

Water Resources Planning Guideline

Water Resource Planning Guidelines - Supply - Demand Worksheet **version 1_0 (file name: S-D Worksheet_v 1_0.xls)**

Instructions:

All information for completing tables is contained within the Water Resources Planning Guidance document **reference (Version 1.1) date (April 2007)**
The Guideline is also available on the Environment Agency website at <http://www.environment-agency.gov.uk/subjects/waterres/981441/408371/>
All queries on the content of this workbook should be directed to water-companies-plan@environment-agency.gov.uk

All calculated cells should use the calculations given in the corresponding derivation column

Yellow shaded cells are calculation cells and protected. Do not input data to these cells

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

shaded cells do not require any input

Resource Zone and sign off information:

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

Company: Northumbrian Water
Resource Zone Name Berwick & Fowberry Peak
Resource Zone Number: 2 of 3
Planning Scenario Name: Critical Period
Chosen Level of Service: Company Preferred

Responsible Officer: M. Lunn **Signed:** M. Lunn **Dated:** 18-Apr-08

Version: Draft

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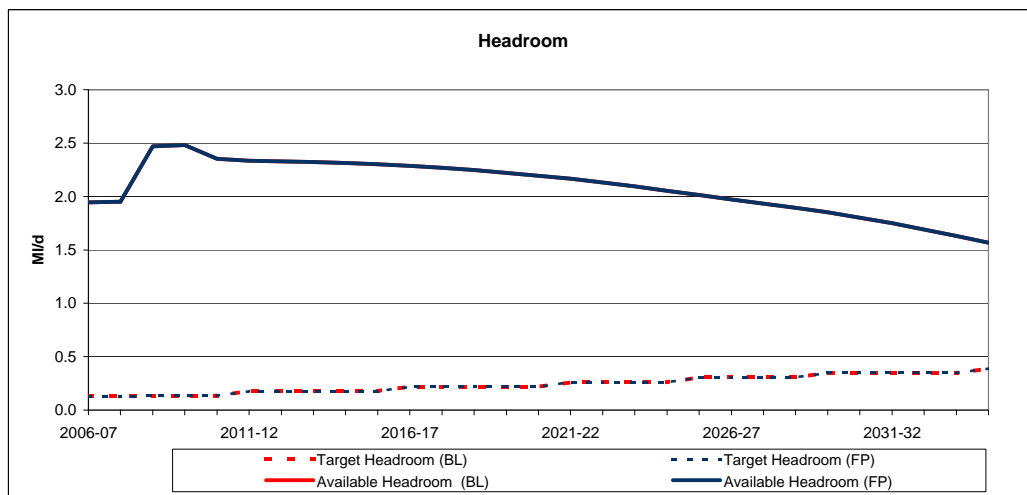
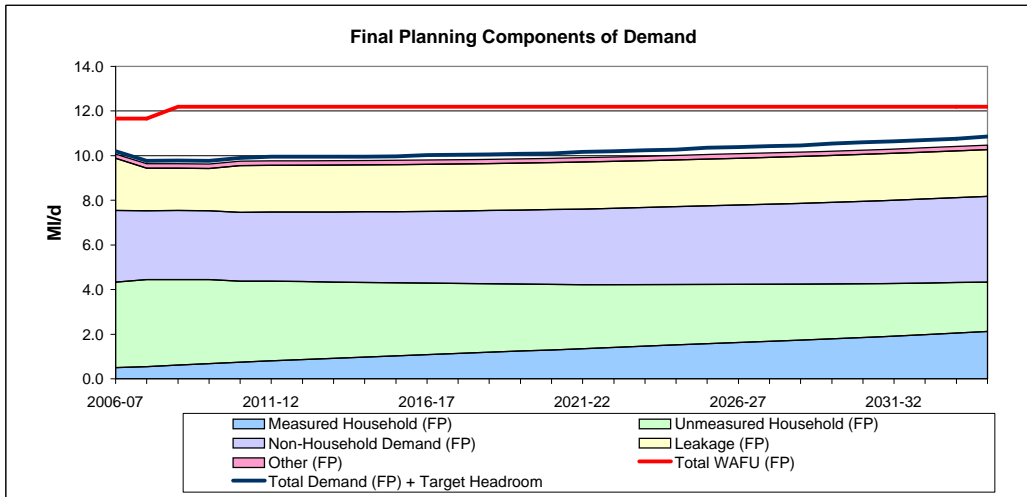
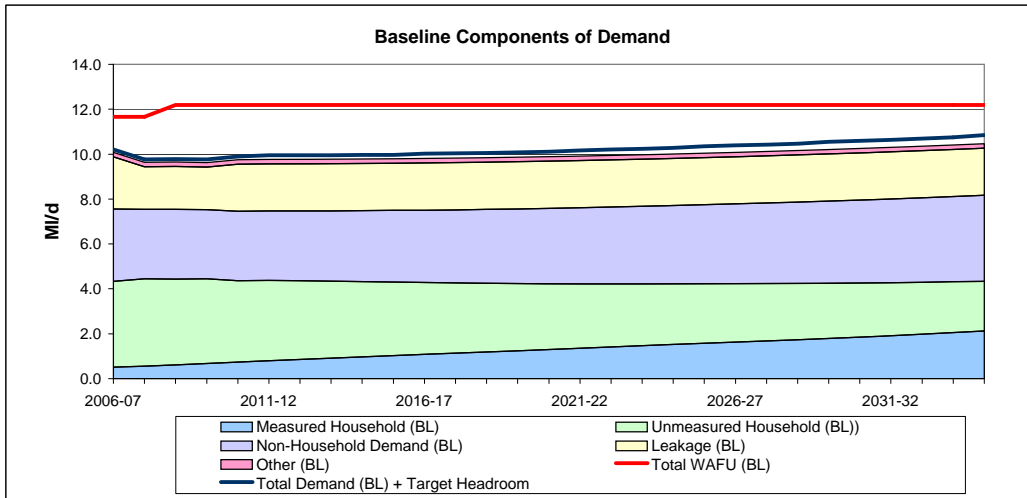
WRP Tables

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Summary of WRP Tables Inputs



Company:	<u>Northumbrian Water</u>
Resource Zone Name	<u>Berwick & Fowberry Peak</u>
Resource Zone Number:	<u>2 of 3</u>
Planning Scenario Name:	<u>Critical Period</u>
Chosen Level of Service:	<u>Company Preferred</u>

Table WRP1-BL: Baseline Supply Demand Components

ROW Ref.	DERIVATION	DESCRIPTION	UNITS	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	
BASIC RESOURCES BASELINE																																	
1 _{BL}	Input	Deployable Output (Specify individual Source Yields on Table WRP4)	MI/d	11.76	11.76	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29
2 _{BL}	WRP1a-BL 2a _{BL}	Reductions in Deployable Output	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3 _{BL}	Input	Outage Allowance	MI/d	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
4 _{BL}	9 _{BL} +11 _{BL}	Process Losses	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5 _{BL}	1 _{BL} -(2 _{BL} +3 _{BL} +4 _{BL})	Water Available For Use (own sources)	MI/d	11.66	11.66	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	
RAW WATER BASELINE																																	
6 _{BL}	Input	Raw Water Abstracted	MI/d	9.91	9.90	9.92	9.90	10.04	10.05	10.06	10.07	10.08	10.09	10.10	10.12	10.14	10.17	10.20	10.23	10.26	10.30	10.34	10.38	10.42	10.46	10.50	10.55	10.60	10.65	10.71	10.77	10.84	
7 _{BL}	WRP1a-BL 7a _{BL}	Raw Water Exported (existing)	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8 _{BL}	WRP1a-BL 8a _{BL}	Raw Water Imported (existing)	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9 _{BL}	Input	Raw Water Losses and Operational Use	MI/d	0.20	0.20	0.21	0.22	0.22	0.23	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.39	0.39	
10 _{BL}	WRP1a-BL 10a _{BL}	Non Potable Supplies (existing)	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
POTABLE WATER TO POINT OF DELIVERY BASELINE																																	
11 _{BL}	Input	Treatment Works Losses and Operational Use	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
12 _{BL}	WRP1a-BL 12a _{BL}	Potable Water Imported	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
13 _{BL}	WRP1a-BL 13a _{BL}	Potable Water Exported	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14 _{BL}	Input	Distribution Input	MI/d	10.07	9.64	9.65	9.63	9.76	9.77	9.77	9.78	9.78	9.79	9.80	9.82	9.84	9.86	9.88	9.91	9.94	9.97	10.01	10.05	10.09	10.12	10.16	10.20	10.25	10.29	10.35	10.41	10.47	
15 _{BL}	Input	Distribution Losses	MI/d	1.45	1.02	1.02	1.02	1.22	1.22	1.22	1.22	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.24	1.24	1.24	1.24	
16 _{BL}	Input	Distribution System Operational Use	MI/d	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	0.13	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	0.13	0.13	
17 _{BL}	14 _{BL} -15 _{BL} -16 _{BL}	Water Delivered	MI/d	8.49	8.49	8.50	8.48	8.41	8.42	8.42	8.42	8.43	8.44	8.45	8.46	8.48	8.50	8.53	8.55	8.58	8.62	8.65	8.69	8.72	8.76	8.79	8.83	8.88	8.93	8.98	9.04	9.09	
POTABLE WATER CUSTOMER USE BASELINE																																	
18 _{BL}	Input	Unmeasured Household - Population	000's	24.657	25.059	24.519	24.010	22.904	22.442	21.991	21.535	21.086	20.650	20.212	19.784	19.375	18.980	18.560	18.147	17.793	17.459	17.116	16.805	16.495	16.197	15.894	15.515	15.164	14.816	14.470	14.130	13.795	
19 _{BL}	Input	Unmeasured Household - Properties	000's	7.176	7.127	7.009	6.904	6.807	6.714	6.621	6.528	6.435	6.342	6.249	6.156	6.063	5.970	5.877	5.784	5.691	5.598	5.505	5.412	5.319	5.226	5.133	5.040	4.947	4.854	4.761	4.668	4.575	
20 _{BL}	18 _{BL} /19 _{BL}	Unmeasured Household - Occupancy Rate	h/pr	3.44	3.52	3.50	3.48	3.36	3.34	3.32	3.30	3.28	3.26	3.23	3.21	3.20	3.18	3.16	3.14	3.13	3.12	3.11	3.11	3.10	3.10	3.10	3.08	3.07	3.05	3.04	3.03	3.02	
21 _{BL}	Input	Measured Household - Population	000's	3.565	3.844	4.289	4.705	5.109	5.499	5.885	6.276	6.661	7.038	7.419	7.791	8.155	8.505	8.882	9.266	9.692	10.082	10.480	10.842	11.193	11.521	11.853	12.260	12.690	13.117	13.543	13.962	14.376	
22 _{BL}	Input	Measured Household - Properties	000's	1.438	1.538	1.726	1.900	2.069	2.231	2.393	2.556	2.718	2.878	3.039	3.198	3.353	3.504	3.655	3.808	3.961	4.108	4.258	4.395	4.528	4.653	4.778	4.929	5.079	5.227	5.374	5.519	5.661	
23 _{BL}	21 _{BL} /22 _{BL}	Measured Household - Occupancy Rate	h/pr	2.48	2.50	2.48	2.48	2.47	2.46	2.46	2.46	2.45	2.45	2.44	2.44	2.43	2.43	2.43	2.44	2.45	2.45	2.46	2.47	2.47	2.48	2.48	2.49	2.50	2.51	2.52	2.53	2.54	
24 _{BL}	Input	Unmeasured Non Household - Population	000's	0.106	0.107	0.108	0.109	0.110	0.111	0.112	0.112	0.113	0.114	0.115	0.116	0.117	0.118	0.119	0.120	0.123	0.125	0.127	0.129	0.131	0.134	0.136	0.139	0.141	0.144	0.146	0.149	0.152	
25 _{BL}	Input	Unmeasured Non Household - Properties	000's	0.154	0.135	0.126	0.117	0.112	0.111	0.109	0.108	0.106	0.105	0.103	0.102	0.100	0.099	0.097	0.096	0.095	0.093	0.092	0.090	0.089	0.087	0.086	0.084	0.083	0.082	0.080	0.079	0.077	
26 _{BL}	Input	Measured Non Household - Population	000's	0.559	0.563	0.567	0.573	0.578	0.582	0.586	0.588	0.592	0.597	0.602	0.608	0.615	0.620	0.625	0.632	0.644	0.655	0.667	0.677	0.688	0.701	0.715	0.728	0.742	0.755	0.769	0.782	0.796	
27 _{BL}	Input	Measured Non Household - Properties	000's	0.746	0.788	0.803	0.818	0.831	0.839	0.845	0.851	0.858	0.865	0.874	0.882	0.892	0.902	0.910	0.920	0.934	0.951	0.968	0.984	1.000	1.018	1.037	1.057	1.076	1.096	1.115	1.135	1.154	
28 _{BL}	18 _{BL} +21 _{BL} +24 _{BL} +26 _{BL}	Total Population	000's	28.887	29.574	29.484	29.396	28.701	28.634	28.573	28.512	28.452	28.399	28.348	28.298	28.262	28.223	28.186	28.185	28.251	28.322	28.390	28.453	28.507	28.553	28.597	28.642	28.737	28.833	28.928	29.023	29.119	
29 _{BL}	Input	Void Households	000's	0.445	0.361	0.364	0.367	0.370	0.373	0.376	0.378	0.381	0.384	0.387	0.390	0.392	0.395	0.397	0.400	0.402	0.404	0.407	0.409	0.410	0.412	0.413	0.415	0.418	0.420	0.422	0.424	0.427	
30 _{BL}	Input	Void Non Households	000's	0.157	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186
31 _{BL}	19 _{BL} +22 _{BL} +25 _{BL} +27 _{BL} +29 _{BL} +30 _{BL}	Total Properties	000's	10.116	10.135	10.213	10.292	10.373	10.452	10.529	10.607	10.683	10.759	10.837	10.913	10.987	11.055	11.123	11.193	11.268	11.340	11.415	11.475	11.531	11.580	11.632	11.711	11.788	11.863	11.938	12.010	12.080	
POTABLE WATER DELIVERED BASELINE																																	
32 _{BL}	Input	Water Taken Unbilled	MI/d	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	0.13	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	0.13	0.13	
33 _{BL}	Input	Water Delivered Unmeasured Household	MI/d	4.52	4.60	4.51	4.43	4.29	4.22	4.14																							

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

ROW Ref.	DERIVATION	DESCRIPTION <i>[Insert/delete non-numbered lines to suit]</i>	UNITS	Scenario Year	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35			
				2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35				
2a _{BL}	Input as appropriate	Reductions in Baseline Deployable Output: Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
			M/d																																	
			M/d																																	
			M/d																																	
			M/d																																	
7a _{BL}	Input as appropriate	Baseline Raw Water Exported (existing). Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		to	M/d																																	
		to	M/d																																	
		to	M/d																																	
8a _{BL}	Input as appropriate	Baseline Raw Water Imported (existing). Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		from	M/d																																	
		from	M/d																																	
		from	M/d																																	
10a _{BL}	Input as appropriate	Baseline Non Potable Supplies (existing). Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		to	M/d																																	
		to	M/d																																	
		to	M/d																																	
12a _{BL}	Input as appropriate	Baseline Potable Water Imported. Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		from	M/d																																	
		from	M/d																																	
		from	M/d																																	
13a _{BL}	Input as appropriate	Baseline Potable Water Exported. Total here and specify below	M/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		to	M/d																																	
		to	M/d																																	
		to	M/d																																	

Company:	<u>Northumbrian Water</u>
Resource Zone Name	<u>Berwick & Fowberry Peak</u>
Resource Zone Number:	<u>2 of 3</u>
Planning Scenario Name:	<u>Critical Period</u>
Chosen Level of Service:	<u>Company Preferred</u>

Table WRP2: Feasible list of water management options

ROW Ref.	DERIVATION	OPTION DESCRIPTION <i>[Insert / delete non-numbered lines to suit]</i>	WATER MANAGEMENT OPTION COST AND SOLUTION - TO BE COMPLETED FOR ALL FEASIBLE OPTIONS										
			OPTION REFERENCE No.	WAFU ON FULL IMPLEMENTATION (MI/d)	EARLIEST POTENTIAL OPTION START DATE (YEAR)	NPV of WAFU (MI)	CAPEX NPV (£000)	OPEX NPV (£000)	NPV of OPEX SAVINGS (£000)	SOCIAL & ENV. NPV (£000)	TOTAL NPV (£000)	AIC (p/M ³)	AISC (p/M ³)
54	Input as appropriate	Customer Side Management, Specify Below....											
55	Input as appropriate	Distribution Side Management, Specify Below....											
56	Input as appropriate	Production Side Management, Specify Below....											
57	Input as appropriate	Resource Management, Specify Below....											

Company:	<u>Northumbrian Water</u>
Resource Zone Name	<u>Berwick & Fowberry Peak</u>
Resource Zone Number:	<u>2 of 3</u>
Planning Scenario Name:	<u>Critical Period</u>
Chosen Level of Service:	<u>Company Preferred</u>

Table WRP3: Preferred list of water management options

		PLANNED GAINS IN WAFU OR SAVINGS IN DEMAND (M/d) - TO BE COMPLETED FOR ALL PREFERRED OPTIONS (WAFU gains for each year are individual year gains and not cumulative gains)																															
ROW Ref.	DERIVATION	OPTION DESCRIPTION <i>[Insert / delete non-numbered lines to suit]</i>	OPTION REFERENCE No.	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	
58	Input as appropriate	Customer Side Management, Specify Below....																															
59	Input as appropriate	Distribution Side Management, Specify Below....																															
60	Input as appropriate	Production Side Management, Specify Below....																															
61	Input as appropriate	Resource Management, Specify Below....																															
SUMMARY of WAFU GAINS																																	
62	sum of 58 + sum of 59	Total Customer and Distribution Management Gains		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
63	sum of 60 + sum of 61	Total Production and Resource Management Gains		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

Company:	Northumbrian Water
Resource Zone Name	Berwick & Fowberry Peak
Resource Zone Number:	2 of 3
Planning Scenario Name:	Critical Period
Chosen Level of Service:	Company Preferred

Table WRP4-FP: Final Planning Supply Demand Components

ROW Ref.	DERIVATION	DESCRIPTION	UNITS	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	
BASIC RESOURCES FINAL PLANNING																																	
1 _{FP}	Input	Deployable Output (Specify individual Source Yields on Table WRP4)	Mi/d	11.76	11.76	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29	12.29
2 _{FP}	WRP4a-FP 2a _{FP}	Reductions in Deployable Output	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 _{FP}	Input	Outage Allowance	Mi/d	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
4 _{FP}	9 _{FP} +11 _{FP}	Process Losses	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 _{FP}	1 _{FP} -(2 _{FP} +3 _{FP} +4 _{FP})	Water Available For Use (own sources)	Mi/d	11.66	11.66	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19
RAW WATER FINAL PLANNING																																	
6 _{FP}	Input	Raw Water Abstracted	Mi/d	9.91	9.90	9.92	9.90	10.04	10.05	10.06	10.07	10.08	10.09	10.10	10.12	10.14	10.17	10.20	10.23	10.26	10.30	10.34	10.38	10.42	10.46	10.50	10.55	10.60	10.65	10.71	10.77	10.84	
7 _{FP}	WRP4a-FP 7a _{FP}	Raw Water Exported	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8 _{FP}	WRP4a-FP 8a _{FP}	Raw Water Imported	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9 _{FP}	Input	Raw Water Losses and Operational Use	Mi/d	0.20	0.20	0.21	0.22	0.22	0.23	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.39	0.39	
10 _{FP}	WRP4a- FP 10a _{FP}	Non Potable Supplies	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
POTABLE WATER TO POINT OF DELIVERY FINAL PLANNING																																	
11 _{FP}	Input	Treatment Works Losses and Operational Use	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12 _{FP}	WRP4a-FP 12a _{FP}	Potable Water Imported	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
13 _{FP}	WRP4a-FP 13a _{FP}	Potable Water Exported	Mi/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14 _{FP}	Input	Distribution Input	Mi/d	10.07	9.64	9.65	9.63	9.76	9.77	9.77	9.78	9.78	9.79	9.80	9.82	9.84	9.86	9.88	9.91	9.94	9.97	10.01	10.05	10.09	10.12	10.16	10.20	10.25	10.29	10.35	10.41	10.47	
15 _{FP}	Input	Distribution Losses	Mi/d	1.45	1.02	1.02	1.02	1.22	1.22	1.22	1.22	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
16 _{FP}	Input	Distribution System Operational Use	Mi/d	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	0.13	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	0.13	0.13	
17 _{FP}	14 _{FP} -15 _{FP} -16 _{FP}	Water Delivered	Mi/d	8.49	8.49	8.50	8.48	8.41	8.42	8.42	8.42	8.43	8.44	8.45	8.46	8.48	8.50	8.53	8.55	8.58	8.62	8.65	8.69	8.72	8.76	8.79	8.83	8.88	8.93	8.98	9.04	9.09	
POTABLE WATER CUSTOMER USE FINAL PLANNING																																	
18 _{FP}	Input	Unmeasured Household - Population	000's	24.66	25.06	24.52	24.01	22.90	22.44	21.99	21.54	21.09	20.65	20.21	19.78	19.38	18.98	18.56	18.15	17.79	17.46	17.12	16.80	16.50	16.20	15.89	15.51	15.16	14.82	14.47	14.13	13.80	
19 _{FP}	Input	Unmeasured Household - Properties	000's	7.18	7.13	7.01	6.90	6.81	6.71	6.62	6.53	6.43	6.34	6.25	6.16	6.06	5.97	5.88	5.78	5.69	5.60	5.50	5.41	5.32	5.23	5.13	5.04	4.95	4.85	4.76	4.67	4.57	
20 _{FP}	18 _{FP} /19 _{FP}	Unmeasured Household - Occupancy Rate	h/pr	3.44	3.52	3.50	3.48	3.36	3.34	3.32	3.30	3.28	3.26	3.23	3.21	3.20	3.18	3.16	3.14	3.13	3.12	3.11	3.11	3.10	3.10	3.08	3.07	3.05	3.04	3.03	3.02		
21 _{FP}	Input	Measured Household - Population	000's	3.57	3.84	4.29	4.71	5.11	5.50	5.89	6.28	6.66	7.04	7.42	7.79	8.15	8.50	8.88	9.29	9.69	10.08	10.48	10.84	11.19	11.52	11.85	12.26	12.69	13.12	13.54	13.96	14.38	
22 _{FP}	Input	Measured Household - Properties	000's	1.44	1.54	1.73	1.90	2.07	2.23	2.39	2.56	2.72	2.88	3.04	3.20	3.35	3.50	3.66	3.81	3.96	4.11	4.26	4.39	4.53	4.65	4.78	4.93	5.08	5.23	5.37	5.52	5.66	
23 _{FP}	21 _{FP} /22 _{FP}	Measured Household - Occupancy Rate	h/pr	2.48	2.50	2.48	2.48	2.47	2.46	2.46	2.46	2.45	2.45	2.44	2.44	2.43	2.43	2.43	2.44	2.45	2.45	2.46	2.47	2.47	2.48	2.48	2.49	2.50	2.51	2.52	2.53	2.54	
24 _{FP}	Input	Unmeasured Non Household - Population	000's	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15		
25 _{FP}	Input	Unmeasured Non Household - Properties	000's	0.15	0.13	0.13	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08		
26 _{FP}	Input	Measured Non Household - Population	000's	0.56	0.56	0.57	0.57	0.58	0.58	0.59	0.59	0.60	0.60	0.61	0.61	0.62	0.63	0.63	0.64	0.66	0.67	0.68	0.69	0.70	0.71	0.73	0.74	0.76	0.77	0.78	0.80		
27 _{FP}	Input	Measured Non Household - Properties	000's	0.75	0.79	0.80	0.82	0.83	0.84	0.85	0.85	0.86	0.87	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.95	0.97	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.13	1.15	
28 _{FP}	18 _{FP} +21 _{FP} +24 _{FP} +26 _{FP}	Total Population	000's	28.887	29.574	29.484	29.396	28.701	28.634	28.573	28.512	28.452	28.399	28.348	28.298	28.262	28.223	28.186	28.185	28.251	28.322	28.390	28.453	28.507	28.553	28.597	28.642	28.737	28.833	28.928	29.023	29.119	
29 _{FP}	Input	Void Households	000's	0.45	0.36	0.36	0.37	0.37	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.40	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.42	0.43		
30 _{FP}	Input	Void Non Households	000's	0.16	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	
31 _{FP}	19 _{FP} +22 _{FP} +25 _{FP} +27 _{FP} +29 _{FP} +30 _{FP}	Total Properties	000's	10.116	10.135	10.213	10.292	10.373	10.452	10.529	10.607	10.683	10.759	10.837	10.913	10.987	11.055	11.123	11.193	11.268	11.340	11.415	11.475	11.531	11.580	11.632	11.711	11.788	11.863	11.938	12.010	12.080	
POTABLE WATER DELIVERED FINAL PLANNING																																	
32 _{FP}	Input	Water Taken Unbilled	Mi/d	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	0.13	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	0.13	0.13	
33 _{FP}	Input	Water Delivered Unmeasured Household	Mi/d	4.52	4.60	4.51	4.43	4.29	4.22	4.14	4.06	3.97	3.89	3.81	3.73	3.66	3.58	3.50	3.43	3.36	3.30	3.23	3.18	3.12	3.07	3.01	2.95	2.89	2.83	2.77	2.72	2.66	
34 _{FP}	Input	Unmeasured Household - USPL	Mi/d																														

Table WRP4a-FP: Final Planning WRP3 Supporting transfer and DO reduction data

ROW Ref.	DERIVATION	DESCRIPTION <i>[insert / delete non-numbered lines to suit]</i>	UNITS	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35			
2a _{FP}	Input as appropriate	Reductions in Final Planning Deployable Output. Total here and specify below	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
			MI/d																																
			MI/d																																
			MI/d																																
7a _{FP}	Input as appropriate	Final Planning Raw Water Exported. Total here and specify below	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
		to	MI/d																																
		to	MI/d																																
		to	MI/d																																
8a _{FP}	Input as appropriate	Final Planning Raw Water Imported. Total here and specify below	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		from	MI/d																																
		from	MI/d																																
		from	MI/d																																
10a _{FP}	Input as appropriate	Final Planning Non Potable Supplies. Total here and specify below	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		to	MI/d																																
		to	MI/d																																
		to	MI/d																																
12a _{FP}	Input as appropriate	Final Planning Potable Water Imported. Total here and specify below	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		from	MI/d																																
		from	MI/d																																
		from	MI/d																																
13a _{FP}	Input as appropriate	Final Planning Potable Water Exported. Total here and specify below	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		to	MI/d																																
		to	MI/d																																
		to	MI/d																																

Company:	Northumbrian Water
Resource Zone Name	Berwick & Fowberry Peak
Resource Zone Number:	2 of 3
Planning Scenario Name:	Critical Period
Chosen Level of Service:	Company Preferred

WRP6: Breakdown of Measured Households (Dry Year Baseline)

Cumulative breakdown

Row Ref	Derivation	Description	Units	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35
6.1	(year-1)+(6.2*6.3)	Total	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.2	(year-1)+(6.6+6.10+6.14+6.18+6.22)	Total	Properties	000's	0.21	0.39	0.57	0.74	0.91	1.08	1.25	1.42	1.59	1.75	1.92	2.08	2.24	2.40	2.56	2.72	2.87	3.03	3.18	3.32	3.45	3.58	3.73	3.88	4.04	4.19	4.34	4.49
6.3	6.1/6.2	Total	Occupancy	h/prop																												
6.4	(Blank)																															

Annual increase

6.5	6.6*6.7	Optant annual increase	Population	000's	0.00	0.32	0.33	0.33	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.33	0.16	0.15	0.15	0.14	0.13	0.13	0.12	0.12	0.11	0.10	0.09	0.09	0.08	0.08	0.08
6.6	Input	Optant annual increase	Properties	000's	0.00	0.15	0.13	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
6.7	Input	Optant annual increase	Occupancy	h/prop	0.00	2.12	2.53	2.65	2.66	2.68	2.69	2.70	2.71	2.73	2.74	2.76	2.79	2.84	2.83	2.79	2.74	2.71	2.68	2.68	2.68	2.71	2.72	2.68	2.64	2.60	2.57	2.54
6.8	Input	Optant annual increase	pcc	l/h/d	0.00	144.99	145.14	145.84	147.36	148.02	148.09	147.97	147.83	147.69	147.57	147.45	147.31	147.14	147.03	146.91	146.84	146.75	146.81	146.87	146.96	147.06	147.18	147.45	147.72	148.00	148.58	149.18
6.9	6.10*6.11	New Property annual increase	Population	000's	0.00	0.12	0.11	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.09	0.09	0.09	0.09	0.09	0.08	0.07	0.05	0.04	0.03	0.06	0.09	0.09	0.08	0.08	0.07
6.10	Input	New Property annual increase	Properties	000's	0.00	0.06	0.05	0.05	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.03	0.04	0.04	0.04	0.04	
6.11	Input	New Property annual increase	Occupancy	h/prop	0.00	2.15	2.15	2.15	2.15	2.15	2.14	2.14	2.14	2.13	2.13	2.12	2.12	2.12	2.12	2.13	2.13	2.13	2.13	2.13	2.14	2.14	2.14	2.14	2.14	2.15	2.15	2.15
6.12	Input	New Property annual increase	pcc	l/h/d	0.00	139.67	140.35	141.06	141.80	142.08	141.67	141.40	141.24	141.16	141.12	141.12	141.14	141.18	141.21	141.26	141.15	141.07	141.01	140.97	140.95	140.94	140.93	140.96	141.00	141.05	141.22	141.38
6.13	6.14*6.15	Change in OCC annual increase	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.14	Input	Change in OCC annual increase	Properties	000's																												
6.15	Input	Change in OCC annual increase	Occupancy	h/prop																												
6.16	Input	Change in OCC annual increase	pcc	l/h/d																												
6.17	6.18*6.19	Selected annual increase	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.17	0.18	0.18	0.18	0.18	
6.18	Input	Selected annual increase	Properties	000's														0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	
6.19	Input	Selected annual increase	Occupancy	h/prop														2.12	2.12	2.13	2.13	2.13	2.13	2.13	2.14	2.14	2.14	2.14	2.14	2.15	2.15	
6.20	Input	Selected annual increase	pcc	l/h/d														142.38	142.27	142.20	142.12	142.17	142.23	142.32	142.42	142.53	142.79	143.05	143.33	143.89	144.47	
6.21	6.22*6.23	Compulsory metered annual increase	Population	000's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.22	Input	Compulsory metered annual increase	Properties	000's																												
6.23	Input	Compulsory metered annual increase	Occupancy	h/prop																												
6.24	Input	Compulsory metered annual increase	pcc	l/h/d																												

Company:	<u>Northumbrian Water</u>
Resource Zone Name	<u>Berwick & Fowberry Peak</u>
Resource Zone Number:	<u>2 of 3</u>
Planning Scenario Name:	<u>Critical Period</u>
Chosen Level of Service:	<u>Company Preferred</u>

WRP8:Non-Household Sector Consumption (Dry Year Baseline)

Row Ref	Derivation	Description	2003 SIC codes	Units	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
8.1	Input	Primary products and metals		MI/d	0.41	0.40	0.40	0.40	0.40	0.40	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.42													
8.2	Input	Food, drink and tobacco		MI/d	0.18	0.18	0.19	0.20	0.21	0.22	0.24	0.25	0.27	0.29	0.31	0.33	0.35	0.38	0.40													
8.3	Input	Chemicals and oil refining		MI/d	0.35	0.32	0.31	0.29	0.27	0.25	0.24	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15													
8.4	Input	Other manufacturing		MI/d	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07													
8.5	Input	Public services		MI/d	0.18	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19													
8.6	Input	Other sectors		MI/d	0.55	0.53	0.55	0.56	0.56	0.57	0.58	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67													
8.7	Input	Unallocated		MI/d	1.38	1.33	1.35	1.34	1.35	1.35	1.36	1.37	1.37	1.38	1.39	1.40	1.40	1.41	1.42													
8.8	Input	Total		MI/d	3.13	3.01	3.04	3.03	3.03	3.05	3.07	3.09	3.11	3.14	3.17	3.20	3.24	3.28	3.32	3.35	3.39	3.42	3.45	3.49	3.52	3.56	3.59	3.63	3.67	3.70	3.74	3.78
8.9	Input																															
8.10	Input																															
8.11	Input																															
8.12	Input																															
8.13	Input																															
8.14	Input																															
8.15	Input																															
8.16	Input																															
8.17	Input																															
8.18	Input																															
8.19	Input																															
8.20	Input																															

Company:	<u>Northumbrian Water</u>
Resource Zone Name	<u>Berwick & Fowberry Peak</u>
Resource Zone Number:	<u>2 of 3</u>
Planning Scenario Name:	<u>Critical Period</u>
Chosen Level of Service:	<u>Company Preferred</u>

Table WRP9: Normal Year Final Planning Supply Demand Components

ROW Ref.	DERIVATION	DESCRIPTION	UNITS	Scenario Year 2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	
BASIC RESOURCES NORMAL YEAR																																	
3 _N	Input	Outage Allowance	MI/d	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
5 _N	Input	Water Available For Use (own sources)	MI/d	11.66	11.66	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	
RAW WATER NORMAL YEAR																																	
6 _N	Input	Raw Water Abstracted	MI/d	9.20	8.71	8.74	8.74	8.92	8.96	8.98	9.01	9.04	9.07	9.11	9.15	9.19	9.24	9.28	9.33	9.38	9.43	9.49	9.54	9.59	9.65	9.70	9.76	9.82	9.88	9.94	10.01	10.08	
7 _N	Input	Raw Water Exported (existing)	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8 _N	Input	Raw Water Imported (existing)	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9 _N	Input	Raw Water Losses and Operational Use	MI/d	0.20	0.20	0.21	0.22	0.22	0.23	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.39	0.39	0.39	
10 _N	Input	Non Potable Supplies (existing)	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
POTABLE WATER TO POINT OF DELIVERY NORMAL YEAR																																	
11 _N	Input	Treatment Works Losses and Operational Use	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12 _N	Input	Potable Water Imported	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
13 _N	Input	Potable Water Exported	MI/d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14 _N	Input	Distribution Input	MI/d	9.88	8.37	8.41	8.41	8.58	8.61	8.64	8.66	8.69	8.72	8.76	8.80	8.84	8.88	8.93	8.97	9.02	9.07	9.12	9.17	9.22	9.27	9.33	9.38	9.44	9.50	9.56	9.62	9.69	
15 _N	Input	Distribution Losses	MI/d	1.45	1.02	1.03	1.03	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.25	1.25	1.25	1.25	
16 _N	Input	Distribution System Operational Use	MI/d	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	0.13	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	0.13	0.13	
17 _N	14 _N -15 _N -16 _N	Water Delivered	MI/d	8.30	7.22	7.25	7.25	7.22	7.26	7.28	7.31	7.34	7.37	7.40	7.44	7.48	7.52	7.57	7.61	7.66	7.71	7.76	7.81	7.86	7.91	7.96	8.01	8.07	8.12	8.19	8.25	8.31	
POTABLE WATER DELIVERED NORMAL YEAR																																	
32 _N	Input	Water Taken Unbilled	MI/d	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	0.13	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	0.13	0.13	
33 _N	Input	Water Delivered Unmeasured Household	MI/d	4.45	4.52	4.43	4.36	4.22	4.15	4.07	3.99	3.91	3.83	3.75	3.67	3.60	3.52	3.45	3.37	3.31	3.24	3.18	3.13	3.07	3.02	2.96	2.90	2.84	2.78	2.73	2.67	2.62	
34 _N	Input	Unmeasured Household - USPL	MI/d	0.70	0.70	0.68	0.67	0.66	0.65	0.65	0.64	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.55	0.54	0.53	0.52	0.51	0.50	0.49	0.48	0.47	0.46	0.46	0.45	
35 _N	33 _N -34 _N	Unmeasured Household - Consumption	MI/d	3.75	3.82	3.75	3.69	3.55	3.50	3.43	3.35	3.28	3.21	3.14	3.07	3.00	2.94	2.87	2.81	2.75	2.70	2.65	2.60	2.55	2.51	2.46	2.41	2.36	2.31	2.26	2.22	2.18	
36 _N	Input	Unmeasured Household - PCC	l/h/d	151.90	152.62	152.77	153.52	155.12	155.81	155.88	155.75	155.61	155.47	155.34	155.21	155.06	154.89	154.76	154.64	154.57	154.48	154.54	154.60	154.70	154.80	154.93	155.21	155.49	155.79	156.40	157.03	157.68	
37 _N	Input	Water Delivered Measured Household	MI/d	0.47	0.50	0.57	0.62	0.68	0.74	0.79	0.84	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.26	1.31	1.36	1.42	1.47	1.52	1.56	1.61	1.67	1.73	1.79	1.85	1.91	1.97	
38 _N	Input	Measured Household - USPL	MI/d	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.28	0.28	0.29	0.30	
39 _N	37 _N -38 _N	Measured Household - Consumption	MI/d	0.39	0.42	0.47	0.52	0.57	0.61	0.66	0.70	0.75	0.79	0.83	0.88	0.92	0.96	1.00	1.05	1.10	1.14	1.19	1.23	1.28	1.32	1.36	1.41	1.46	1.51	1.56	1.61	1.67	
40 _N	Input	Measured Household - PCC	l/h/d	179.03	173.89	170.44	168.39	167.24	166.07	164.69	163.51	162.51	161.66	160.96	160.35	159.81	159.31	159.14	159.14	159.17	159.19	159.32	159.42	159.54	159.65	159.80	160.16	160.54	160.93	161.57	162.22	162.89	
41 _N	Input	Water Delivered Unmeasured Non Household	MI/d	0.13	0.12	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	
42 _N	Input	Unmeasured Non Household - USPL	MI/d	0.02	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
43 _N	41 _N -42 _N	Unmeasured Non Household - Consumption	MI/d	0.12	0.10	0.10	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	
44 _N	Input	Water Delivered Measured Non Household	MI/d	3.13	3.01	3.04	3.03	3.03	3.05	3.07	3.09	3.11	3.14	3.17	3.20	3.24	3.28	3.32	3.35	3.39	3.42	3.45	3.49	3.52	3.56	3.59	3.63	3.67	3.70	3.74	3.78	3.82	
45 _N	Input	Measured Non Household - USPL	MI/d	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
46 _N	44 _N -45 _N	Measured Non Household - Consumption	MI/d	3.10	2.98	3.01	3.00	3.00	3.02	3.03	3.06	3.08	3.11	3.14	3.17	3.21	3.24	3.28	3.32	3.35	3.38	3.42	3.45	3.49	3.52	3.56	3.59	3.63	3.66	3.70	3.74	3.77	
47 _N	Input	Void Properties - USPL	MI/d	0.06	0.05	0.05	0.05	0.05	0.05	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	
LEAKAGE NORMAL YEAR																																	
48 _N	Input	Total Leakage	MI/d	2.32	1.90	1.90	1.90	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	
49 _N	Input	Total Leakage	l/pr/d	229.34	187.46	186.03	184.61	202.44	200.91	199.44	197.98	196.57	195.18	193.77	192.43	191.14	189.96	188.80	187.62	186.37	185.18	183.97	183.00	182.12	181.34	180.53	179.32	178.15	177.01	175.91	174.86	173.85	
SUPPLY DEMAND BALANCE NORMAL YEAR																																	
50 _N	5 _N +(8 _N +12 _N)-(7 _N +13 _N)	Total Water Available For Use	MI/d	11.66	11.66	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	
51 _N	Input	Available Headroom	MI/d	2.81	3.29	3.78	3.78	3.61	3.58	3.55	3.53	3.50	3.47	3.43	3.39	3.35	3.31	3.26	3.22	3.17	3.12	3.07	3.02	2.97	2.92	2.8							