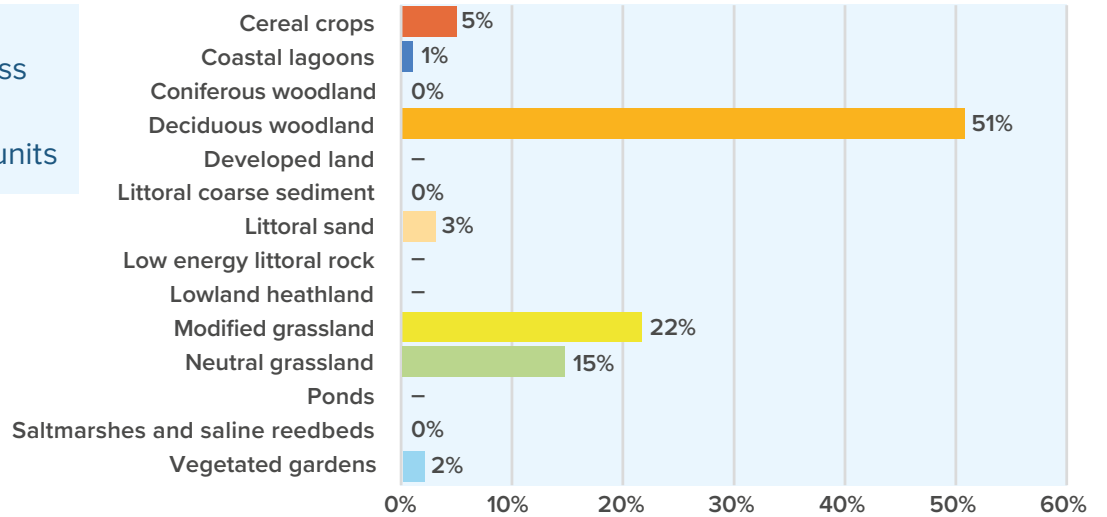
C1: Land cover by habitat type (catchment area = 56,731ha)



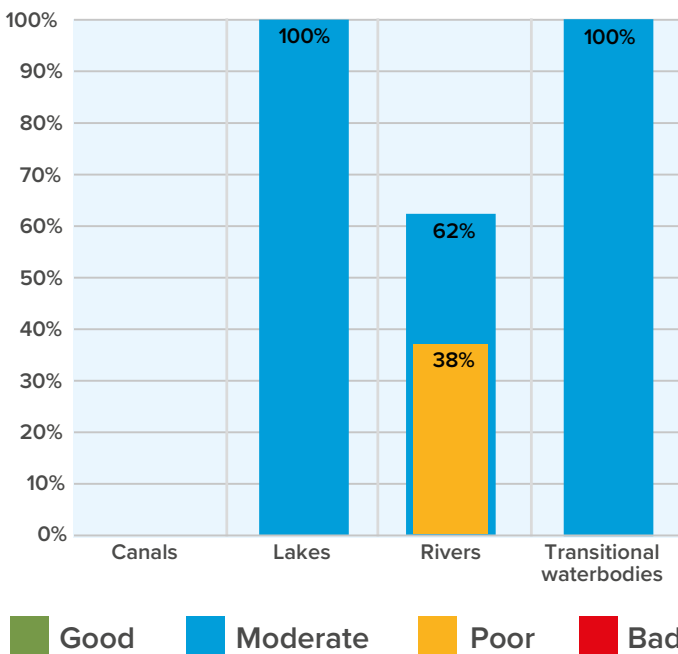
Total area	56,731ha
Area owned by Southern Water (freehold)	58ha
Carbon sequestered by habitats	53,840 tCO ₂ e/yr

C2: Baseline biodiversity units for area-based habitats (total units = 577,644)

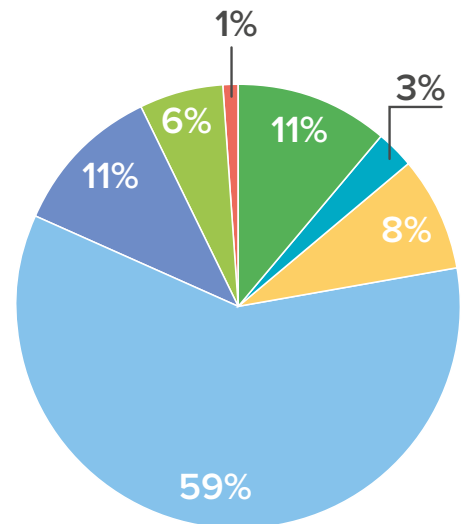
Note:
 0% signifies less than zero
 – signifies no units



C3: WFD status by waterbody type



C4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

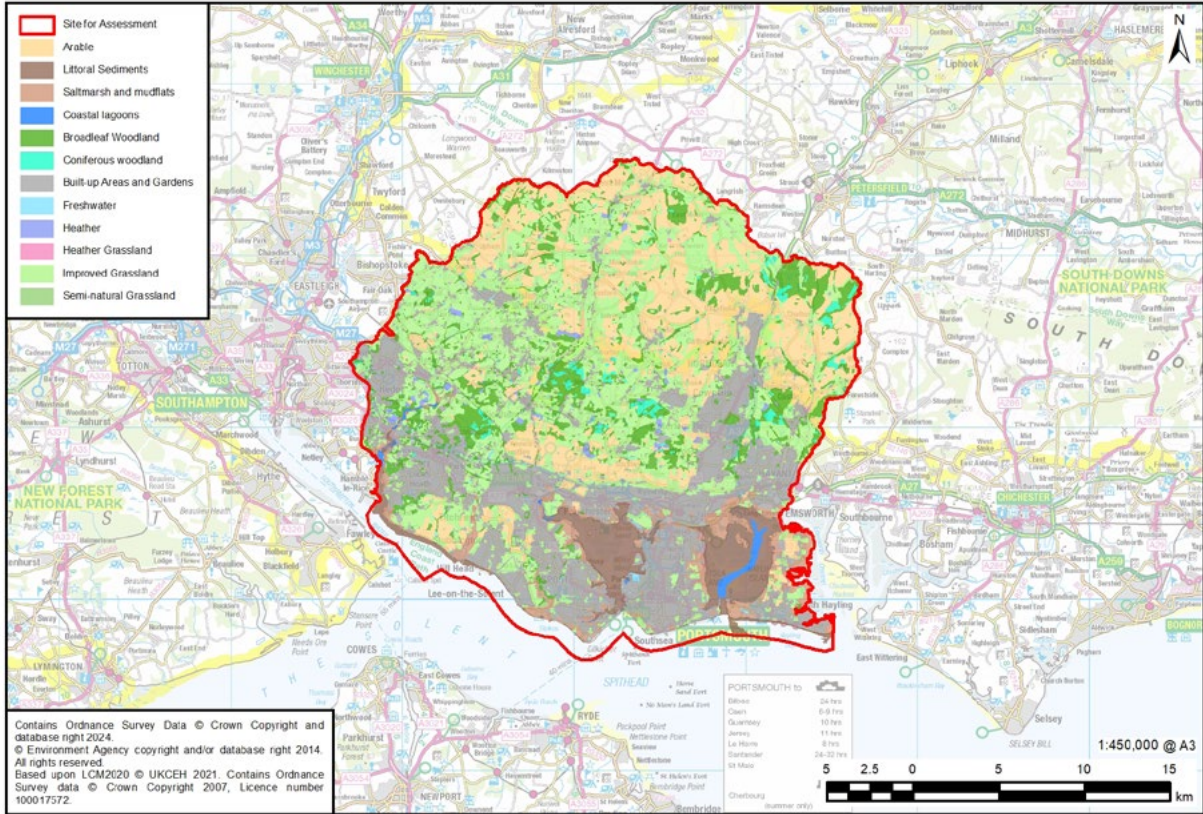


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

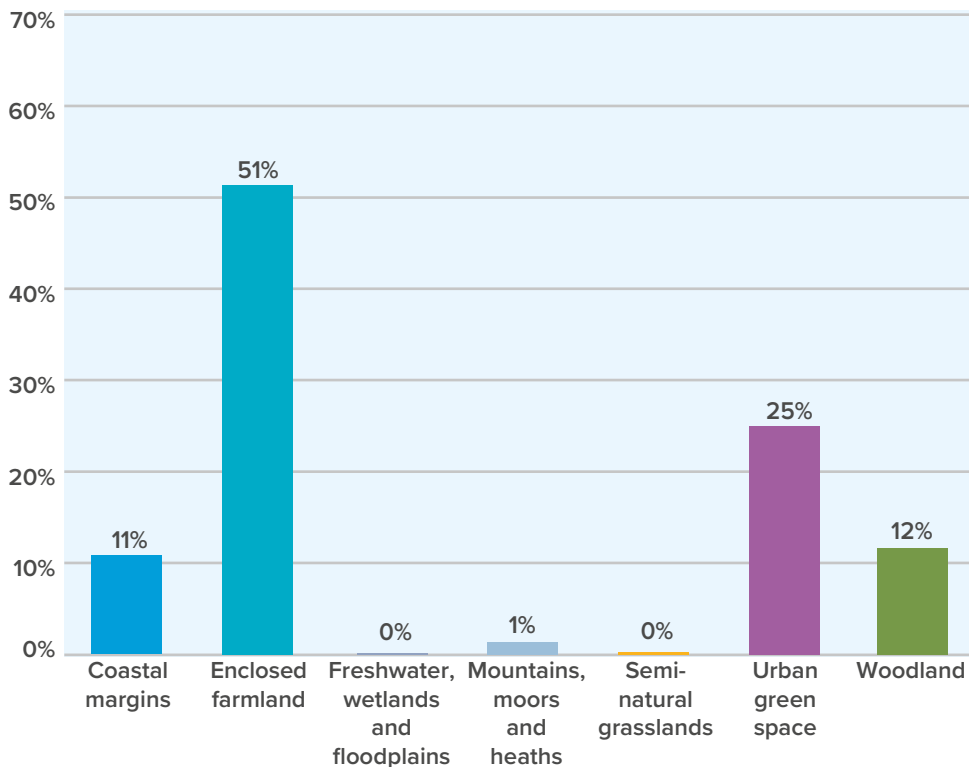
Appendix D

East Hampshire

Catchment summary



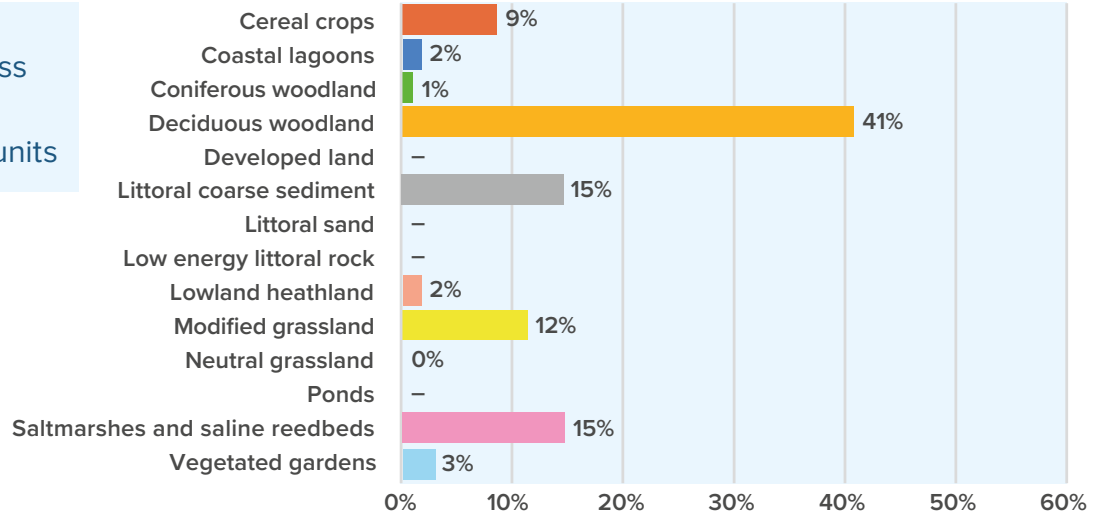
D1: Land cover by habitat type (catchment area = 56,731ha)



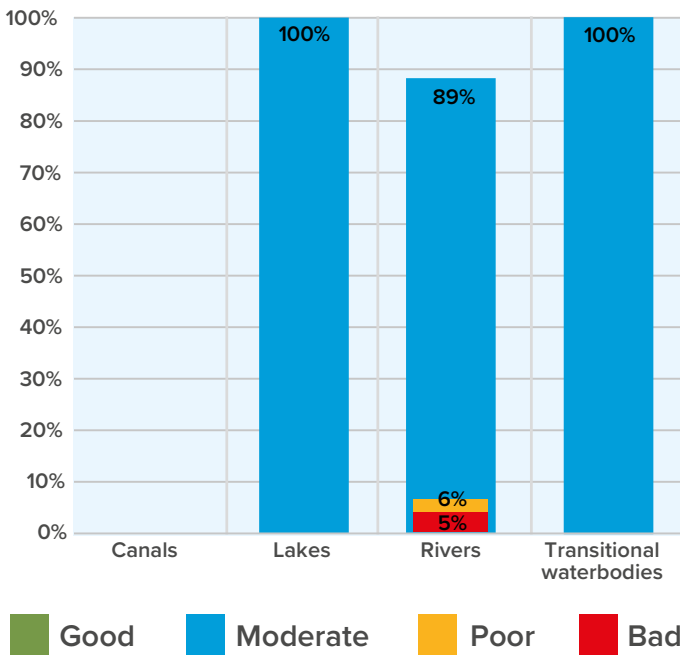
Total area	62,493ha
Area owned by Southern Water (freehold)	85ha
Carbon sequestered by habitats	68,156 tCO ₂ e/yr

D2: Baseline biodiversity units for area-based habitats (total units = 577,644)

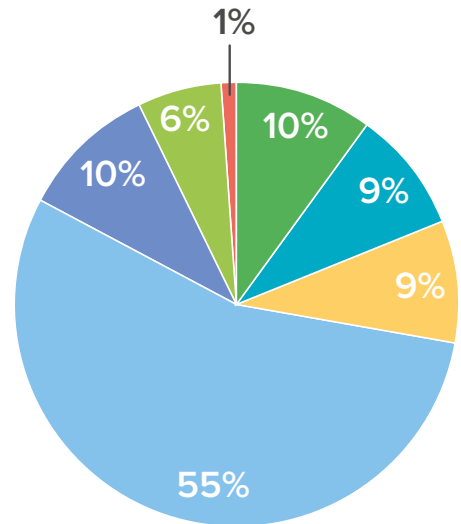
Note:
 0% signifies less than zero
 – signifies no units



D3: WFD status by waterbody type



D4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

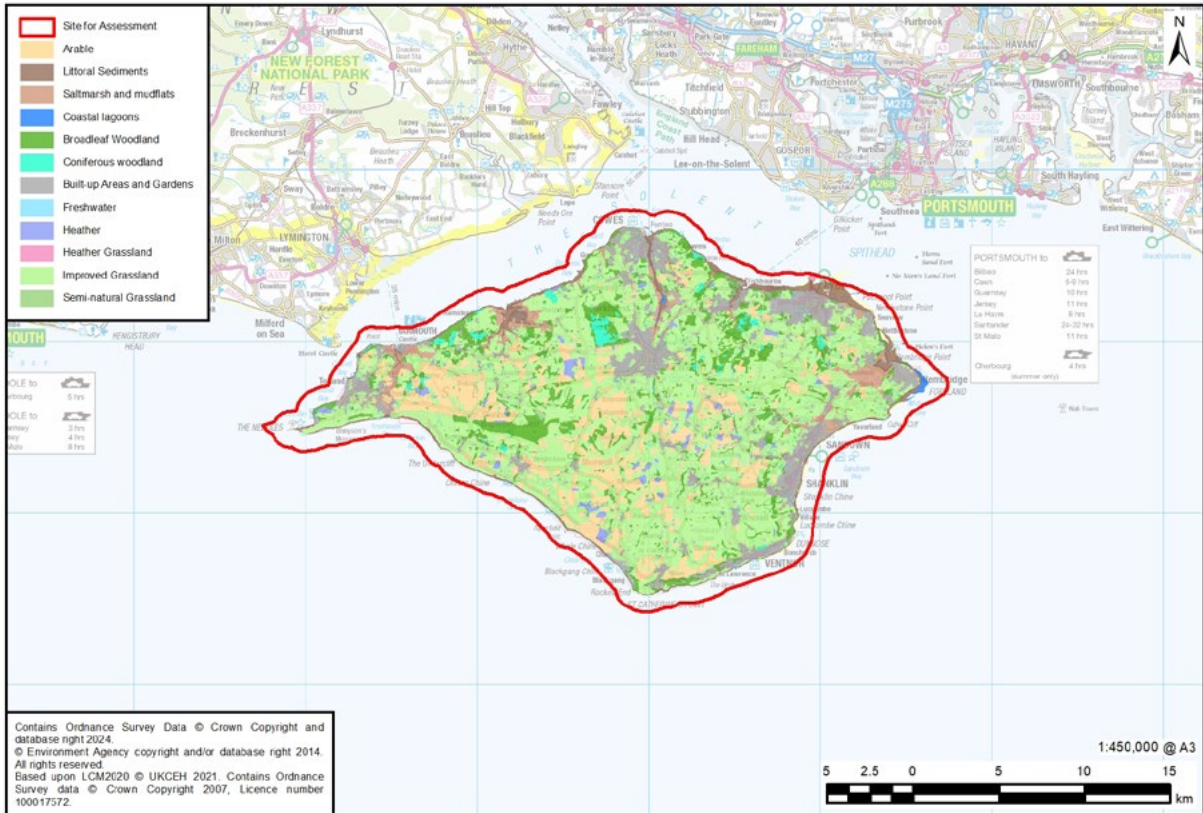


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

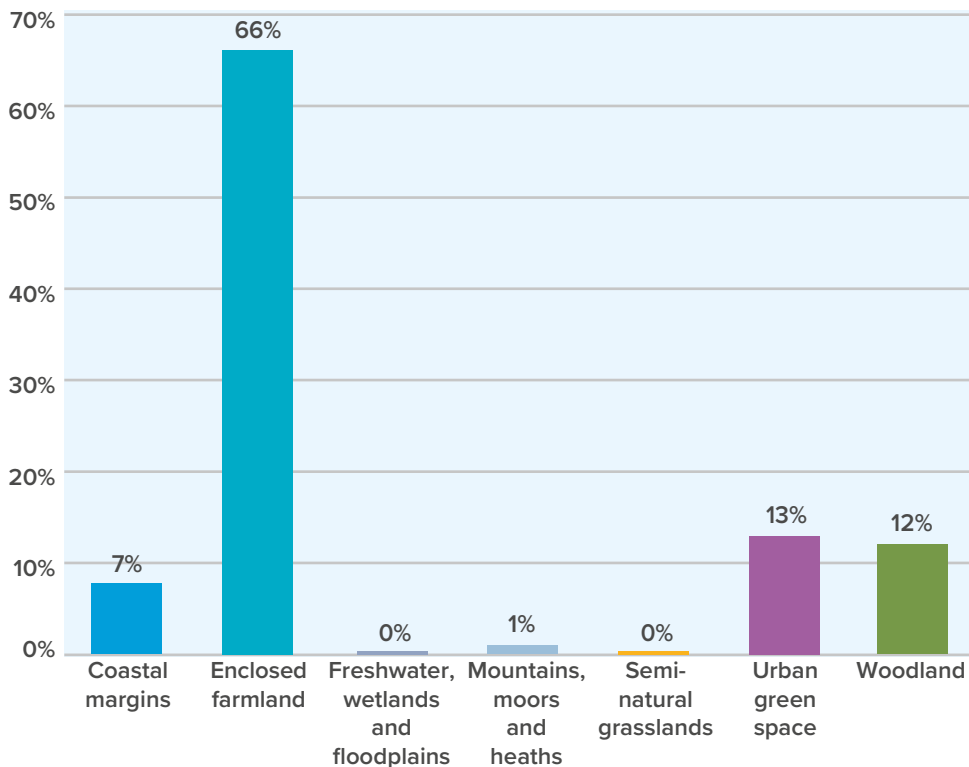
Appendix E

Isle of Wight

Catchment summary



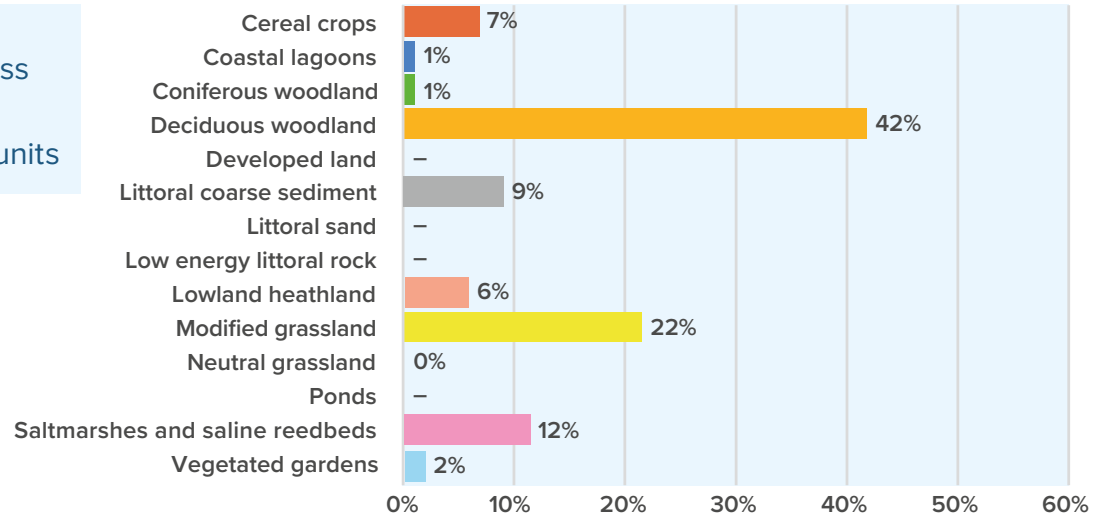
E1: Land cover by habitat type (catchment area = 48,686ha)



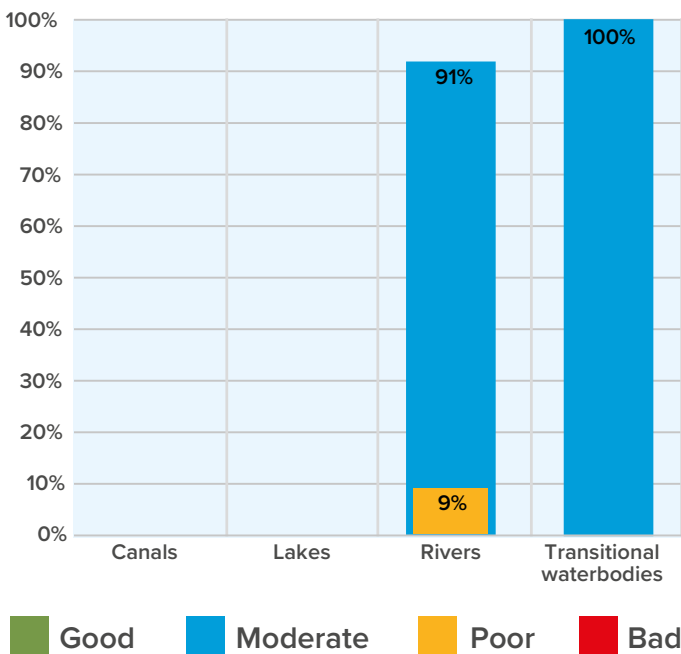
Total area	48,686ha
Area owned by Southern Water (freehold)	78ha
Carbon sequestered by habitats	43,413 tCO ₂ e/yr

E2: Baseline biodiversity units for area-based habitats (total units = 577,644)

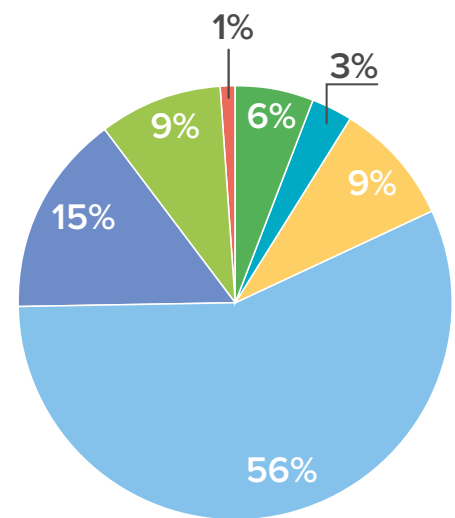
Note:
 0% signifies less than zero
 – signifies no units



E3: WFD status by waterbody type



E4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

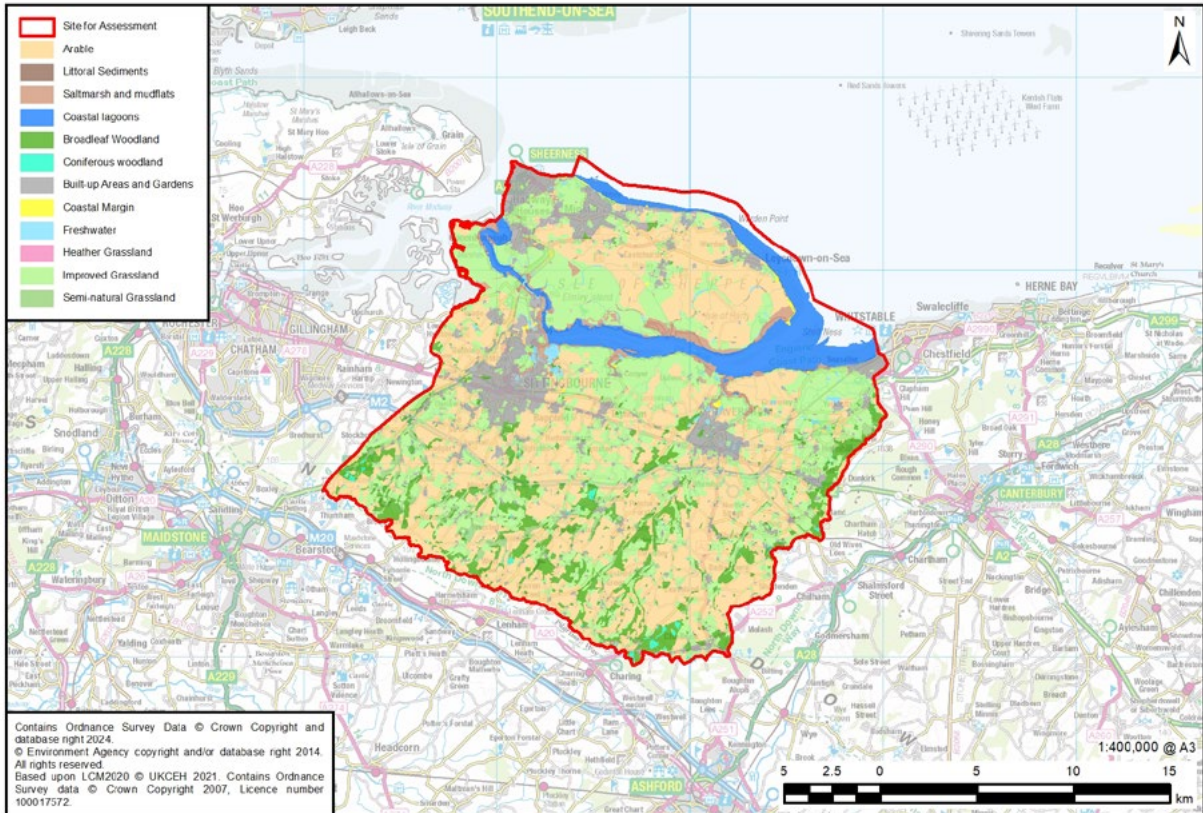


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

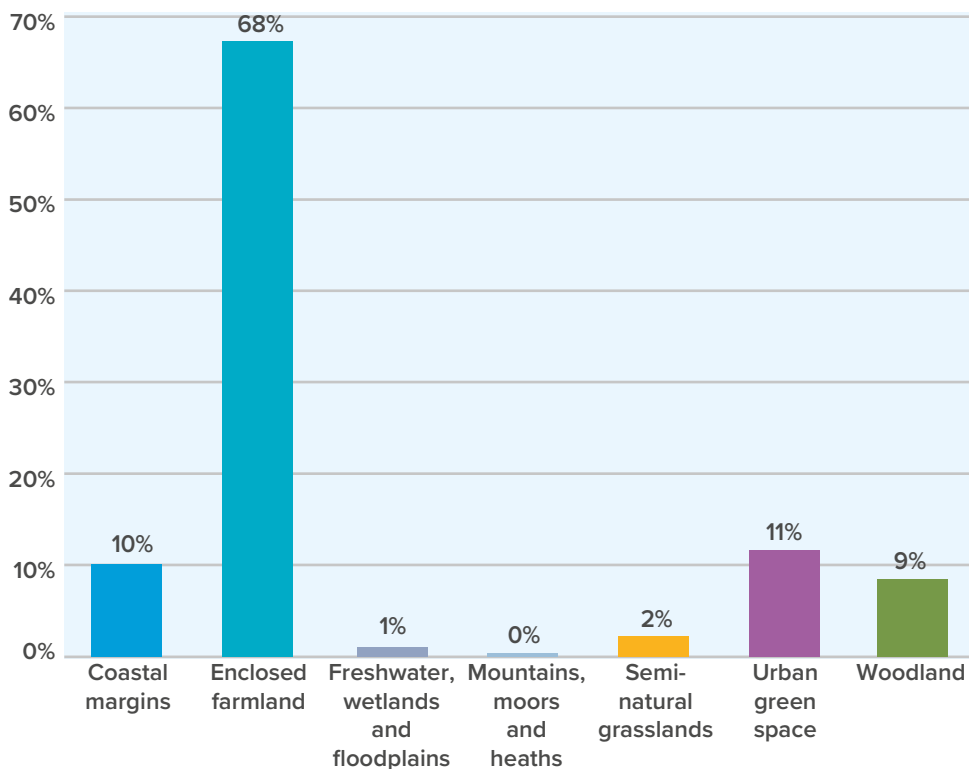
Appendix F

Kent North

Catchment summary



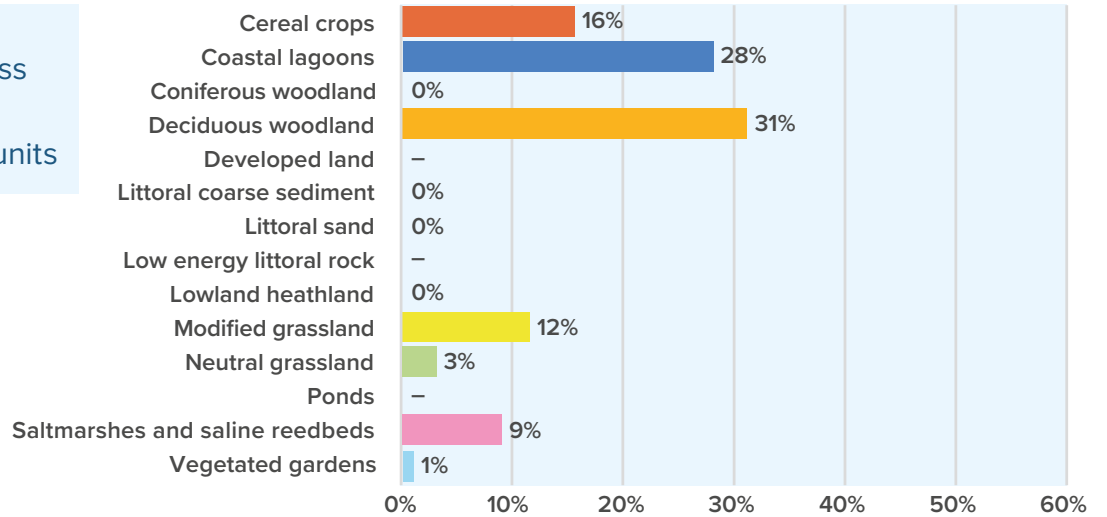
F1: Land cover by habitat type (catchment area = 48,686ha)



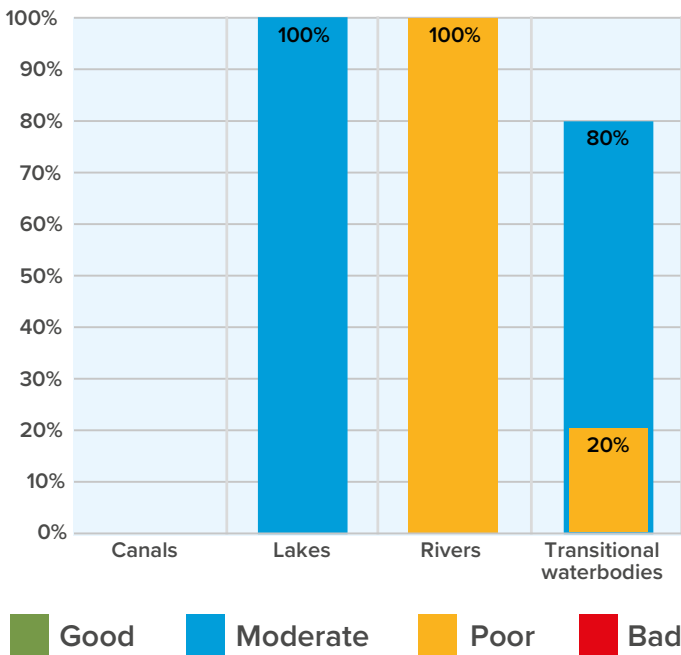
Total area	46,553ha
Area owned by Southern Water (freehold)	69ha
Carbon sequestered by habitats	35,602 tCO ₂ e/yr

F2: Baseline biodiversity units for area-based habitats (total units = 577,644)

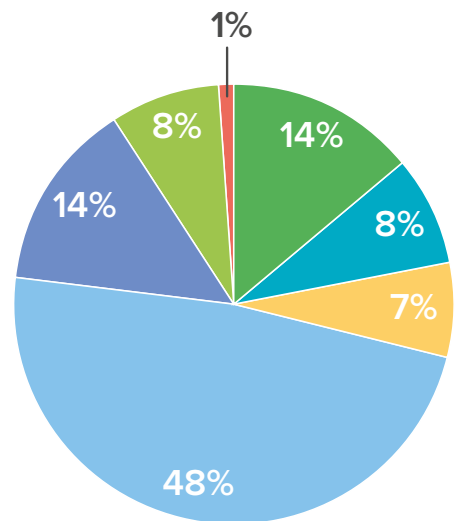
Note:
 0% signifies less than zero
 – signifies no units



F3: WFD status by waterbody type



F4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

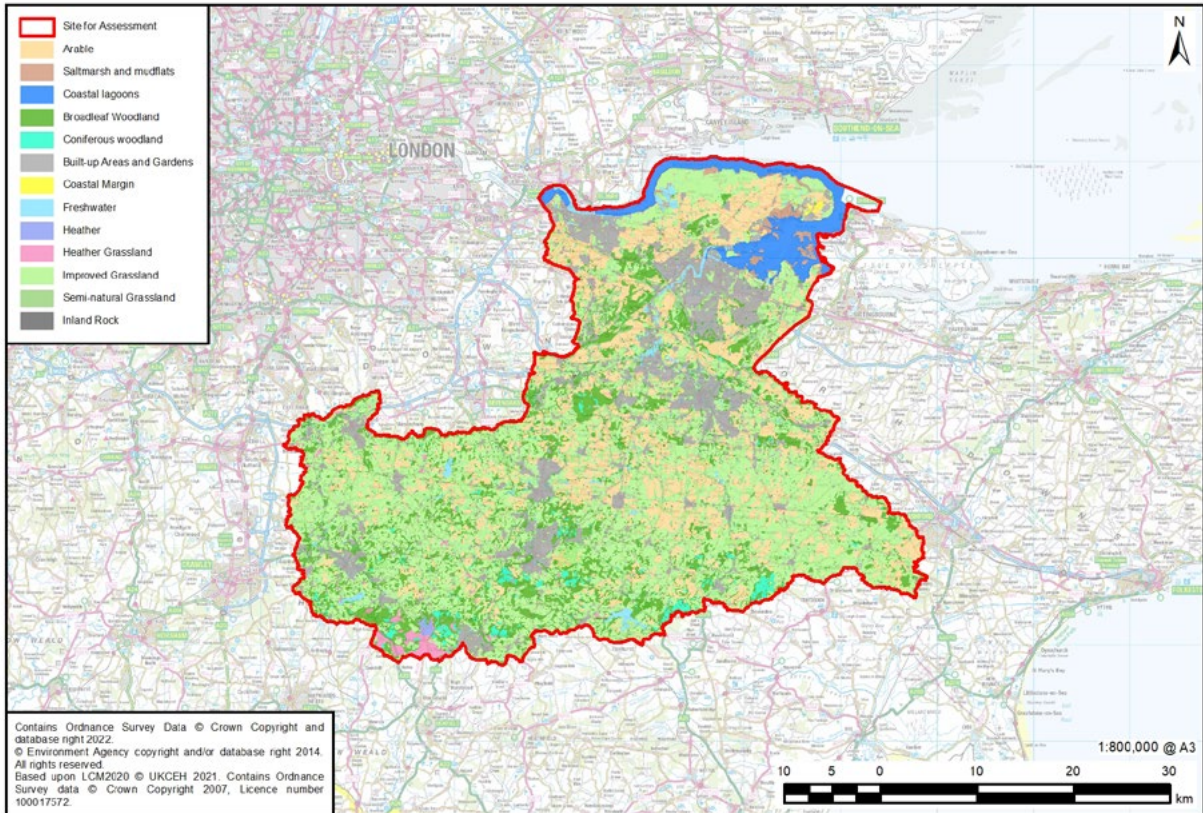


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

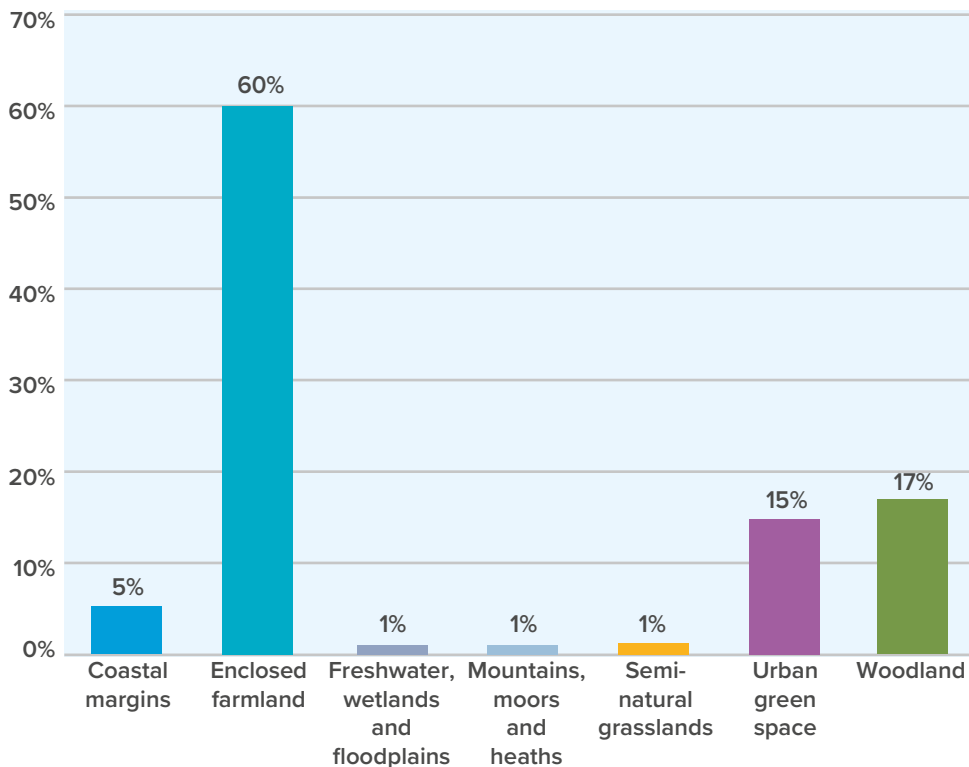
Appendix G

Medway

Catchment summary



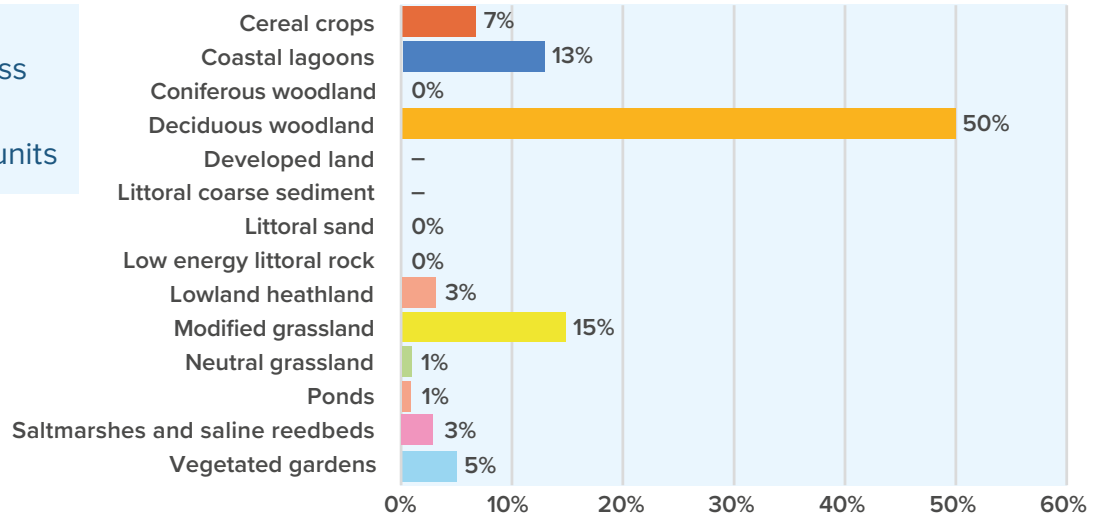
G1: Land cover by habitat type (catchment area = 48,686ha)



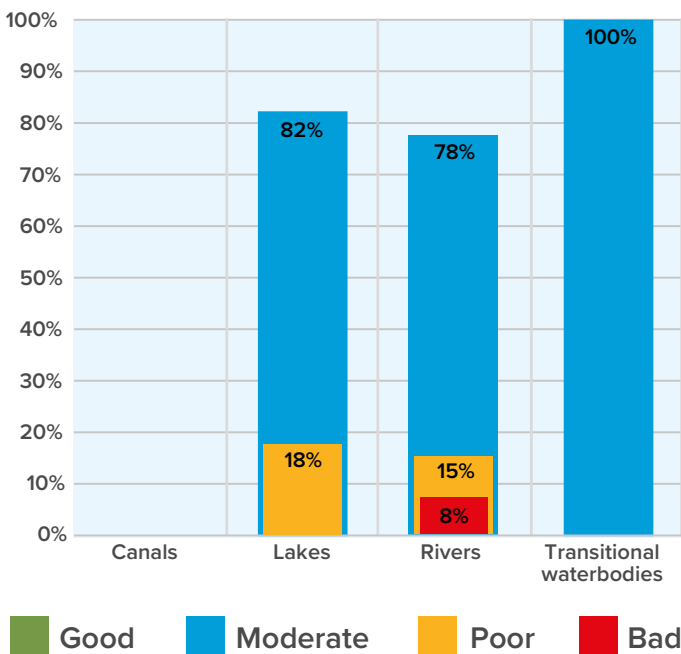
Total area	194,855ha
Area owned by Southern Water (freehold)	952ha
Carbon sequestered by habitats	252,323 tCO ₂ e/yr

G2: Baseline biodiversity units for area-based habitats (total units = 577,644)

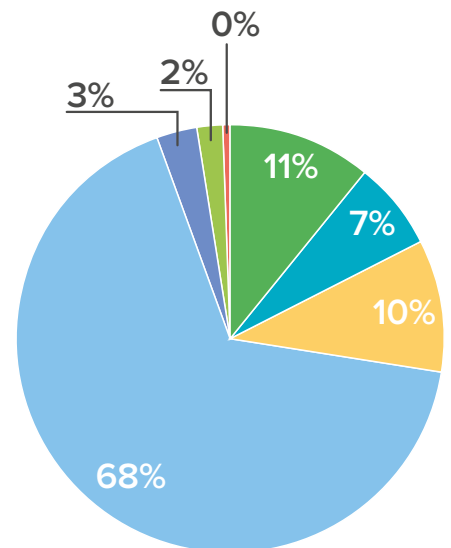
Note:
 0% signifies less than zero
 – signifies no units



G3: WFD status by waterbody type



G4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

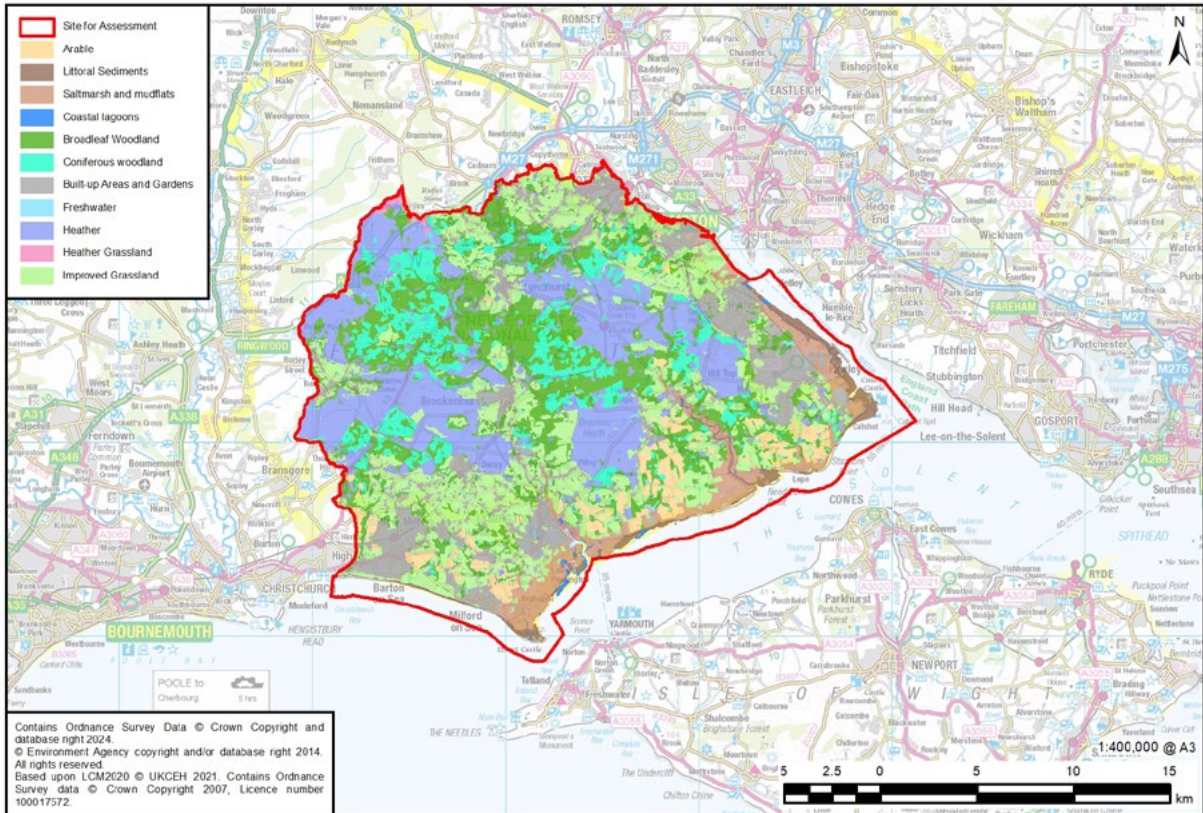


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

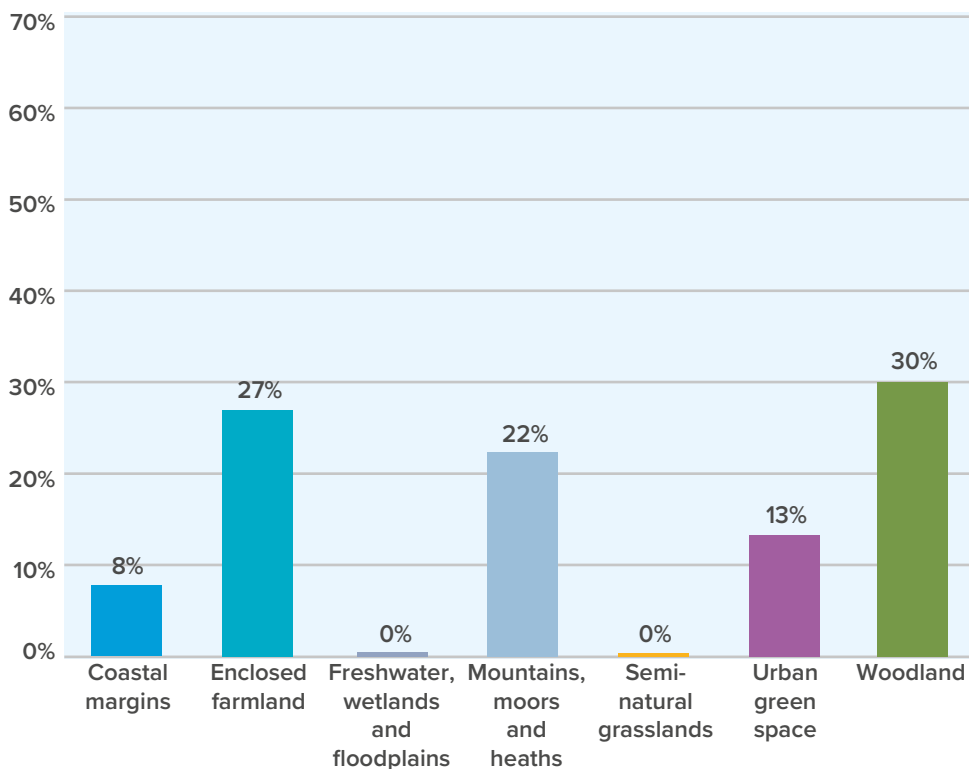
Appendix H

New Forest

Catchment summary



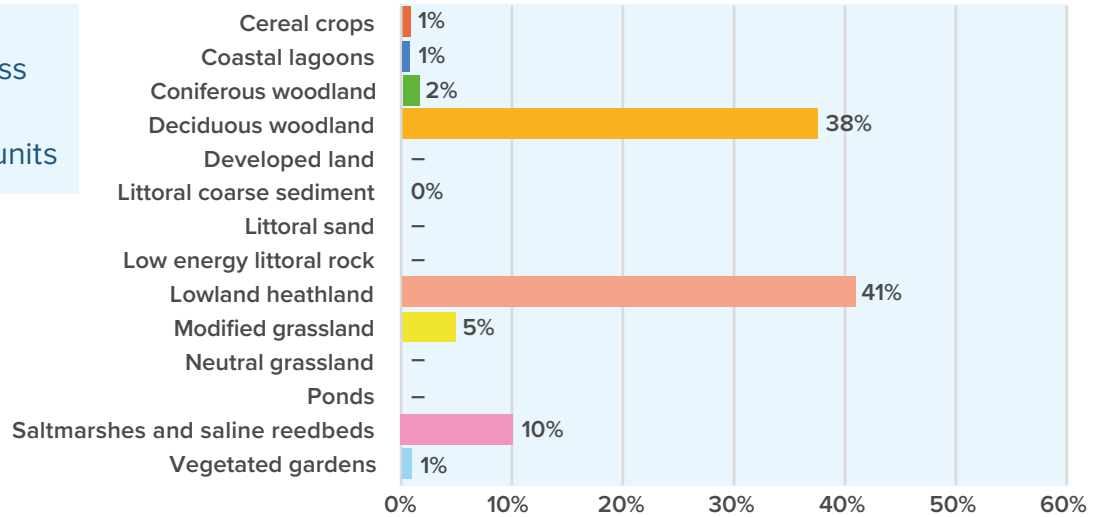
H1: Land cover by habitat type (catchment area = 48,686ha)



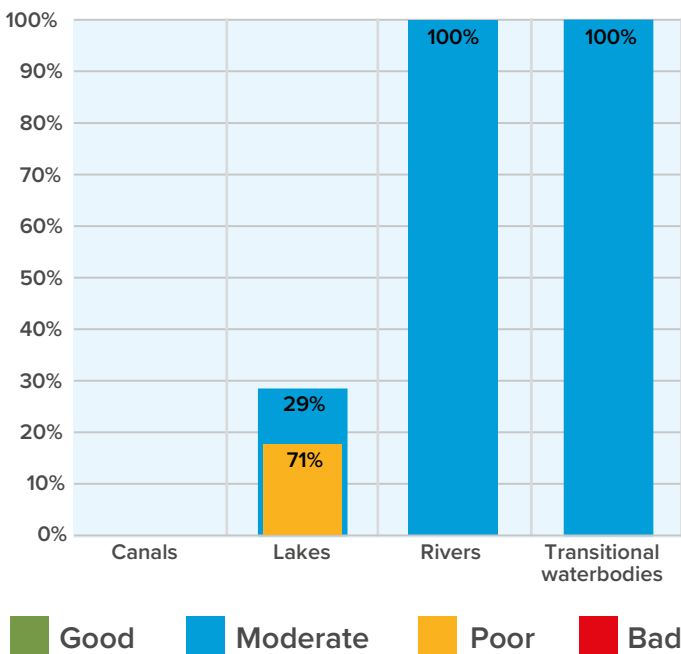
Total area	49,108ha
Area owned by Southern Water (freehold)	38ha
Carbon sequestered by habitats	129,973 tCO ₂ e/yr

H2: Baseline biodiversity units for area-based habitats (total units = 577,644)

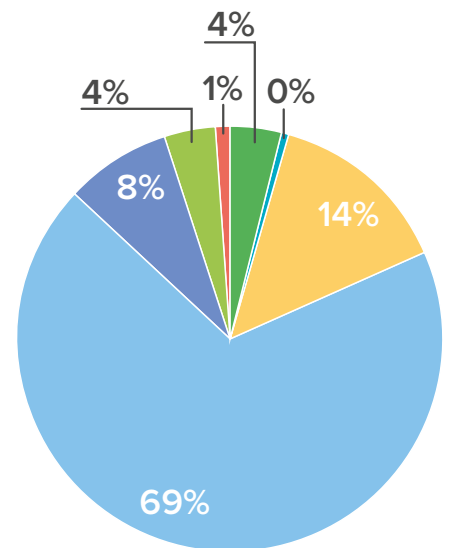
Note:
 0% signifies less than zero
 – signifies no units



H3: WFD status by waterbody type



H4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)

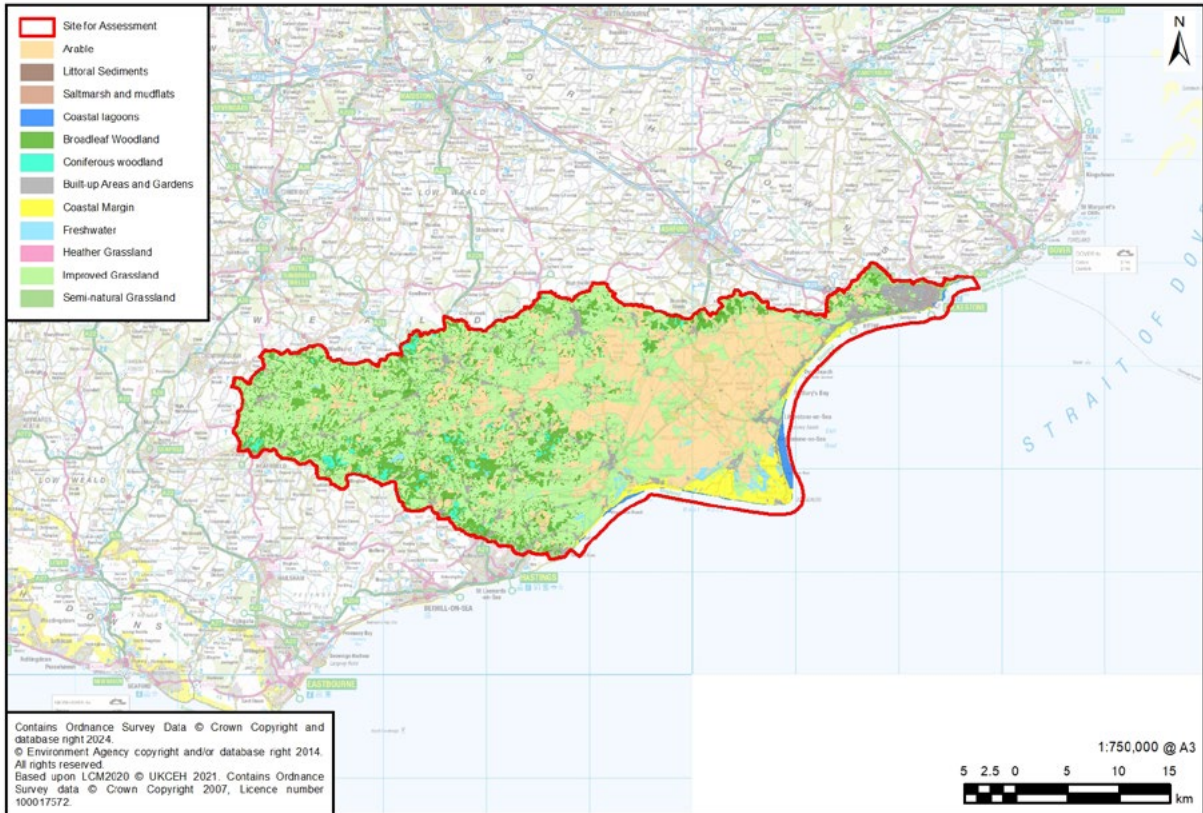


- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation

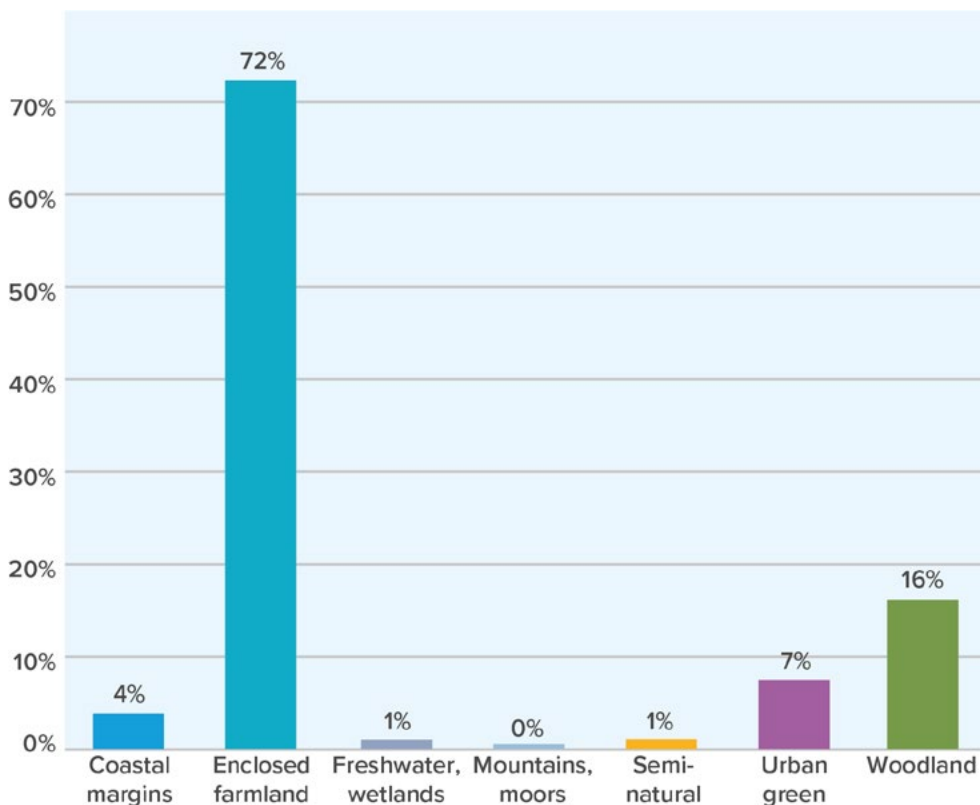
Appendix I

Rother

Catchment summary



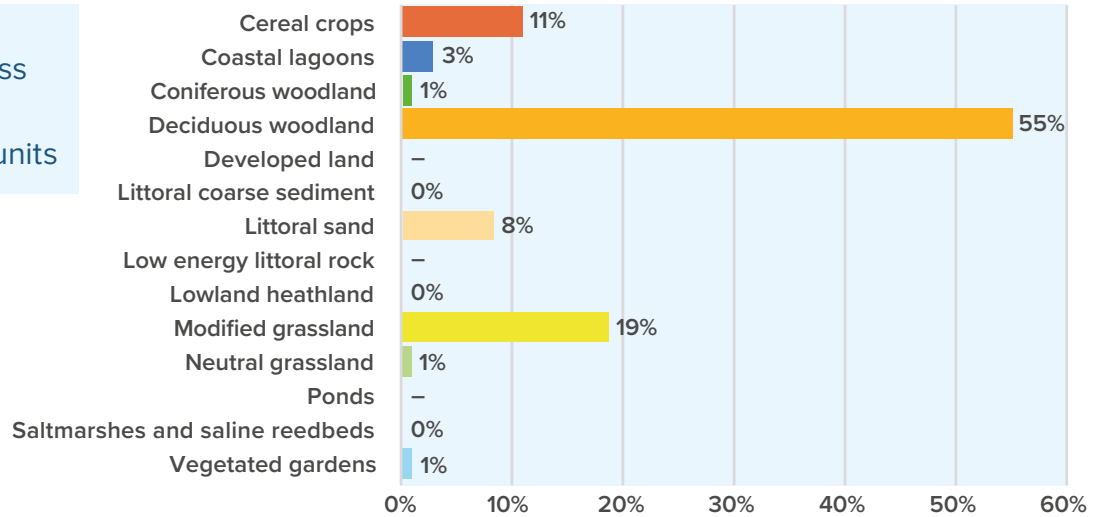
I1: Land cover by habitat type (catchment area = 118,402ha)



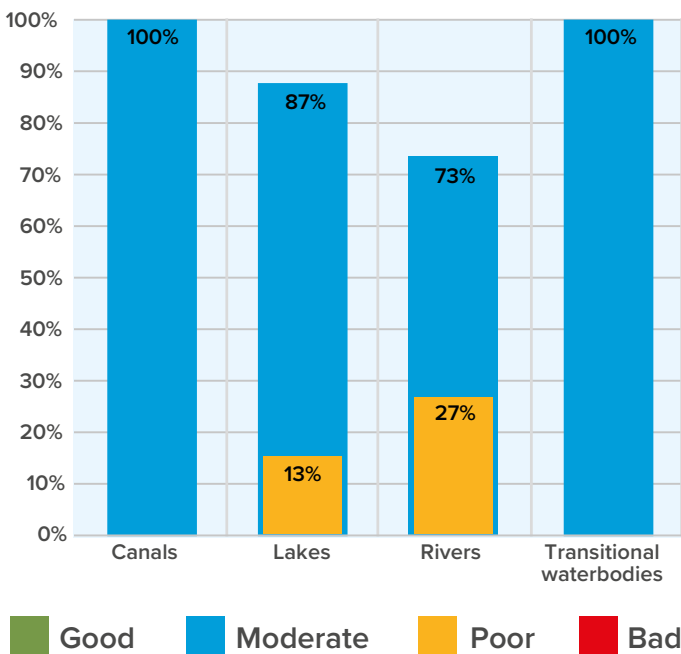
Total area	104,107ha
Area owned by Southern Water (freehold)	253ha
Carbon sequestered by habitats	118,402 tCO ₂ e/yr

I2: Baseline biodiversity units for area-based habitats (total units = 577,644)

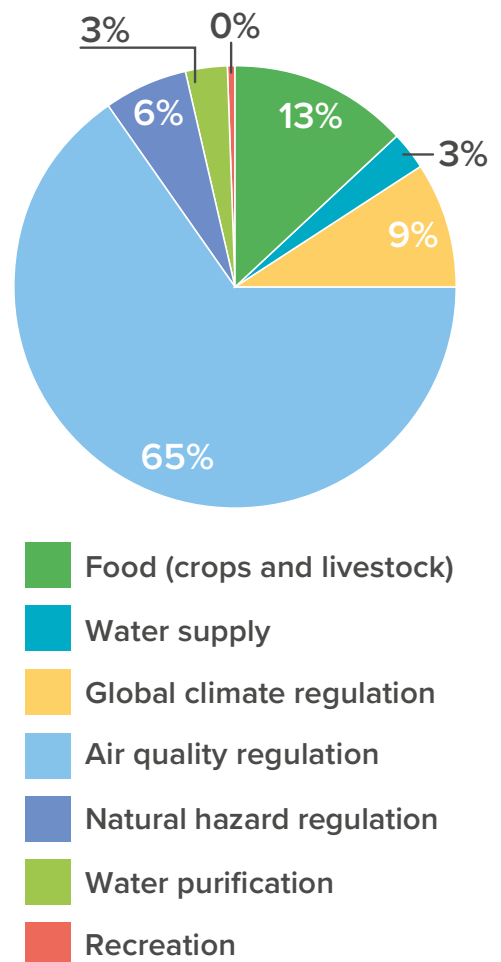
Note:
 0% signifies less than zero
 – signifies no units



I3: WFD status by waterbody type



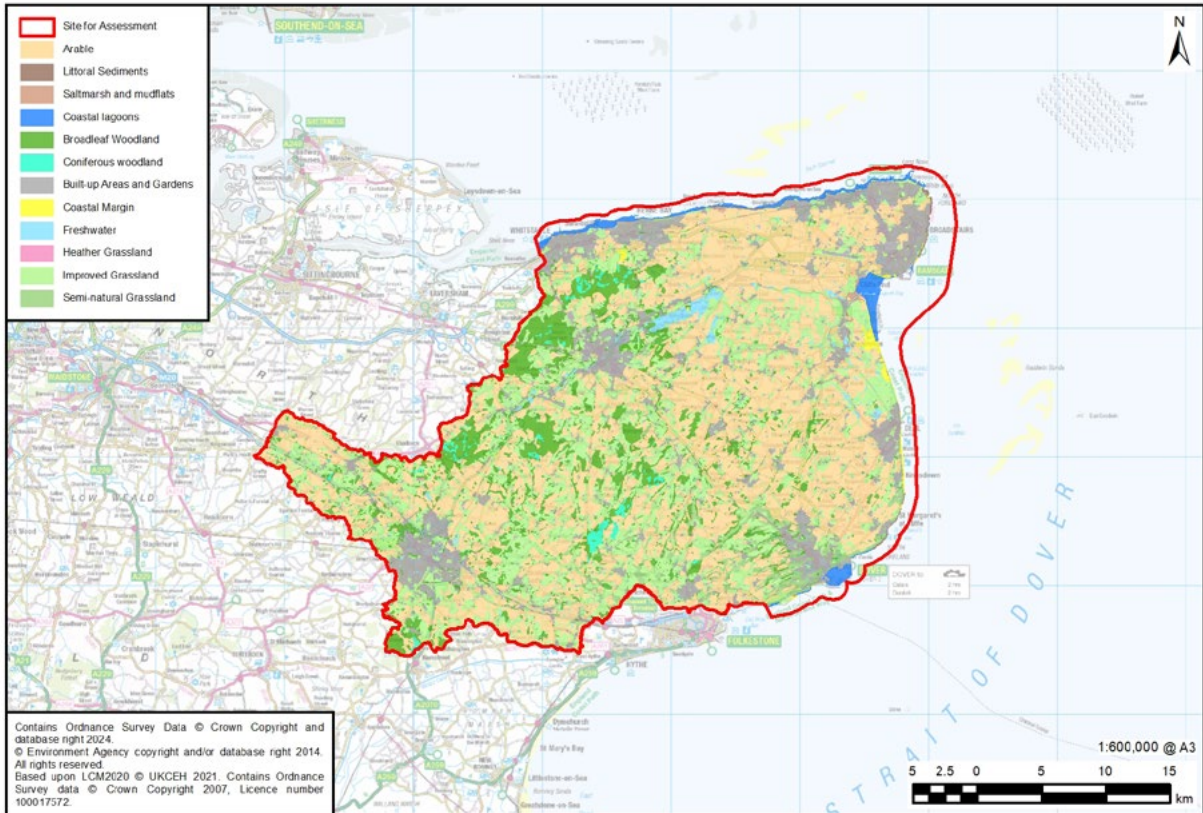
I4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)



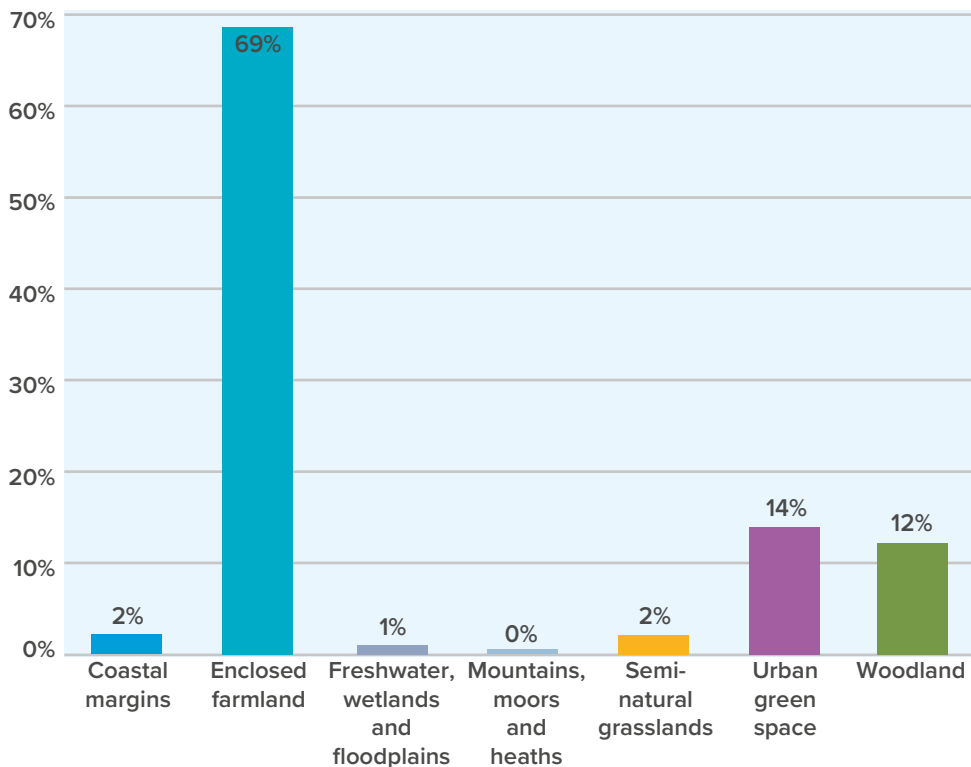
Appendix J

Stour

Catchment summary



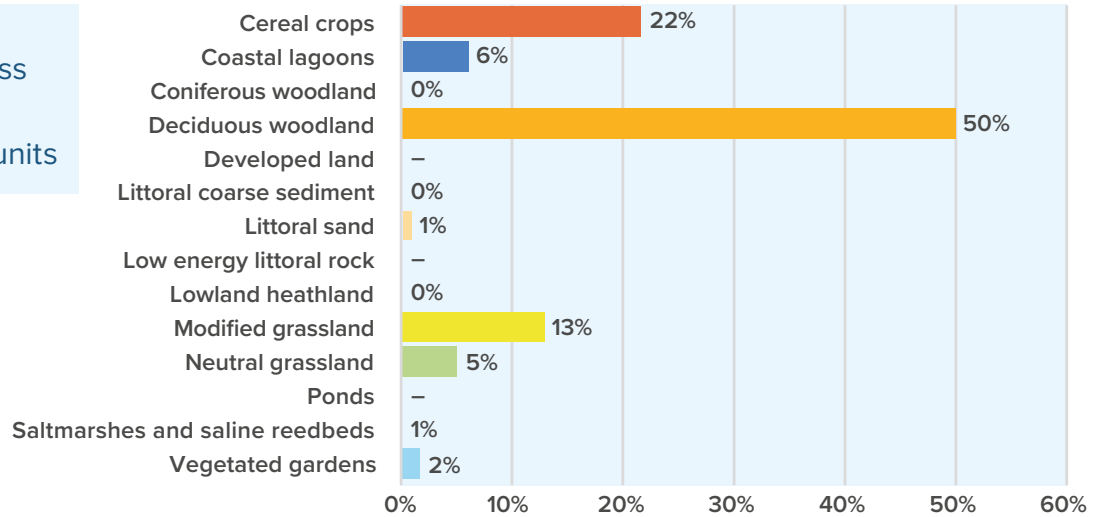
J1: Land cover by habitat type (catchment area = 103,901ha)



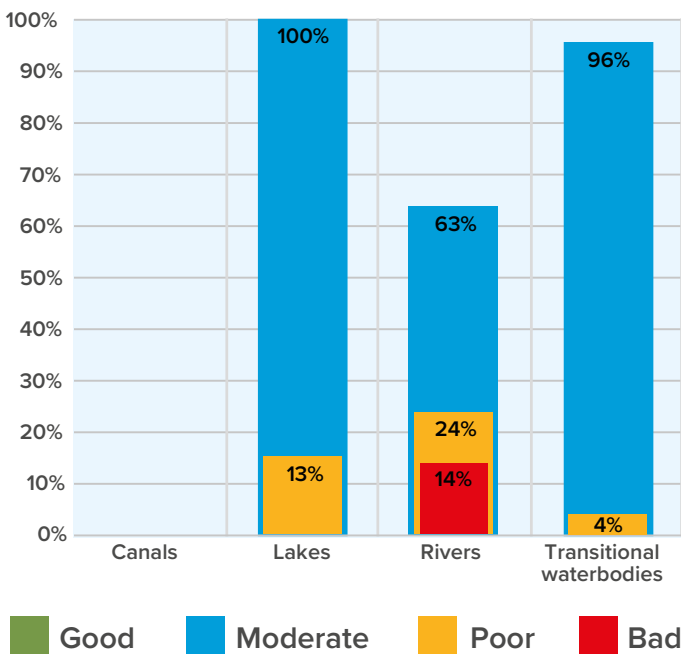
Total area	121,986ha
Area owned by Southern Water (freehold)	147ha
Carbon sequestered by habitats	103,901 tCO ₂ e/yr

J2: Baseline biodiversity units for area-based habitats (total units = 577,644)

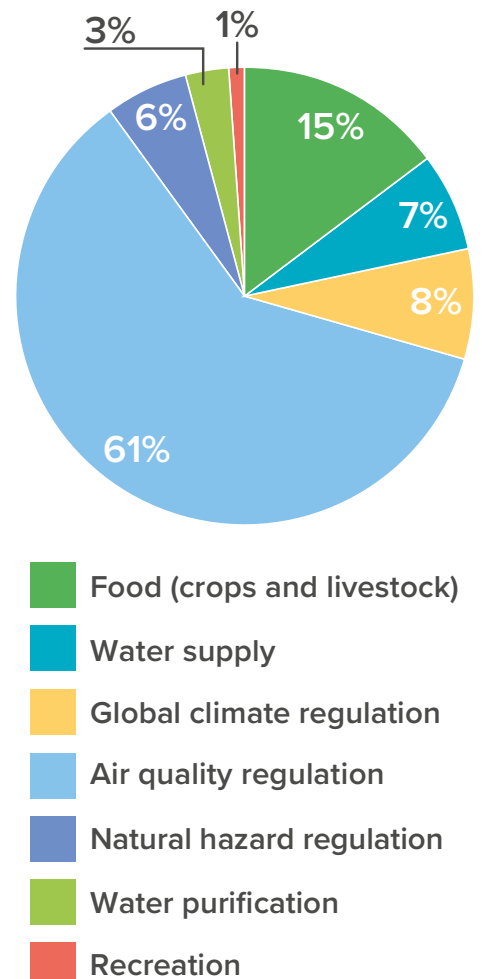
Note:
 0% signifies less than zero
 – signifies no units



J3: WFD status by waterbody type



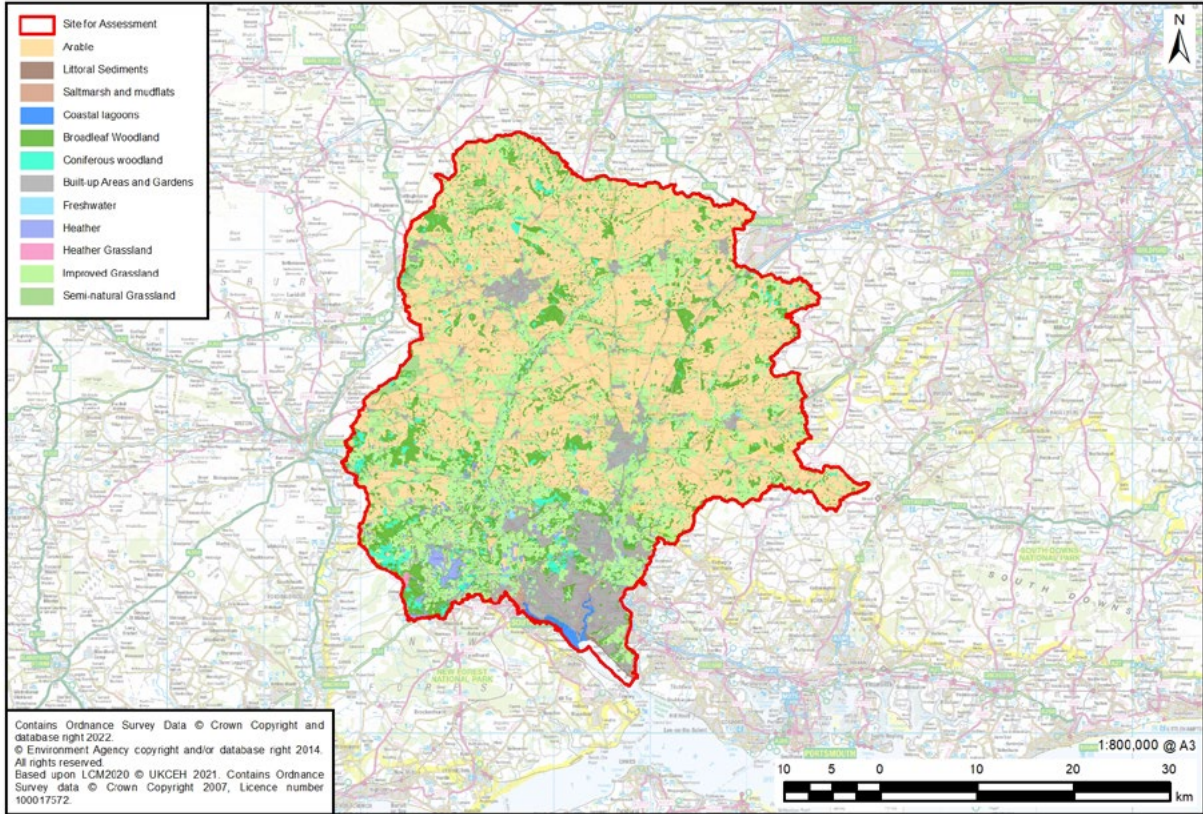
J4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)



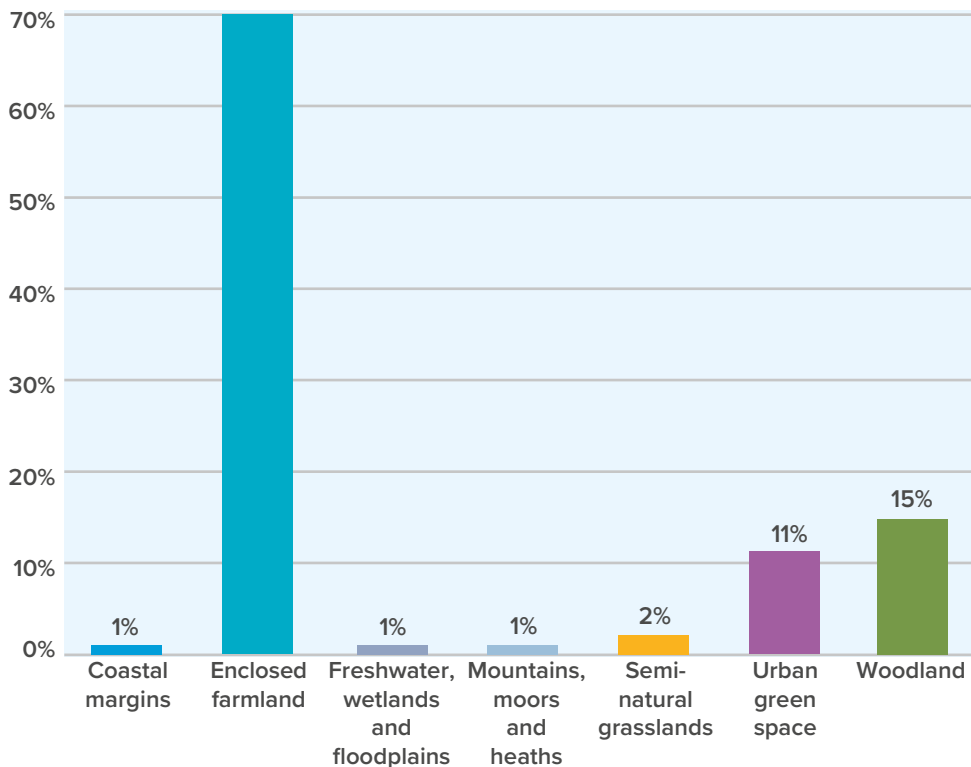
Appendix K

Test and Itchen

Catchment summary



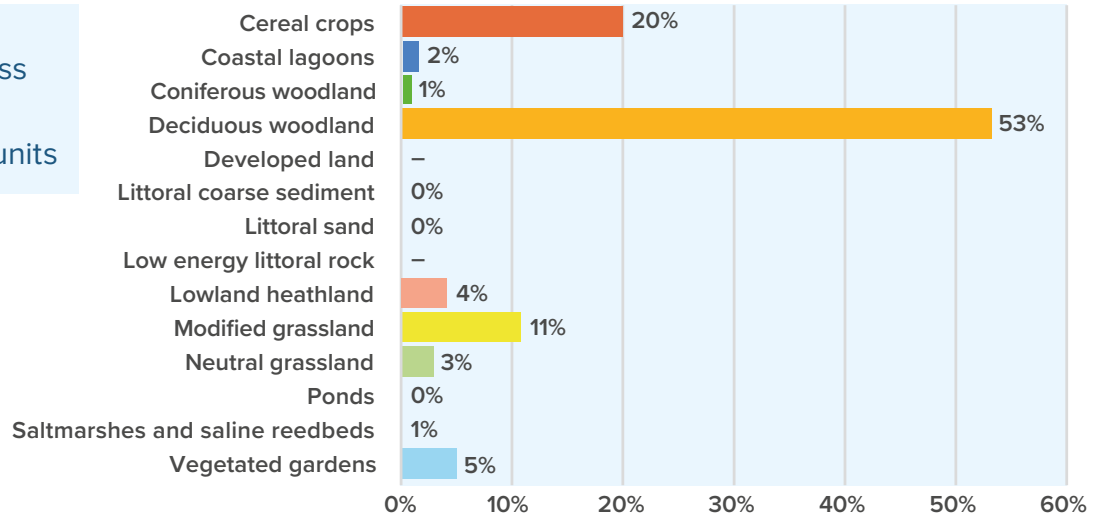
K1: Land cover by habitat type (catchment area = 175,087ha)



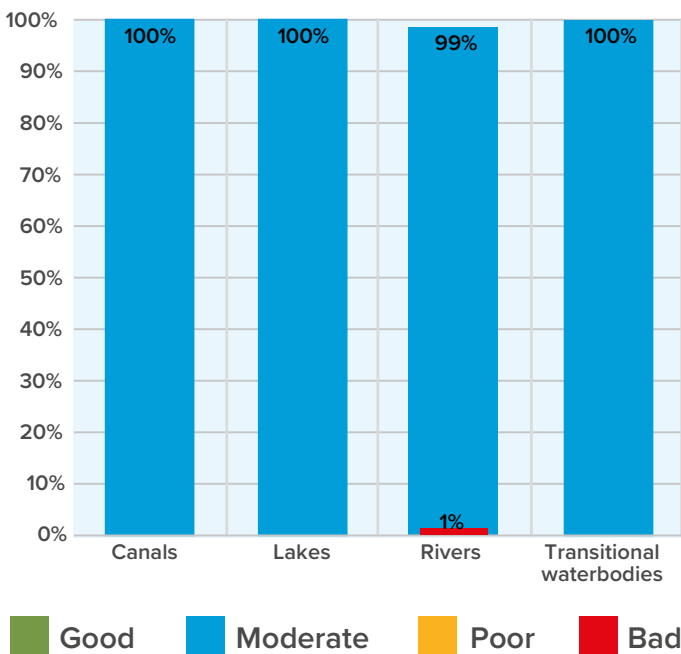
Total area	175,087ha
Area owned by Southern Water (freehold)	334ha
Carbon sequestered by habitats	209,749 tCO ₂ e/yr

K2: Baseline biodiversity units for area-based habitats (total units = 577,644)

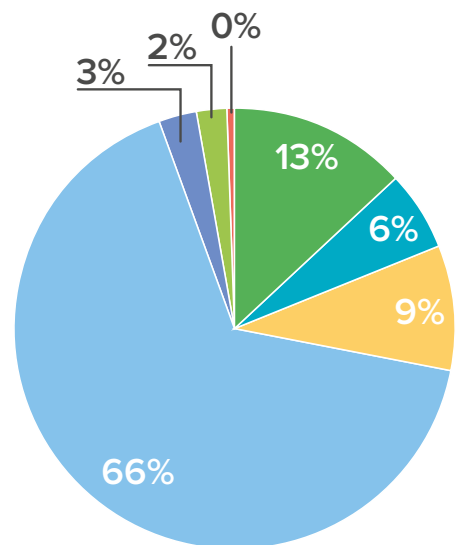
Note:
 0% signifies less than zero
 – signifies no units



K3: WFD status by waterbody type



K4: Estimated annual value of ecosystem service provision (% of 323,105 £k/yr)



- Food (crops and livestock)
- Water supply
- Global climate regulation
- Air quality regulation
- Natural hazard regulation
- Water purification
- Recreation



Find further information at southernwater.co.uk

from

**Southern
Water** 

in partnership with

AECOM