

BOX 5



ENVIRONMENT
AGENCY



RIVER CATCHMENT Data Report



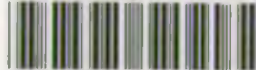
SOUTHERN REGION

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ENVIRONMENT AGENCY



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RIVER CATCHMENT Data Report 1996

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Reference: 205

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Technical Planning**

INTRODUCTION

On 1st April 1996, the Environment Agency was created, merging the expertise of the National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution (HMIP) and the Waste Regulation Authorities (WRA). The constituent organisations of the Environment Agency had responsibility for three different media, namely air, water and land.

The NRA were the 'Guardians of the Water Environment', HMIP had the primary responsibility for the prevention, minimisation and rendering harmless of polluting substances into the environment, and the WRA regulated the treatment and disposal of controlled waste. In the Regional Summary there is some data on Waste Regulation and Integrated Pollution Control, this will be covered more fully in future updates.

John Gummer, MP said of the Environment Agency:

"It will first of all need to take an integrated approach to providing effective environmental protection: to take account of impacts of air, water and land and integrated geographically so that integrated systems such as river catchments are considered as a whole."

Catchment Management Plans (CMPs) are to be renamed, 'Local Environment Agency Plans' (LEAPs) to reflect their broader remit. They will progressively be developed to include integrated pollution control, nuclear and waste issues. Annual reviews will incorporate relevant issues although the fully integrated plans will result from the five yearly reviews.

The work of the Environment Agency will be critical in achieving the aims of the Government's proposals on sustainable development. This will involve combining economic development with conservation and enhancement of the environment. The new legislation requires consideration to be given to the costs likely to be incurred and the resulting benefits that would be accrued. These concepts will form the basis of future Local Environment Agency Plans and reviews. Within the documents issues are highlighted, and proposed actions for dealing with them are given. They provide a framework for

- Presenting a vision for improving the water environment
- Integrating the management of the Environment Agency functions
- Seeking public input into the implementation of Environment Agency policy

The Environment Agency Southern Region is currently divided into 13 catchment areas. Some of these are based on a single major river system such as the Itchen, while others group together a number of rivers and streams such as the Meon, West Hampshire and Adur/Ouse catchments.

This Data Report will supplement Southern Region's local plans by presenting key statistics for each catchment, which, when combined summarise the region as a whole. The Data Report will be updated at regular intervals.

The catchment boundaries are based upon natural geographical areas. These generally follow surface water catchments. However other hydrological factors may affect this, for example an aquifer. In some areas it is necessary to include chalk blocks where the sub-surface boundary is not coincident with the surface. An example of this is the Worthing chalk block which has been incorporated in the Arun catchment.

The combined data for the Region is presented first. This is followed by the data for the catchments in alphabetical order under the Area headings. Generally, the Regional total represents the sum of the individual catchments. There are however a few exceptions to this in the Conservation figures. The maps show the catchment's major rivers, main towns and significant sub-catchment resource areas. The appendix lists sources of information, clarifies terms and abbreviations and highlights points for consideration when referring to the statistics.

The information is by no means comprehensive. The selection has been chosen to provide a broad overview for each catchment area and the Region. Greater detail is provided in the respective Catchment Management Plan Consultation Reports and Final Action Plans.

Further information may be obtained from the Southern Regional Office at the following address:

Environmental Planner
Environment Agency
Southern Region
Guildbourne House
Chatsworth Road
Worthing
West Sussex
BN11 1LD

Telephone: 01903 832000

SOUTHERN REGION



REGIONAL AREA 10,979 km²

GEOLOGY

Geological strata all are sedimentary and relatively young, ranging in age from the topmost formation of the Jurassic series, the Purbeck Beds in the Weald, to recent deposits of peat and alluvium. High quality Chalk is a major feature of the Region and forms the most important aquifer.

TOPOGRAPHY

The North and South Downs form the main topographical features together with the Weald in the South East and the Hampshire Basin in the West.

Maximum: 297 m AOD Test Catchment
Minimum: 0 m AOD All Catchments

RESIDENT POPULATION

1991 estimate: 4.6 m
2001 estimate: 4.8 m
1991 holiday trips to Region 10.5 m

LONGEST RIVER IN REGION

River Medway 110 km
Source - Sheerness

ADMINISTRATION

County Council	Persons per ha	Area (km ²) in Region	% of Region
Kent	4.0	3755	34.2
Hampshire	4.1	2617	23.8
West Sussex	3.5	1853	16.9
East Sussex	3.8	1801	16.4
Isle of Wight	3.3	386	3.5
Surrey	6.1	267	2.4
Wiltshire	1.6	184	1.7
Greater London	42.3	106	1.0
Berkshire	5.8	9	0.1
Dorset	2.4	0.75	0.0

51 District/Borough/City Councils (all or part) in Southern Region.

Main Towns and population (1991)

Southampton 199860, Portsmouth 180950, Brighton 143600, Chatham/Rochester/Strood 129700, Margate/Ramsgate 125000, Havant 104200, Worthing 96960, Gillingham 95200, Maidstone 90000, Hove 85360, Eastbourne 81400, Hastings 80820.

WATER RESOURCES

Rainfall (weighted av. mm/yr)	Annual	Effective
Average	790	290
1 in 10 yr drought	620	160

Total authorised abstraction (Ml) 2,197,938

% Auth. abst. from GW 63.8%

% Auth. abst. high/med loss 76.4%

Actual abstraction (Ml) 772111

Water Supply Reservoirs

	Area (ha)	Volume (Gross Mm ³)	Reliable yield (Ml/d)
8 reservoirs combined total	787	61905	213.5

Water Companies	Area (km ²) in Region	% of Region
Southern Water	4208	38.3
Mid Kent	2031	18.5
South East Water	1992	18.2
Portsmouth	873	7.9
Thames Water	419	3.8
Folkestone & Dover	414	3.8
Mid Southern	307	2.8
East Surrey	264	2.4
Bournemouth & West Hants	262	2.4
Wessex Water	209	1.9

(Southern Water = SWS and South East Water = SEW)

37 Resources Areas in Southern Region

FLOOD DEFENCE

		Length (km)
Coastline	inc. main tidal waters	1123.7
Main River	including tidal lengths	2677.94
Sea Defences	EA responsibility	145.73
	Other responsibility	10.93
Tidal Banks	EA responsibility	411.60

16 Internal Drainage Districts in Southern Region

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	340.3	500.1	A 269.5
1B Good	1178.9	1043.4	B 955.6
2 Fair	704.9	514.2	C 685.0
3 Poor	2.0	150.3	D 165.7
4 Bad	0	18.1	E 134.9
			F 2.7
Total	2226.1	2226.1	Total 2213.4

Number of EC Designated Bathing Waters 69

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	399.68	30.2
Salmonid	268.76	4.5

CONSERVATION

National Nature Reserves	15
Sites of Special Scientific Interest (SSSIs)	378
Water dependent SSSIs	271
Ramsar and/or Special Protection Areas (designated and proposed)	27
Environmentally Sensitive Areas	7
SAC	7

RECREATION AND NAVIGATION

Harbour of Rye	EA responsibility
Length of towpath (km)	52 approx.
Length of inland navigation – River Medway (km)	89.1
	EA maintained 54.8
	LA/Other maintained 34.3
Number of EA maintained locks	10 Medway 1 E Rother

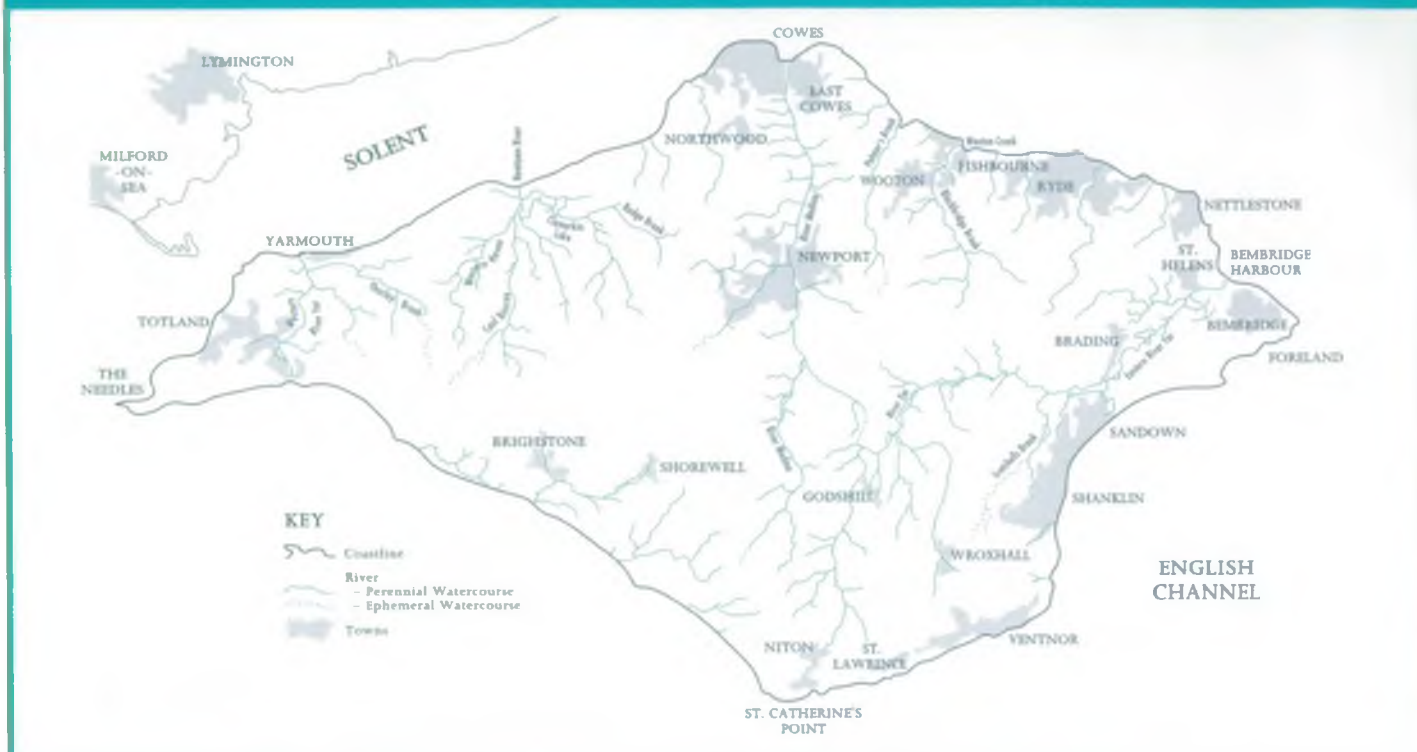
WASTE REGULATION

Licensed Waste Facilities	755
Registered Waste Carriers	8,950
Waste Generated and Disposed of in the Region	6.5 million tonnes

INTEGRATED POLLUTION CONTROL

Nuclear Sites	2
Industrial Processes Regulated	125
Sites using Radioactive materials	300
Sites accumulating Radioactive Waste	100

ISLE OF WIGHT



CATCHMENT AREA 387 km²

GEOLOGY

North - predominantly Tertiary deposits, Central - Chalk and minor Greensand, South - Wadhurst Clay and Ashdown Beds and minor Chalk and Greensand.

TOPOGRAPHY

Maximum: 236 m AOD
Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 127000
2001 estimate: 135400

MAIN RIVERS AND STREAMS

R Medina, E Yar, W Yar.

ADMINISTRATION

Isle of Wight Unitary Authority

387 km² within catchment
100% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Medina	6.1	117	30.2
South Wight	2.0	270	69.8

Main Towns and population (1991)

Cowes 19920, Newport 25035, Ryde 26150,
Sandown/Shanklin 17760, Ventnor 5980.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	850	361
1 in 10 yr drought	662	203
Auth abst (Ml)		29093
% from GW		66%
% high/med loss		85%
Actual abst (Ml)		12702

River Flow (cumecs)	Q50	Q95
R Medina	0.16	0.07
Lukely Brook	0.04	0.01
E Yar	0.17	0.03

Water Supply Reservoirs		None
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Water Companies	Area (km ²) in catchment	% Catchment area
SWS IoW	387	100

Resources Areas		
Name	Number	Area (km ²)
Isle of Wight	36	387

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	127.5
Main River	including tidal lengths	160.0
Sea Defences	EA responsibility	0.5
Tidal Banks	EA responsibility	1.0
Internal Drainage Districts		None

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	0	20.3	A 0
1B Good	51.5	38.1	B 27.7
2 Fair	36.0	16.5	C 42.3
3 Poor	0	12.6	D 8.2
4 Bad	0	0	E 9.3
			F 0
Total	87.5	87.5	Total 87.5

Number of EC Designated Bath Waters	13
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STWs - Discharges to	Number	Volume (m ³ /d)
River	20	3257
Estuary	5	12415
Sea	3	7160

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	14.28	0
Salmonid	0	0

CONSERVATION

National Nature Reserves	1
Sites of Special Scientific Interest (SSSIs)	43
Water dependent SSSIs	22
Ramsar and/or Special Protection Areas (designated and proposed)	1
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	850	361
1 in 10 yr drought	662	203
Auth abst (Ml)		29093
% from GW		66%
% high/med loss		85%
Actual abst (Ml)		12702
River Flow (cumecs)	Q50	Q95
R Medina	0.16	0.07
Lukely Brook	0.04	0.01
EYar	0.17	0.03

Water Supply Reservoirs None

Water Companies	Area (km ²) in catchment	% Catchment area
SWS IoW	387	100

Resources Areas		
Name	Number	Area (km ²)
Isle of Wight	36	387

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	127.5
Main River	including tidal lengths	160.0
Sea Defences	EA responsibility	0.5
Tidal Banks	EA responsibility	1.0
Internal Drainage Districts		None

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	0	20.3	A 0
1B Good	51.5	38.1	B 27.7
2 Fair	36.0	16.5	C 42.3
3 Poor	0	12.6	D 8.2
4 Bad	0	0	E 9.3
			F 0
Total	87.5	87.5	Total 87.5

Number of EC Designated Bath Waters 13

STWs - Discharges to	Number	Volume (m ³ /d)
River	20	3257
Estuary	5	12415
Sea	3	7160

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	14.28	0
Salmonid	0	0

CONSERVATION

National Nature Reserves	1
Sites of Special Scientific Interest (SSSIs)	43
Water dependent SSSIs	22
Ramsar and/or Special Protection Areas (designated and proposed)	1
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

ITCHEN



ADMINISTRATION

Hampshire County Council

473.0 km² within catchment

100% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Basingstoke	2.3	41	8.7
East Hampshire	2.0	53	11.1
Eastleigh	13.3	46	9.7
Southampton	39.5	28	6.0
Test Valley	1.6	15	3.1
Winchester	1.5	290	61.3

Main Towns and population (1991)

Eastleigh 53905, Southampton (part) 199860,
Winchester 29465.

CATCHMENT AREA 473.0 km²

GEOLOGY

North - predominantly Chalk, South - Tertiary deposits.

TOPOGRAPHY

Maximum: 234 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 240000

2001 estimate: 242000

MAIN RIVERS AND STREAMS

R Itchen, Candover Str, R Alre, Cheriton Str, Monks
Brook, Bow Lake, Allington Lane Str, Sholing Common
Str, Weston Common Str.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	870	404
1 in 10 yr drought	678	196

Auth abst (Ml)	231988
% from GW	40.7%
% high/med loss	33%
Actual abst (Ml)	164328
incl (fish farms)	

River Flow (cumecs)	Q50	Q95
R Itchen (Allbridge & Highbridge)	4.81	2.94

Water Supply Reservoirs	None
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Water Companies	Area (km ²) in catchment	% Catchment area
SWS Hants	364	77
Mid Southern	90	19
Portsmouth	19	4

Resources Areas	Number	Area (km ²)
Name		
River Meon (part)	29	24.2
Lower Itchen (part)	31	288.3
Upper Itchen (part)	32	158.9
Upper Test (part)	34	1.6

FLOOD DEFENCE

	Length (km)
Coastline including main tidal waters	7.3
Main River including tidal lengths	86.1
Sea Defences EA responsibility	0
Tidal Banks EA responsibility	0
Internal Drainage Districts	None

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	60.6	79.4	A 48.3
1B Good	30.8	16.2	B 36.9
2 Fair	6.3	2.1	C 10.4
3 Poor	0	0	D 0
4 Bad	0	0	E 2.1
			F 0
Total	97.7	97.7	Total 97.7

Number of EC Designated Bathing Waters	0
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FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	0	0
Salmonid	51.13	0

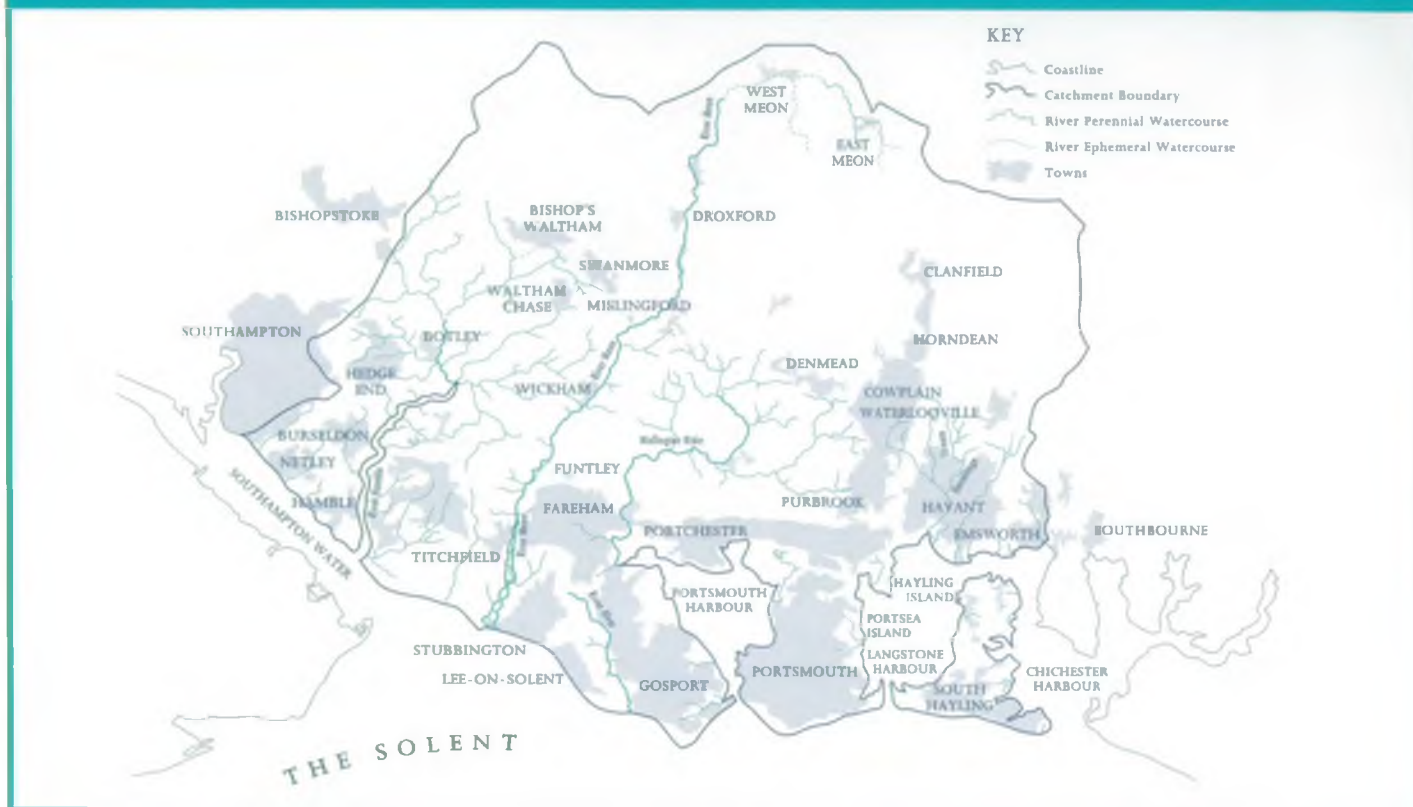
CONSERVATION

National Nature Reserves	0
Sites of Special Scientific Interest (SSSIs)	10
Water dependent SSSIs	10
Ramsar and/or Special Protection Areas (designated and proposed)	1
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Length of towpath (km)	15 approx.
Length of inland navigation (km)	0

MEON, HAMBLE AND PORTSMOUTH



ADMINISTRATION

Hampshire County Council

557.5 km² within catchment

97.6% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
E Hampshire	2.0	83	14.5
Eastleigh	13.3	34	6.0
Fareham	13.4	79	13.9
Gosport	34.1	27	4.8
Havant	21.7	55	9.7
Portsmouth	41.6	39	6.9
Southampton	39.5	1	0.2
Winchester	1.5	239	41.8

West Sussex County Council

13.5 km² within catchment

2.4% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Chichester	1.3	14	2.4

Main Towns and population (1991)

Fareham 33165, Gosport 79750, Havant 104200, Hayling Island 15510, Horndean 11960, Portsmouth 180950.

CATCHMENT AREA 570.99 km²

GEOLOGY

North - predominantly Chalk, South - Tertiary deposits.

TOPOGRAPHY

Maximum: 248 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 589000

2001 estimate: 605000

MAIN RIVERS AND STREAMS

R Meon, R Hamble, R Wallington.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	850	369
1 in 10 yr drought	662	205

	MEON	HAMBLE	PORTS
Auth abst (Ml)	19979	11925	60242
% from GW	81.5%	98.7%	99.1%
% high/med loss	53%	99%	97%
Actual abst (Ml) 93/94	13763	5816	27910

River Flow (cumecs)	Q50	Q95
R Meon (Mislingford)	0.70	0.19
R Hamble (Frogmill)	0.27	0.10

Water Supply Reservoirs	None
-------------------------	------

Water Companies	Area (km ²) in catchment	% Catchment area
Portsmouth	425	74
SWS Hants	114	20
SEW, Mid Southern	32	6

Resource Areas	Number	Area (km ²)
Name		
Wallington	28	301
Meon (part)	29	102.5
Hamble	30	147.7
Lower Itchen (part)	31	19.8

FLOOD DEFENCE

	Length (km)
Coastline to Schedule 4	142.4
including main tidal waters	165.3
Main River including tidal lengths	160.0
Sea Defences EA responsibility	4.88
Tidal Banks EA responsibility	23.8
Internal Drainage Districts	None

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
MEON			
1A Good	0	24.4	A 32.0
1B Good	38.2	13.8	B 5.0
2 Fair	0	0	C 1.2
3 Poor	0	0	D 0
4 Bad	0	0	E 0
			F 0
Meon Total	38.2	38.2	Total 38.2

HAMBLE			
1A Good	0	10.4	A 0
1B Good	0	25.8	B 32.9
2 Fair	58.1	16.9	C 24.4
3 Poor	0	5.0	D 0
4 Bad	0	0	E 0
			F 0
Hamble Total	58.1	58.1	Total 57.3

PORTSMOUTH			
1A Good	0	5.9	A 9.9
1B Good	0	44.8	B 10.0
2 Fair	65.3	13.1	C 33.7
3 Poor	0	0	D 0
4 Bad	0	1.5	E 9.1
			F 0
Portsmouth Total	65.3	65.3	Total 62.7

Number of EC Designated Bathing Waters	7
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STWs – Discharges to	Number	Volume (m ³ /d)
River	19	6386
Estuary	7	136237
Sea	0	0

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	0	0
Salmonid	24.42	0

CONSERVATION

National Nature Reserves	2
Sites of Special Scientific Interest (SSSIs)	25
Water dependent SSSIs	16
Ramsar and/or Special Protection Areas (designated and proposed)	2
Environmentally Sensitive Areas	South Downs

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

TEST



CATCHMENT AREA 1250.32 km²

GEOLOGY

North - predominantly Chalk, South - Tertiary deposits.

TOPOGRAPHY

Maximum: 297 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 300000

2001 estimate: 316000

MAIN RIVERS AND STREAMS

R Test, R Blackwater, Wallop Brook, R Anton, R Dever,
R Dun.

ADMINISTRATION

Hampshire County Council

1057.8 km² within catchment

84.6% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Basingstoke	2.3	267	21.4
New Forest	2.1	53	4.2
Southampton	39.5	22	1.8
Test Valley	1.6	592	47.3
Winchester	1.5	124	9.9

Wiltshire County Council

183.9 km² within catchment

14.7% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Kenet	0.7	63	5.1
Salisbury	1.0	121	9.6

Berkshire County Council

8.6 km² within catchment
0.7% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Newbury	1.9	8.6	0.7

Main Towns and population (1991)

Andover 32325, Romsey 14340, Southampton (part)
199860, Totton 26770.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	823	352
1 in 10 yr drought	642	195

Auth abst (Ml) 447318
(245887 Ml is authorised for fish farming. This is not reflected in the actual abstraction figure).

% from GW 21%

% high/med loss 33%

Actual abst (Ml) (Minus Fish Farms) 64302

River Flow (cumecs)	Q50	Q95
R Test (Broadlands)	9.98	5.89

Water Supply Reservoirs None

Water Companies	Area (km ²) in catchment	% Catchment area
SWS Hants	925	74
Wessex Water	209	17
Mid Southern	74	6
Thames Water	42	3

Resources Areas

Name	Number	Area (km ²)
Lower Itchen (part)	31	61.8
Upper Itchen (part)	32	1.6
Lower Test (part)	33	580.5
Upper Test (part)	34	606.4

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	18.4
Main River	including tidal lengths	272.5
Sea Defences	EA responsibility	0
Tidal Banks	EA responsibility	0
Internal Drainage Districts		None

WATER QUALITY**Length of Freshwater River in NWC Class (km)**

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	143.5	111.0	A 88.3
1B Good	22.2	124.6	B 129.7
2 Fair	97.0	23.1	C 38.6
3 Poor	0	4.0	D 4.7
4 Bad	0	0	E 0
			F 0
Total	262.7	262.7	Total 261.3

Number of EC Designated Bathing Waters 0

FISHERIES**Length of EC Designated Fisheries (km):**

	Freshwater	Tidal
Cyprinid	0	0
Salmonid	103.53	0

CONSERVATION

National Nature Reserves	0
Sites of Special Scientific Interest (SSSIs)	30
Water dependent SSSIs	26
Ramsar and/or Special Protection Areas (designated and proposed)	1
Environmentally Sensitive Areas	Test Valley

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

WEST HAMPSHIRE



CATCHMENT AREA 450.49 km²

GEOLOGY

Tertiary deposits.

TOPOGRAPHY

Maximum: 114 m AOD
Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 97000
2001 estimate: 10500

MAIN RIVERS AND STREAMS

R Beulieu, R Lymington.

ADMINISTRATION

Hampshire County Council

449.8 km² within catchment
99.8% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
New Forest	2.1	449.8	99.8

Dorset County Council

0.75 km² within catchment
0.2% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Christchurch	8.1	0.75	0.2

Main Towns and population (1991)

Lymington and Pennington 13405.

WATER QUALITY

Length of Freshwater River in NWC Class (km)					
Class	Objective	Achieved		GQA	
		1990 Survey		(km)	
1A Good	45.1	89.1	A	31.3	
1B Good	110.8	88.6	B	98.9	
2 Fair	34.4	12.6	C	45.4	
3 Poor	0	0	D	8.7	
4 Bad	0	0	E	2.5	
			F	0	
Total	190.3	190.3	Total	186.8	
Number of EC Designated Bathing Waters					5

FISHERIES

Length of EC Designated Fisheries (km):		
	Freshwater	Tidal
Cyprinid	0	0
Salmonid	17.83	0

CONSERVATION

National Nature Reserves	1
Sites of Special Scientific Interest (SSSIs)	13
Water dependent SSSIs	13
Ramsar and/or Special Protection Areas (designated and proposed)	1
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

ADUR AND OUSE



CATCHMENT AREA 1072.69 km²

GEOLOGY

North – predominantly Weald Clay, Central – Gault Clay and Greensand, South – Chalk.

TOPOGRAPHY

Maximum: 248 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 500000

2001 estimate: 511000

A SELECTION OF MAIN RIVERS AND STREAMS

R Ouse - Glynde Reach, Bevern Str., Iron River, Cockhaise Brook, Longford Str., R Uck, Shortbridge Str.

R Adur - Cowfold Str., Chess Str., Herrings Str., Lancing Bk, Honeybridge Str., Pike Barn Sewer.

Main Towns and population (1991)

Brighton 143600, Burgess Hill 25670, Cuckfield 2660, Haywards Heath 22640, Hove 85360, Lewes 15380, Newhaven 10210, Shoreham/Southwick/Portslade 32000.

ADMINISTRATION

East Sussex County Council

562 km² within catchment

52.4% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Brighton	25.1	66	6.2
Hove	35.7	23	2.1
Lewes	3.0	264	24.6
Wealden	1.6	209	19.5

West Sussex County Council

510.7 km² within catchment

47.6% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Adur	13.9	26	2.4
Horsham	2.1	244	22.8
Mid Sussex	3.6	241	22.4

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	838	347
1 in 10 yr drought	659	190

	ADUR	OUSE	CHALK
Auth abst (Ml)	1610	24049	42052
% from GW	80%	15%	95%
% high/med loss	97%	96%	96%
Actual abst (Ml)	626	15350	35667

River Flow (cumecs)	Q50	Q95
Adur, East	0.45	0.15
Adur, West	0.27	0.02
Ouse (at Barcombe)	1.91	0.31

Water Supply Reservoirs

	Area (ha)	Volume (Gross Mm ³)	Reliable yield (Ml/d)
Ardingly	73	5206	53.65}
Barcombe Mills	16	546	combined}

Water Companies	Area (km ²) in catchment	% Catchment area
SEW	658	61
SWS Sussex (Coast)	247	23
SWS Sussex (West)	168	16

Resources Areas

Name	Number	Area (km ²)
Seaford Chalk (part)	19	19.8
River Ouse	21	469.1
Brighton Chalk	22	197.7
River Adur (part)	23	376.6
Worthing Chalk (part)	24	9.5

FLOOD DEFENCE

	Length (km)
Coastline including main tidal waters	40.2
Main River including tidal lengths	290.5
Sea Defences EA responsibility	13.5
Tidal Banks EA responsibility	92.1

Internal Drainage Districts	Area (km ²)
River Adur	17.37
River Ouse	55.16

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
ADUR			
1A Good	0	0	A 0
1B Good	34.7	30.1	B 18.1
2 Fair	53.9	43.2	C 51.8
3 Poor	0	15.3	D 8.3
4 Bad	0	0	E 10.4
			F 0
Total	88.6	88.6	Total 88.6

OUSE

1A Good	1.0	14.0	A 4.0
1B Good	120.2	72.5	B 84.1
2 Fair	24.5	51.2	C 46.6
3 Poor	0	8.0	D 11.2
4 Bad	0	0	E 0
			F 0
Total	145.7	145.7	Total 145.9

Number of EC Designated Bathing Waters

5

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	77.33	6.27
Salmonid	0	0

CONSERVATION

National Nature Reserves	2
Sites of Special Scientific Interest (SSSIs)	27
Water dependent SSSIs	16
Ramsar and/or Special Protection Areas (designated and proposed)	1
Environmentally Sensitive Areas	South Downs
SPA proposed	1
SAC proposed	2

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

ARUN



ADMINISTRATION

West Sussex County Council

1289.2 km² within catchment
86.8% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Adur	13.9	18	1.2
Arun	5.9	227	15.3
Chichester	1.3	748	50.4
Horsham	2.0	258	17.4
Mid Sussex	3.6	5	0.3
Worthing	29.6	33	2.2

Surrey County Council

116.0 km² within catchment
7.9% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Mole Valley	3.1	49	3.3
Waverley	3.3	66	4.5
Guildford	4.5	1	0.1

Hampshire County Council

78.8 km² within catchment
5.3% of total catchment area

District	People per ha	Area (km ²) in catchment	% Catchment area
E Hampshire	2.0	79	5.3

Main Towns and population (1991)

Arundel 3250, Billingshurst 5910, Bognor Regis 20605, Chichester 25675, Horsham 40960, Littlehampton 24290, Midhurst 4790, Petersfield 12690, Worthing 96960.

CATCHMENT AREA 1484.02 km²

GEOLOGY

North - predominantly Weald Clay, Central - Chalk and Greensand, South - Tertiary deposits and Chalk.

TOPOGRAPHY

Maximum: 294 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 480000

2001 estimate: 520000

MAIN RIVERS AND STREAMS

R Arun, Chichester Canal, Loxwood Str., R Lavant, R Lod, R Ems, R Rother, R Chilt, Ferring Rife.

North River, Black Ditch, River Stor, River Kird, Aldingbourne Rife, Channells Brook.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	862	354
1 in 10 yr drought	671	204

	ARUN	CHALK
Auth abst (Ml)	87041	90047

(37843 Ml from Arun (A) is used for a Water Wheel.
This is not reflected in the actual abstraction figure.)

% from GW	51%	97%
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% high/med loss	48%	81%
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Actual abst (Ml)	25797	54036
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River Flow (cumecs)	Q50	Q95
R Arun	1.26	0.32

Water Supply Reservoirs		None
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Water Companies	Area (km ²) in catchment	% Catchment area
SWS Sussex (West)	653	44
Portsmouth	430	29
SWS Sussex (Coast)	167	11
Mid Southern	111	7.5
Thames Water	91	6
East Surrey	28	2
SEW	4	0.5

Resources Areas

Name	Number	Area (km ²)
River Adur (part)	23	2.8
Worthing Chalk (part)	24	162.2
River Arun	25	482.0
Western Rother	26	355.2
Chichester Chalk	27	481.8

FLOOD DEFENCE

	Length (km)
Coastline including main tidal waters	142.5
Main River including tidal lengths	408.27
Sea Defences EA responsibility	18.81
Tidal Banks EA responsibility	65.1

Internal Drainage Districts	Area (km ²)
River Adur	33.04
South West Sussex	50.05

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
ARUN			
1A Good	5.3	22.0	A 90.4
1B Good	122.1	97.5	B 85.1
2 Fair	76.2	65.9	C 14.6
3 Poor	0	18.2	D 13.5
4 Bad	0	0	E 0
			F 0
Total	203.6	203.6	Total 203.6

CHALK (SUSSEX RIFES)

1A Good	0	2.3	A 2.3
1B Good	3.1	7.7	B 3.1
2 Fair	29.7	9.0	C 0
3 Poor	0	12.1	D 8.1
4 Bad	0	1.7	E 19.3
			F 0
Total	32.8	32.8	Total 32.8

Number of EC Designated Bathing Waters	10
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FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	73.87	0
Salmonid	57.55	0

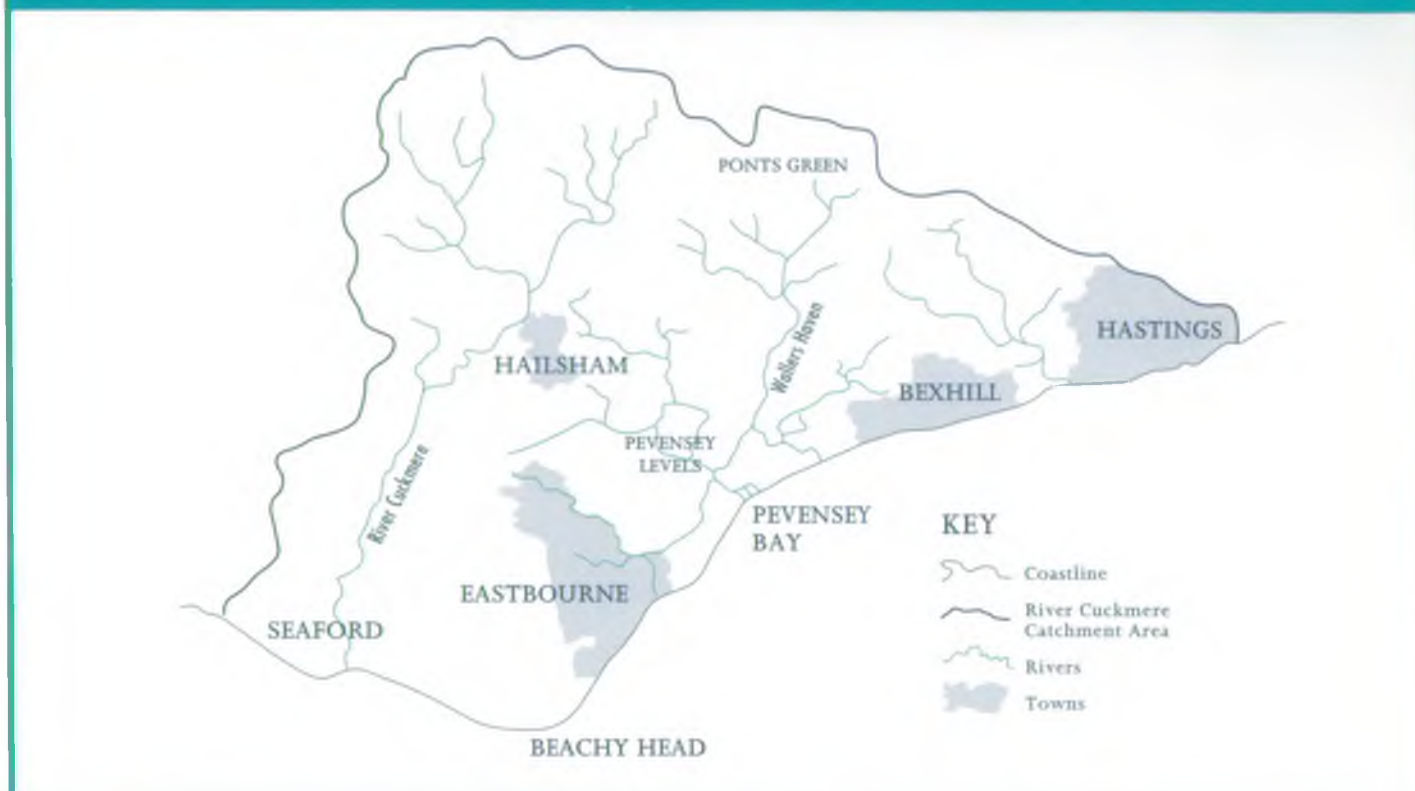
CONSERVATION

National Nature Reserves	1
Sites of Special Scientific Interest (SSSIs)	62
Water dependent SSSIs	34
Ramsar and/or Special Protection Areas (designated and proposed)	2
Environmentally Sensitive Areas	South Downs
Special Areas of Conservation (SAC)	Proposed 4

RECREATION AND NAVIGATION

Length of towpath (km)	6
Length of inland navigation (km)	partial 27
Chichester Canal	LA/Other maintained (km) 6
Wey & Arun Canal	LA/Other maintained (km)
	- proposed restoration 21
	- already restored (of 21km) 7

CUCKMERE AND PEVENSEY LEVELS



CATCHMENT AREA 527.49 km²

GEOLOGY

North East - Hastings Beds and Weald Clay, recent deposits in marsh areas, South West - Chalk with minor Gault Clay and Greensand.

TOPOGRAPHY

Maximum: 183 m AOD
Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 259000
2001 estimate: 287000

MAIN RIVERS AND STREAMS

Cuckmere R, Wallers Haven, Bull R, Huggletts Str, Combe Haven, Powdermill Str, East Str, Pevensey Haven, Hurst Haven, Nunningham Str, Ashbourne Str.

ADMINISTRATION

East Sussex County Council

527.5 km² within catchment
100% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Eastbourne	18.4	49	9.3
Hastings	27.2	29	5.6
Lewes	3.0	36	6.7
Rother	1.6	95	18.1
Wealden	1.6	318	60.3

Main Towns and population (1991)

Bexhill 38905, Eastbourne 81400, Hailsham 17940, Hastings 80820, Heathfield 10680, Seaford 20930.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	808	325
1 in 10 yr drought	637	180

	CUCKMERE	CHALK
Auth abst (Ml)	19634	19392
% from GW	31%	100%
% high/med loss	89%	98%
Actual abst (Ml)	4347	22066
River Flow (cumecs)	Q50	Q95
Cuckmere R	0.40	0.07
Wallers Haven	0.28	0.09

Water Supply Reservoirs

	Area (ha)	Volume (Gross Mm ³)	Reliable yield (Ml/d)
Arlington	49	3546	19.8

Water Companies	Area (km ²) in catchment	% Catchment area
SEW	499.5	95
SWS Sussex (East)	28.0	5

Resources Areas

Name	Number	Area (km ²)
Pevensey Levels	18	274.7
Seaford Chalk (part)	19	106.1
River Cuckmere	20	146.7

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	51.6
Main River	including tidal lengths	209.72
Sea Defences	EA responsibility	12.95
Tidal Banks	EA responsibility	15.4

Internal Drainage Districts	Area (km ²)
River Cuckmere	7.47
Pevensey Levels	67.14

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	0	7.6 A	5.3
1B Good	53.4	50.2 B	43.7
2 Fair	62.5	47.0 C	28.4
3 Poor	0	11.1 D	24.2
4 Bad	0	0 E	14.3
		F	0
Total	115.9	115.9	Total 115.9

Number of EC Designated Bathing Waters	7
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FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	40.56	0
Salmonid	10.8	0

CONSERVATION

National Nature Reserves	2
Sites of Special Scientific Interest (SSSIs)	25
Water dependent SSSIs	20
Environmentally Sensitive Areas	South Downs
Ramsar proposed	1

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

DARENT



CATCHMENT AREA 400.96 km²

GEOLOGY

North and Central - Chalk, North West - Tertiary deposits, South - Greensand and Gault Clay.

TOPOGRAPHY

Maximum: 251 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 417000

2001 estimate: 422000

MAIN RIVERS AND STREAMS

R Darent, R Cray, R Shuttle.

ADMINISTRATION

Kent County Council

290.5 km² within catchment

72.4% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Dartford	10.9	53	13.3
Sevenoaks	3.0	228	56.8
Tonbridge	4.2	9	2.3

Greater London

105.8 km² within catchment

26.4% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Bexley	35.6	32	7.9
Bromley	19.1	64	16.0
Greenwich	43.6	10	2.5

Surrey County Council

4.7 km² within catchment
1.2% of total catchment area

District	People per ha	Area (km ²) in catchment	% Catchment area
Tandridge	3.1	5	1.2

Main Towns and population (1991)

Bexley 19600, Dartford 62400, Gillingham 95200,
Orpington 44160, Sevenoaks 21100, Sidcup 20300.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	655	191
1 in 10 yr drought	515	50
Auth abst (Ml)		110593
% from GW		97%
% high/med loss		79%
Actual abst (Ml)		67424

River Flow (cumecs)	Q50	Q95
R Darent	0.46	0.02

Water Supply Reservoirs None

Water Companies	Area (km ²) in catchment	% Catchment area
Thames Water	262	65
Mid Kent	60	15
SEW	50	13
SWS Kent (Medway)	18	4
East Surrey	11	3

Resources Areas		
Name	Number	Area (km ²)
Darent & Clay	37	401.0

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	9.2
Main River	including tidal lengths	78.7
Sea Defences	EA responsibility	0
Tidal Banks	EA responsibility	13.1

Internal Drainage Districts	Area (km ²)
Commissioned Area West of Gravesend	6 approx.

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	0	13.4 A	0
1B Good	38.2	45.7 B	51.6
2 Fair	20.9	0 C	7.5
3 Poor	0	0 D	0
4 Bad	0	0 E	0
		F	0
Total	59.1	59.1	Total 59.1

Number of EC Designated Bathing Waters 0

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	51.64	0
Salmonid	0	0

CONSERVATION

National Nature Reserves	0
Sites of Special Scientific Interest (SSSIs)	19
Water dependent SSSIs	18
Ramsar and/or Special Protection Areas (designated and proposed)	0
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

EASTERN ROTHER



CATCHMENT AREA 970.83 km²

GEOLOGY

Hastings Beds and Weald Clay, recent deposits in marsh areas.

TOPOGRAPHY

Maximum: 197 m AOD
Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 170000
2001 estimate: 188000

MAIN RIVERS AND STREAMS

Eastern Rother, Royal Military Canal, R Brede, R Tillingham, R Dudwell, R Darwell, New Sewer, Clobdsen Sewer.

ADMINISTRATION

East Sussex County Council

489.2 km² within catchment
50.4% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Hastings	27.2	5	0.5
Rother	1.6	406	41.8
Wealden	1.6	78	8.0

Kent County Council

481.6 km² within catchment
49.6% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Ashford	1.6	191	19.6
Shepway	2.6	223	23.0
Tunbridge Wells	3.0	68	7.0

Main Towns and population (1991)

Battle 5730, Hythe 18000, Lydd 5309, New Romney 6204, Rye 4210, Tenterden 5700.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	754	246
1 in 10 yr drought	596	133
Auth abst (Ml)		55764
% from GW		58%
% high/med loss		88%
Actual abst (Ml)		19685
River Flow (cumecs)	Q50	Q95
E Rother	0.9	0.21

Water Supply Reservoirs

	Area (ha)	Volume (Gross Mm ³)	Reliable yield (Ml/d)
Darwell	73	4728	21.9
Powdermill	21	856	2.1

Water Companies

	Area (km ²) in catchment	% Catchment area
Mid Kent	363	37
SEW	339	35
SWS Sussex (East)	137	14
Folkestone & Dover	132	14

Resource Areas

Name	Number	Area (km ²)
Romney Marsh	15	20.67
Lower Rother	16	558.8
Upper Rother	17	205.3

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	55.2
Main River	including tidal lengths	324.0
Sea Defences	EA responsibility	39.97
Tidal Banks	EA responsibility	10.8

Internal Drainage Districts

	Area (km ²)
Denge Southbrooks	37.59
Romney Marsh Levels	105.03
Pett Level	34.01
Rother	65.92
Walland Marsh	89.16

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	40.6	11.1 A	0
1B Good	120.3	111.8 B	104.1
2 Fair	44.7	51.5 C	81.9
3 Poor	1.0	24.7 D	32.8
4 Bad	0	7.5 E	30.3
		F	2.7
Total	206.6	206.6	Total 251.8

Number of EC Designated Bathing Waters

6

FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	27.9	10.04
Salmonid	3.5	0

CONSERVATION

National Nature Reserves	1
Sites of Special Scientific Interest (SSSIs)	21
Water dependent SSSIs	18
Ramsar and/or Special Protection Areas (designated and proposed)	2
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Harbour of Rye NRA responsibility

Length of towpath (km)	0
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Length of inland navigation (km)	31.1
Royal Military Canal (Iden Lock - Seabrook Outfall)	
EA maintained	23.8

EA maintained locks	1 - Scots Float
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MEDWAY



CATCHMENT AREA 1780.99 km²

GEOLOGY

North - Chalk, Gault Clay and Greensand, Central - Weald Clay, South - Hastings Beds.

TOPOGRAPHY

Maximum: 277 m AOD

Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 734000

2001 estimate: 755000

MAIN RIVERS AND STREAMS

R Medway, R Teise, R Beult, R Bourne, R Eden, R Len, Lesser Teise, Edenbrook.

ADMINISTRATION

Kent County Council

1372.0 km² within catchment

77.0% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Ashford	1.6	133	7.5
Dartford	10.9	16	0.9
Gillingham	29.4	12	0.7
Gravesham	9.3	102	5.7
Maidstone	3.5	309	17.4
Rochester	9.1	164	9.2
Sevenoaks	3.0	144	8.1
Tonbridge	4.2	229	12.8
Tunbridge Wells	3.0	263	14.7

East Sussex County Council

222.2 km² within catchment

12.5% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Rother	1.6	13	0.7
Wealden	1.6	209	11.7

Surrey County Council

146.8 km² within catchment

8.2% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Tandridge	3.1	147	8.2

West Sussex County Council

40.0 km² within catchment
2.3% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Mid Sussex	3.6	40	2.3

Main Towns and population (1991)

Chatham/Rochester/Strood 129700, Crowborough
19120, East Grinstead 23955, Gravesend/Northfleet
70900, Maidstone 90000, Swanscombe 6000, Tonbridge
34900, Tunbridge Wells 56300.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	729	235
1 in 10 yr drought	571	145

	ESTUARY	UPPER M
Auth abst (Ml)	374533	196721
% from GW	18%	23%
high/med loss	56%	95%
Actual abst (Ml)	28658	42337

River Flow (cumecs)	Q50	Q95
R Medway	4.79	1.49

Reservoirs	Area (ha)	Volume (Gross Mm ³)	Reliable yield (Ml/d)
Bowl Water	312	31300	75
Bough Beech	130	10100	27
Weir Wood	113	5623	14

Water Companies	Area (km ²) in catchment	% Catchment area
Mid Kent	822	46
SEW	440	25
SWS (Medway)	270	15
East Surrey	225	13
Thames Water	24	1

Resources Areas	Number	Area (km ²)
Medway Estuary	1	335.5
Medway (middle)	2	380.8
Eden	3	222.8
Medway (upper)	4	253.1
Teise	5	227.8
Beult	6	294.3
West Swale (part)	7	66.7

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	119.4
Main River	including tidal lengths	259.74
Sea Defences	EA responsibility	7.14
Tidal Banks	EA responsibility	80.7

Internal Drainage Districts	Area (km ²)
Commissioned Areas E & W of Gravesend	42
Lower Medway	19.20
Upper Medway	139.13

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	23.7	51.1	A 44.5
1B Good	312.2	204.3	B 144.6
2 Fair	60.1	108.6	C 158.5
3 Poor	0.2	24.8	D 37.1
4 Bad	0	7.4	E 6.0
			F 0
Total	396.2	396.2	Total 390.7

Number of EC Designated Bathing Waters	0
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FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	87.2	0
Salmonid	0	0

CONSERVATION

National Nature Reserves	2
Sites of Special Scientific Interest (SSSIs)	49
Water dependent SSSIs	40
Ramsar and/or Special Protection Areas (designated and proposed)	5
Environmentally Sensitive Areas	North Kent Marshes

RECREATION AND NAVIGATION

Length of towpath (km)	31
Length of inland navigation (km)	31
Medway (Allington Lock - Leigh Barrier)	
EA maintained	31
EA maintained locks	10

NORTH KENT



CATCHMENT AREA 530.05 km²

GEOLOGY

North - recent deposits in marsh areas and Tertiary deposits, South - predominantly Chalk.

TOPOGRAPHY

Maximum: 171 m AOD
Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 226000
2001 estimate: 234000

MAIN RIVERS AND STREAMS

Swalecliffe Brook and minor streams feeding to the Swale and Medway Estuary.

ADMINISTRATION

Kent County Council

530.1 km² within catchment
100% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Ashford	1.6	18	3.4
Canterbury	4.0	56	10.5
Gillingham	29.4	22	4.1
Maidstone	3.5	64	12.2
Swale	3.1	370	69.8

Main Towns and population (1991)

Faversham 15800, Herne Bay 31900, Sheerness 31000,
Sittingbourne 38200, Whitstable 29800.

WATER QUALITY

Length of Freshwater River in NWC Class (km)				
Class	Objective	Achieved 1990 Survey	GQA (km)	
1A Good	0	0	A	0
1B Good	3.5	0	B	0
2 Fair	6.7	3.5	C	0.1
3 Poor	0	6.7	D	4.6
4 Bad	0	0	E	6.2
			F	0
Total	10.2	10.2	Total	10.9

Number of EC Designated Bathing Waters 4

FISHERIES

	Freshwater	Tidal
Cyprinid	0	0
Salmonid	0	0

CONSERVATION

National Nature Reserves	2
Sites of Special Scientific Interest (SSSIs)	12
Water dependent SSSIs	11
Ramsar and/or Special Protection Areas (designated and proposed)	6
Environmentally Sensitive Areas	North Kent Marshes

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

STOUR AND EAST KENT



CATCHMENT AREA 1080.8 km²

GEOLOGY

North - Tertiary deposits, South - predominantly Chalk with minor Gault Clay and Greensand.

TOPOGRAPHY

Maximum: 205 m AOD
Minimum: 0 m AOD

RESIDENT POPULATION

1991 estimate: 452000
2001 estimate: 476400

MAIN RIVERS AND STREAMS

Great Stour, Little Stour, Nailbourne, R Dour, Wingham R, East Stour, Aylesford Str, Sarre Penn.

ADMINISTRATION

Kent County Council

1080.8 km² within catchment
100% of total catchment area

District	Persons per ha	Area (km ²) in catchment	% Catchment area
Ashford	1.6	236	21.8
Canterbury	4.0	252	23.4
Dover	3.3	321	29.7
Maidstone	3.5	17	1.5
Shepway	2.6	141	13.0
Swale	3.1	6	0.6
Thanet	12.0	108	10

Main Towns and population (1991)

Ashford 54200, Canterbury 45600, Deal 29100, Dover 42600, Folkestone 40500, Margate/Broadstairs/Ramsgate 125000, Sandwich 4730.

WATER RESOURCES

Rainfall (mm/yr)	Annual	Effective
Average	730	246
1 in 10 yr drought	575	125
	Thanet Chalk 40	

Auth abst (Ml)	187719
% from GW	81%
% high/med loss	88%
Actual abst (Ml)	90880

River Flow (cumecs)	Q50	Q95
R Stour	3.34	1.56
R Dour	0.32	0.07

Water Supply Reservoirs	None
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Water Companies	Area (km ²) in catchment	% Catchment area
Mid Kent	442	41
SWS Kent (Thanet)	357	33
Folkestone & Dover	282	26

Resources Areas	Number	Area (km ²)
Name		
Stour Marshes	9	173.5
Great Stour	10	171.2
Upper Great Stour	11	233.2
Little Stour	12	285.2
Thanet Chalk	13	76.1
Dover Chalk	14	141.5

FLOOD DEFENCE

		Length (km)
Coastline	including main tidal waters	80.6
Main River	including tidal lengths	254.58
Sea Defences	EA responsibility	17.85
Tidal Banks	EA responsibility	38.05
Internal Drainage Districts	Area (km ²)	
River Stour (Kent)		119.14

WATER QUALITY

Length of Freshwater River in NWC Class (km)

Class	Objective	Achieved 1990 Survey	GQA (km)
1A Good	20.5	38.1	A 3.6
1B Good	117.7	71.7	B 74.8
2 Fair	28.6	50.0	C 29.1
3 Poor	0.8	7.8	D 3.2
4 Bad	0	0	E 11.9
			F 0
Total	167.6	167.6	Total 122.6

Number of EC Designated Bathing Waters	12
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FISHERIES

Length of EC Designated Fisheries (km):

	Freshwater	Tidal
Cyprinid	26.9	13.9
Salmonid	0	4.5

CONSERVATION

National Nature Reserves	2
Sites of Special Scientific Interest (SSSIs)	34
Water dependent SSSIs	29
Ramsar and/or Special Protection Areas (designated and proposed)	4
Environmentally Sensitive Areas	0

RECREATION AND NAVIGATION

Length of towpath (km)	0
Length of inland navigation (km)	0

APPENDIX

GENERAL AND ADMINISTRATION

Map Scales – Region 1:1000 000

Catchment 1: 1:600 000

Catchment Area – from 1:100 000 and 1:50 000 maps.

Topography m AOD – metres above ordnance datum.

From Institute of Hydrology gauging station data sheets (1989).

Resident Population – 1991 figure derived from Registrar General's provisional mid-1991 estimates. 2001 figure derived from 1990 NRA demand forecast review. Using data by District/Borough/City Council, catchment population has been estimated as a percentage of Council area within each catchment. Adjustments have been made for population concentrated in main towns.

County and District Councils – area from 1:250 000 map. Persons per ha (hectare) from OPCS 1991 County Monitors.

Main Towns – towns recorded by Ordnance Survey as over 2 km² in area. Town population – estimate of 1991 population from County and District Councils.

WATER RESOURCES

Rainfall, Effective – total rainfall minus actual evapotranspiration.

1 in 10 year drought – drought with a statistical probability of occurring once in a 10 year period.

Authorised Abstraction – annual figure as at March 1993. Saline water abstraction is excluded from all abstraction data shown. All abstraction data given +/-5% confidence.

% from GW – percentage of authorised abstraction from groundwater.

% high/med loss – percentage of authorised abstraction in high and medium loss factor categories (1993 Scheme of Abstraction Charges). Indication of consumptive use.

Actual Abstraction – for water year October 1990 to September 1991.

Q50/Q95 – flow exceeded for 50/95% of the flow record. On 1 day duration. Calculated from archived flow records. Measured at downstream catchment gauges located at:

E Adur	– Sakeham	W Adur	– Hatterrell
Ouse	– Barcombe Mills		
Arun	– Pallingham		
Cuckmere	– Shermans Br.	Waller's	– Boreham Br.
Darent	– Hawley		
E Rother	– Udiam		

IoW Medina	– U Shide	Lukely	– Newport
IoW E Yar	– Alverstone		
Itchen	– Allbrook & Highbridge		
Medway	– Teston		
Meon	– Mislingford	Hamble	– Frogmill
Stour	– Plucks Gutter	Dour	– Crabble Mill
Test	– Broadlands		
Lymington	– Brockenhurst		

Reservoirs – area from Water Authority leaflet (1985).

Water Companies – area from 1:250 000 map.

FLOOD DEFENCE

Coastline – from 1:250 000 map along mean high water mark (Coast Protection Act 1949, plus 1990 Portsmouth, Chichester and Langstone Harbour revisions). Second figure includes main tidal waters (Thames Estuary, Medway Estuary, Swale and Southampton Water).

Main River – sum of tidal and non tidal main river lengths.

Sea Defences / Tidal Banks – from National Sea Defence Survey. Sea defences under private/military responsibility are not shown by catchment.

WATER QUALITY

GQA – General Water Assessment

NWC – National Water Council

FISHERIES

Salmonid – Salmon *Salmo salar*, Brown and Sea Trout *Salmo trutta* and Rainbow Trout *Oncorhynchus mykiss*. Coarse fish which are all non-salmonid. Freshwater fish and eels.

CONSERVATION

SACs – Special Area of Conservation

SSSIs and Ramsar / SPAs – sites that straddle catchment boundaries have been recorded in both/all catchments except Southampton Water/Solent Marshes Ramsar site/SPA which is only included in the Regional total, and Solent – Isle of Wight Maritime Proposed SAC.

Water dependent SSSIs – sites where operations that involve a change of water levels/tables or water utilization require prior consultation with English Nature. These are included in the total number of SSSIs shown.

RECREATION AND NAVIGATION

Inland navigation – navigation above the tidal limit.

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