Water Resources Planning Tables 2019

v15 - June 2018

All queries on the content of this workbook should be sent to:
water-company-plan@environment-agency.gov.uk

Water resource zone information

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned
Base Year:	2016/17
Responsible Officer:	William Robinson
Version:	Draft Final

Signed: **William Robinson** **Dated:** 20/08/2018

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Key to cells

Clear cells - indicate an input is required

Yellow shaded cells - indicates a formula.

Blue shaded cells - indicate base year data.

Light grey shaded cells - indicate preceding years.

Dark grey cells - indicate that no data entry is required.

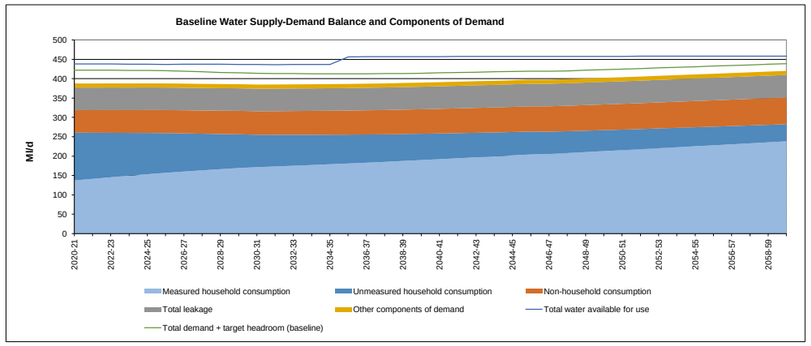
Worksheet	Content
WRZ summary	Supply-Demand Balance and components
1. BL Licences	Baseline water resources
2. BL Supply	Baseline water supplies
3. BL Demand	Baseline demand
4. BL SDB	Baseline supply demand balance
5. Feasible options	Fixed and Variable costs, Net Present Value, AIC and AISC of all feasible options (confidential)
6. Preferred options	High level costs of preferred options (Dry Year) - publicly available
7. FP Supply	Final Planning water supplies (impact of Scenario options)
8. FP Demand	Final Planning demand (impact of Scenario options)
9. FP SDB	Final Planning supply demand balance
10. Drought plan links	Drought plan links

Summary graphs of water resources planning tables data
Essex & Suffolk Water
Essex

DERIVATION	DESCRIPTION	UNITS	For info 2017-18	For info 2018-19	For info 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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
	SUPPLY																																													
13BL	Total water available for use	Ml/d	437.86	432.88	432.94	433.01	438.07	437.94	437.82	437.69	437.33	436.97	437.04	437.10	437.16	436.65	436.72	436.00	436.84	436.91	436.97	456.44	456.50	456.57	457.05	457.11	457.14	457.24	457.30	457.36	457.43	457.49	457.55	457.62	457.68	457.74	457.80	457.87	457.93	457.99	458.05	458.12	458.18	458.24	458.31	458.37
13FP	Total water available for use	Ml/d	437.86	432.88	432.94	433.01	438.07	437.94	437.82	437.69	437.33	436.97	437.04	437.10	437.16	436.65	436.72	436.00	436.84	436.91	436.97	456.44	456.50	456.57	457.05	457.11	457.14	457.24	457.30	457.36	457.43	457.49	457.55	457.62	457.68	457.74	457.80	457.87	457.93	457.99	458.05	458.12	458.18	458.24	458.31	458.37
	DEMAND		0.00																																											
26BL	Unmeasured household consumption	Ml/d	140.14	136.69	132.38	128.32	123.30	119.09	114.87	110.64	106.56	102.63	98.64	94.68	90.86	87.11	83.81	81.87	80.03	78.12	76.27	74.62	72.89	71.11	69.52	67.94	66.44	64.90	63.35	61.79	60.28	59.07	57.71	56.41	55.23	54.13	53.06	52.05	51.06	50.05	49.02	48.14	47.08	46.05	45.09	44.18
26FP	Unmeasured household consumption	Ml/d	140.14	136.69	132.38	128.32	122.70	117.76	112.85	107.98	103.31	98.94	94.66	90.45	86.39	82.43	78.92	76.74	74.66	72.55	70.49	68.64	66.72	64.97	63.48	62.00	60.58	59.14	57.70	56.23	54.82	53.69	52.42	51.20	50.09	49.05	48.06	47.11	46.18	45.23	44.27	43.45	42.45	41.48	40.58	39.73
25BL	Measured household consumption	Ml/d	119.25	122.96	127.70	132.24	137.46	141.28	145.43	149.42	153.33	156.93	160.16	163.30	166.30	169.33	171.46	173.34	175.17	177.07	179.04	181.01	183.09	185.16	187.57	189.94	192.13	194.53	197.01	199.51	202.04	204.41	205.57	208.05	210.53	212.99	215.41	217.93	220.46	222.98	225.55	227.98	230.56	233.13	235.74	238.34
25FP	Measured household consumption	Ml/d	119.25	122.96	127.70	132.24	137.03	140.53	144.33	147.93	151.42	154.47	157.04	159.50	161.82	164.15	165.57	166.78	167.95	169.17	170.46	171.73	173.11	174.95	177.31	179.63	181.77	184.11	186.54	188.99	191.47	193.80	194.91	197.34	199.76	202.17	204.55	207.01	209.49	211.96	214.48	216.86	219.39	221.90	224.46	227.00
23BL+24BL	Non-household consumption	Ml/d	57.10	57.47	57.66	57.79	58.18	58.43	58.66	58.77	59.11	59.38	59.63	59.78	60.18	60.43	60.69	60.85	61.27	61.57	61.86	62.01	62.38	62.73	63.02	63.17	63.62	63.94	64.29	64.44	64.84	65.13	65.42	65.60	66.03	66.32	66.60	66.71	67.18	67.46	67.75	67.85	68.26	68.54	68.83	68.93
23FP+24FP	Non-household consumption	Ml/d	57.10	57.47	57.66	57.79	58.18	58.43	58.66	58.77	59.11	59.38	59.63	59.78	60.18	60.43	60.69	60.85	61.27	61.57	61.86	62.01	62.38	62.73	63.02	63.17	63.62	63.94	64.29	64.44	64.84	65.13	65.42	65.60	66.03	66.32	66.60	66.71	67.18	67.46	67.75	67.85	68.26	68.54	68.83	68.93
40BL	Total leakage	Ml/d	59.25	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19
40FP	Total leakage	Ml/d	59.25	58.19	58.19	58.19	56.15	54.12	52.08	50.04	48.01	47.05	46.09	45.13	44.17	43.21	42.34	41.48	40.61	39.75	38.89	38.11	37.33	36.55	35.77	35.00	34.30	33.60	32.90	32.20	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50
BL-(23BL:26BL)-40	Other components of demand	Ml/d	11.00	10.53	10.56	10.55	10.61	10.63	10.65	10.67	10.68	10.67	10.67	10.67	10.66	10.66	10.66	10.65	10.64	10.64	10.63	10.62	10.61	10.61	10.60	10.60	10.58	10.58	10.57	10.57	10.56	10.55	10.55	10.54	10.53	10.53	10.52	10.52	10.51	10.50	10.50	10.49	10.49	10.48	10.47	10.47
FP-(23FP:26FP)-40	Other components of demand	Ml/d	11.00	10.53	10.56	10.55	10.61	10.63	10.65	10.67	10.68	10.67	10.67	10.67	10.66	10.66	10.66	10.65	10.64	10.64	10.63	10.62	10.61	10.61	10.60	10.60	10.58	10.58	10.57	10.57	10.56	10.55	10.55	10.54	10.53	10.53	10.52	10.52	10.51	10.50	10.50	10.49	10.49	10.48	10.47	10.47
	Total demand + target headroom (baseline)	Ml/d	386.74	385.85	419.96	420.28	421.63	421.69	421.83	421.49	421.00	420.61	419.23	417.80	415.85	415.22	413.96	413.04	413.14	412.67	412.45	412.36	412.80	413.42	413.23	414.17	415.13	415.68	416.89	417.63	418.41	419.44	419.48	420.24	421.92	423.46	424.90	426.22	427.97	429.38	430.61	432.46	434.07	435.28	437.18	438.43
	Total demand + target headroom (final plar	Ml/d	386.74	385.85	419.96	420.28	418.56	415.54	412.61	409.19	405.66	403.32	400.03	396.70	392.87	390.37	387.34	384.64	382.98	380.76	378.79	377.02	375.79	375.43	374.51	374.72	375.02	374.92	375.48	375.57	375.69	376.75	376.83	377.62	379.32	380.88	382.34	383.66	385.43	386.85	388.09	389.95	391.58	392.79	394.70	395.95
	SUPPLY-DEMAND BALANCE																																													
16BL	Target headroom	Ml/d	0.00	0.00	33.48	33.19	33.88	34.07	34.04	33.80	33.14	32.82	31.94	31.18	29.66	29.49	29.16	28.13	27.84	27.09	26.47	25.90	25.65	25.63	24.33	24.33	24.17	23.55	23.48	23.14	22.50	22.08	22.04	21.45	21.41	21.31	21.11	20.81	20.58	20.20	19.60	19.80	19.50	18.89	18.86	18.33
16FP	Target headroom	Ml/d	0.00	0.00	33.48	33.19	33.88	34.07	34.04	33.80	33.14	32.82	31.94	31.18	29.66	29.49	29.16	28.13	27.84	27.09	26.47	25.90	25.65	25.63	24.33	24.33	24.17	23.55	23.48	23.14	22.50	22.08	22.04	21.45	21.41	21.31	21.11	20.81	20.58	20.20	19.60	19.80	19.50	18.89	18.86	18.33
17BL	Available headroom	Ml/d	51.12	47.04	46.46	45.92	50.33	50.32	50.02	50.00	49.47	49.18	49.75	50.48	50.97	50.92	51.91	51.10	51.54	51.32	50.99	69.98	69.35	68.77	68.15	67.27	66.17	65.11	63.89	62.87	61.52	60.13	60.11	58.82	57.17	55.59	54.01	52.46	50.54	48.81	47.05	45.46	43.61	41.86	39.99	38.27
17FP	Available headroom	Ml/d	51.12	47.04	46.46	45.92	53.39	56.47	59.25	62.29	64.81	66.47	68.95	71.58	73.95	75.78	78.53	79.50	81.70	83.24	84.65	105.33	106.36	106.77	106.87	106.72	106.28	105.87	105.30	104.93	104.23	102.82	102.76	101.44	99.76	98.17	96.57	95.01	93.08	91.34	89.56	87.97	86.11	84.34	82.47	80.75

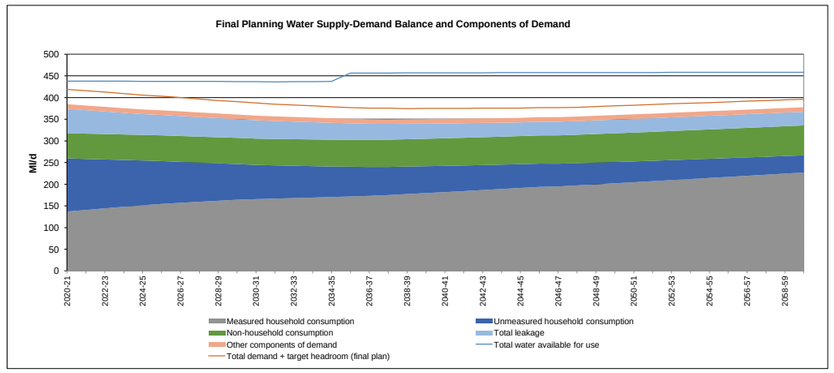
Baseline Supply-Demand Balance:

	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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
SDB (Ml/d)	16.44	16.25	15.98	16.20	16.33	16.36	17.81	19.30	21.32	21.43	22.75	22.96	23.70	24.24	24.52	44.08	43.70	43.15	43.82	42.95	42.00	41.56	40.41	39.74	39.02	38.05	38.07	37.37	35.76	34.28	32.90	31.65	29.96	28.61	27.44	25.65	24.11	22.97	21.13	19.94



Final Planning Supply-Demand Balance:

	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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
SDB (Ml/d)	19.51	22.40	25.21	28.50	31.68	33.65	37.01	40.40	44.29	46.29	49.38	51.36	53.86	56.15	58.18	79.42	80.71	81.14	82.54	82.39	82.11	82.32	81.82	81.80	81.74	80.74	80.72	79.99	78.35	76.86	75.47	74.20	72.50	71.14	69.96	68.17	66.60	65.45	63.61	62.41



Company:	Essex & Suffolk Water
Resource Zone Name	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 1: Baseline licences

Row ref	Derivation	Licence number	Source name	Source type	Deployable output (Ml/d)	Annual licensed quantity (Ml/d)	Constraints on deployable output	Additional notes (if desired)
All individual licences:								
0.1BL	Sum (0.1BL+...)	-	-	-	3.40	2100.00	-	
-	Input	8/37/54/0028	South Essex Well 2	GW	3.4	2100	DAPWL	
	Input							
Grouped licences	**Derivation**	**Licence number**	**Source name**	**Source type**	**DYAA deployable output (Ml/d)**	**Annual licensed quantity (Ml/d)**		
0.2BL	Sum (0.2BL+...)	-	**Total**	-	395.50	-	-	
-	-	**Group #:**	**[Enter name of group]**	-	395.50	-	-	
-	Input	Various	Essex 3	SW:Reservoir	392	247745	River Flow: see WRMP	
-	Input	8/37/56/*G/0044	South Essex Well 1	GW	3.5	3728	WTW	
-	Input							
-	Input							
-	Input							
Unused licences:	**Derivation**	**Licence number**	**Source name**	**Source type**	**DYAA deployable output (Ml/d)**	**Annual licensed quantity (Ml/d)**	**Reason licence is unused**	
0.3BL	Sum (0.3BL+...)	-	-	-	0.00	0.00	-	
	Input							
-	Input							
New licences (within current AMP):	**Derivation**	**Licence number**	**Source name**	**Source type**	**DYAA deployable output (Ml/d)**	**Annual licensed quantity (Ml/d)**	**Status of licence**	
0.4BL	Sum (0.4BL+...)	-	-	-	0.00	0.00	-	
	Input							
-	Input							
-	-	-	-	-	-	-	-	

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

README

Table 2: Baseline supply

	Row ref	Component	Derivation	Unit	decimal places	2016/17	For info 2017-18	For info 2018-19	For info 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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
Resources	18L	Raw water abstracted	Input	Mld	2	296.00	295.87	296.93	297.21	297.89	297.80	298.03	297.95	298.18	298.14	297.66	297.04	296.64	296.21	295.33	295.46	295.91	296.21	296.64	297.17	297.89	298.58	299.72	300.68	301.85	303.05	304.37	305.48	306.93	308.42	308.55	309.93	311.69	313.37	315.05	316.70	318.73	320.56	322.42	324.11	326.07	327.92	329.89	331.71
	28L	Total raw water imported	sum(2.18L+2.28L+2.38L...)	Mld	2	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00
	2.18L+	Raw water imported from: None	Input	Mld	2	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00
	-	-	-	-	2		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	38L	Total potable water imported	sum(3.18L+3.28L+3.38L...)	Mld	2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	3.18L+	Potable water imported from: None	Input	Mld	2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	58L	Total raw water exported (raw exports and non potable uses)	sum(5.18L+5.28L+...)	Mld	2	20.00	25.00	25.00	25.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5.18L	Non potable water supplied to:	Input	Mld	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5.28L+	Raw water export to: None	Input	Mld	2	20.00	25.00	25.00	25.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	68L	Total potable water exported	sum(6.18L+6.28L+6.38L...)	Mld	2	3.52	3.52	3.52	3.52	3.52	3.71	3.90	4.09	4.51	4.93	4.93	4.93	4.93	5.50	5.50	6.28	5.50	5.50	5.50	6.09	6.09	6.09	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67
	6.18L+	Potable water export to: None	Input	Mld	2	3.52	3.52	3.52	3.52	3.52	3.71	3.90	4.09	4.51	4.93	4.93	4.93	4.93	5.50	5.50	6.28	5.50	5.50	5.50	6.09	6.09	6.09	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67
	-	-	-	Mld	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	78L	Deployable Output (baseline profile without reductions)	sum(0.18B+0.28L+0.38L+0.48L)	Mld	2	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90
Resource (grid process) Losses	88L	Baseline forecast changes to Deployable Output	sum(8.18L+8.28L+8.38L)	Mld	2	2.67	2.70	2.76	2.82	2.89	2.95	3.01	3.07	3.14	3.20	3.26	3.32	3.39	3.45	3.51	3.58	3.64	3.70	3.76	3.83	3.89	3.95	4.01	4.08	4.10	4.20	4.27	4.33	4.39	4.45	4.52	4.58	4.64	4.70	4.77	4.83	4.89	4.96	5.02	5.08	5.14	5.21	5.27	5.33
	8.18L	Change in DO due to climate change	Input (reductions must be expressed as -ve)	Mld	2	2.67	2.76	2.76	2.82	2.89	2.95	3.01	3.07	3.14	3.20	3.26	3.32	3.39	3.45	3.51	3.58	3.64	3.70	3.76	3.83	3.89	3.95	4.01	4.08	4.10	4.20	4.27	4.33	4.39	4.45	4.52	4.58	4.64	4.70	4.77	4.83	4.89	4.96	5.02	5.08	5.14	5.21	5.27	5.33
	8.28L	Reductions to restore sustainable abstraction	sum(8.28L sub components)	Mld	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8.218L+	Total for the zone	Input (zero or negative number)	Mld	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					2																																												
	8.38L	Total other changes to DO (specify, e.g. nitrates): None	Input (reductions must be expressed as -ve)	Mld	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					2																																												
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	98L	Raw water losses, treatment works losses and operational use	Input	Mld	2	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
	108L	Outage allowance	Input	Mld	2	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 3: Baseline demand

Section	Row ref	Component	Derivation	Unit	Decimal places	2016/17	For info 2017-18	For info 2018-19	For info 2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Consumption	19BL	Water delivered measured non-household	Input	Ml/d	2	56.78	57.35	57.56	57.71	58.12	58.39	58.64	58.77	59.12	59.41
	20BL	Water delivered unmeasured non- household	Input	Ml/d	2	0.70	0.53	0.51	0.49	0.47	0.46	0.44	0.42	0.40	0.39
	21BL	Water delivered measured household	Input	Ml/d	2	124.80	128.99	133.97	138.77	144.30	148.37	152.73	156.93	161.04	164.82
	22BL	Water delivered unmeasured household	Input	Ml/d	2	147.17	143.61	139.09	134.80	129.54	125.10	120.65	116.20	111.91	107.76
	23BL	Measured Non Household - Consumption	19BL-34BL	Ml/d	2	56.44	56.99	57.19	57.34	57.75	58.02	58.26	58.39	58.74	59.03
	24BL	Unmeasured Non Household - Consumption	20BL-35BL	Ml/d	2	0.66	0.49	0.47	0.45	0.44	0.42	0.40	0.39	0.37	0.36
	25BL	Measured Household - Consumption	21BL-36BL	Ml/d	2	119.25	122.96	127.70	132.24	137.46	141.28	145.43	149.42	153.33	156.93
	26BL	Unmeasured Household - Consumption	22BL-37BL	Ml/d	2	140.14	136.69	132.38	128.32	123.30	119.09	114.87	110.64	106.56	102.63
	27 -	Percentage of consumption driven by climate change	Input	%	1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3
	28 -	Volume of consumption driven by climate change		Ml/d	1	0.0	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0
PCC and consumption by component	29BL	Measured Household - PCC	(25BL*1,000,000)/(51BL*1,000)	l/h/d	1	147.7	146.8	145.7	144.7	143.7	142.3	141.2	140.1	139.1	138.1
	29.1BL	Measured toilet flushing	Input	l/h/d	1	31.9	31.8	31.6	31.5	31.4	31.2	31.1	30.9	30.7	30.6
	29.2BL	Measured personal washing	Input	l/h/d	1	73.3	73.1	72.8	72.6	72.3	72.1	71.9	71.8	71.6	71.5
	29.3BL	Measured clothes washing	Input	l/h/d	1	11.4	11.2	11.0	10.8	10.6	10.3	10.1	9.9	9.7	9.5
	29.4BL	Measured dish washing	Input	l/h/d	1	9.6	9.4	9.2	9.1	8.9	8.7	8.5	8.3	8.1	8.0
	29.5BL	Measured miscellaneous internal use	Input	l/h/d	1	10.9	10.8	10.7	10.6	10.5	10.3	10.2	10.0	9.9	9.8
	29.6BL	Measured external use	Input	l/h/d	1	10.6	10.4	10.3	10.1	9.9	9.6	9.4	9.2	9.0	8.8
	30BL	Unmeasured Household - PCC	(26BL*1,000,000)/(52BL*1,000)	l/h/d	1	168.4	167.8	167.0	166.3	165.5	164.7	163.8	163.0	162.2	161.3
	30.1BL	Unmeasured toilet flushing	Input	l/h/d	1	38.3	38.2	38.2	38.1	38.0	38.0	37.9	37.9	37.8	37.7
	30.2BL	Unmeasured personal washing	Input	l/h/d	1	76.3	76.2	76.0	75.7	75.5	75.2	75.0	74.7	74.5	74.2
	30.3BL	Unmeasured clothes washing	Input	l/h/d	1	12.0	11.8	11.7	11.6	11.5	11.4	11.2	11.1	10.9	10.8
	30.4BL	Unmeasured dish washing	Input	l/h/d	1	13.7	13.5	13.3	13.1	12.9	12.7	12.5	12.3	12.2	12.0
	30.5BL	Unmeasured miscellaneous internal use	Input	l/h/d	1	15.6	15.6	15.5	15.5	15.4	15.4	15.4	15.3	15.3	15.2
	30.6BL	Unmeasured external use	Input	l/h/d	1	12.5	12.5	12.4	12.2	12.1	11.9	11.8	11.7	11.5	11.4
	31BL	Average Household - PCC	((25BL+26BL)*1,000,000)/(51BL+52BL*1,000)	l/h/d	1	158.2	157.1	155.8	154.6	153.2	151.7	150.4	149.0	147.7	146.5
	32BL	Water Taken Unbilled	Input	Ml/d	2	9.62	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20
	33BL	Distribution System Operational Use	Input	Ml/d	2	2.23	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Leakage	34BL	Measured Non Household - USPL	Input	Ml/d	2	0.34	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38
	35BL	Unmeasured Non Household - USPL	Input	Ml/d	2	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
	36BL	Measured Household - USPL	Input	Ml/d	2	5.55	6.02	6.27	6.53	6.84	7.09	7.30	7.51	7.71	7.89
	37BL	Unmeasured Household - USPL	Input	Ml/d	2	7.03	6.92	6.71	6.47	6.25	6.01	5.79	5.56	5.35	5.14
	38BL	Void Properties - USPL	Input	Ml/d	2	0.85	0.92	0.89	0.90	0.84	0.82	0.80	0.78	0.77	0.78
	39BL	Distribution Losses	Input	Ml/d	2	45.44	43.92	43.90	43.87	43.85	43.85	43.88	43.92	43.95	43.97
	40BL	Total Leakage	sum(34BL:39BL)	Ml/d	2	59.25	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19
	41BL	Total Leakage	(40BL*1,000,000)/(48BL*1,000)	l/prop/d	2	87.12	84.73	83.80	82.85	81.96	81.14	80.33	79.57	78.81	78.10
Customer: Properties	42BL	Measured non-households - properties	Input (total, excluding voids)	000's	2	26.17	26.30	26.44	26.58	26.72	26.86	27.00	27.14	27.28	27.41
	43BL	Unmeasured non-households - properties	Input (total, excluding voids)	000's	2	1.57	1.54	1.49	1.44	1.38	1.33	1.28	1.23	1.17	1.13
	44BL	All void non-households - properties	Input (voids in each year)	000's	2	4.49	4.44	4.45	4.45	4.45	4.46	4.46	4.46	4.47	4.47
	45BL	Total measured households - properties (excl void)	Pre-plan year = input. Forecast years = Previous year 45BL +	000's	2	366.97	378.99	394.90	410.95	428.93	444.92	460.80	476.17	491.24	505.31
	45.1BL	New build properties - properties	Input (new builds in each year)	000's	2	4.52	6.68	7.68	7.97	7.75	7.18	7.30	6.89	7.15	6.70
	45.2BL	Meter optants - properties	Input (meter optants in each year)	000's	2	4.61	5.03	6.70	8.70	9.23	8.88	8.63	8.38	8.13	7.88
	45.3BL	Compulsory metering - properties	Input (compulsory meters in each year)	000's	2										
	45.4BL	Metering on change of occupancy - properties	Input (change of occupancy meters in each year)	000's	2										
	45.5BL	Selective metering - properties	Input (selective meters in each year)	000's	2	3.09	3.04	1.50	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	45.6BL	Other changes to existing metering - properties	Input (other changes to meters in each year)	000's	2	0.00	-2.73	0.03	-0.64	1.01	-0.08	-0.05	0.09	-0.20	-0.52
	45.7BL	Measured void households - properties	Input (voids in each year)	000's	2	14.66	17.36	17.30	17.91	16.87	16.92	16.94	16.81	16.99	17.47
	46BL	Unmeasured households - properties (excl void)	Input (total)	000's	2	254.76	247.11	239.60	231.21	223.14	214.75	206.64	198.73	191.13	183.40
	47BL	Unmeasured void households - properties	Input (voids in each year)	000's	2	11.52	11.00	10.20	9.79	8.53	7.93	7.32	6.75	6.12	5.87
	48BL	Total Resource Zone Properties (incl voids)	SUM(42BL:45BL)+45.7BL+46BL+47BL	000's	2	680.14	686.74	694.38	702.32	710.03	717.17	724.43	731.29	738.39	745.07
Customer: Population	49BL	Measured Non Household - Population	Input (total)	000's	2	7.84	7.92	8.00	8.10	8.20	8.32	8.49	8.66	8.82	8.97
	50BL	Unmeasured Non Household - Population	Input (total)	000's	2	1.49	1.51	1.52	1.54	1.56	1.59	1.62	1.65	1.68	1.71
	51BL	Measured Household - Population	Input (total)	000's	2	807.32	837.85	876.22	914.03	956.74	993.03	1030.17	1066.37	1102.19	1135.94
	52BL	Unmeasured Household - Population	Input (total)	000's	2	832.12	814.75	792.67	771.65	745.01	723.24	701.09	678.68	656.97	636.07
	53BL	Total Resource Zone Population	Sum(49BL:52BL)	000's	2	1648.77	1662.03	1678.42	1695.32	1711.51	1726.18	1741.36	1755.36	1769.66	1782.69
Occupar	54BL	Measured Household - Occupancy Rate (average) (ex	51BL/45BL	h/prop	1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	55BL	Unmeasured Household - Occupancy Rate	52BL/46BL	h/prop	1	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.5
Metering	56BL	Total Household Metering penetration (excl. voids)	45BL/45BL+46BL	%	0	59%	61%	62%	64%	66%	67%	69%	71%	72%	73%
	57BL	Total Household Metering penetration (incl. voids)	45BL/(45BL+45.7BL+46BL+47BL)	%	0	57%	58%	60%	61%	63%	65%	67%	68%	70%	71%

Row ref	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46
19BL	59.67	59.84	60.25	60.52	60.79	60.97	61.41	61.71	62.01	62.19	62.56	62.93	63.23	63.40	63.86	64.19	64.55	64.72	65.13	65.43
20BL	0.37	0.36	0.34	0.33	0.31	0.30	0.29	0.28	0.26	0.25	0.24	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14
21BL	168.22	171.51	174.67	177.86	180.10	182.09	184.02	186.02	188.09	190.17	192.34	194.52	197.03	199.50	201.78	204.28	206.86	209.46	212.09	214.57
22BL	103.56	99.40	95.39	91.45	88.02	86.03	84.12	82.16	80.25	78.55	76.77	74.95	73.32	71.70	70.15	68.57	66.98	65.37	63.82	62.57
23BL	59.29	59.45	59.86	60.13	60.40	60.58	61.01	61.31	61.61	61.78	62.16	62.52	62.82	62.99	63.45	63.78	64.14	64.30	64.71	65.00
24BL	0.34	0.33	0.31	0.30	0.29	0.28	0.27	0.25	0.24	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.15	0.14	0.13
25BL	160.16	163.30	166.30	169.33	171.46	173.34	175.17	177.07	179.04	181.01	183.09	185.16	187.57	189.94	192.13	194.53	197.01	199.51	202.04	204.41
26BL	98.64	94.68	90.86	87.11	83.81	81.87	80.03	78.12	76.27	74.62	72.89	71.11	69.52	67.94	66.44	64.90	63.35	61.79	60.28	59.07
27 -	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8
28 -	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.6
29BL	137.3	136.5	135.7	134.9	134.1	133.4	132.7	132.0	131.4	130.9	130.5	130.1	129.9	129.7	129.4	129.2	129.0	128.8	128.6	128.4
29.1BL	30.5	30.4	30.2	30.1	30.0	29.9	29.8	29.8	29.7	29.6	29.6	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
29.2BL	71.4	71.2	71.1	71.0	70.8	70.6	70.5	70.3	70.2	70.1	70.0	69.8	69.8	69.7	69.6	69.5	69.4	69.4	69.3	69.2
29.3BL	9.3	9.2	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.3	8.2	8.2	8.1	8.1	8.1	8.0	8.0	8.0	7.9	7.9
29.4BL	7.8	7.7	7.6	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.7	6.6	6.6	6.6	6.5	6.5	6.5	6.5	6.4
29.5BL	9.6	9.5	9.4	9.3	9.2	9.1	9.0	9.0	8.9	8.8	8.8	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
29.6BL	8.6	8.5	8.3	8.1	8.0	7.9	7.7	7.6	7.5	7.4	7.3	7.1	7.1	7.0	7.0	6.9	6.9	6.9	6.8	6.7
30BL	160.7	160.0	159.3	158.7	157.3	156.9	156.5	156.1	155.7	155.2	154.8	154.4	154.3	154.1	153.6	153.5	153.4	153.4	153.3	153.2
30.1BL	37.7	37.6	37.6	37.5	37.4	37.4	37.3	37.3	37.2	37.2	37.1	37.1	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
30.2BL	74.0	73.8	73.6	73.5	72.7	72.5	72.3	72.1	71.8	71.6	71.4	71.2	71.0	71.0	70.9	70.8	70.7	70.6	70.5	70.4
30.3BL	10.7	10.5	10.4	10.2	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.2	9.2	9.2	9.2	9.3
30.4BL	11.8	11.7	11.5	11.4	11.3	11.3	11.2	11.2	11.2	11.2	11.1	11.2	11.2	11.2	11.3	11.3	11.4	11.5	11.5	11.5
30.5BL	15.2	15.1	15.1	15.1	15.0	15.0	14.9	14.9	14.8	14.8	14.8	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
30.6BL	11.3	11.2	11.1	11.0	10.8	10.8	10.8	10.8	10.9	10.8	10.8	10.9	11.0	10.9	10.6	10.5	10.5	10.4	10.4	10.3
31BL	145.4	144.3	143.2	142.2	140.9	140.1	139.3	138.6	137.8	137.2	136.6	136.0	135.7	135.3	134.9	134.5	134.2	133.9	133.6	133.3
32BL	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20
33BL	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
34BL	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.40	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42
35BL	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
36BL	8.06	8.22	8.37	8.53	8.65	8.75	8.85	8.95	9.06	9.16	9.26	9.35	9.45	9.55	9.65	9.75	9.85	9.95	10.06	10.16
37BL	4.93	4.72	4.53	4.34	4.21	4.15	4.10	4.04	3.98	3.93	3.89	3.85	3.80	3.76	3.71	3.67	3.63	3.58	3.54	3.50
38BL	0.78	0.78	0.79	0.79	0.79	0.80	0.81	0.81	0.82	0.83	0.84	0.84	0.85	0.85	0.87	0.87	0.88	0.88	0.89	0.90
39BL	44.01	44.05	44.09	44.12	44.12	44.07	44.01	43.96	43.91	43.85	43.78	43.72	43.66	43.60	43.53	43.47	43.40	43.34	43.27	43.21
40BL	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19
41BL	77.56	77.03	76.52	76.00	75.51	75	74	74	73	73	72	72	71	71	70	70	69	69	68	68
42BL	27.55	27.69	27.83	27.97	28.11	28.25	28.39	28.53	28.67	28.81	28.95	29.09	29.22	29.36	29.50	29.64	29.78	29.92	30.06	30.20
43BL	1.08	1.04	0.99	0.96	0.92	0.88	0.84	0.81	0.77	0.73	0.69	0.66	0.62	0.58	0.55	0.52	0.49	0.46	0.43	0.41
44BL	4.48	4.48	4.49	4.50	4.51	4.51	4.52	4.53	4.54	4.55	4.56	4.56	4.57	4.58	4.59	4.60	4.61	4.62	4.64	4.65
45BL	517.86	530.12	541.88	553.75	562.94	570.54	577.97	585.64	593.31	600.58	607.80	615.03	622.29	629.56	636.67	643.99	651.40	658.89	666.46	673.88
45.1BL	5.26	5.19	5.07	5.16	5.03	5.88	5.89	5.96	5.96	5.98	5.99	6.00	6.04	6.05	6.09	6.10	6.19	6.28	6.36	6.20
45.2BL	7.63	7.38	7.13	7.00	4.50	2.00	2.00	2.00	2.00	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
45.3BL																				
45.4BL																				
45.5BL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
45.6BL	-0.33	-0.32	-0.43	-0.30	-0.34	-0.29	-0.47	-0.29	-0.29	-0.47	-0.28	-0.28	-0.28	-0.28	-0.48	-0.28	-0.29	-0.29	-0.29	-0.29
45.7BL	17.78	18.07	18.47	18.74	19.05	19.30	19.74	20.00	20.27	20.71	20.96	21.20	21.46	21.71	22.16	22.41	22.67	22.93	23.19	23.45
46BL	175.94	168.73	161.72	154.87	150.41	148.36	146.32	144.28	142.24	140.44	138.89	137.33	135.77	134.22	132.66	131.11	129.55	127.99	126.44	124.88
47BL	5.59	5.32	5.10	4.85	4.71	4.65	4.58	4.52	4.46	4.40	4.35	4.30	4.25	4.21	4.16	4.11	4.06	4.01	3.96	3.91
48BL	750.30	755.46	760.49	765.64	770.64	776.50	782.37	788.31	794.25	800.22	806.19	812.17	818.19	824.21	830.29	836.38	842.56	848.83	855.18	861.38
49BL	9.08	9.30	9.51	9.74	9.93	10.15	10.48	10.75	10.96	11.14	11.33	11.49	11.66	11.84	12.01	12.19	12.40	12.62	12.85	13.08
50BL	1.73	1.77	1.81	1.85	1.89	1.93	2.00	2.05	2.09	2.12	2.16	2.19	2.22	2.25	2.29	2.32	2.36	2.40	2.45	2.49
51BL	1166.42	1196.41	1225.50	1255.01	1278.91	1299.67	1320.15	1341.28	1362.52	1382.36	1402.77	1423.30	1444.01	1464.82	1484.61	1505.69	1527.08	1548.77	1570.75	1591.54
52BL	613.94	591.82	570.35	548.95	532.74	521.70	511.27	500.49	489.85	480.91	470.90	460.51	450.48	440.77	432.49	422.78	412.89	402.85	393.24	385.50
53BL	1791.16	1799.30	1807.17	1815.55	1823.47	1833.46	1843.90	1854.57	1865.41	1876.53	1887.16	1897.49	1908.36	1919.68	1931.40	1942.99	1954.73	1966.65	1979.28	1992.62
54BL	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4
55BL	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.1	3.1	3.1
56BL	75%	76%	77%	78%	79%	79%	80%	80%	81%	81%	81%	82%	82%	82%	83%	83%	83%	84%	84%	84%
57BL	72%	73%	75%	76%	76%	77%	77%	78%	78%	78%	79%	79%	79%	80%	80%	80%	81%	81%	81%	82%

Row ref	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
19BL	65.73	65.91	66.35	66.65	66.94	67.06	67.53	67.83	68.12	68.24	68.65	68.94	69.24	69.35
20BL	0.13	0.12	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.03
21BL	215.83	218.41	220.99	223.55	226.08	228.70	231.32	233.95	236.62	239.15	241.83	244.50	247.22	249.91
22BL	61.16	59.82	58.60	57.45	56.34	55.29	54.25	53.20	52.13	51.20	50.10	49.02	48.02	47.06
23BL	65.30	65.48	65.92	66.22	66.51	66.63	67.10	67.39	67.68	67.79	68.21	68.50	68.79	68.90
24BL	0.12	0.11	0.11	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03
25BL	205.57	208.05	210.53	212.99	215.41	217.93	220.46	222.98	225.55	227.98	230.56	233.13	235.74	238.34
26BL	57.71	56.41	55.23	54.13	53.06	52.05	51.06	50.05	49.02	48.14	47.08	46.05	45.09	44.18
27 -	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
28 -	2.7	2.8	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
29BL	127.4	127.2	127.0	126.8	126.7	126.5	126.4	126.2	126.0	125.9	125.7	125.6	125.4	125.3
29.1BL	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
29.2BL	69.0	68.9	68.8	68.8	68.7	68.6	68.5	68.5	68.4	68.3	68.2	68.2	68.1	68.0
29.3BL	7.7	7.7	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.5	7.5
29.4BL	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.1	6.0	6.0
29.5BL	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
29.6BL	6.6	6.5	6.5	6.4	6.4	6.3	6.3	6.2	6.2	6.1	6.1	6.0	6.0	5.9
30BL	153.1	153.0	152.8	152.6	152.6	152.5	152.4	152.3	152.2	152.1	152.1	152.0	151.9	151.7
30.1BL	37.0	37.0	37.0	37.0	37.0	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
30.2BL	70.3	70.2	70.1	70.0	69.9	69.8	69.7	69.6	69.5	69.4	69.3	69.1	69.0	68.9
30.3BL	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
30.4BL	11.6	11.6	11.7	11.7	11.7	11.7	11.7	11.7	11.8	11.8	11.8	11.8	11.8	11.8
30.5BL	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
30.6BL	10.2	10.2	10.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
31BL	132.3	132.0	131.7	131.3	131.1	130.8	130.6	130.3	130.0	129.8	129.5	129.3	129.1	128.8
32BL	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20
33BL	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
34BL	0.42	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.45	0.45	0.45
35BL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
36BL	10.26	10.36	10.46	10.56	10.66	10.77	10.87	10.97	11.07	11.17	11.27	11.37	11.47	11.58
37BL	3.45	3.41	3.37	3.32	3.28	3.24	3.19	3.15	3.10	3.06	3.02	2.97	2.93	2.89
38BL	0.90	0.91	0.92	0.92	0.93	0.93	0.94	0.95	0.95	0.96	0.96	0.97	0.98	0.98
39BL	43.14	43.08	43.01	42.94	42.88	42.81	42.75	42.68	42.62	42.55	42.49	42.42	42.36	42.29
40BL	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19	58.19
41BL	67	67	66	66	65	65	64	64	63	63	63	62	62	61
42BL	30.34	30.48	30.62	30.76	30.89	31.03	31.17	31.31	31.45	31.59	31.73	31.87	32.01	32.15
43BL	0.39	0.36	0.34	0.32	0.30	0.27	0.25	0.23	0.21	0.18	0.16	0.14	0.12	0.09
44BL	4.66	4.68	4.69	4.70	4.72	4.73	4.74	4.76	4.77	4.78	4.79	4.81	4.82	4.83
45BL	681.30	688.72	696.14	703.56	710.98	718.40	725.82	733.24	740.66	748.08	755.50	762.92	770.34	777.76
45.1BL	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
45.2BL	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
45.3BL														
45.4BL														
45.5BL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
45.6BL	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29
45.7BL	23.71	23.97	24.22	24.48	24.74	25.00	25.26	25.52	25.77	26.03	26.29	26.55	26.81	27.07
46BL	123.32	121.77	120.21	118.66	117.10	115.54	113.99	112.43	110.87	109.32	107.76	106.21	104.65	103.09
47BL	3.86	3.81	3.77	3.72	3.67	3.62	3.57	3.52	3.47	3.42	3.38	3.33	3.28	3.23
48BL	867.58	873.79	879.99	886.19	892.40	898.60	904.80	911.01	917.21	923.41	929.61	935.82	942.02	948.22
49BL	13.34	13.60	13.86	14.12	14.38	14.62	14.85	15.06	15.27	15.45	15.65	15.80	15.94	16.05
50BL	2.54	2.59	2.64	2.69	2.74	2.79	2.83	2.87	2.91	2.94	2.98	3.01	3.04	3.06
51BL	1613.31	1635.16	1657.11	1679.16	1700.24	1722.44	1744.74	1767.12	1789.60	1810.97	1833.61	1856.34	1879.17	1902.08
52BL	376.87	368.70	361.35	354.62	347.66	341.31	335.05	328.71	322.11	316.49	309.62	303.02	296.87	291.11
53BL	2006.07	2020.05	2034.97	2050.59	2065.02	2081.16	2097.47	2113.76	2129.88	2145.86	2161.86	2178.18	2195.01	2212.30
54BL	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
55BL	3.1	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8
56BL	85%	85%	85%	86%	86%	86%	86%	87%	87%	87%	88%	88%	88%	88%
57BL	82%	82%	82%	83%	83%	83%	84%	84%	84%	84%	85%	85%	85%	85%

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 4: Baseline supply demand balance

	Row ref	Component	Derivation	Unit	Decimal places	2016/17	For info 2017-18	For info 2018-19	For info 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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
SDB	11BL	Distribution Input	19BL+20BL+21BL+22BL+32BL+33BL+39BL	Ml/d	2	386.74	386.47	386.49	387.29	387.74	387.62	387.80	387.69	387.87	387.80	387.28	386.62	386.19	385.73	384.81	384.91	385.31	385.58	385.98	386.46	387.15	387.79	388.90	389.84	390.97	392.13	393.41	394.49	395.91	397.36	397.46	398.79	400.51	402.15	403.79	405.41	407.39	409.18	411.01	412.66	414.57	416.39	418.32	420.10
	12BL	Water Available For Use (own sources)	(7BL+8BL)+(9BL+10BL)	Ml/d	2	369.38	368.40	368.46	369.58	369.59	369.65	369.72	369.78	369.84	369.90	369.97	370.03	370.09	370.15	370.22	370.28	370.34	370.41	370.47	370.53	370.59	370.66	370.72	370.78	370.80	370.91	370.97	371.03	371.10	371.16	371.22	371.28	371.35	371.41	371.47	371.53	371.60	371.66	371.72	371.79	371.85	371.91	371.97	372.04
	13BL	Total Water Available For Use	12BL+(2BL+3BL)+(5BL+6BL)	Ml/d	2	437.66	433.88	433.94	433.91	438.07	437.94	437.82	437.69	437.33	436.97	437.04	437.10	437.16	436.65	436.72	436.00	436.84	436.91	436.97	456.44	456.50	456.57	457.05	457.11	457.14	457.24	457.30	457.36	457.43	457.49	457.55	457.62	457.68	457.74	457.80	457.87	457.93	457.99	458.05	458.12	458.18	458.24	458.31	458.37
	14BL	Target headroom (climate change component)	Input	Ml/d	2	0.00	0.00	1.59	1.79	2.38	2.90	2.50	2.63	1.72	2.70	2.83	3.59	2.50	2.98	3.75	3.14	3.91	3.54	3.62	3.90	3.87	4.38	3.94	4.10	4.49	4.54	4.71	4.84	4.47	4.59	4.75	4.93	5.28	5.62	5.46	5.79	5.81	5.65	5.90	6.20	6.09	5.74	6.33	6.04
	15BL	Target headroom (all other components)	Input	Ml/d	2	0.00	0.00	31.87	31.46	31.51	31.17	31.53	31.16	31.42	30.12	29.11	27.59	27.15	26.51	25.41	24.99	23.92	23.54	22.65	22.01	21.78	21.24	20.68	20.22	19.68	19.00	18.77	18.30	18.02	17.49	17.28	16.82	16.13	15.69	15.65	15.02	14.77	14.55	13.70	13.60	13.41	13.15	12.53	12.30
	16BL	Target Headroom	14BL+15BL	Ml/d	2	0.00	0.00	33.46	33.19	33.88	34.07	34.04	33.80	33.14	32.82	31.94	31.18	29.66	29.49	29.16	28.13	27.84	27.09	26.47	25.90	25.65	25.63	24.33	24.33	24.17	23.55	23.48	23.14	22.50	22.08	22.04	21.45	21.41	21.31	21.11	20.81	20.58	20.20	19.60	19.80	19.50	18.89	18.86	18.33
	17BL	Available Headroom	13BL-11BL	Ml/d	2	51.12	47.34	46.46	45.92	50.33	50.32	50.02	50.00	49.47	49.18	49.75	50.48	50.97	50.92	51.91	51.10	51.54	51.32	50.99	69.98	69.35	68.77	68.15	67.27	66.17	65.11	63.89	62.87	61.52	60.13	60.11	58.82	57.17	55.59	54.01	52.46	50.54	48.81	47.05	45.46	43.61	41.86	39.99	38.27
	18BL	Supply Demand Balance	17BL-16BL	Ml/d	2	51.12	47.34	12.88	12.73	16.44	16.25	15.98	16.20	16.33	16.36	17.81	19.30	21.32	21.43	22.75	22.96	23.70	24.24	24.52	44.08	43.70	43.15	43.82	42.95	42.00	41.56	40.41	39.74	39.02	38.05	38.07	37.37	35.76	34.28	32.90	31.65	29.96	28.61	27.44	25.65	24.11	22.97	21.13	19.94

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

README

Table 5: Feasible options detailed costs

Detail the gains in WAFU / savings in demand, and the costs of feasible options under capacity use scenario

ENTER DISCOUNT RATE % 3.50%

ENTER DISCOUNT PERIOD (YRS) 80

Row ref	Option name	Option reference no.	Type of option	Preferred Option (Y/N)	Earliest potential option start date	Costs based on capacity	WAFU on full implementation (Ml/d)	NPV of WAFU (Ml)	CAPEX NPV (£000)	OPEX NPV (£000)	NPV of opex savings (£000)	NPV of carbon (£000)	Social & Env. NPV (£000)	TOTAL NPV (£000)	AIC (p/m3)	AISC (p/m3)	Scope confidence (score 1 to 5)	Cost confidence (score 1 to 5)
58a	**RESOURCE SIDE**																	
58.1a	Options to increase raw water abstractions																	
58.2a	Options to increase raw imports																	
58.3a	Options to increase potable imports																	
58.4a	Options to reduce raw water losses and operational use																	
58.5a	Options to reduce raw water exports																	
58.6a	Options to reduce potable water exports																	
58.7a	Other options to increase Deployable Output																	
59a	**DISTRIBUTION SIDE**																	
59.1a	Options to reduce Distribution Losses																	
	Leakage	1	Leakage Control	Y	2017/18	Capacity	26.6	143153.64	240886.71	15930.44	0.00	0.00	0.00	256817.14	179.40	179.40		
59.2a	Options to reduce Distribution System Operating Use (DSOU) losses																	
60a	**PRODUCTION SIDE**																	
60.1a	Options to reduce treatment works losses																	
60.2a	Options to reduce outage																	
61a	**CUSTOMER SIDE**																	
61.1a	Options to change volume delivered to measured non households																	
61.2a	Options to change volume delivered to unmeasured non households																	
61.3a	Options to change volume delivered to measured households																	
	Enhanced Water Efficiency	2	Household Water Efficiency	Y	2020/21	Capacity	11.7	64087.07	0.00	20909.90	0.00	0.00	0.00	20909.90	32.63	32.63		
	Enhanced Metering	3	Household Metering	Y	2020/21	Capacity	-0.1	-8509.42	1358.81	0.00	0.00	0.00	0.00	1358.81	-15.97	-15.97		
61.4a	Options to change volume delivered to unmeasured households																	
	Enhanced Water Efficiency	2	Household Water Efficiency	Y	2020/21	Capacity	4.8	25637.12	0.00	10517.40	0.00	0.00	0.00	10517.40	41.02	41.02		
61.5a	Options to reduce water taken unbilled																	
61.6a	Options impacting on measured Non Household - USPL																	
61.7a	Options impacting on unmeasured Non Household - USPL																	
61.8a	Options impacting on measured Household - USPL																	
61.9a	Options impacting on unmeasured Household - USPL																	
61.10a	Options impacting on Void properties - USPL																	

Row ref	Cost component	Derivation	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
58a																											
58.1a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.2a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.3a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.4a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.5a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.6a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.7a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59a																											
59.1a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gains in WAFU / Savings in demand	Input	Ml/d	2.0	4.1	6.1	8.1	10.1	11.1	12.0	13.0	14.0	14.9	15.8	16.7	17.5	18.4	19.2	20.0	20.8	21.6	22.4	23.1	23.8	24.5	25.2	25.9
	Fixed capex	Input	£000s	4554.0	54.6	0.0	860.9	0.0	0.0	0.0	0.0	12054.6	12054.6	12054.6	12054.6	12054.6	30136.5	30136.5	30136.5	30136.5	30136.5	30136.5	30136.5	30136.5	30136.5	30136.5	30136.5
	Variable capex	Input	£000s																								
	Financing costs	Input	£000s																								
	Fixed opex	Input	£000s	641.9	726.2	726.2	726.2	641.9	641.9	641.9	641.9	1184.7	1184.7	1184.7	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4
	Variable opex	Input	£000s																								
	Opex savings	Input	£000s																								
	Fixed env & social	Input	£000s																								
	Variable env & social	Input	£000s																								
	Fixed carbon costs	Input	£000s																								
	Variable carbon costs	Input	£000s																								
	Customer willingness to pa	Input	£000s																								
	Total	above (excl	£000s	5195.84	780.77	726.18	1587.12	641.88	641.88	641.88	641.88	13239.29	13239.29	13239.29	13154.99	13154.99	31236.91	31236.91	31236.91	31236.91	31236.91	31236.91	31236.91	31236.91	31236.91	31236.91	31236.91
59.2a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60a																											
60.1a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60.2a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61a																											
61.1a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.2a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.3a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gains in WAFU / Savings in demand	Input	Ml/d	0.6	1.1	1.7	2.3	3.0	3.6	4.3	5.0	5.6	6.3	7.0	7.7	8.4	9.1	9.7	10.4	11.1	11.4	11.4	11.5	11.5	11.6	11.6	11.7
	Fixed capex	Input	£000s																								
	Variable capex	Input	£000s																								
	Financing costs	Input	£000s																								
	Fixed opex	Input	£000s	1294.6	1332.1	1370.2	1407.3	1443.1	1476.7	1508.9	1540.6	1571.0	1601.3	1624.5	1642.0	1658.7	1675.8	1692.6	1707.2	1722.8	1738.6	0.0	0.0	0.0	0.0	0.0	0.0
	Variable opex	Input	£000s																								
	Opex savings	Input	£000s																								
	Fixed env & social	Input	£000s																								
	Variable env & social	Input	£000s																								
	Fixed carbon costs	Input	£000s																								
	Variable carbon costs	Input	£000s																								
	Customer willingness to pa	Input	£000s																								
	Total	above (excl	£000s	1294.56	1332.15	1370.22	1407.30	1443.14	1476.68	1508.89	1540.62	1571.02	1601.30	1624.51	1641.98	1658.69	1675.76	1692.61	1707.23	1722.81	1738.62	0.00	0.00	0.00	0.00	0.00	0.00
	Gains in WAFU / Savings in demand	Input	Ml/d	-0.1	-0.4	-0.6	-0.8	-1.1	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
	Fixed capex	Input	£000s	330.7	310.1	289.4	268.7	248.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable capex	Input	£000s																								
	Financing costs	Input	£000s																								
	Fixed opex	Input	£000s																								
	Variable opex	Input	£000s																								
	Opex savings	Input	£000s																								
	Fixed env & social	Input	£000s																								
	Variable env & social	Input	£000s																								
	Fixed carbon costs	Input	£000s																								
	Variable carbon costs	Input	£000s																								
	Customer willingness to pa	Input	£000s																								
	Total	above (excl	£000s	330.69	310.05	289.35	268.65	248.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61.4a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gains in WAFU / Savings in demand	Input	Ml/d	0.5	0.9	1.3	1.6	2.0	2.3	2.6	2.8	3.1	3.3	3.5	3.7	4.0	4.2	4.4	4.6	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1
	Fixed capex	Input	£000s																								
	Variable capex	Input	£000s																								
	Financing costs	Input	£000s																								
	Fixed opex	Input	£000s	1008.1	970.2	932.5	895.7	860.2	826.9	794.2	762.1	731.2	700.4	676.7	659.1	642.4	625.3	608.5	593.9	578.3	562.5	0.0	0.0	0.0	0.0	0.0	0.0
	Variable opex	Input	£000s																								
	Opex savings	Input	£000s																								
	Fixed env & social	Input	£000s																								
	Variable env & social	Input	£000s																								
	Fixed carbon costs	Input	£000s																								
	Variable carbon costs	Input	£000s																								
	Customer willingness to pa	Input	£000s																								
	Total	above (excl	£000s	1008.06	970.22	932.51	895.67	860.20	826.86	794.19	762.08	731.16	700.41	676.70	659.11	642.38	625.30	608.52	593.93	578.34	562.53	0.00	0.00	0.00	0.00	0.00	0.00
61.5a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.6a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.7a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.8a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.9a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.10a				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RZCOSTSHERE

Company:	**Essex & Suffolk Water**
Resource Zone Name:	**Essex**
Resource Zone Number:	**1.00**
Planning Scenario Name:	**Dry Year Annual Average**
Chosen Level of Service:	**Planned**

Start dates	**Option Categories**
2020-21	Aquifer recharge
2021-22	Bulk supply
2022-23	Conjunctive use
2023-24	Desalination
2024-25	Effluent reuse
2025-26	GW enhancement
2026-27	GW new
2027-28	Reservoir enlargement
2028-29	New reservoir
2029-30	SW enhancement
2030-31	SW new
2031-32	
2032-33	
2033-34	Active leakage management
2034-35	Mains repair
2035-36	Mains replacement (not trunk mains)

3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Year 25	**Year 26**	**Year 27**	**Year 28**	**Year 29**	**Year 30**	**Year 31**	**Year 32**	**Year 33**	**Year 34**	**Year 35**	**Year 36**	**Year 37**	**Year 38**	**Year 39**	**Year 40**	**Year 41**	**Year 42**	**Year 43**	**Year 44**	**Year 45**	**Year 46**	**Year 47**	**Year 48**	**Year 49**	**Year 50**	**Year 51**	**Year 52**	**Year 53**	**Year 54**	**Year 55**	**Year 56**	**Year 57**	**Year 58**	**Year 59**	**Year 60**	**Year 61**	**Year 62**	**Year 63**	**Year 64**	**Year 65**	**Year 66**	**Year 67**	**Year 68**	**Year 69**	**Year 70**	**Year 71**	**Year 72**	**Year 73**	**Year 74**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	0.0	0.0	0.0	0.0	0.0																													
30136.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																													
1100.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																													
31236.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.7	11.8	11.8	11.9	12.0	12.0	12.1	12.1	12.2	12.2	12.3	12.3	12.4	12.5	12.5	12.6	0.0	0.0	0.0	0.0	0.0																													
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																													
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	0.0	0.0	0.0	0.0	0.0																													
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																													
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	3.9	3.8	3.8	3.7	3.6	3.5	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: If option costs are required from beyond year 80 then the NPV calculation formula must be amended manually to cover the extended period

3.00%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
Year 75	Year 76	Year 77	Year 78	Year 79	Year 80	Year 81	Year 82	Year 83	Year 84	Year 85	Year 86	Year 87	Year 88	Year 89	Year 90	Year 91	Year 92	Year 93	Year 94	Year 95	Year 96	Year 97	Year 98	Year 99	Year 100	Year 101	Year 102	Year 103	Year 104
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 6: Preferred list of water management options

DRY YEAR PLANNED GAINS IN WAFU OR SAVINGS IN DEMAND (Ml/d) - TO BE COMPLETED FOR ALL PREFERRED OPTIONS

Row Ref	Option Name [Insert / delete non-numbered lines to suit]	Option Reference No.	Unit	Decimal places	2016/17	For info 2017-18	For info 2018-19	For info 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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
58	**Resource Management**	-	**Ml/d**	**2**	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58.1	Increase raw water abstractions	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	-	-	Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.2	Raw water imports	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.3	Potable water imports (input reductions as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.4	Reduce raw water losses and operational use (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.5	Reduced raw water export (including non potable supplies)		Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58.51	Reduce raw water exports (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.52	Reduce non potable supplies (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.6	Reduce potable water exports (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
58.7	Other options to increase deployable output	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2																																												
-	*(insert row above)*	-	-	-	-																																											
59	**Distribution Side Management**	-				0.00	0.00	0.00	-2.03	-4.06	-6.08	-8.11	-10.13	-11.09	-12.05	-13.01	-13.97	-14.93	-15.79	-16.66	-17.52	-18.38	-19.25	-20.03	-20.80	-21.58	-22.36	-23.14	-23.84	-24.54	-25.24	-25.94	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64
59.1	Reduce distribution losses (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	-2.03	-4.06	-6.08	-8.11	-10.13	-11.09	-12.05	-13.01	-13.97	-14.93	-15.79	-16.66	-17.52	-18.38	-19.25	-20.03	-20.80	-21.58	-22.36	-23.14	-23.84	-24.54	-25.24	-25.94	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64
-	**Leakage**	1	Ml/d	2	0.00	0.00	0.00	0.00	-2.03	-4.06	-6.08	-8.11	-10.13	-11.09	-12.05	-13.01	-13.97	-14.93	-15.79	-16.66	-17.52	-18.38	-19.25	-20.03	-20.80	-21.58	-22.36	-23.14	-23.84	-24.54	-25.24	-25.94	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64	-26.64
-	*(insert row above)*	-	-	-	-																																											
59.2	Reduce distribution system operational use (DSOU) (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
60	**Production Side Management, Specify Below ...**	-		**2**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.1	Reduce treatment works losses (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
60.2	Reduce outages (input as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
61	**Customer Side Management**	-		**2**	0.00	0.00	0.00	0.00	-1.03	-2.09	-3.15	-4.19	-5.22	-6.20	-7.15	-8.09	-9.01	-9.93	-10.83	-11.74	-12.64	-13.53	-14.41	-15.32	-16.20	-16.41	-16.36	-16.31	-16.27	-16.23	-16.18	-16.12	-16.08	-16.05	-16.01	-15.98	-15.96	-15.94	-15.93	-15.91	-15.90	-15.89	-15.88	-15.88	-15.86	-15.85	-15.84	-15.84
61.1	Change volume delivered to measured non households (input reductions as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
61.2	Change volume delivered to unmeasured non households (input reductions as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
61.3	Change volume delivered to measured households (input reductions as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	-0.43	-0.75	-1.10	-1.49	-1.91	-2.46	-3.12	-3.80	-4.48	-5.19	-5.88	-6.55	-7.22	-7.90	-8.58	-9.28	-9.98	-10.22	-10.27	-10.31	-10.36	-10.41	-10.46	-10.51	-10.56	-10.61	-10.66	-10.71	-10.76	-10.81	-10.86	-10.92	-10.97	-11.02	-11.07	-11.12	-11.18	-11.23	-11.28	-11.33
-	Enhanced Water Efficiency	2	Ml/d	2		-0.55	-1.13	-1.72	-2.34	-2.97	-3.62	-4.28	-4.95	-5.64	-6.35	-7.04	-7.70	-8.38	-9.05	-9.74	-10.43	-11.14	-11.38	-11.43	-11.48	-11.53	-11.58	-11.64	-11.69	-11.74	-11.80	-11.85	-11.90	-11.96	-12.01	-12.07	-12.12	-12.18	-12.23	-12.29	-12.34	-12.40	-12.46	-12.51	-12.57
-	*Enhanced Metering*	3	Ml/d	2		0.13	0.38	0.62	0.85	1.06	1.16	1.16	1.16	1.16	1.16	1.15	1.15	1.15	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.17	1.17	1.17	1.17	1.18	1.18	1.19	1.19	1.19	1.20	1.20	1.20	1.21	1.21	1.21	1.22	1.22	1.22	1.23	1.23	1.23
61.4	Change volume delivered to unmeasured households (input reductions as -ve)	-	Ml/d	2	0.00	0.00	0.00	0.00	-0.60	-1.33	-2.02	-2.66	-3.25	-3.69	-3.97	-4.23	-4.47	-4.68	-4.89	-5.13	-5.36	-5.58	-5.78	-5.98	-6.17	-6.14	-6.04	-5.94	-5.85	-5.76	-5.66	-5.56	-5.46	-5.38	-5.30	-5.21	-5.14	-5.07	-5.01	-4.94	-4.88	-4.82	-4.75	-4.70	-4.63	-4.57	-4.50	-4.45
-	Enhanced Water Efficiency	2	Ml/d	2		-0.45	-0.87	-1.27	-1.63	-1.97	-2.28	-2.57	-2.83	-3.06	-3.27	-3.49	-3.73	-3.96	-4.17	-4.37	-4.57	-4.76	-4.73	-4.62	-4.52	-4.43	-4.33	-4.23	-4.12	-4.12	-4.02	-3.94	-3.85	-3.76	-3.69	-3.61	-3.54	-3.47	-3.41	-3.34	-3.27	-3.21	-3.14	-3.07	-3.01	-2.95	
-	*Enhanced Metering*	3	Ml/d	2		-0.15	-0.45	-0.75	-1.03	-1.29	-1.41	-1.41	-1.41	-1.41	-1.41	-1.40	-1.40	-1.40	-1.41	-1.41	-1.41	-1.41	-1.41	-1.42	-1.42	-1.42	-1.42	-1.43	-1.43	-1.44	-1.44	-1.45	-1.45	-1.46	-1.46	-1.46	-1.47	-1.47	-1.48	-1.48	-1.49	-1.49	-1.49	-1.50	-1.50	
61.5	Options to reduce water taken unbilled (input as -ve)		Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
61.6	Options impacting on measured Non Household - USPL (input reductions as -ve)		l/p	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
61.7	Options impacting on unmeasured Non Household - USPL (input reductions as -ve)		l/p	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											
61.8	Options impacting on measured Household - USPL (input reductions as -ve)		l/p	2	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
-	Enhanced Metering	3	Ml/d	2	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
-	*(insert row above)*	-	-	-	-																																											
61.9	Options impacting on unmeasured Household - USPL (input reductions as -ve)		l/p	2	0.00	0.00	0.00	0.00	-0.01	-0.04	-0.06	-0.09	-0.11	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12
-	Enhanced Metering	3	Ml/d	2	0.00	0.00	0.00	0.00	-0.01	-0.04	-0.06	-0.09	-0.11	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12
-	*(insert row above)*	-	-	-	-																																											
61.10	Options impacting on Void properties - USPL (input reductions as -ve)		l/p	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-			Ml/d	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	*(insert row above)*	-	-	-	-																																											

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 7: Final planning water supply

	Row Ref	Component	Derivation	Unit	Decimal places	2016/17	For info 2017/18	For info 2018/19	For info 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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
Resources	1FP	Raw Water Abstracted	1BL	Mld	2	296.00	295.97	295.97	295.97	294.83	291.65	288.80	285.65	282.83	280.84	278.46	275.94	273.66	271.35	268.71	267.06	265.75	264.30	262.97	261.82	260.88	260.58	261.00	261.23	261.74	262.29	262.95	263.42	264.22	265.73	265.90	267.31	269.09	270.78	272.48	274.15	276.19	278.03	279.90	281.60	283.56	285.43	287.40	289.23
	2FP	Raw Water Imported	2BL+ (6. Preferred scenario ref 58.2)	Mld	2	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3FP	Potable Water Imported	3BL+ (6. Preferred scenario ref 58.3)	Mld	2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resource (and process) losses	5FP	Raw Water Exported (raw exports and non potable uses)	5BL+ (6. Preferred scenario ref 58.5)	Mld	2	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6FP	Potable Water Exported	6BL+ (6. Preferred scenario ref 58.6)	Mld	2	3.52	3.52	3.52	3.52	3.52	3.71	3.90	4.09	4.51	4.93	4.93	4.93	4.93	5.50	5.50	6.28	5.50	5.50	5.50	6.09	6.09	6.09	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7FP	Deployable Output	7BL+ 8BL+ (9. Preferred scenario ref 58.7) + (9. Preferred scenario ref 58.1)		2	399.57	399.60	399.66	399.72	399.79	399.85	399.91	399.97	400.04	400.10	400.16	400.22	400.29	400.35	400.41	400.48	400.54	400.60	400.66	400.73	400.79	400.85	400.91	400.98	401.00	401.10	401.17	401.23	401.29	401.35	401.42	401.48	401.54	401.60	401.67	401.73	401.79	401.86	401.92	401.98	402.04	402.11	402.17	402.23
	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	8FP	Raw water losses, treatment works losses and operational use	9BL+ (9. Preferred scenario ref 60.1)+(9. Preferred scenario ref 58.4)	Mld	2	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
	10FP	Outage allowance	10BL+ (6. Preferred scenario ref 60.2)	Mld	2	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93	29.93

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 8: Final planning water demand

Section	Row Ref	Component	Derivation / Impact of preferred options	Unit	Decimal places	2016/17	For info 2017-18	For info 2018-19	For info 2019-20	2020-21	2021-22	2022-23
Consumption	19FP	Water Delivered Measured Non Household	Calculated BL+Preferred options	Ml/d	2	56.78	57.35	57.56	57.71	58.12	58.39	58.64
	20FP	Water Delivered Unmeasured Non Household	Calculated BL+Preferred options	Ml/d	2	0.70	0.53	0.51	0.49	0.47	0.46	0.44
	21FP	Water Delivered Measured Household	Calculated BL+Preferred options	Ml/d	2	124.80	128.99	133.97	138.77	143.88	147.65	151.67
	22FP	Water Delivered Unmeasured Household	Calculated BL+Preferred options	Ml/d	2	147.17	143.61	139.09	134.80	128.93	123.73	118.57
	23FP	Measured Non Household - Consumption	19FP-34FP	Ml/d	2	56.44	56.99	57.19	57.34	57.75	58.02	58.26
	24FP	Unmeasured Non Household - Consumption	20FP-35FP	Ml/d	2	0.66	0.49	0.47	0.45	0.44	0.42	0.40
	25FP	Measured Household - Consumption	21FP-36FP	Ml/d	2	119.25	122.96	127.70	132.24	137.03	140.53	144.33
	26FP	Unmeasured Household - Consumption	22FP-37FP	Ml/d	2	140.14	136.69	132.38	128.32	122.70	117.76	112.85
	27 -	Percentage of consumption driven by climate change	n/a in FP	-	1	-	-	-	-	-	-	-
	28 -	Volume of consumption driven by climate change	n/a in FP	-	1		-	-	-	-	-	-
PCC and consumption by component	29FP	Measured Household - PCC	(25FP*1,000,000)/(51FP*1,000)	l/h/d	1	147.7	146.8	145.7	144.7	143.1	141.1	139.5
	29.1FP	Measured toilet flushing	Input brief explanation here	l/h/d	1	31.9	31.8	31.6	31.5	31.3	31.0	30.8
	29.2FP	Measured personal washing	Input brief explanation here	l/h/d	1	73.3	73.1	72.8	72.6	72.2	71.9	71.7
	29.3FP	Measured clothes washing	Input brief explanation here	l/h/d	1	11.4	11.2	11.0	10.8	10.5	10.1	9.8
	29.4FP	Measured dish washing	Input brief explanation here	l/h/d	1	9.6	9.4	9.2	9.1	8.8	8.5	8.2
	29.5FP	Measured miscellaneous internal use	Input brief explanation here	l/h/d	1	10.9	10.8	10.7	10.6	10.4	10.2	9.9
	29.6FP	Measured external use	Input brief explanation here	l/h/d	1	10.6	10.4	10.3	10.1	9.8	9.4	9.1
	30FP	Unmeasured Household - PCC	(26FP*1,000,000)/(52FP*1,000)	l/h/d	1	168.4	167.8	167.0	166.3	164.9	163.4	162.0
	30.1FP	Unmeasured toilet flushing	Input brief explanation here	l/h/d	1	38.3	38.2	38.2	38.1	37.9	37.8	37.6
	30.2FP	Unmeasured personal washing	Input brief explanation here	l/h/d	1	76.3	76.2	76.0	75.7	75.4	75.0	74.7
	30.3FP	Unmeasured clothes washing	Input brief explanation here	l/h/d	1	12.0	11.8	11.7	11.6	11.4	11.2	10.9
	30.4FP	Unmeasured dish washing	Input brief explanation here	l/h/d	1	13.7	13.5	13.3	13.1	12.8	12.5	12.2
	30.5FP	Unmeasured miscellaneous internal use	Input brief explanation here	l/h/d	1	15.6	15.6	15.5	15.5	15.3	15.2	15.1
	30.6FP	Unmeasured external use	Input brief explanation here	l/h/d	1	12.5	12.5	12.4	12.2	12.0	11.7	11.5
	31FP	Average Household - PCC	((25FP+26FP)*1,000,000))/(51FP+52FP*1,000)	l/h/d	1	158.2	157.1	155.8	154.6	152.6	150.5	148.6
	32FP	Water Taken Unbilled	Calculated BL+Preferred options	Ml/d	1	9.6	9.2	9.2	9.2	9.2	9.2	9.2
	33FP	Distribution System Operational Use	Calculated BL+Preferred options	Ml/d	1	2.2	2.3	2.3	2.3	2.3	2.3	2.3
Leakage	34FP	Measured Non Household - USPL	Calculated BL+Preferred options	Ml/d	2	0.34	0.37	0.37	0.37	0.37	0.38	0.38
	35FP	Unmeasured Non Household - USPL	Calculated BL+Preferred options	Ml/d	2	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	36FP	Measured Household - USPL	Calculated BL+Preferred options	Ml/d	2	5.55	6.02	6.27	6.53	6.85	7.12	7.34
	37FP	Unmeasured Household - USPL	Calculated BL+Preferred options	Ml/d	2	7.03	6.92	6.71	6.47	6.23	5.97	5.72
	38FP	Void Properties - USPL	Calculated BL+Preferred options	Ml/d	2	0.85	0.92	0.89	0.90	0.84	0.82	0.80
	39FP	Distribution Losses	Calculated BL+Preferred options	Ml/d	2	45.44	43.92	43.90	43.87	41.82	39.79	37.80
	40FP	Total Leakage	Sum(34FP:39FP)	Ml/d	2	59.25	58.19	58.19	58.19	56.15	54.12	52.08
	41FP	Total Leakage	(40FP*1,000,000)/(48FP*1,000)	l/prop/d	2	87.12	84.73	83.80	82.85	79.09	75.46	71.89
Customer: Properties	42FP	Measured Non Household - Properties	Input (total, excluding voids)	000's	2	26.17	26.30	26.44	26.58	26.72	26.86	27.00
	43FP	Unmeasured Non Household - Properties	Input (total, excluding voids)	000's	2	1.57	1.54	1.49	1.44	1.38	1.33	1.28
	44FP	All void non-households - properties	Input (voids in each year)	000's	2	4.49	4.44	4.45	4.45	4.45	4.46	4.46
	45FP	Measured Household - Properties (excl voids)	Pre-plan year = input. Forecast years = Previous year 45FP + sum(45.1FP:45.6FP)	000's	2	366.97	378.99	394.90	410.95	429.42	446.34	463.09
	45.1FP	New properties	Input (new builds in each year)	000's	2	4.52	6.68	7.68	7.97	7.75	7.18	7.30
	45.2FP	Meter optants - properties	Input (meter optants in each year)	000's	2	4.61	5.03	6.70	8.70	9.73	9.84	9.53
	45.3FP	Compulsory metering - properties	Input (compulsory meters in each year)	000's	2							
	45.4FP	Metering on change of occupancy - properties	Input (change of occupancy meters in each year)	000's	2							
	45.5FP	Selective metering properties	Input (selective meters in each year)	000's	2	3.09	3.04	1.50	0.01	0.01	0.01	0.01
	45.6FP	Other changes to existing metering - properties	Input (other changes to meters in each year)	000's	2	0.00	-2.73	0.03	-0.64	0.99	-0.11	-0.08
	45.7FP	Measured void households - properties	Input (voids in each year)	000's	2	14.66	17.36	17.30	17.91	16.89	16.97	17.02
	46FP	Unmeasured households - properties (excl void)	Input (total)	000's	2	254.76	247.11	239.60	231.21	222.66	213.34	204.35
	47FP	Unmeasured void households - properties	Input (voids in each year)	000's	2	11.52	11.00	10.20	9.79	8.51	7.88	7.24
	48FP	Total Resource Zone Properties (incl voids)	SUM(42FP:45FP)+45.7FP+46FP+47FP	000's	2	680.14	686.74	694.38	702.32	710.03	717.17	724.43
Customer: Po	49FP	Measured Non Household - Population	Input (total)	000's	2	7.84	7.92	8.00	8.10	8.20	8.32	8.49
	50FP	Unmeasured Non Household - Population	Input (total)	000's	2	1.49	1.51	1.52	1.54	1.56	1.59	1.62
	51FP	Measured Household - Population	Input (total)	000's	2	807.32	837.85	876.22	914.03	957.64	995.79	1034.76
	52FP	Unmeasured Household - Population	Input (total)	000's	2	832.12	814.75	792.67	771.65	744.10	720.48	696.50
	53FP	Total Resource Zone Population	49FP+Sum(50FP:52FP)	000's	2	1648.77	1662.03	1678.42	1695.32	1711.51	1726.18	1741.36
Occup	54FP	Measured Household - Occupancy Rate (average) (excl voids)	51FP/45FP	h/prop	1	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	55FP	Unmeasured Household - Occupancy Rate	52BL/46BL	h/prop	1	3.3	3.3	3.3	3.3	3.3	3.4	3.4
Mete	56FP	Total Household Metering penetration (excl. voids)	45FP/45FP+46FP	%	0	59%	61%	62%	64%	66%	68%	69%
	57FP	Total Household Metering penetration (incl. voids)	45FP/(45FP+45.7FP+46FP+47FP)	%	0	57%	58%	60%	61%	63%	65%	67%

Row Ref	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35
19FP	58.77	59.12	59.41	59.67	59.84	60.25	60.52	60.79	60.97	61.41	61.71	62.01
20FP	0.42	0.40	0.39	0.37	0.36	0.34	0.33	0.31	0.30	0.29	0.28	0.26
21FP	155.49	159.18	162.42	165.16	167.78	170.25	172.73	174.28	175.60	176.86	178.19	179.58
22FP	113.45	108.55	103.95	99.47	95.05	90.80	86.65	83.01	80.77	78.64	76.47	74.35
23FP	58.39	58.74	59.03	59.29	59.45	59.86	60.13	60.40	60.58	61.01	61.31	61.61
24FP	0.39	0.37	0.36	0.34	0.33	0.31	0.30	0.29	0.28	0.27	0.25	0.24
25FP	147.93	151.42	154.47	157.04	159.50	161.82	164.15	165.57	166.78	167.95	169.17	170.46
26FP	107.98	103.31	98.94	94.66	90.45	86.39	82.43	78.92	76.74	74.66	72.55	70.49
27 -	-	-	-	-	-	-	-	-	-	-	-	-
28 -	-	-	-	-	-	-	-	-	-	-	-	-
29FP	137.9	136.4	134.9	133.6	132.3	131.1	129.9	128.6	127.5	126.4	125.3	124.3
29.1FP	30.5	30.3	30.1	29.9	29.7	29.5	29.3	29.1	28.9	28.8	28.6	28.5
29.2FP	71.4	71.2	71.0	70.7	70.5	70.3	70.2	69.9	69.7	69.4	69.2	69.0
29.3FP	9.5	9.2	9.0	8.7	8.5	8.3	8.1	7.8	7.6	7.5	7.3	7.1
29.4FP	7.9	7.7	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.9	5.7
29.5FP	9.7	9.4	9.2	9.0	8.8	8.7	8.5	8.3	8.1	8.0	7.8	7.7
29.6FP	8.8	8.6	8.3	8.0	7.8	7.6	7.3	7.1	6.9	6.7	6.4	6.3
30FP	160.6	159.2	157.7	156.4	155.1	153.9	152.6	150.7	149.7	148.6	147.6	146.6
30.1FP	37.5	37.3	37.1	37.0	36.8	36.7	36.5	36.3	36.2	36.0	35.9	35.7
30.2FP	74.3	74.0	73.6	73.3	73.0	72.7	72.5	71.6	71.3	71.0	70.6	70.3
30.3FP	10.7	10.4	10.2	10.0	9.7	9.5	9.2	9.0	8.8	8.6	8.4	8.2
30.4FP	11.9	11.7	11.3	11.1	10.8	10.6	10.4	10.2	10.0	9.9	9.8	9.7
30.5FP	14.9	14.8	14.6	14.5	14.3	14.2	14.0	13.9	13.8	13.6	13.5	13.3
30.6FP	11.3	11.0	10.8	10.6	10.4	10.2	10.0	9.7	9.6	9.5	9.4	9.4
31FP	146.6	144.8	143.0	141.4	139.8	138.2	136.7	135.0	133.7	132.5	131.2	130.1
32FP	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
33FP	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
34FP	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.40
35FP	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
36FP	7.55	7.76	7.95	8.12	8.28	8.43	8.59	8.71	8.81	8.91	9.02	9.12
37FP	5.48	5.24	5.02	4.81	4.61	4.41	4.22	4.09	4.04	3.98	3.92	3.86
38FP	0.78	0.77	0.78	0.78	0.78	0.79	0.79	0.79	0.80	0.81	0.81	0.82
39FP	35.81	33.81	32.88	31.97	31.05	30.12	29.20	28.33	27.41	26.49	25.58	24.66
40FP	50.04	48.01	47.05	46.09	45.13	44.17	43.21	42.34	41.48	40.61	39.75	38.89
41FP	68.43	65.02	63.14	61.42	59.73	58.08	56.43	54.94	53.42	51.91	50.42	48.96
42FP	27.14	27.28	27.41	27.55	27.69	27.83	27.97	28.11	28.25	28.39	28.53	28.67
43FP	1.23	1.17	1.13	1.08	1.04	0.99	0.96	0.92	0.88	0.84	0.81	0.77
44FP	4.46	4.47	4.47	4.48	4.48	4.49	4.50	4.51	4.51	4.52	4.53	4.54
45FP	479.28	495.11	509.54	522.09	534.35	546.11	557.98	567.18	574.77	582.20	589.87	597.54
45.1FP	6.89	7.15	6.70	5.26	5.19	5.07	5.16	5.03	5.88	5.89	5.96	5.96
45.2FP	9.22	8.91	8.25	7.63	7.38	7.13	7.00	4.50	2.00	2.00	2.00	2.00
45.3FP												
45.4FP												
45.5FP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
45.6FP	0.07	-0.23	-0.53	-0.33	-0.32	-0.43	-0.30	-0.34	-0.29	-0.47	-0.29	-0.29
45.7FP	16.92	17.12	17.62	17.92	18.21	18.61	18.88	19.19	19.45	19.89	20.15	20.41
46FP	195.62	187.25	179.16	171.70	164.49	157.48	150.63	146.16	144.12	142.08	140.04	138.00
47FP	6.64	6.00	5.74	5.46	5.19	4.97	4.72	4.58	4.52	4.45	4.39	4.32
48FP	731.29	738.39	745.07	750.30	755.46	760.49	765.64	770.64	776.50	782.37	788.31	794.25
49FP	8.66	8.82	8.97	9.08	9.30	9.51	9.74	9.93	10.15	10.48	10.75	10.96
50FP	1.65	1.68	1.71	1.73	1.77	1.81	1.85	1.89	1.93	2.00	2.05	2.09
51FP	1072.69	1110.12	1144.67	1175.18	1205.21	1234.33	1263.88	1287.81	1308.61	1329.12	1350.29	1371.57
52FP	672.37	649.04	627.35	605.17	583.02	561.52	540.08	523.84	512.76	502.30	491.48	480.80
53FP	1755.36	1769.66	1782.69	1791.16	1799.30	1807.17	1815.55	1823.47	1833.46	1843.90	1854.57	1865.41
54FP	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
55FP	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5
56FP	71%	73%	74%	75%	76%	78%	79%	80%	80%	80%	81%	81%
57FP	69%	70%	72%	73%	74%	75%	76%	77%	77%	78%	78%	79%

Row Ref	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46
19FP	62.19	62.56	62.93	63.23	63.40	63.86	64.19	64.55	64.72	65.13	65.43
20FP	0.25	0.24	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14
21FP	180.95	182.43	184.36	186.83	189.24	191.48	193.92	196.46	199.01	201.59	204.02
22FP	72.45	70.49	68.70	67.16	65.64	64.18	62.69	61.20	59.70	58.24	57.07
23FP	61.78	62.16	62.52	62.82	62.99	63.45	63.78	64.14	64.30	64.71	65.00
24FP	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.15	0.14	0.13
25FP	171.73	173.11	174.95	177.31	179.63	181.77	184.11	186.54	188.99	191.47	193.80
26FP	68.64	66.72	64.97	63.48	62.00	60.58	59.14	57.70	56.23	54.82	53.69
27 -	-	-	-	-	-	-	-	-	-	-	-
28 -	-	-	-	-	-	-	-	-	-	-	-
29FP	123.4	122.6	122.1	122.0	121.9	121.7	121.5	121.4	121.3	121.2	121.1
29.1FP	28.4	28.3	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
29.2FP	68.8	68.6	68.5	68.4	68.4	68.3	68.2	68.2	68.1	68.0	68.0
29.3FP	7.0	6.9	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.7
29.4FP	5.5	5.4	5.3	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.2
29.5FP	7.6	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5
29.6FP	6.1	5.9	5.8	5.8	5.8	5.7	5.7	5.6	5.6	5.6	5.5
30FP	145.5	144.5	143.9	143.9	143.7	143.1	143.0	143.0	142.9	142.8	142.8
30.1FP	35.6	35.4	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.2	35.2
30.2FP	70.0	69.7	69.5	69.3	69.2	69.1	69.0	68.9	68.8	68.7	68.6
30.3FP	8.0	7.8	7.6	7.6	7.5	7.4	7.4	7.4	7.5	7.5	7.6
30.4FP	9.5	9.4	9.4	9.5	9.5	9.5	9.6	9.6	9.7	9.8	9.8
30.5FP	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
30.6FP	9.2	9.1	9.1	9.3	9.2	8.8	8.7	8.7	8.7	8.6	8.5
31FP	129.0	128.0	127.4	127.1	126.8	126.4	126.1	125.9	125.7	125.4	125.2
32FP	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
33FP	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
34FP	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42
35FP	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
36FP	9.22	9.32	9.42	9.52	9.61	9.71	9.81	9.91	10.01	10.12	10.22
37FP	3.81	3.77	3.73	3.68	3.64	3.60	3.55	3.51	3.47	3.42	3.38
38FP	0.83	0.84	0.84	0.85	0.85	0.87	0.87	0.88	0.88	0.89	0.90
39FP	23.82	22.98	22.14	21.30	20.46	19.70	18.93	18.17	17.40	16.63	16.57
40FP	38.11	37.33	36.55	35.77	35.00	34.30	33.60	32.90	32.20	31.50	31.50
41FP	47.62	46.30	45.01	43.72	42.46	41.31	40.17	39.04	37.93	36.83	36.57
42FP	28.81	28.95	29.09	29.22	29.36	29.50	29.64	29.78	29.92	30.06	30.20
43FP	0.73	0.69	0.66	0.62	0.58	0.55	0.52	0.49	0.46	0.43	0.41
44FP	4.55	4.56	4.56	4.57	4.58	4.59	4.60	4.61	4.62	4.64	4.65
45FP	604.81	612.03	619.26	626.52	633.79	640.90	648.22	655.63	663.12	670.69	678.11
45.1FP	5.98	5.99	6.00	6.04	6.05	6.09	6.10	6.19	6.28	6.36	6.20
45.2FP	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
45.3FP											
45.4FP											
45.5FP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
45.6FP	-0.47	-0.28	-0.28	-0.28	-0.28	-0.48	-0.28	-0.29	-0.29	-0.29	-0.29
45.7FP	20.85	21.10	21.35	21.60	21.85	22.30	22.56	22.82	23.08	23.34	23.60
46FP	136.20	134.64	133.09	131.53	129.98	128.42	126.86	125.31	123.75	122.19	120.64
47FP	4.27	4.22	4.17	4.12	4.07	4.02	3.97	3.93	3.88	3.83	3.78
48FP	800.22	806.19	812.17	818.19	824.21	830.29	836.38	842.56	848.83	855.18	861.38
49FP	11.14	11.33	11.49	11.66	11.84	12.01	12.19	12.40	12.62	12.85	13.08
50FP	2.12	2.16	2.19	2.22	2.25	2.29	2.32	2.36	2.40	2.45	2.49
51FP	1391.44	1411.88	1432.45	1453.19	1474.03	1493.86	1514.97	1536.40	1558.12	1580.13	1600.96
52FP	471.83	461.79	451.37	441.30	431.56	423.25	413.50	403.57	393.51	383.86	376.09
53FP	1876.53	1887.16	1897.49	1908.36	1919.68	1931.40	1942.99	1954.73	1966.65	1979.28	1992.62
54FP	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4
55FP	3.5	3.4	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.1	3.1
56FP	82%	82%	82%	83%	83%	83%	84%	84%	84%	85%	85%
57FP	79%	79%	80%	80%	80%	81%	81%	81%	81%	82%	82%

Row Ref	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
19FP	65.73	65.91	66.35	66.65	66.94	67.06	67.53	67.83	68.12	68.24	68.65	68.94	69.24	69.35
20FP	0.13	0.12	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.03
21FP	205.23	207.76	210.29	212.80	215.27	217.84	220.42	222.99	225.61	228.09	230.72	233.34	236.00	238.64
22FP	55.75	54.49	53.34	52.26	51.22	50.23	49.25	48.26	47.26	46.39	45.35	44.34	43.39	42.50
23FP	65.30	65.48	65.92	66.22	66.51	66.63	67.10	67.39	67.68	67.79	68.21	68.50	68.79	68.90
24FP	0.12	0.11	0.11	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03
25FP	194.91	197.34	199.76	202.17	204.55	207.01	209.49	211.96	214.48	216.86	219.39	221.90	224.46	227.00
26FP	52.42	51.20	50.09	49.05	48.06	47.11	46.18	45.23	44.27	43.45	42.45	41.48	40.58	39.73
27 -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29FP	120.1	120.0	119.9	119.7	119.6	119.5	119.4	119.3	119.2	119.1	119.0	118.9	118.8	118.7
29.1FP	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.2	28.2	28.2	28.2	28.2
29.2FP	67.8	67.7	67.6	67.6	67.5	67.5	67.4	67.3	67.3	67.2	67.1	67.1	67.0	66.9
29.3FP	6.5	6.5	6.5	6.5	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
29.4FP	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9
29.5FP	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
29.6FP	5.3	5.3	5.3	5.2	5.2	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.9	4.8
30FP	142.7	142.5	142.4	142.2	142.1	142.0	141.9	141.8	141.7	141.6	141.6	141.5	141.4	141.3
30.1FP	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
30.2FP	68.5	68.4	68.3	68.2	68.1	68.0	67.9	67.8	67.7	67.6	67.5	67.4	67.3	67.2
30.3FP	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
30.4FP	9.9	9.9	9.9	9.9	10.0	10.0	10.0	10.0	10.0	10.0	10.1	10.1	10.1	10.1
30.5FP	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
30.6FP	8.5	8.4	8.4	8.2	8.3	8.3	8.3	8.2	8.3	8.3	8.3	8.3	8.3	8.3
31FP	124.3	124.0	123.8	123.5	123.3	123.1	122.9	122.7	122.5	122.4	122.2	122.0	121.8	121.6
32FP	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
33FP	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
34FP	0.42	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.45	0.45	0.45
35FP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
36FP	10.32	10.42	10.52	10.62	10.73	10.83	10.93	11.03	11.13	11.23	11.33	11.44	11.54	11.64
37FP	3.33	3.29	3.25	3.20	3.16	3.12	3.07	3.03	2.99	2.94	2.90	2.85	2.81	2.77
38FP	0.90	0.91	0.92	0.92	0.93	0.93	0.94	0.95	0.95	0.96	0.96	0.97	0.98	0.98
39FP	16.50	16.44	16.37	16.31	16.24	16.18	16.11	16.05	15.98	15.92	15.85	15.79	15.72	15.66
40FP	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50
41FP	36.30	36.05	35.79	35.54	35.29	35.05	34.81	34.57	34.34	34.11	33.88	33.66	33.44	33.22
42FP	30.34	30.48	30.62	30.76	30.89	31.03	31.17	31.31	31.45	31.59	31.73	31.87	32.01	32.15
43FP	0.39	0.36	0.34	0.32	0.30	0.27	0.25	0.23	0.21	0.18	0.16	0.14	0.12	0.09
44FP	4.66	4.68	4.69	4.70	4.72	4.73	4.74	4.76	4.77	4.78	4.79	4.81	4.82	4.83
45FP	685.53	692.95	700.37	707.79	715.21	722.63	730.05	737.47	744.89	752.31	759.73	767.15	774.57	781.99
45.1FP	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
45.2FP	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
45.3FP														
45.4FP														
45.5FP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
45.6FP	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29
45.7FP	23.86	24.11	24.37	24.63	24.89	25.15	25.40	25.66	25.92	26.18	26.44	26.70	26.95	27.21
46FP	119.08	117.53	115.97	114.41	112.86	111.30	109.74	108.19	106.63	105.08	103.52	101.96	100.41	98.85
47FP	3.73	3.68	3.63	3.58	3.54	3.49	3.44	3.39	3.34	3.29	3.24	3.19	3.15	3.10
48FP	867.58	873.79	879.99	886.19	892.40	898.60	904.80	911.01	917.21	923.41	929.61	935.82	942.02	948.22
49FP	13.34	13.60	13.86	14.12	14.38	14.62	14.85	15.06	15.27	15.45	15.65	15.80	15.94	16.05
50FP	2.54	2.59	2.64	2.69	2.74	2.79	2.83	2.87	2.91	2.94	2.98	3.01	3.04	3.06
51FP	1622.76	1644.65	1666.64	1688.71	1709.83	1732.07	1754.40	1776.82	1799.33	1820.73	1843.41	1866.17	1889.03	1911.99
52FP	367.42	359.21	351.83	345.06	338.07	331.68	325.39	319.01	312.38	306.72	299.82	293.19	287.00	281.21
53FP	2006.07	2020.05	2034.97	2050.59	2065.02	2081.16	2097.47	2113.76	2129.88	2145.85	2161.86	2178.18	2195.01	2212.30
54FP	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
55FP	3.1	3.1	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.8
56FP	85%	85%	86%	86%	86%	87%	87%	87%	87%	88%	88%	88%	89%	89%
57FP	82%	83%	83%	83%	84%	84%	84%	84%	85%	85%	85%	85%	86%	86%

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 9: Final planning water supply

	Row ref	Component	Derivation	Unit	Decimal places	2016/17	For info 2017/18	For info 2018/19	For info 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	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60
SDB	12FP	Distribution Input	19FP+20FP+21FP+22FP+32FP+33FP+36FP	Mld	2	386.74	385.85	386.48	387.09	384.68	381.47	378.57	375.39	372.52	370.50	368.09	365.52	363.21	360.88	358.18	356.51	355.15	353.67	352.32	351.11	350.15	349.80	350.18	350.39	350.66	351.37	352.09	352.43	353.19	354.67	354.80	356.17	357.91	359.57	361.23	362.85	364.65	366.65	368.49	370.14	372.07	373.90	375.64	377.62
	13FP	Water Available For Use (own sources)	7FP+28FP+13FP+	Mld	2	368.38	369.40	369.46	369.53	369.59	369.65	369.72	369.78	369.84	369.90	369.97	370.03	370.09	370.15	370.22	370.28	370.34	370.41	370.47	370.53	370.59	370.66	370.72	370.78	370.80	370.91	370.97	371.03	371.10	371.16	371.22	371.28	371.35	371.41	371.47	371.53	371.60	371.66	371.72	371.79	371.85	371.91	371.97	372.04
	13FP	Total Water Available For Use	12FP+23FP+30FP+35FP+40FP+	Mld	2	437.86	432.88	433.34	433.81	436.07	437.94	437.82	437.66	437.33	436.97	437.04	437.10	437.18	436.65	436.72	436.00	436.84	436.91	436.97	456.44	456.50	456.57	457.05	457.11	457.14	457.24	457.30	457.36	457.43	457.49	457.55	457.62	457.68	457.74	457.80	457.87	457.93	457.99	458.05	458.12	458.18	458.24	458.31	458.37
	14FP	Target headroom (climate change component)	Input	Mld	2	0.00	0.00	1.50	1.79	2.38	2.90	2.50	2.63	1.72	2.70	2.83	3.59	2.50	2.08	3.75	3.14	3.91	3.54	3.82	3.90	3.87	4.38	3.64	4.10	4.49	4.54	4.71	4.84	4.47	4.59	4.75	4.63	5.28	5.62	5.46	5.79	5.81	5.65	5.90	6.20	6.09	5.74	6.33	6.04
	15FP	Target headroom (All other components)	Input	Mld	2	0.00	0.00	31.97	31.40	31.51	31.17	31.53	31.18	31.42	30.12	29.11	27.59	27.15	26.51	25.45	24.38	23.92	23.54	22.65	22.01	21.78	21.24	20.68	20.22	19.68	19.00	18.77	18.30	18.02	17.49	17.28	16.82	16.13	15.69	15.65	15.02	14.77	14.55	13.70	13.60	13.41	13.15	12.53	12.30
	16FP	Target Headroom	14FP+15FP	Mld	2	0.00	0.00	33.48	33.19	33.88	34.07	34.04	33.80	33.14	32.82	31.94	31.18	29.66	29.49	29.18	28.13	27.84	27.09	26.47	25.90	25.65	25.63	24.33	24.33	24.17	23.55	23.48	23.14	22.50	22.08	22.04	21.45	21.41	21.31	21.11	20.81	20.58	20.20	19.60	19.80	19.50	18.89	18.86	18.33
	17FP	Available Headroom	13FP-11FP	Mld	2	51.12	47.04	46.46	45.92	53.39	56.47	58.25	62.29	64.81	66.47	68.95	71.58	73.95	75.78	78.53	79.50	81.70	83.24	84.65	105.13	106.38	106.77	108.87	108.72	108.28	105.87	105.30	104.93	104.23	102.62	102.76	101.44	99.76	98.17	96.57	95.01	93.08	91.34	89.56	87.67	86.11	84.34	82.47	80.75
	18FP	Supply Demand Balance	17FP-16FP	Mld	2	51.12	47.04	12.98	12.73	19.51	22.45	25.21	28.50	31.68	33.65	37.01	40.40	44.29	46.29	49.38	51.36	53.86	56.15	58.18	79.42	80.71	81.14	82.54	82.39	82.11	82.32	81.82	81.80	81.74	80.74	80.72	79.99	78.35	76.86	75.47	74.20	72.50	71.14	69.96	68.17	66.60	65.46	63.91	62.41

Company:	Essex & Suffolk Water
Resource Zone Name:	Essex
Resource Zone Number:	1
Planning Scenario Name:	Dry Year Annual Average
Chosen Level of Service:	Planned

Table 10: Drought plan links and Deployable Output Overview

10.1 Planning scenarios					10.2 Water resources management plan								10.3 Drought plan						10.4 Demand	
Drought Scenarios	**Drought Description**	**Drought Severity**	**Plan in which scenario is used (highlights overlaps)**		**WRMP DO of Sources (not including drought measures)**	**WRMP Additional Yield from Drought Supply Measures (eg drought permits or orders)**			**WRMP Impact on DO of drought plan Demand Restrictions (eg TUBs)**			**WRMP DO Levels of Service**	**Drought Plan Additional Yield from Further Supply Measures (eg drought permits or orders)**			**Drought Plan Impact on DO of Further Demand Restrictions (eg TUBs)**			**Unrestricted Demand**	**Restricted Demand**
			WRMP	Drought Plan	DO (Ml/d)	Description	Marginal Benefit (Ml/d)	DO (Ml/d)	Description	Marginal Benefit (Ml/d)	DO (Ml/d)	DO (Ml/d)	Description	Marginal Benefit (Ml/d)	DO (Ml/d)	Description	Marginal Benefit (Ml/d)	DO (Ml/d)	**Ml/d**	**Ml/d**
Historic Droughts	1921	0.5% chance in any given year	Y	Y	384.9	None	0.0	384.9	Level 1 and 2 restrictions	12.0	396.9	396.9	Essex Drought Actions	Not known, dependent on individual drought	N/A	Level 1 and 2 restrictions	12.0	396.9	386.74	340.33
Additional Drought Scenarios	200	Severe Drought	Y	Y	385.9	None	0.0	385.9	Level 1 and 2 restrictions	12.0	397.9	397.9	Essex Drought Actions	Not known, dependent on individual drought	N/A	Level 1 and 2 restrictions	12.0	397.9	386.74	340.33

Reported DO for WRMP tables highlighted in yellow

10.5 Summary report

WRMP DO Overview

Deployable output figures reported in this table are Essex WRZ WAFU figures. There is a large bulk import from Thames Water Utilities into Essex WRZ, and not including the import in this table would imply that there is a supply-balance deficit in the WRZ, which is not the case.
DO Approach - Aquator modelling was used for all surface water DO calculations. The English & Welsh method was used for the historic drought, and the Scottish method for the 1 in 200 year severe drought scenario. This is outlined in sections 3.2 and 3.3 of the WRMP.
The standard UKWIR methodology (1995) entitled "A Methodology for the Determination of Outputs for Groundwater Sources" was used to determine the DO of the groundwater sources. The regional groundwater model was used to determine the DO at groundwater sources during a 1 in 200-year drought scenario. The groundwater DO approach is outlined in sections 3.6 and 3.7 of the WRMP.
LoS - the planned levels of service for our customers are 1 in 20 years for temporary use bans, 1 in 50 years for drought order bans, and 1 in 250 years for pressure reduction.
Constraint on DO - our deployable output is licence-constrained, with the exception of one groundwater sources, which is aquifer constrained.
Critical Year - our worst historical drought year in the Essex WRZ is 1921.
Data length & quality - we have 107-year naturalised river flow series covering 1910-2016. The derviation of these series is covered in section 3.2.3 of the WRMP.
Approach to drought severity - estimation of drought severity was carried out using analysis of rainfall data and Tabony tables, outlined in section 2.9.1 of the WRMP.

Additional Drought Scenarios

Drought scenarios chosen and justification - a severe (1 in 200 year) drought scenario was analysed for our surface water sources using the Aquator Scottish method and annual failure analysis, outlined in section 3.3 of the WRMP. The same severity drought was analysed for our groundwater sources using the groundwater regional model, outlined in section 3.7 of our WRMP.

Impact on Supply Demand

We have not included any supply side drought measures in WRMP deployable output assessments, but demand side restrictions are taken into account. Only Level 1 and 2 demand restrictions are enforced in modelling of our worst historic drought and severe drought scenario.

Demands

We have used the Dry Year Distribution Input figures for base year 2016/17 as the Unrestricted Demand. Restricted Demand is the Unrestricted Demand minus the 12% demand reduction from Level 1 and 2 restrictions.

Drought Plan Overview

The supply and demand side measures included within our Drought Plan are listed below, alongside their associated daily benefit (as a reduction in demand or increase in yield).

Drought Supply Measures and Demand Restrictions Further Details

Demand – Appeals for restraint – 7% demand reduction
Demand – Temporary use ban – further 5% demand reduction
Demand – Drought order ban – further 2% demand reduction
Supply – Increased bulk transfers from Thames Water Utilities – benefit not known
Supply – Increased abstraction from SAGS – benefit not known
Supply – Reduction of compensation flow from Hanningfield reservoir – benefit not known

REF: WRMP19 Table instructions REVISED May 2017v16

2.3 Making changes to the WRP tables

Please see below slight changes to the WRP tables

Structure: no changes

Content: see below

Table	Row ref	Component	Derivaion	Unit	DP	What has been amended	Reasoning	
2	7BL	Deployable Output (baseline profile withou	sum(0.1BI+0.2BL+0.3BL+0.4BL)	Ml/d	2	Formula has been removed, this row is **Input** from Supply data	DO is calculated for consistancy on Supply calculations, DO is not sum of licences	amended final v
9	11FP	Distribution Input	19FP+20FP+21FP+22FP+32FP+33FP+39FP	Ml/d	2	Void SPL removed row 38 from calculation, NWL/ESW following UKWIR/NRA WR1 demand forecasting methodology, void usage which inlcudes SPL is included in Water unbilled. So to not double count this volume of water Void SPL has been removed from the total DI calculation. Unbilled contains both void usage as well as SPL, this row is already included in the DI calculation.	Consistency between WRP and water balance assumptions/calculations Following UKWIR/NRA WR1 demand forecasting methodology. Reflects WRMP report Void SPL ranges from 0.01% to 0.3% of DI	amended final v
4	11BL	Distribution input	19BL+20BL+21BL+22BL+32BL+33BL+3	Ml/d	2	As above	As above	amended final v
8	30FP	Unmeasured Household - PCC	(26FP*1,000,000)/(52FP*1,000)	l/h/d	1	Formula amended to 1 decimal place rather than 0 as per table requirement New '=ROUND((H10*1000000)/(H55*1000),1) Old '=ROUND((H10*1000000)/(H55*1000),1)	For consistency between BL/FB as well as complying with table requirements	
8	29FP	Measured Household - PCC	(25FP*1,000,000)/(51FP*1,000)	l/h/d	1	As above	For consistency between BL/FB as well as complying with table requirements	
2	8.21BL+	Total for the zone	Input (zero or negative number)	Ml/d	2	Row reference	The row reference is a duplicate of 8.2 ie there are two 8.2's so one has been amended to 8.21 to enable an accurate data load of the tables.	amended final v
7	1FP	Raw Water Abstracted	1BL	Ml/d	2	FP should be different than = BP Input from Final Supply demand (DI for BL and FP are different) which means BL and FP raw water abstracted will be different figures	Final plan DI + raw water imports - raw water exports + process losses should = Final Plan Raw water abstracted	amended final v
6	61.4	Change volume delivered to unmeasured households (input reductions as -ve)	-	Ml/d	2	The volume associated in the row if consumption rather than the previous water delivered, changes made due to the version 15 including SPL to the water delivered figure		
6	61.3	Change volume delivered to measured households (input reductions as -ve)	-	Ml/d	2	The volume associated in the row if consumption rather than the previous water delivered, changes made due to the version 15 including SPL to the water delivered figure		