

Water Resources Planning Guideline supply-demand workbook - Version 2.8

Instructions for completing these tables is contained within chapters 13 - 22 of the Water Resources Planning Guideline

The Guideline and tables are available on the Environment Agency website at www.environment-agency.gov.uk/business/sectors/39687.aspx

All queries on the content of this workbook should be sent to water-company-plans@ea.gov.uk

Yellow shaded cells are calculated cells. Do not input data to these cells.

Blue shaded cells represent the base-year data (**Scenario Year 2006-07**)

Shaded cells do not require any input

Shaded cells require input where data is available

Resource Zone and sign off information:

Please enter the information below to identify this workbook. This will be copied through to all work sheets.

Company: Thames Water
Resource Zone Name: Kennet Valley
Resource Zone Number: 3 of 6
Planning Scenario Name: Dry Year Critical Period
Chosen Level of Service: Company Preferred Level of Service

Responsible Officer: David Spiller Signed: _____ Dated: 05/12/2011

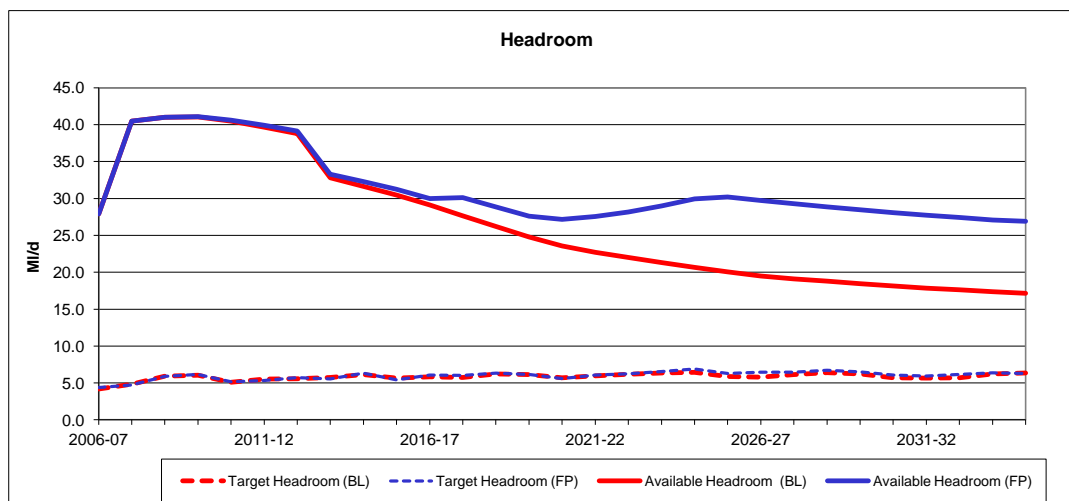
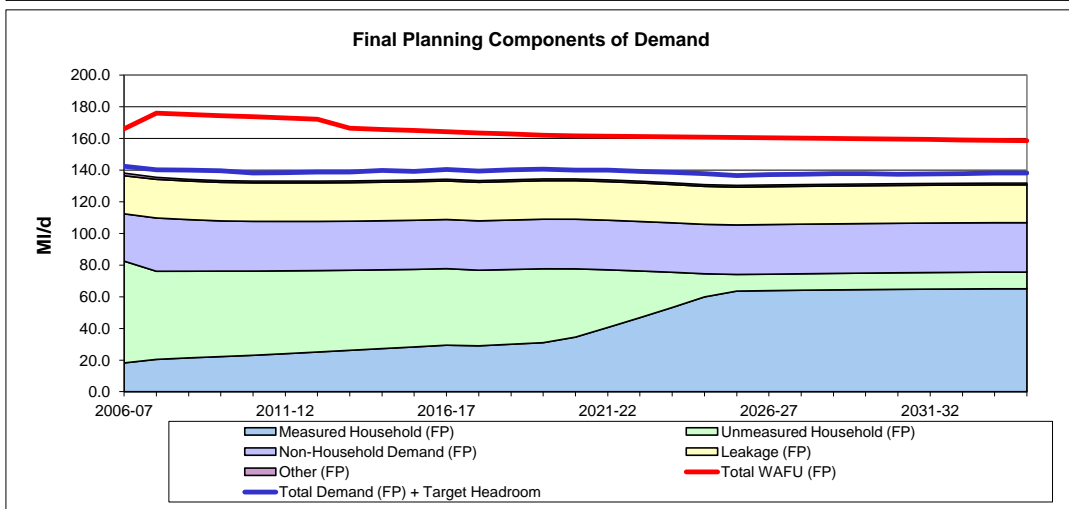
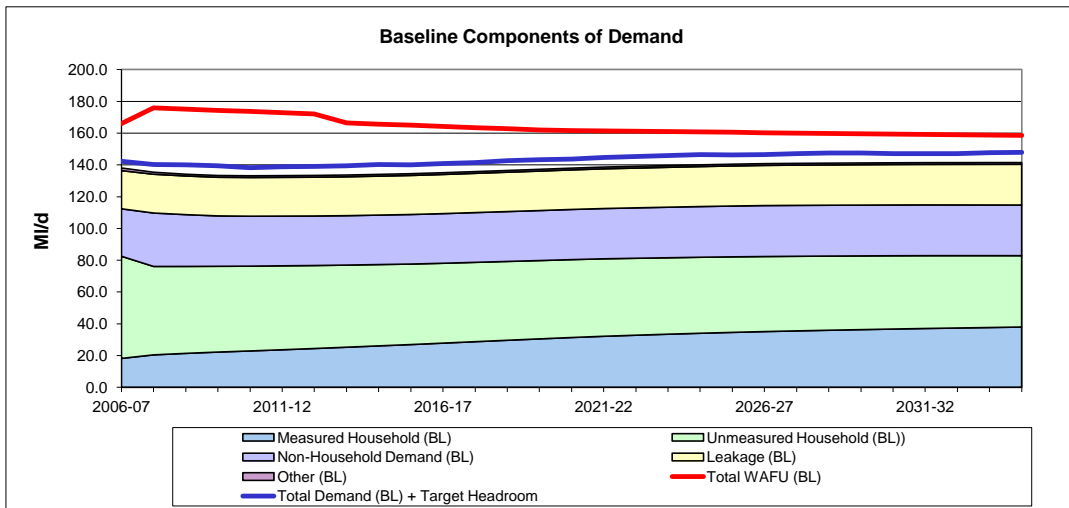
Version: Draft Final WRMP

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Company:	Thames Water
Resource Zone Name:	Kennet Valley
Resource Zone Number:	3 of 6
Planning Scenario Name:	Dry Year Critical Period
Chosen Level of Service:	Company Preferred Level of Service

Table WRP1-BL: Baseline supply-demand components

ROW Ref.	DERIVATION	DESCRIPTION	UNITS	Scenario																																		
				Year	2007-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35					
BASIC RESOURCES BASELINE																																						
1 _{BL}	Input	Deployable Output (Specify individual Source Yields on Table WRP6)	M/d	167.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55	177.55		
2 _{BL}	WRP1a-BL 2 _{BL}	Reductions in Deployable Output	M/d	0.00	0.00	0.74	1.48	2.22	2.96	3.70	9.44	10.18	10.92	11.66	12.40	13.14	13.88	14.33	14.53	14.74	14.95	15.16	15.36	15.57	15.78	15.98	16.19	16.40	16.61	16.81	17.02	17.23	17.43	17.63	17.83			
3 _{BL}	Input	Outage Allowance	M/d	1.60	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68			
4 _{BL}	9 _{BL} +11 _{BL}	Process Losses	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
5 _{BL}	1 _{BL} -(2 _{BL} +3 _{BL} +4 _{BL})	Water Available For Use (own sources)	M/d	165.95	175.87	175.13	174.39	173.65	172.91	172.17	166.43	165.69	164.95	164.21	163.47	162.73	161.99	161.54	161.34	161.13	160.92	160.71	160.51	160.30	160.09	159.88	159.68	159.47	159.26	159.06	158.85	158.65	158.44	158.24	158.04	157.84		
RAW WATER BASELINE																																						
6 _{BL}	Input	Raw Water Abstracted	M/d	142.32	144.93	143.57	142.70	142.54	142.64	142.76	143.03	143.47	143.93	144.59	145.36	146.11	146.87	147.68	148.40	148.90	149.41	149.91	150.33	150.70	150.88	151.03	151.16	151.28	151.37	151.39	151.42	151.44	151.46	151.48	151.50	151.52	151.54	
7 _{BL}	WRP1a-BL 7 _{BL}	Raw Water Exported (existing)	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8 _{BL}	WRP1a-BL 8 _{BL}	Raw Water Imported (existing)	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
9 _{BL}	Input	Raw Water Losses and Operational Use	M/d	0.43	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.95	0.95	0.96	0.96	0.97	0.97	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99		
10 _{BL}	WRP1a-BL 10 _{BL}	Non Potable Supplies (existing)	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
POTABLE WATER TO POINT OF DELIVERY BASELINE																																						
11 _{BL}	Input	Treatment Works Losses and Operational Use	M/d	3.83	8.57	8.49	8.43	8.42	8.43	8.44	8.45	8.48	8.51	8.55	8.59	8.64	8.68	8.73	8.77	8.80	8.83	8.86	8.89	8.91	8.92	8.93	8.93	8.94	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95		
12 _{BL}	WRP1a-BL 12 _{BL}	Potable Water Exported	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
13 _{BL}	WRP1a-BL 13 _{BL}	Potable Water Imported	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
14 _{BL}	Input	Distribution Input	M/d	138.06	135.41	134.15	133.33	133.18	133.27	133.38	133.63	134.05	134.48	135.10	135.81	136.52	137.23	137.98	138.65	139.12	139.60	140.06	140.46	140.80	140.98	141.11	141.23	141.35	141.43	141.45	141.47	141.48	141.48	141.48	141.48	141.48	141.48	
15 _{BL}	Input	Distribution Losses	M/d	17.21	17.49	17.40	17.33	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43
16 _{BL}	Input	Distribution System Operational Use	M/d	0.21	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
17 _{BL}	14 _{BL} -15 _{BL} -16 _{BL}	Water Delivered	M/d	120.64	117.74	116.57	115.76	115.56	115.66	115.77	116.02	116.42	116.83	117.42	118.10	118.77	119.44	120.11	120.63	120.96	121.30	121.63	121.95	122.28	122.44	122.56	122.68	122.78	122.85	122.88	122.89	122.89	122.89	122.89	122.89	122.89	122.89	
POTABLE WATER CUSTOMER USE BASELINE																																						
18 _{BL}	Input	Unmeasured Household - Population	000's	256.532	243.105	240.440	238.053	235.974	234.500	232.147	230.021	228.101	226.075	224.554	222.930	221.260	219.599	218.084	216.497	214.944	212.665	210.863	209.000	207.152	205.239	203.328	201.359	199.495	197.641	195.659	193.661	191.642	189.596	187.525	185.429			
19 _{BL}	Input	Unmeasured Household - Properties	000's	93.788	91.028	89.847	88.759	87.765	86.865	85.965	85.065	84.165	83.265	82.365	81.465	80.565	79.665	78.765	77.865	76.965	76.065	75.165	74.265	73.365	72.465	71.565	70.665	69.765	68.865	67.965	67.065	66.165	65.265	64.365	63.465	62.565		
20 _{BL}	18 _{BL} /19 _{BL}	Unmeasured Household - Occupancy Rate	h/pt	2.74	2.67	2.68	2.68	2.69	2.70	2.70	2.71	2.72	2.73	2.74	2.75	2.76	2.77	2.78	2.79	2.80	2.81	2.82	2.83	2.84	2.85	2.86	2.87	2.88	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89		
21 _{BL}	WRP6-6.1 _{BL}	Measured Household - Population	000's	94.151	107.576	112.053	116.209	119.954	123.867	128.023	132.500	137.206	141.949	147.295	152.612	157.911	163.232	168.638	173.740	178.117	182.514	186.931	191.225	195.381	199.244	203.062	206.977	210.951	214.748	218.414	222.258	226.274	230.271	234.249	238.207	242.145		
22 _{BL}	WRP6-6.2 _{BL}	Measured Household - Properties	000's	44.633	48.539	50.802	53.106	55.178	57.229	59.523	61.953	64.445	66.994	69.675	72.375	75.094	77.826	80.555	83.181	85.650	88.079	90.520	92.940	95.309	97.564	99.686	101.786	103.870	105.877	107.894	109.975	112.076	114.141	116.141	118.141	120.141		
23 _{BL}	21 _{BL} /22 _{BL}	Measured Household - Occupancy Rate	h/pt	2.11	2.22	2.21	2.19	2.17	2.16	2.15	2.14	2.13	2.12	2.11	2.11	2.10	2.10	2.09	2.09	2.08	2.07	2.07	2.06	2.05	2.04	2.04	2.03	2.03	2.03	2.02	2.02	2.02	2.02	2.02				
24 _{BL}	Input	Unmeasured Non Household - Population	000's	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
25 _{BL}	Input	Unmeasured Non Household - Properties	000's	0.377	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482		
26 _{BL}	Input	Measured Non Household - Population	000's	20.554	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455	21.455		
27 _{BL}	Input	Measured Non Household - Properties	000's	8.014	8.458	8.563	8.669	8.774	8.879	8.984	9.090	9.195	9.300	9.405	9.511	9.616	9.721	9.827	9.932	10.037	10.142	10.248	10.353	10.458	10.563	10.669	10.774	10.879	10.984	11.090	11.195	11.300	11.405	11.510	11.615	11.720		
28 _{BL}	18 _{BL} +21 _{BL} +24 _{BL} +25 _{BL}	Total Population	000's	371.237	372.136	373.948	375.717	377.388	379.071	381.624	383.976	386.762	389.473	393.304	397.006	400.626	404.286	408.176	411.692	414.066	416.633	419.253	421.680	423.988	426.098	428.044	429.744	431.000	432.844	434.555								

Table WRP1a-BL: Baseline WRP1 supporting transfer and DO reductions data

ROW Ref.	DERIVATION	DESCRIPTION <i>(insert/delete non-numbered lines to suit)</i>	UNITS	Scenario	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	
				Year																														
2a _{BL}	Input as appropriate	Reductions in Baseline Deployable Output. Total here and specify below	M/d	0.00	0.00	0.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.66	7.40	8.14	8.88	9.33	9.53	9.74	9.95	10.16	10.36	10.57	10.78	10.98	11.19	11.40	11.61	11.81	12.02	12.23		
		<i>Climate change</i>	M/d	0.00	0.00	0.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.66	7.40	8.14	8.88	9.33	9.53	9.74	9.95	10.16	10.36	10.57	10.78	10.98	11.19	11.40	11.61	11.81	12.02	12.23		
		<i>Sustainability Reduction</i>	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		<i>Network Constraints</i>	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			M/d																															
			M/d																															
7a _{BL}	Input as appropriate	Baseline Raw Water Exported (existing). Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		to	M/d																															
		to	M/d																															
		to	M/d																															
8a _{BL}	Input as appropriate	Baseline Raw Water Imported (existing). Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		from	M/d																															
		from	M/d																															
		from	M/d																															
10a _{BL}	Input as appropriate	Baseline Non Potable Supplies (existing). Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		to	M/d																															
		to	M/d																															
		to	M/d																															
		to	M/d																															
12a _{BL}	Input as appropriate	Baseline Potable Water Exported. Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		to	M/d																															
		to	M/d																															
		to	M/d																															
		to	M/d																															
		to	M/d																															
13a _{BL}	Input as appropriate	Baseline Potable Water Imported. Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		from	M/d																															
		from	M/d																															
		from	M/d																															
		from	M/d																															
		from	M/d																															

Company: Thames Water

Resource Zone Name: Kennet Valley

Resource Zone Number: 3 of 6

Planning Scenario Name: Dry Year Critical Period

Chosen Level of Service: Company Preferred Level of Service

Table WRP2: Feasible list of water management options

ROW Ref.	DERIVATION	OPTION DESCRIPTION <i>(insert / delete non-numbered lines to suit)</i>	WATER MANAGEMENT OPTION COST AND SOLUTION - TO BE COMPLETED FOR ALL FEASIBLE OPTIONS										
			OPTION REFERENCE No.	WAFU ON FULL IMPLEMENTATION (M/d)	EARLIEST POTENTIAL OPTION START DATE (YEAR)	NPV of WAFU (M)	CAPEX NPV (£000)	OPEX NPV (£000)	NPV of OPEX SAVINGS (£000)	SOCIAL & ENV. NPV (£000)	TOTAL NPV (£000)	AIC (p/M ³)	AISC (p/M ³)
54	Input as appropriate	Customer Side Management, Specify Below....											
		Change of Occupier (Compulsory Current Powers)		9.61	2010/11	43358.63	19127.96	4223.96	-1554.97	610.06	23961.98	50.27	51.68
		Targetted compulsory metering (New Powers)		9.61	2010/11	43358.63	13216.39	3519.97	-1554.97	610.06	17346.42	35.01	36.42
		Enhanced water efficiency		10.71	2010/11	38511.57	0.00	57562.69	-1177.98	294.26	57856.95	146.41	147.17
		Optant Metering (Included in Baseline)		0.44	2010/11	2631.41	8486.90	972.31	-43.60	610.06	10069.28	357.82	381.00
55	Input as appropriate	Distribution Side Management, Specify Below....											
56	Input as appropriate	Production Side Management, Specify Below....											
57	Input as appropriate	Resource Management, Specify Below....											
		Marlow Groundwater Resource Development	PR09 KV 01	15	2013	118070.26	22348.66	8138.76	0.00	1043.81	31531.23	25.82	26.71
		Woodley North Licence Disaggregation	PR09 KV 02	8.5	2013	66906.48	13433.53	7123.03	0.00	809.34	21365.90	30.72	31.93
		Hungerford (licence increase)	PR09 KV 03	1.35	2012	10626.32	2960.72	1209.82	0.00	150.81	4321.34	39.25	40.67
		Reading West Groundwater Resource Development	PR09 KV 05	15	2013	118070.26	36598.97	15074.18	0.00	939.69	52612.83	43.76	44.56
		Arborfield disused source (recommission)	PR09 KV 06	2	2012	15742.70	5065.31	1880.50	0.00	194.52	7140.33	44.12	45.36
		Newbury North East Disused Source Recommissioning	PR09 KV 07	1.82	2012	14325.86	4889.91	1472.91	0.00	144.33	6507.16	44.41	45.42
		Henley South East Groundwater Resource Development	PR09 KV 08	15	2012	118070.26	41648.08	13715.56	0.00	814.74	56178.38	46.89	47.58
		Caversham East Licence Increase	PR09 KV 09	1.3	2012	10232.76	6103.31	1880.50	0.00	147.93	8131.73	78.02	79.47
		Mortimer (transfer peak licence from Arborfield)	PR09 KV 10	1.2	2012	9445.62	8155.37	12492.80	0.00	50.72	20698.90	218.60	219.14
		Shalbourne (option B)	PR09 KV04	7.1	2012	55886.59	10525.67	5324.48	0.00	218.00	16068.15	28.36	28.75

Company:	<u>Thames Water</u>
Resource Zone Name	<u>Kennet Valley</u>
Resource Zone Number:	<u>3 of 6</u>
Planning Scenario Name:	<u>Dry Year Critical Period</u>
Chosen Level of Service:	<u>Company Preferred Level of Service</u>

Table WRP4a-FP: Final planning WRP4a supporting transfer and DO reduction data

ROW Ref.	DERIVATION	DESCRIPTION <i>[Insert / delete non-numbered lines to suit]</i>	UNITS	Scenario																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				Year	2007-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
2a _{FP}	Input as appropriate	Reductions in Final Planning Deployable Output. Total here and specify below	M/d	0.00	0.00	0.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.66	7.40	8.14	8.88	9.62	10.36	11.10	11.84	12.58	13.32	14.06	14.80	15.54	16.28	17.02	17.76	18.50	19.24	19.98	20.72	21.46	22.20	22.94	23.68	24.42	25.16	25.90	26.64	27.38	28.12	28.86	29.60	30.34	31.08	31.82	32.56	33.30	34.04	34.78	35.52	36.26	37.00	37.74	38.48	39.22	39.96	40.70	41.44	42.18	42.92	43.66	44.40	45.14	45.88	46.62	47.36	48.10	48.84	49.58	50.32	51.06	51.80	52.54	53.28	54.02	54.76	55.50	56.24	56.98	57.72	58.46	59.20	59.94	60.68	61.42	62.16	62.90	63.64	64.38	65.12	65.86	66.60	67.34	68.08	68.82	69.56	70.30	71.04	71.78	72.52	73.26	74.00	74.74	75.48	76.22	76.96	77.70	78.44	79.18	79.92	80.66	81.40	82.14	82.88	83.62	84.36	85.10	85.84	86.58	87.32	88.06	88.80	89.54	90.28	91.02	91.76	92.50	93.24	93.98	94.72	95.46	96.20	96.94	97.68	98.42	99.16	99.90	100.64	101.38	102.12	102.86	103.60	104.34	105.08	105.82	106.56	107.30	108.04	108.78	109.52	110.26	111.00	111.74	112.48	113.22	113.96	114.70	115.44	116.18	116.92	117.66	118.40	119.14	119.88	120.62	121.36	122.10	122.84	123.58	124.32	125.06	125.80	126.54	127.28	128.02	128.76	129.50	130.24	130.98	131.72	132.46	133.20	133.94	134.68	135.42	136.16	136.90	137.64	138.38	139.12	139.86	140.60	141.34	142.08	142.82	143.56	144.30	145.04	145.78	146.52	147.26	148.00	148.74	149.48	150.22	150.96	151.70	152.44	153.18	153.92	154.66	155.40	156.14	156.88	157.62	158.36	159.10	159.84	160.58	161.32	162.06	162.80	163.54	164.28	165.02	165.76	166.50	167.24	167.98	168.72	169.46	170.20	170.94	171.68	172.42	173.16	173.90	174.64	175.38	176.12	176.86	177.60	178.34	179.08	179.82	180.56	181.30	182.04	182.78	183.52	184.26	185.00	185.74	186.48	187.22	187.96	188.70	189.44	190.18	190.92	191.66	192.40	193.14	193.88	194.62	195.36	196.10	196.84	197.58	198.32	199.06	199.80	200.54	201.28	202.02	202.76	203.50	204.24	204.98	205.72	206.46	207.20	207.94	208.68	209.42	210.16	210.90	211.64	212.38	213.12	213.86	214.60	215.34	216.08	216.82	217.56	218.30	219.04	219.78	220.52	221.26	222.00	222.74	223.48	224.22	224.96	225.70	226.44	227.18	227.92	228.66	229.40	230.14	230.88	231.62	232.36	233.10	233.84	234.58	235.32	236.06	236.80	237.54	238.28	239.02	239.76	240.50	241.24	241.98	242.72	243.46	244.20	244.94	245.68	246.42	247.16	247.90	248.64	249.38	250.12	250.86	251.60	252.34	253.08	253.82	254.56	255.30	256.04	256.78	257.52	258.26	259.00	259.74	260.48	261.22	261.96	262.70	263.44	264.18	264.92	265.66	266.40	267.14	267.88	268.62	269.36	270.10	270.84	271.58	272.32	273.06	273.80	274.54	275.28	276.02	276.76	277.50	278.24	278.98	279.72	280.46	281.20	281.94	282.68	283.42	284.16	284.90	285.64	286.38	287.12	287.86	288.60	289.34	290.08	290.82	291.56	292.30	293.04	293.78	294.52	295.26	296.00	296.74	297.48	298.22	298.96	299.70	300.44	301.18	301.92	302.66	303.40	304.14	304.88	305.62	306.36	307.10	307.84	308.58	309.32	310.06	310.80	311.54	312.28	313.02	313.76	314.50	315.24	315.98	316.72	317.46	318.20	318.94	319.68	320.42	321.16	321.90	322.64	323.38	324.12	324.86	325.60	326.34	327.08	327.82	328.56	329.30	330.04	330.78	331.52	332.26	333.00	333.74	334.48	335.22	335.96	336.70	337.44	338.18	338.92	339.66	340.40	341.14	341.88	342.62	343.36	344.10	344.84	345.58	346.32	347.06	347.80	348.54	349.28	350.02	350.76	351.50	352.24	352.98	353.72	354.46	355.20	355.94	356.68	357.42	358.16	358.90	359.64	360.38	361.12	361.86	362.60	363.34	364.08	364.82	365.56	366.30	367.04	367.78	368.52	369.26	370.00	370.74	371.48	372.22	372.96	373.70	374.44	375.18	375.92	376.66	377.40	378.14	378.88	379.62	380.36	381.10	381.84	382.58	383.32	384.06	384.80	385.54	386.28	387.02	387.76	388.50	389.24	390.00	390.74	391.48	392.22	392.96	393.70	394.44	395.18	395.92	396.66	397.40	398.14	398.88	399.62	400.36	401.10	401.84	402.58	403.32	404.06	404.80	405.54	406.28	407.02	407.76	408.50	409.24	410.00	410.74	411.48	412.22	412.96	413.70	414.44	415.18	415.92	416.66	417.40	418.14	418.88	419.62	420.36	421.10	421.84	422.58	423.32	424.06	424.80	425.54	426.28	427.02	427.76	428.50	429.24	430.00	430.74	431.48	432.22	432.96	433.70	434.44	435.18	435.92	436.66	437.40	438.14	438.88	439.62	440.36	441.10	441.84	442.58	443.32	444.06	444.80	445.54	446.28	447.02	447.76	448.50	449.24	450.00	450.74	451.48	452.22	452.96	453.70	454.44	455.18	455.92	456.66	457.40	458.14	458.88	459.62	460.36	461.10	461.84	462.58	463.32	464.06	464.80	465.54	466.28	467.02	467.76	468.50	469.24	470.00	470.74	471.48	472.22	472.96	473.70	474.44	475.18	475.92	476.66	477.40	478.14	478.88	479.62	480.36	481.10	481.84	482.58	483.32	484.06	484.80	485.54	486.28	487.02	487.76	488.50	489.24	490.00	490.74	491.48	492.22	492.96	493.70	494.44	495.18	495.92	496.66	497.40	498.14	498.88	499.62	500.36	501.10	501.84	502.58	503.32	504.06	504.80	505.54	506.28	507.02	507.76	508.50	509.24	510.00	510.74	511.48	512.22	512.96	513.70	514.44	515.18	515.92	516.66	517.40	518.14	518.88	519.62	520.36	521.10	521.84	522.58	523.32	524.06	524.80	525.54	526.28	527.02	527.76	528.50	529.24	530.00	530.74	531.48	532.22	532.96	533.70	534.44	535.18	535.92	536.66	537.40	538.14	538.88	539.62	540.36	541.10	541.84	542.58	543.32	544.06	544.80	545.54	546.28	547.02	547.76	548.50	549.24	550.00	550.74	551.48	552.22	552.96	553.70	554.44	555.18	555.92	556.66	557.40	558.14	558.88	559.62	560.36	561.10	561.84	562.58	563.32	564.06	564.80	565.54	566.28	567.02	567.76	568.50	569.24	570.00	570.74	571.48	572.22	572.96	573.70	574.44	575.18	575.92	576.66	577.40	578.14	578.88	579.62	580.36	581.10	581.84	582.58	583.32	584.06	584.80	585.54	586.28	587.02	587.76	588.50	589.24	590.00	590.74	591.48	592.22	592.96	593.70	594.44	595.18	595.92	596.66	597.40	598.14	598.88	599.62	600.36	601.10	601.84	602.58	603.32	604.06	604.80	605.54	606.28	607.02	607.76	608.50	609.24	610.00	610.74	611.48	612.22	612.96	613.70	614.44	615.18	615.92	616.66	617.40	618.14	618.88	619.62	620.36	621.10	621.84	622.58	623.32	624.06	624.80	625.54	626.28	627.02	627.76	628.50	629.24	630.00	630.74	631.48	632.22	632.96	633.70	634.44	635.18	635.92	636.66	637.40	638.14	638.88	639.62	640.36	641.10	641.84	642.58	643.32	644.06	644.80	645.54	646.28	647.02	647.76	648.50	649.24	650.00	650.74	651.48	652.22	652.96	653.70	654.44	655.18	655.92	656.66	657.40	658.14	658.88	659.62	660.36	661.10	661.84	662.58	663.32	664.06	664.80	665.54	666.28	667.02	667.76	668.50	669.24	670.00	670.74	671.48	672.22	672.96	673.70	674.44	675.18	675.92	676.66	677.40	678.14	678.88	679.62	680.36	681.10	681.84	682.58	683.32	684.06	684.80	685.54	686.28	687.02	687.76	688.50	689.24	690.00	690.74	691.48	692.22	692.96	693.70	694.44	695.18	695.92	696.66	697.40	698.14	698.88	699.62	700.36	701.10	701.84	702.58	703.32	704.06	704.80	705.54	706.28	707.02	707.76	708.50	709.24	710.00	710.74	711.48	712.22	712.96	713.70	714.44	715.18	715.92	716.66	717.40	718.14	718.88	719.62	720.36	721.10	721.84	722.58	723.32	724.06	724.80	725.54	726.28	727.02	727.76	728.50	729.24	730.00	730.74	731.48	732.22	732.96	73

Table WRP5: Baseline resource zone deployable output reconciliation

Row Ref	Derivation	Licence number	Source name	Source type (GW/SW/Res/Conj. use)	Dry year deployable output (MI/d)	Critical period deployable output (MI/d)	Annual licenced quantity (MI/d)	Constraint	Length of record assessed (Years)	Critical event (Year)
5.1	Input	28/39/21/0009	Bradfield Valley & Bradfield Windmill	GW		2.30	2.27	L	1904-2007	
5.2	Input	28/39/22/0033	Bishops Green *	GW		18.20	18.18	T	1962-2006	
5.3	Input	28/39/22/0564	East Woodhay (Source) *	GW		13.50	13.50	L	1993-2008	
5.4	Input	28/39/22/0047	Speen	GW		13.60	13.64	L	1990-2006	
5.5	Input	28/39/22/0415	Ufton Nerve *	GW		13.60	13.64	L	1975-2007	
5.6	Input	28/39/22/0172	Ufton Nerve (Disused) *	GW		0.00	**	Disused		
5.7	Input	28/39/22/0043	Cold Ash (Disused)	GW		0.00	1.82	Disused	1929	
5.8	Input	28/39/22/0032	Mortimer	GW		4.50	4.55	L	1950-1999	
5.9	Input	28/39/21/0007	Pangbourne *	GW		31.00	38.64	B	1941-2006	2006 RWL & PV
5.10	Input	28/39/21/0089	Pangbourne FC *	GW		0.00	38.64			
5.11	Input	28/39/21/0072	Theale FC (Disused) *	GW		0.00	18.18	Disused	1970-1982	
5.12	Input	28/39/23/0134	Playhatch	GW		8.20	8.18	L	1975-2006	
5.13	Input	28/39/24/0014	Arborfield (Disused)	GW		0.00	2.27	Disused		
5.14	Input	28/39/22/0435	Fobney	SW		65.00	72.74		1961-2007	1976
5.15	Input	28/39/22/0044	Hungerford *	GW		3.15	3.15	L	1975-2006	
5.16	Input	28/39/22/0588	Shalbourne (Emergency) * (Aggregated with Hungerford)	GW		0.00	3.14		1973-1996	
5.17	Input	28/39/22/0041	Fognam Down *	GW		4.50	2.73	L	1967-2006	
5.18	Input	28/39/22/0375	Fognam Down * (Aggregated with Fognam Down above)	GW		0.00	4.55			
5.19	Input									
5.20	Input		* Licenced volume or DO aggregated with another source							
5.21	Input		** Aggregated with the source value above it							
5.22	Input									
5.23	Input		L = Licence							
5.24	Input		Q = Quality							
5.25	Input		P = Pump Size or Depth							
5.26	Input		GWL = Low Groundwater Levels							
5.27	Input		B = Borehole depth or restriction							
5.28	Input		T = Treatment							
5.29	Input		RWL = Rest Water Level							
5.30	Input		PWL = Pumping Water Level							
5.31	Input									
5.32	Sum (5.1:6.40) Total reconciled DO				0.00	177.55	259.82			

Company:	<u>Thames Water</u>
Resource Zone Name	<u>Kennet Valley</u>
Resource Zone Number:	<u>3 of 6</u>
Planning Scenario Name:	<u>Dry Year Critical Period</u>
Chosen Level of Service:	<u>Company Preferred Level of Service</u>

Table WRP6: Baseline breakdown of measured households

Row Ref	Derivation	Description	Units	Scenario Year	2007-07	2008-08	2009-09	2010-10	2011-11	2012-12	2013-13	2014-14	2015-15	2016-16	2017-17	2018-18	2019-19	2020-20	2021-21	2022-22	2023-23	2024-24	2025-25	2026-26	2027-27	2028-28	2029-29	2030-30	2031-31	2032-32	2033-33	2034-34	2035-35	
6.1 _{RL}	6.5 _{RL} +6.9 _{RL} +6.13 _{RL} +6.17 _{RL} +6.21 _{RL} +6.25 _{RL}	Total	Population	000's	94.15	107.58	112.05	116.21	119.95	123.87	128.02	132.50	137.21	141.95	147.30	152.61	157.91	163.23	168.64	173.74	178.12	182.51	186.94	191.23	195.38	199.24	203.06	206.98	210.95	214.75	218.41	222.26	226.27	
6.2 _{RL}	6.9 _{RL} +6.10 _{RL} +6.14 _{RL} +6.18 _{RL} +6.22 _{RL} +6.26 _{RL}	Total	Properties	000's	44.63	48.54	50.80	53.11	55.18	57.23	59.52	61.95	64.44	66.99	69.67	72.37	75.09	77.83	80.55	83.18	85.65	88.08	90.52	92.94	95.31	97.56	99.69	101.79	103.87	105.88	107.89	109.98	112.08	
6.3 _{RL}	6.1 _{RL} /6.2 _{RL}	Total	Occupancy	h/prop	2.11	2.22	2.21	2.19	2.17	2.16	2.15	2.14	2.13	2.12	2.11	2.10	2.10	2.09	2.09	2.08	2.07	2.07	2.06	2.05	2.04	2.04	2.03	2.03	2.03	2.02	2.02	2.02	2.02	
6.5 _{RL}	Input	Meter optants	Population	000's	0.00	0.00	1.43	3.07	4.56	5.92	7.25	8.57	9.89	11.20	12.53	13.85	15.17	16.48	17.80	19.11	20.37	21.65	22.92	24.18	25.43	26.92	28.44	29.98	31.53	33.08	34.60	36.40	37.70	
6.6 _{RL}	Input	Meter optants	Properties	000's	0.00	0.00	0.94	2.03	3.02	3.92	4.82	5.72	6.62	7.52	8.42	9.32	10.22	11.12	12.02	12.92	13.82	14.72	15.62	16.52	17.42	18.32	19.22	20.12	21.02	21.92	22.82	23.72	24.62	
6.7 _{RL}	6.5 _{RL} /6.6 _{RL}	Meter optants	Occupancy	h/prop	#DIV/0!	#DIV/0!	1.52	1.51	1.51	1.51	1.50	1.50	1.49	1.49	1.49	1.48	1.48	1.48	1.48	1.47	1.47	1.47	1.46	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.53		
6.8 _{RL}	Input	Meter optants	pcc	l/h/d	0.00	0.00	142.64	142.51	142.18	141.82	141.71	141.73	141.73	141.98	142.10	142.51	143.02	143.59	144.30	145.07	146.10	147.08	148.08	149.12	149.47	149.41	149.39	149.32	149.91	149.72	149.52	148.96	149.18	
6.9 _{RL}	Input	New properties	Population	000's	0.00	0.00	3.12	5.97	8.48	11.17	14.38	17.89	21.54	25.29	29.39	33.51	37.65	41.82	45.99	49.90	53.33	56.70	60.09	63.39	66.55	69.34	71.91	74.48	77.04	79.42	81.76	84.13	86.83	
6.10 _{RL}	Input	New properties	Properties	000's	0.00	0.00	1.32	2.54	3.62	4.77	6.16	7.69	9.28	10.93	12.71	14.51	16.33	18.16	19.99	21.72	23.29	24.82	26.36	27.88	29.35	30.70	31.92	33.12	34.31	35.42	36.53	37.71	38.91	
6.11 _{RL}	6.9 _{RL} /6.10 _{RL}	New properties	Occupancy	h/prop	#DIV/0!	#DIV/0!	2.36	2.35	2.35	2.34	2.33	2.33	2.32	2.31	2.31	2.31	2.31	2.30	2.30	2.30	2.29	2.28	2.28	2.27	2.27	2.26	2.25	2.25	2.25	2.24	2.24	2.23	2.23	
6.12 _{RL}	Input	New properties	pcc	l/h/d	0.00	0.00	144.96	144.91	143.90	142.67	141.18	139.80	138.36	137.13	136.09	135.60	135.35	135.29	135.45	135.75	136.37	136.98	136.92	136.92	137.00	137.21	137.45	137.60	137.63	137.59	137.50	137.42		
6.13 _{RL}	Input	Metering on change of occupancy	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.14 _{RL}	Input	Metering on change of occupancy	Properties	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.15 _{RL}	6.13 _{RL} /6.14 _{RL}	Metering on change of occupancy	Occupancy	h/prop	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6.16 _{RL}	Input	Metering on change of occupancy	pcc	l/h/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.17 _{RL}	Input	Selective metering	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.18 _{RL}	Input	Selective metering	Properties	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.19 _{RL}	6.17 _{RL} /6.18 _{RL}	Selective metering	Occupancy	h/prop	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6.20 _{RL}	Input	Selective metering	pcc	l/h/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.21 _{RL}	Input	Compulsory metering	Population	000's																														
6.22 _{RL}	Input	Compulsory metering	Properties	000's																														
6.23 _{RL}	6.21 _{RL} /6.22 _{RL}	Compulsory metering	Occupancy	h/prop	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6.24 _{RL}	Input	Compulsory metering	pcc	l/h/d																														
6.25 _{RL}	Input	Existing Metering	Population	000's	94.15	107.58	107.51	107.17	106.91	106.78	106.39	106.04	105.77	105.45	105.37	105.25	105.09	104.94	104.85	104.74	104.41	104.16	103.93	103.66	103.40	102.98	102.71	102.52	102.39	102.26	102.05	101.73	101.75	
6.26 _{RL}	Input	Existing Metering	Properties	000's	44.63	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	
6.27 _{RL}	6.25 _{RL} /6.26 _{RL}	Existing Metering	Occupancy	h/prop	2.11	2.22	2.21	2.21	2.20	2.20	2.19	2.18	2.18	2.17	2.17	2.17	2.17	2.16	2.16	2.16	2.15	2.15	2.14	2.14	2.13	2.12	2.12	2.11	2.11	2.11	2.10	2.10		
6.28 _{RL}	Input	Existing Metering	pcc	l/h/d	0.00	139.58	139.96	139.94	139.88	139.81	139.87	139.90	139.78	139.59	139.15	138.71	138.11	137.30	136.25	135.05	133.80	132.16	130.60	128.79	126.91	124.95	122.77	120.37	117.51	114.83	112.05	109.05	105.84	

Company:	Thames Water
Resource Zone Name	Kennet Valley
Resource Zone Number:	3 of 6
Planning Scenario Name	Dry Year Critical Period
Chosen Level of Service:	Company Preferred Level of Service

Table WRP6a: Final planning breakdown of measured households

Row Ref	Derivation	Description	Units	Scenario Year	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35
6.1 _{pp}	6.5 _{pp} +6.9 _{pp} +6.13 _{pp} +6.17 _{pp} +6.21 _{pp} +6.25 _{pp}	Total	Population	000's	94.15	107.58	112.05	116.21	120.63	125.89	131.36	137.08	142.97	148.81	155.21	161.54	167.79	174.01	193.76	227.07	260.89	296.22	333.64	354.29	356.71	358.79	360.79	362.82	364.99	367.00	368.77	370.70	372.64
6.2 _{pp}	6.6 _{pp} +6.10 _{pp} +6.14 _{pp} +6.18 _{pp} +6.22 _{pp} +6.26 _{pp}	Total	Properties	000's	44.63	48.54	50.80	53.11	55.48	58.15	61.03	64.02	67.03	70.04	73.15	76.25	79.34	82.40	90.89	104.74	118.40	131.98	145.53	153.05	154.52	155.87	157.10	158.30	159.48	160.59	161.70	162.88	164.09
6.3 _{pp}	6.1 _{pp} /6.2 _{pp}	Total	Occupancy	h/prop	2.11	2.22	2.21	2.19	2.17	2.17	2.15	2.14	2.13	2.12	2.12	2.12	2.11	2.11	2.13	2.17	2.20	2.24	2.29	2.31	2.31	2.30	2.30	2.29	2.29	2.29	2.28	2.28	2.27
6.5 _{pp}	Input	Meter optants	Population	000's	0.00	0.00	1.43	3.07	4.71	6.34	7.92	9.44	10.90	12.27	13.60	14.89	16.12	17.29	18.44	19.55	20.81	22.34	23.95	24.79	24.72	24.65	24.60	24.56	24.53	24.49	24.45	24.40	24.35
6.6 _{pp}	Input	Meter optants	Properties	000's	0.00	0.00	0.94	2.03	3.12	4.21	5.27	6.31	7.30	8.24	9.14	10.02	10.86	11.67	12.45	13.23	13.98	14.70	15.37	15.70	15.70	15.70	15.70	15.70	15.70	15.70	15.70	15.70	15.70
6.7 _{pp}	6.5 _{pp} /6.6 _{pp}	Meter optants	Occupancy	h/prop	#DIV/0!	#DIV/0!	1.52	1.51	1.51	1.51	1.50	1.50	1.49	1.49	1.49	1.49	1.48	1.48	1.48	1.49	1.52	1.56	1.58	1.57	1.57	1.56	1.56	1.56	1.56	1.56	1.55	1.55	1.55
6.8 _{pp}	Input	Meter optants	pcc	l/h/d	0.00	0.00	142.64	142.51	142.04	141.81	141.65	141.67	141.66	141.88	141.96	135.19	135.56	135.98	136.46	136.91	137.03	136.70	135.74	135.81	136.14	136.58	137.00	137.33	138.26	138.42	138.56	138.68	138.81
6.9 _{pp}	Input	New properties	Population	000's	0.00	0.00	3.12	5.97	8.48	11.17	14.38	17.90	21.54	25.29	29.39	33.51	37.66	41.82	45.99	49.88	53.21	56.62	59.86	63.15	66.31	69.18	71.79	74.35	76.90	79.28	81.62	84.10	86.60
6.10 _{pp}	Input	New properties	Properties	000's	0.00	0.00	1.32	2.54	3.62	4.77	6.16	7.69	9.28	10.93	12.71	14.51	16.33	18.16	19.99	21.72	23.29	24.82	26.36	27.88	29.35	30.70	31.92	33.12	34.31	35.42	36.53	37.71	38.91
6.11 _{pp}	6.9 _{pp} /6.10 _{pp}	New properties	Occupancy	h/prop	#DIV/0!	#DIV/0!	2.36	2.35	2.35	2.34	2.33	2.33	2.32	2.31	2.31	2.31	2.31	2.30	2.30	2.30	2.28	2.28	2.27	2.27	2.26	2.25	2.24	2.24	2.24	2.24	2.23	2.23	2.23
6.12 _{pp}	Input	New properties	pcc	l/h/d	0.00	0.00	144.96	144.91	143.80	142.61	141.18	139.82	138.40	137.17	136.13	128.81	128.51	128.37	128.35	128.40	128.73	129.04	128.69	129.23	129.28	129.45	129.63	129.72	129.71	129.65	129.56	129.99	130.42
6.13 _{pp}	Input	Metering on change off occupancy	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.14 _{pp}	Input	Metering on change off occupancy	Properties	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.15 _{pp}	6.13 _{pp} /6.14 _{pp}	Metering on change off occupancy	Occupancy	h/prop	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6.16 _{pp}	Input	Metering on change off occupancy	pcc	l/h/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.17 _{pp}	Input	Selective metering	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.18 _{pp}	Input	Selective metering	Properties	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.19 _{pp}	6.17 _{pp} /6.18 _{pp}	Selective metering	Occupancy	h/prop	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6.20 _{pp}	Input	Selective metering	pcc	l/h/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.21 _{pp}	Input	Compulsory metering	Population	000's	0.00	0.00	0.00	0.53	1.60	2.66	3.70	4.75	5.79	6.84	7.88	8.92	9.95	24.46	52.94	82.70	113.26	146.30	163.07	162.65	162.21	161.87	161.57	161.36	161.15	160.83	160.52	160.20	
6.22 _{pp}	Input	Compulsory metering	Properties	000's	0.00	0.00	0.00	0.21	0.64	1.06	1.48	1.91	2.33	2.76	3.18	3.60	4.03	9.91	21.25	32.59	43.93	55.26	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	
6.23 _{pp}	6.21 _{pp} /6.22 _{pp}	Compulsory metering	Occupancy	h/prop	#DIV/0!	#DIV/0!	#DIV/0!	2.52	2.51	2.50	2.50	2.49	2.48	2.48	2.47	2.47	2.47	2.47	2.49	2.54	2.58	2.65	2.68	2.67	2.66	2.66	2.65	2.64	2.64	2.63	2.63		
6.24 _{pp}	Input	Compulsory metering	pcc	l/h/d	0.00	0.00	0.00	144.28	143.82	143.47	143.16	142.87	142.66	142.46	135.35	135.44	135.58	135.49	135.36	135.69	134.94	135.42	134.67	132.73	132.47	132.22	131.98	131.72	131.47	131.23	130.46	129.71	
6.25 _{pp}	Input	Existing Metering	Population	000's	94.15	107.58	107.51	107.17	106.91	106.79	106.40	106.04	105.78	105.46	105.38	105.25	105.10	104.95	104.87	104.69	104.17	104.01	103.54	103.28	103.02	102.74	102.53	102.34	102.21	102.08	101.88	101.69	101.48
6.26 _{pp}	Input	Existing Metering	Properties	000's	44.63	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	
6.27 _{pp}	6.25 _{pp} /6.26 _{pp}	Existing Metering	Occupancy	h/prop	2.11	2.22	2.21	2.21	2.20	2.20	2.19	2.18	2.18	2.17	2.17	2.17	2.16	2.16	2.15	2.15	2.14	2.13	2.12	2.12	2.11	2.11	2.11	2.11	2.10	2.10	2.09	2.09	
6.28 _{pp}	Input	Existing Metering	pcc	l/h/d	0.00	139.58	139.96	139.94	139.76	139.77	139.97	140.09	140.06	139.95	139.56	132.18	131.59	130.76	130.07	129.65	128.90	128.58	126.23	125.91	128.91	128.86	128.49	127.87	126.72	125.71	124.78	124.12	123.28

Company:	Thames Water
Resource Zone Name:	Kennet Valley
Resource Zone Number:	3 of 6
Planning Scenario Name:	Dry Year Critical Period
Chosen Level of Service:	Company Preferred Level of Service

Table WRP7: Baseline household micro-component consumption

Row Ref	Derivation	Description <i>Insert additional components as required</i>	Units	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35
7.1	Input	Unmeasured toilet flushing	l/h/d																													
7.2	Input	Unmeasured bath use	l/h/d																													
7.3	Input	Unmeasured shower use	l/h/d																													
7.4	Input	Unmeasured hand basin	l/h/d																													
7.5	Input	Unmeasured clothes washing	l/h/d																													
7.6	Input	Unmeasured dish washing	l/h/d																													
7.7	Input	Unmeasured garden use	l/h/d																													
7.8	Input	Unmeasured car washing	l/h/d																													
7.9	Input	Unmeasured miscellaneous use	l/h/d																													
7.10	Input	Unmeasured wastage	l/h/d																													
7.11	Input	Unmeasured water efficiency	l/h/d																													
7.12	Input		l/h/d																													
7.13	Input		l/h/d																													
7.14	Input		l/h/d																													
7.15	Input		l/h/d																													
7.16	Input		l/h/d																													
7.17	Input		l/h/d																													
7.18	Input		l/h/d																													
7.19	Sum(7.1-7.18)	Unmeasured pcc	l/h/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7.20	Input	Measured toilet flushing	l/h/d																													
7.21	Input	Measured bath use	l/h/d																													
7.22	Input	Measured shower use	l/h/d																													
7.23	Input	Measured hand basin	l/h/d																													
7.24	Input	Measured clothes washing	l/h/d																													
7.25	Input	Measured dish washing	l/h/d																													
7.26	Input	Measured garden use	l/h/d																													
7.27	Input	Measured car washing	l/h/d																													
7.28	Input	Measured miscellaneous use	l/h/d																													
7.29	Input	Measured wastage	l/h/d																													
7.30	Input	Measured water efficiency	l/h/d																													
7.31	Input		l/h/d																													
7.32	Input		l/h/d																													
7.33	Input		l/h/d																													
7.34	Input		l/h/d																													
7.35	Input		l/h/d																													
7.36	Input		l/h/d																													
7.37	Input		l/h/d																													
7.38	Sum(7.20-7.37)	Measured pcc	l/h/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Company: Thames Water
Resource Zone Name: Kennet Valley
Resource Zone Number: 3 of 6
Planning Scenario Name: Dry Year Critical Period
Chosen Level of Service: Company Preferred Level of Service

Table WRP8: Baseline non-household sector consumption

Row Ref	Derivation	Description	2007 SIC codes	Units	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34		
8.1	Input	Agriculture, horticulture, forestry and fishing	A1, A2, A3	M/d																														
8.2	Input	Extraction of metals, minerals and energy producing materials	B5, B6, B7, B8, B9	M/d																														
8.3	Input	Food and drink (manufacture)	C10, C11, C12	M/d																														
8.4	Input	Textile, fur and leather (manufacture)	C13, C14, C15	M/d																														
8.5	Input	Other manufacturing	C16, C26, C27, C31, C32, C33	M/d																														
8.6	Input	Paper (manufacture)	C17, C18	M/d																														
8.7	Input	Fuel refining	C19	M/d																														
8.8	Input	Chemicals, rubbers, plastics and man-made material (manufacture)	C20, C21, C22	M/d																														
8.9	Input	Manufacture of non-metallic minerals	C23	M/d																														
8.10	Input	Manufacture of basic metals, fabricated metal products and	C24, C25, C28, C29	M/d																														
8.11	Input	Transportation and manufacture of transport equipment	C30, H49, H50, H51, H52, H53	M/d																														
8.12	Input	Electricity, gas and water supplies	D35, E36, E37, E38, E39	M/d																														
8.13	Input	Construction	F41, F42, F43	M/d																														
8.14	Input	Wholesale and retail	G45, G46, G47	M/d																														
8.15	Input	Hotels, bars and restaurants	I55, I56	M/d																														
8.16	Input	Other services	J, K, L, M, N, O, R, S, T, U	M/d																														
8.17	Input	Education and Health	P, Q	M/d																														
8.18	Input			M/d																														
8.19	Input			M/d																														
8.20	Input			M/d																														

Company:	<u>Thames Water</u>
Resource Zone Name	<u>Kennet Valley</u>
Resource Zone Number:	<u>3</u> of <u>6</u>
Planning Scenario Name:	<u>Dry Year Critical Period</u>
Chosen Level of Service:	<u>Company Preferred Level of Service</u>

Table WRP9: Normal year final planning supply-demand components

ROW Ref.	DERIVATION	DESCRIPTION	UNITS	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35				
BASIC RESOURCES NORMAL YEAR																																				
3 _N	Input	Outage Allowance	Mld																																	
5 _N	Input	Water Available For Use (own sources)	Mld																																	
RAW WATER NORMAL YEAR																																				
6 _N	Input	Raw Water Abstracted	Mld																																	
7 _N	Input	Raw Water Exported (existing)	Mld																																	
8 _N	Input	Raw Water Imported (existing)	Mld																																	
9 _N	Input	Raw Water Losses and Operational Use	Mld																																	
10 _N	Input	Non Potable Supplies (existing)	Mld																																	
POTABLE WATER TO POINT OF DELIVERY NORMAL YEAR																																				
11 _N	Input	Treatment Works Losses and Operational Use	Mld																																	
12 _N	Input	Potable Water Exported	Mld																																	
13 _N	Input	Potable Water Imported	Mld																																	
14 _N	Input	Distribution Input	Mld																																	
15 _N	Input	Distribution Losses	Mld																																	
16 _N	Input	Distribution System Operational Use	Mld																																	
17 _N	14 _N +15 _N +16 _N	Water Delivered	Mld	0.00																																
POTABLE WATER DELIVERED NORMAL YEAR																																				
32 _N	Input	Water Taken Unbilled	Mld																																	
33 _N	Input	Water Delivered Unmeasured Household	Mld																																	
34 _N	Input	Unmeasured Household - USPL	Mld																																	
35 _N	33 _N -34 _N	Unmeasured Household - Consumption	Mld	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
36 _N	Input	Unmeasured Household - PCC	l/hd																																	
37 _N	Input	Water Delivered Measured Household	Mld																																	
38 _N	Input	Measured Household - USPL	Mld																																	
39 _N	37 _N -38 _N	Measured Household - Consumption	Mld	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
40 _N	Input	Measured Household - PCC	l/hd																																	
41 _N	Input	Water Delivered Unmeasured Non Household	Mld																																	
42 _N	Input	Unmeasured Non Household - USPL	Mld																																	
43 _N	41 _N -42 _N	Unmeasured Non Household - Consumption	Mld	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
44 _N	Input	Water Delivered Measured Non Household	Mld																																	
45 _N	Input	Measured Non Household - USPL	Mld																																	
46 _N	44 _N -45 _N	Measured Non Household - Consumption	Mld	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47 _N	Input	Void Properties - USPL	Mld																																	
LEAKAGE NORMAL YEAR																																				
48 _N	Input	Total Leakage	Mld																																	
49 _N	Input	Total Leakage	l/psd																																	
SUPPLY DEMAND BALANCE NORMAL YEAR																																				
50 _N	5 _N +(8 _N +13 _N)-(7 _N +12 _N)-10 _N	Total Water Available For Use	Mld	0.00																																
51 _N	Input	Available Headroom	Mld	0.00																																
52 _N	Input	Target Headroom	Mld	0.00																																
53 _N	51 _N -52 _N	Supply Demand Balance	Mld	0.00																																

Company:	Thames Water
Resource Zone Name:	Kennet Valley
Resource Zone Number:	3 of 6
Planning Scenario Name:	Dry Year Critical Period
Chosen Level of Service:	Company Preferred Level of Service