APPENDIX A –

Model Static Input Data and Run Code

[from basecase run using current demands called “SimBase”]

Static data tables included are:

All Model Nodes
All Model Arcs
Reservoirs Nodes
Reservoir Rules
Reservoir SAE Data
Demand Patterns
Lookup Tables (WW Returns, Spillway Curves, etc.)
Independent Wastewater Return Patterns
Arc Minimum Flows
County Agricultural Data
Crop Irrigation Coefficients

OCL files included are:

main.ocl
udef_list.ocl
constants.ocl
agric_calculation.ocl
agric_allocation.ocl
filter_inflows.ocl
WW_Returns.ocl
Routing_neuse.ocl
routing_cf.ocl
Greensboro_ops.ocl
Jordan_ops.ocl
drought_protocol_jordan.ocl
Jordan_WQ_WS_Accounts.ocl
Harris_ops.ocl
OWASA_ops.ocl
Randleman_ops.ocl
SilerCity_ops.ocl
Fayetteville_ops.ocl
FtBragg_ops.ocl
SpringLake_ops.ocl
falls_bdam_ops.ocl
falls_flood_ops.ocl
Falls_Bdam_WS_WQ_Accounts.ocl
raleigh_ops.ocl
upper_eno_ops.ocl
durham_ops.ocl
crabtree_ops.ocl
Johnston_ops.ocl
Fuquay_ops.ocl
buckhorn_Wilson_ops.ocl
drought_plans_cf.ocl
drought_plans_neuse.ocl

Model Nodes

Node No.	Type	Inflow	Name
020	Junction	OCL	node 20
021	Demand	None	Rockingham_40% (Irrigation)
030	Reservoir	None	Reidsville Dam
031	Demand	None	Reidsville Demand_02-79-020
040	Junction	OCL	Haw River_Benaja gage
041	Demand	None	Rockingham_60%
043	Demand	None	Guilford_13%
044	Junction	OCL	Greensboro Emer. Intake
050	Junction	None	Node 50
051	Demand	None	Guilford_20%
070	Reservoir	OCL	Old Stony Creek Res
071	Junction	None	Burlington Total WD PWS 02-01-010
072	Junction	None	Burlington Total WW
075	Demand	None	Haw River 02-01-020
077	Demand	None	Green Level Demand_02-01-030
080	Junction	None	node 80
081	Demand	None	Alamance_35%
083	Demand	None	Caswell_100%
090	Junction	OCL	Haw River_Haw River gage
100	Junction	None	node 100
110	Junction	OCL	ReedyFork_Oak Ridge gage
111	Demand	None	Forsyth_50%
112	Reservoir	OCL	Lake Higgins
120	Reservoir	OCL	Brandt Res
121	Junction	None	Greensboro Combined WS
122	Junction	None	GB System Total WW
123	Demand	None	Greensboro Total Demand_02-41-010
140	Reservoir	OCL	Lake Townsend
145	Junction	OCL	ReedyFork_Gibsonville gage
148	Junction	Pattern	Martin Marietta-Hicone WW Return
160	Junction	None	Node 160
161	Demand	None	Guilford_40%
170	Junction	OCL	North Buffalo_Creek gage
180	Junction	None	Node 180
192	Junction	Pattern	Colonial Pipeline WW Return
200	Junction	None	Node 200
210	Junction	OCL	WForkDeepRiver_HP gage
211	Demand	None	Forsyth_Other_50%
220	Reservoir	OCL	High Point Res
221	Junction	None	High Point Combined WS
222	Junction	None	High Point Total WW
223	Demand	None	High Point Service Area Demand_02-41-020
224	Junction	None	HP WW Receive
225	Junction	None	HP Westide WW (NC0024228) IBT
227	Junction	Pattern	Sedgefield CC WW 0754-0001
230	Junction	None	Node 230
231	Demand	None	Guilford_12%
260	Junction	OCL	Deep River_Randleman gage
261	Demand	None	City of Randleman Demand_02-76-015
263	Demand	None	Randolph_Other_36%
270	Reservoir	OCL	Randleman Res
271	Junction	None	PTRA Randleman Demand_30-76-010
280	Junction	OCL	DeepRiver_Ramseur gage
281	Demand	None	Randolph_28%
282	Junction	Pattern	Asheboro WW Return_nc0026123

Node No.	Type	Inflow	Name
300	Reservoir	OCL	Ramseur Res
301	Demand	None	Ramseur Demand_02-76-020
310	Junction	OCL	Node 310
311	Demand	None	Orange_40%
320	Reservoir	None	Graham Mebane Res
321	Demand	None	Graham-Mebane Demand_02-01-015
324	Reservoir	OCL	Siler City Upper Reservoir
325	Reservoir	OCL	Siler City Lower Reservoir
327	Demand	None	Siler City Demand_03-19-010
328	Junction	OCL	Rocky River discharge
330	Junction	None	Node 330
331	Demand	None	Guilford_15%
340	Reservoir	OCL	Mackintosh Res
341	Demand	None	Burlington Demand_02-01-010
350	Junction	None	Node 350
360	Junction	None	Node 360
361	Demand	None	Alamance_Other_35%
370	Junction	None	Node 370
371	Demand	None	Alamance_30%
380	Junction	OCL	Node 380
381	Demand	None	Orange_24%
390	Reservoir	None	Cane Creek Res
395	Reservoir	OCL	Stone Quarry
396	Junction	None	Stone Quarry Spill
400	Junction	OCL	HawRiver_Bynum gage
401	Demand	None	Pittsboro Demand_03-19-015
403	Demand	None	Chatham_50%
410	Junction	None	Node 410
411	Demand	None	Wake_75%
430	Reservoir	OCL	Univ Lake
431	Demand	None	OWASA Demand_03-68-010
440	Junction	None	Node 440
441	Demand	None	Orange_36%
450	Junction	OCL	NewHopeCk_Blands
453	Junction	None	Durham Triangle Co WW NC0026051
460	Junction	None	460
461	Demand	None	Durham_100%
463	Junction	None	Durham So WRF NC0047597
464	Junction	Pattern	Fearington Utilities WW_nc0043559
470	Reservoir	OCL	Jordan Lake
471	Demand	None	Cary Apex water supply
472	Junction	None	Cary/Apex Total WW
473	Demand	None	Chatham Co. North Demand
474	Demand	None	RTP Demand
475	Demand	None	Jordan Make Up Demand
477	Demand	None	Morrisville demand
479	Junction	None	Cary/Apex WTF
480	Junction	None	Node 480
481	Demand	None	Chatham_5%
483	Demand	None	Performance Fibers / Allied Signal Demand
487	Demand	None	Progress Cape Fear water supply
490	Junction	None	Buckhorn Dam Upstream 1
491	Demand	None	Sanford Water Supply
495	Junction	OCL	Node 495
497	Junction	None	Node 497
510	Junction	None	Node 510

Node No.	Type	Inflow	Name
511	Demand	None	Lee_38%
520	Reservoir	OCL	Harris Lake
521	Demand	None	Progress Harris water supply
525	Junction	None	Harris outflow
526	Junction	None	Harris spill
527	Junction	OCL	Buckhorn Creek gage
528	Reservoir	None	Aux Reservoir
531	Demand	None	Wake_20%
540	Junction	None	Node 540
541	Demand	None	Wake_5%
550	Junction	OCL	CapeFearRiver_Lillington gage
551	Demand	None	Harnett County water supply
553	Demand	None	Harnett_35%
554	Junction	None	Harnett Co. Total WW
555	Reservoir	None	Lillington Routing
556	Junction	None	So HCRWS NC0088366
560	Junction	None	Node 560
570	Junction	OCL	Ramseur WWTP Disch
580	Junction	OCL	Robbins flow
581	Demand	None	Randolph_36%
589	Junction	OCL	Robbins Montogmery Co IBT
590	Junction	OCL	Node 590
591	Junction	Pattern	Robbins Demand_03-63-015
592	Junction	Pattern	Star WWTP Return_nc0058548
593	Demand	None	Montgomery_100%
595	Demand	None	Moore_25%
600	Junction	OCL	Node 600
601	Demand	None	Pilgrims Pride WTP
603	Demand	None	Moore_40%
605	Demand	None	Goldston-Gulf WS PWS 03-19-025
610	Junction	OCL	Node 610
620	Junction	None	Node 620
621	Demand	None	Chatham_45%
623	Demand	None	Lee_7%
640	Junction	OCL	Deep River_Moncure gage
650	Junction	None	Node 650
660	Junction	OCL	Node 660
663	Demand	None	Dunn Demand
664	Junction	None	No. Harnett WW NC0021636
670	Junction	None	CarolinaTraceWW nc0038831
671	Demand	None	Lee_55%
674	Demand	None	Carolina Trace WS_03-53-101
680	Junction	OCL	Node 680
681	Demand	None	Harnett_Other_50%
686	Junction	None	Harnett Erwin WWTP NC0001406
690	Junction	None	Node 690
691	Demand	None	Harnett_15%
700	Junction	OCL	Little River_Linden gage
701	Demand	None	Carthage Demand_03-63-025
710	Junction	None	Node 710
713	Demand	None	Moore_35%
719	Demand	None	Spring Lake WS_03-26-020
720	Junction	OCL	Node 720
721	Demand	None	Old North Ut. FBragg Demand_50-26-019
722	Junction	None	FBragg WW NC0003964
730	Junction	OCL	Node 730

Node No.	Type	Inflow	Name
733	Demand	None	FayettevillePWC Demand_03-26-010
739	Reservoir	None	Fayetteville_Routing
740	Junction	None	Node 740
741	Demand	None	Cumberland_45%
760	Reservoir	OCL	Glenville Res
770	Junction	OCL	Monstanto intake
771	Demand	None	Monsanto water supply
772	Junction	Pattern	Raeford WWTP Return_nc0026514
773	Demand	None	Hoke_100%
774	Junction	Pattern	Oak Resins WW NC0003719
775	Demand	None	Cumberland_40%
777	Reservoir	OCL	L&D #3
780	Junction	OCL	CapeFearRiver_Tarheel Gage
781	Demand	None	Dupont WS
783	Demand	None	Cumberland_15%
785	Demand	None	LCFWSA_BladenBluff Demand_50-09-012
790	Reservoir	OCL	L&D #2
800	Junction	None	Node 800
801	Demand	None	Bladen_20%
810	Junction	None	Node 810
811	Demand	None	Bladen_60%
820	Junction	OCL	CapeFearRiver_Kelly_L&D#1
821	Demand	None	Bladen_Other_20%
823	Demand	None	Cape Fear PUA-Wilmington Demand_04-65-010
825	Demand	None	LCFWSA_KingsBluff Demand_50-09-013
903	Demand	None	Jamestown Demand_02-41-030
904	Demand	None	Archdale Demand Randleman_02-76-030
906	Demand	None	Randolph Co Demand Randleman
910	Junction	Pattern	Franklinville WW NC007820
921	Demand	None	Orange Co Demand Jordan
923	Demand	None	Holly Springs Demand_03-92-050
930	Junction	None	Western Wake WRF_nc0088846
940	Demand	None	Broadway WS_03-53-015
960	Junction	Pattern	Elizabethtown WWTP Return_nc0026671
962	Junction	Pattern	Danaher Ind. WWTP NC0001121
999	Junction	None	Terminal Node
1010	Reservoir	OCL	Orange Upstream Pond
1046	Demand	None	Orange_Alamance Demand_03-68-020
1050	Reservoir	OCL	West Fork Eno Reservoir
1052	Demand	None	WFER_Ag
1060	Reservoir	OCL	Lake Orange
1062	Demand	None	Or_Pond_Ag
1080	Reservoir	OCL	Corp. Lake
1100	Reservoir	OCL	Lake Ben Johnston
1105	Junction	None	Piedmont Minerals
1106	Demand	None	Hillsborough Demand_03-68-015
1107	Junction	None	Channel Loss
1109	Junction	None	Hillsborough WWTP_nc0026433
1110	Junction	OCL	Eno_Hillsborough Gage
1112	Demand	None	EnoDurha_Ag
1115	Junction	OCL	Eno_Durham gage
1116	Demand	None	Piedmont Minerals Demand
1120	Reservoir	None	Teer Quarry
1140	Reservoir	Time Series	Lake Michie
1142	Demand	None	Michie_Ag
1151	Junction	None	Durham Demand_03-32-010

Node No.	Type	Inflow	Name
1162	Demand	None	Durham Service Area Demand
1163	Junction	None	Durham NWRF NC0023841
1200	Reservoir	Time Series	Little River Res.
1202	Demand	None	LitRes_Ag
1205	Junction	OCL	Node 205
1230	Reservoir	Time Series	Beaverdam Lake
1250	Reservoir	OCL	Lake Holt_Butner
1252	Junction	OCL	Kerr Lake Indirect Transfer
1254	Junction	None	Holt Withdrawal
1256	Demand	None	SGWASA Demand_02-39-107
1258	Demand	None	Creedmor Demand_02-39-015
1259	Junction	None	SGWASA Total WW Ret
1270	Reservoir	OCL	Lake Rogers
1290	Reservoir	OCL	Wake Forest Lake
1300	Reservoir	OCL	Falls Lake
1302	Demand	None	Falls_Ag
1306	Demand	None	Raleigh Demand_03-92-010
1307	Junction	Pattern	Riverplace II LLC Discharge_nc0001376
1310	Reservoir	None	Lag Falls Release
1318	Demand	None	Old Burlington Industries
1320	Junction	OCL	Smith Confluence
1400	Reservoir	OCL	#1
1401	Junction	None	Cary NWRF NC0048879
1402	Reservoir	OCL	#2
1403	Junction	OCL	Quarry Dewatering
1404	Reservoir	OCL	#3
1405	Junction	OCL	Apex WRF NC006405
1406	Reservoir	OCL	#5A
1407	Junction	Pattern	Motiva Enterprises WW_nc0022217
1408	Reservoir	OCL	#18
1409	Junction	OCL	Fuquay-Varina WW_nc0066150&nc0066516
1410	Reservoir	OCL	#20A
1412	Reservoir	OCL	#23 (Lake Crabtree)
1414	Reservoir	OCL	#11A
1416	Reservoir	OCL	#25
1418	Reservoir	OCL	#22B
1420	Reservoir	OCL	Lake Wheeler
1422	Reservoir	OCL	#13
1424	Junction	None	Crabtree flood control outflow
1440	Reservoir	OCL	Lake Benson
1445	Reservoir	OCL	Lake Johnson
1450	Reservoir	OCL	Lake Raleigh
1471	Junction	OCL	Cary SCWRF NC0065102
1480	Junction	OCL	Middle Creek Gage
1482	Demand	None	Middl_Ag
1500	Reservoir	OCL	Buckhorn Reservoir
1502	Demand	None	Buckhorn_Ag
1506	Demand	None	Wilson Demand_04-98-010
1520	Junction	OCL	Wiggons Mill Lake
1528	Junction	OCL	Tar River Emergency PS
1560	Junction	OCL	Hookerton gage
1562	Demand	None	Hooke_Ag
1563	Junction	Pattern	Stantonsburg WWTP_nc0007536
1565	Junction	Pattern	Snow Hill WWTP_nc0020842
1567	Junction	Pattern	Farmville WWTP_nc0029572
1569	Junction	Pattern	Maury Sant. Dist WWTP_nc0061492

Node No.	Type	Inflow	Name
1570	Junction	OCL	Little Contentnea Confluence
1600	Junction	OCL	Crabtree Creek_Confluence
1620	Junction	OCL	Walnut Creek Confluence
1630	Junction	OCL	Neuse River_Clayton Gage
1632	Demand	None	Clayt_Ag
1640	Reservoir	None	Lag Clayton Gage
1643	Junction	Pattern	TransMontaigne WW_nc0003549
1645	Junction	Pattern	Magellan Terminals WW_nc0052311
1646	Demand	None	Johnston County Demand_03-51-070
1647	Reservoir	None	JCo Active Quarry
1648	Reservoir	None	JCo Aband Quarry
1649	Junction	None	Quarry Spill
1650	Junction	OCL	Johnston Co Intake 1
1652	Junction	None	JCo Intake 2
1653	Junction	None	Quarry Refill
1654	Junction	None	JCo WD Jnc
1660	Junction	OCL	Neuse River_Smithfield Gage
1666	Demand	None	Smithfield Demand_03-51-010
1675	Junction	None	Johnston County WWTP_nc0030716
1700	Junction	OCL	Swift Creek_Confluence
1705	Junction	Pattern	Aqua NC Inc. Hawthorne WWTP_nc0049662
1706	Demand	None	Fuquay-Varina Demand_03-92-055
1740	Reservoir	OCL	Little River Reservoir (Raleigh proposed)
1747	Junction	OCL	Kenly WWTP_nc0064891
1750	Junction	OCL	Little River_Princeton gage
1752	Demand	None	Litpr_Ag
1753	Junction	Pattern	Princeton WWTP_nc0026662
1755	Junction	OCL	Princeton WW Disch
1756	Demand	None	Benson Demand_03-51-025
1757	Junction	None	Benson NC0020389
1759	Junction	Pattern	Jerry_G_Williams WW
1760	Junction	OCL	Progress Energy
1766	Demand	None	Progress Lee Steam Plant Demand_CUR0001
1770	Junction	None	Node 770
1775	Junction	OCL	Little River_Confluence
1780	Junction	OCL	Neuse River_Goldsboro Gage
1782	Demand	None	Golds_Ag
1786	Demand	None	Goldsboro Demand_04-96-010
1787	Junction	Pattern	La Grange WWTP_nc0021644
1790	Reservoir	None	Lag Goldsboro Gage
1795	Junction	OCL	NRWASA Intake
1800	Junction	OCL	Neuse River_Kinston Gage
1802	Demand	None	Kinst_Ag
1806	Demand	None	Neuse Regional WASA_60-54-001
1845	Junction	None	Contentnea Sewerage District WWTP_nc0032077
1847	Junction	Pattern	Unifi-Kinston LLC_nc0020541
1850	Junction	OCL	Contentea Crk_Confluence
1900	Junction	OCL	Weyerhauser
1902	Demand	None	Weyer_Ag
1906	Demand	None	Weyerhauser Demand_CUR0052
1999	Junction	OCL	New Bern
2000	Junction	None	Terminal

Model Arcs

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
020	021	Rockingham 40%	None	None	None
020	030	20>30	None	None	None
030	031	Reidsville water supply	None	None	None
030	040	Reidsville release	Pattern	None	None
031	040	ReidsWW NC0024881/0046345	None	None	None
031	121	Reidsville to GB Total WS	None	None	None
040	041	Rockingham 60%	None	None	None
040	043	Guilford 13%	None	None	None
040	044	40>44	None	None	None
044	050	GB Townsend WS	None	None	None
044	140	GB Haw Emer. WS	None	None	None
050	051	Guilford 20%	None	None	None
050	080	50>80	None	None	None
070	071	Burlington Stony Ck WD	None	None	None
070	080	Old Stony Crk release	None	None	None
071	075	HawRiver Burl. WS	None	None	None
071	121	Burlington to GBoro WS	None	None	None
071	341	Burlington Demand	None	None	None
072	100	BurlEastWW_nc0023868	None	None	None
072	122	Burlington WW to GB	None	None	None
072	350	BurlSouthWW_nc0023876	None	None	None
075	072	HawRiv Burl WW	None	None	None
075	1046	Or_Ala HawRiver WS	None	None	None
077	072	GreenLevel WW to Burl.	None	None	None
080	081	Alamance 35%	None	None	None
080	083	Caswell 100%	None	None	None
080	090	80>90	None	None	None
090	100	90>100	None	None	None
100	360	100>360	None	None	None
110	111	Forsyth 50%	None	None	None
110	112	Oak Ridge Gage Flow	None	None	None
112	120	Higgins Outflow	None	None	None
120	121	GB Mitchell WS	None	None	None
120	140	Brandt release	Pattern	None	None
121	123	GB Total Demand	None	None	None
121	140	GB Townsend WW NC0081671	None	None	None
121	903	Jamestown GB WS	None	None	None
122	170	GB NBuff WW NC0024325	None	None	None
122	180	GB TZOs WW NC0047384	None	None	None
122	224	GB WW to HP	None	None	None
123	122	GB System Total WW	None	None	None
140	121	GB Townsend WD	None	None	None
140	145	G/T release	OCL	None	None
145	160	145>150	None	None	None
148	145	Mmarietta Hicone WW	None	None	None
160	050	160>50	None	None	None
160	161	Guilford 40%	None	None	None
170	180	170>180	None	None	None
180	160	180>160	None	None	None
192	200	Colonial Pipeline WW	None	None	None
200	220	200>220	None	None	None
210	200	210>200	None	None	None
210	211	Forsyth Other 50%	None	None	None
220	221	High Point F. Ward WS	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
220	230	High Pt release	Pattern	None	None
221	223	High Point Total Demand	None	None	None
221	903	Jamestown HP WS	None	None	None
222	225	HPWestWW_IBT_nc0024228	None	None	None
222	230	HP Eastside WW NC0024210	None	None	None
223	222	HP WW to HP Total WW	None	None	None
224	222	HP WW Receive	None	None	None
227	224	Sedgefield WW to HP	None	None	None
230	231	Guilford 12%	None	None	None
230	260	230>260	None	None	None
260	263	Randolph Other 36%	None	None	None
260	270	260>270	None	None	None
261	280	RandlemanWW_nc0025445	None	None	None
270	271	Total Randleman WD	None	None	None
270	280	Randleman release	OCL	None	None
271	121	GB PTRA WS	None	None	None
271	221	High Point PTRA WS	None	None	None
271	261	Randleman PTRA WS	None	None	None
271	270	PTRA WW NC0087866	None	None	None
271	903	Jamestown PTRA WS	None	None	None
271	904	Archdale PTRA WS	None	None	None
271	906	Randolph Co PTRA WS	None	None	None
280	281	Randolph 28%	None	None	None
280	560	280>560	None	None	None
282	280	Asheboro WW_nc0026123	None	None	None
300	280	Ramseur release	None	None	None
300	301	Ramseur WS	None	None	None
301	570	Ramseur WW NC0026565	None	None	None
310	311	Orange 40%	None	None	None
310	320	310>320	None	None	None
320	100	GraMebane release	Pattern	None	None
320	321	Graham Mebane Demand	None	None	None
321	072	G-M Burl. WW	None	None	None
321	077	Green Level Graham WS	None	None	None
321	100	GrMebTotWW_nc0045292	None	None	None
324	325	Siler City Upper>Lower	None	None	None
325	327	Siler City water supply	None	None	None
325	328	325>328	OCL	None	None
327	328	Siler City WW NC0026441	None	None	None
328	640	Rocky River	None	None	None
330	340	330>340	None	None	None
340	071	Burlington Lk Mackintosh	None	None	None
340	331	Guilford_15%	None	None	None
340	350	Mackintosh release	None	None	None
341	072	Burlington Total WW	None	None	None
341	350	BurlMackWW_nc0083828	None	None	None
350	360	350>360	None	None	None
360	361	Alamance Other 35%	None	None	None
360	370	360>370	None	None	None
370	371	Alamance 30%	None	None	None
370	400	370>400	None	None	None
380	381	Orange 24%	None	None	None
380	390	380>390	None	None	None
390	370	Cane Creek release	Pattern	None	None
390	395	CaneCk>StoneQ Trans.	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
390	431	CaneCk WD	None	Pattern	None
395	396	StoneQuarry Spill	None	None	None
395	431	Stone Quarry WD	None	Pattern	None
400	401	Pittsboro Demand	None	None	None
400	403	Chatham 50%	None	None	None
400	410	400>410	None	None	None
401	410	Pittsboro WWTP_nc0020354	None	None	None
410	411	Wake 75%	None	None	None
410	470	410>470	None	None	None
430	431	430>431	None	None	None
430	440	UnivLake release	None	None	None
431	440	OWASA WW_nc0025241	None	None	None
440	441	Orange 36%	None	None	None
440	450	440>450	None	None	None
450	410	450>410	None	None	Mirror
450	461	450.461	None	None	None
453	470	Co Triangle WWTP nc002605	None	None	None
460	450	Durham So. WW Disch	None	None	None
463	460	Durham So. WW Disch.	None	None	None
464	460	Birchwood WW	None	None	None
470	473	Chatham Co. North WS	None	None	None
470	475	Jordan Make Up Demand	None	None	None
470	479	Eastern Intake WD	None	None	None
470	480	Jordan release	OCL	None	None
470	921	Jordan Lake to Orange Co	None	None	None
471	472	Cary/Apex WW	None	None	None
472	453	Cary DTC WW	None	None	None
472	930	Cary/Apex Western Wake WW	None	None	None
472	1401	Cary North WW Ret	None	None	None
472	1405	Apex WW Ret	None	None	None
472	1471	Cary SWRF nc0065102	None	None	None
473	470	Chatham No. WW NC0064093	None	None	None
474	472	RTP Cary WW	None	None	None
477	472	Morrisville WW	None	None	None
479	470	Cary/Apex WTF WW	None	None	None
479	471	Cary WS	None	None	None
479	474	RTP Supply	None	None	None
479	477	Morrisville WS	None	None	None
479	923	HollySpring JL WS	None	None	None
479	1151	Durham JL WS	None	None	None
480	481	Chatham 5%	None	None	None
480	483	Allied Signal Demand	None	None	None
480	487	Progress Cape Fear Demand	None	None	None
480	490	480>490	None	None	None
483	480	AlliedSignal WW	None	None	None
487	490	Progress CF Discharge	None	None	None
490	491	Sandford Demand	None	None	None
490	495	490>500	None	None	None
491	490	491>490	None	None	None
491	610	Sanford WW_NC0024147	None	None	None
491	674	Sanford to Carolina Trace	None	None	None
491	940	Sanford to Broadway WS	None	None	None
495	497	495>497	None	None	None
497	510	497>510	None	None	None
510	511	Lee 38%	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
510	540	510>540	None	None	None
520	521	Progress Harris Demand	None	None	None
520	525	Harris Min Release	None	None	None
520	526	Harris Spill Arc 1	None	None	None
520	528	Aux Refill	None	None	None
520	531	Wake Irrig Demand_20%	None	None	None
521	520	Progress Harris WW	None	None	None
525	527	525>527	None	None	None
526	525	Harris spill arc 2	None	None	None
527	510	527>510	None	None	None
528	525	Aux Overflow	None	None	None
540	541	Wake 5%	None	None	None
540	550	540>550	None	None	None
550	551	Harnett County Demand	None	None	None
550	553	Harnett 35%	None	None	None
550	555	Lillington_Unrouted_Flow	OCL	None	None
551	554	Harnett Co. WW	None	None	None
551	719	Spring Lake Harnett WS	None	None	None
551	721	FBragg Harnett WS	None	None	None
551	923	HS Hart. Co. WS	None	None	None
551	1706	Fuquay from Harnett	None	None	None
554	550	Harnett WTP WW_nc0007684	None	None	None
554	556	Harnett So WW_nc0088366	None	None	None
554	664	No Harnett WW_nc0021636	None	None	None
554	686	HarErwWWnc0064521_0001406	None	None	None
555	650	Lillington_Routed_Flow	None	None	None
556	720	Harnett So WW	None	None	None
560	570	560>570	None	None	None
570	580	570>580	None	None	None
580	581	Randolph 36%	None	None	None
580	600	580>600	None	None	None
589	591	Robbins Mont. Co. WS	None	None	None
590	580	590>580	None	None	None
590	591	Robbins CB Brooks	None	Pattern	None
590	593	Montgomery 100%	None	None	None
590	595	Moore 25%	None	None	None
591	580	Robbins WW	None	None	None
592	590	Star WW	None	None	None
600	601	Lee Cummock Demand	None	None	None
600	603	Moore 40%	None	None	None
600	605	Goldston Gulf Demand	None	Pattern	None
600	610	600>610	None	None	None
601	610	LeeCty WW	None	None	None
610	620	610>620	None	None	None
620	621	Chatham 45%	None	None	None
620	623	Lee 7%	None	None	None
620	640	620>640	None	None	None
640	480	640>480	None	None	None
650	660	650>660	None	None	None
660	663	Dunn Demand	None	None	None
660	671	Lee_55%	None	None	None
660	680	660>680	None	None	None
663	680	Dunn WW	None	None	None
663	690	DunnWWTP	None	None	None
663	721	FBragg Dunn WS	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
663	1756	Benson Dunn WS	None	None	None
664	660	No Harnett WW Disch	None	None	None
670	660	670>660	None	None	None
674	670	CarolinaTraceWW_nc0038831	None	Pattern	None
680	681	Harnett Other 50%	None	None	None
680	690	680>690	None	None	None
686	680	Erwin South WW	None	None	None
690	691	Harnett 15%	None	None	None
690	730	690>730	None	None	None
700	701	Carthage Demand	None	None	None
700	710	700>710	None	None	None
710	713	Moore 35%	None	None	None
710	720	710>720	None	None	None
719	720	Spring Lake WWTP	None	None	None
720	690	720>690	None	None	None
720	721	Ft. Bragg Demand	None	None	None
721	722	FBragg WW	None	None	None
722	556	FBragg Harnett WW	None	None	None
722	720	Spring Lake WW	None	None	None
730	733	Fay POHoffer	None	None	None
730	739	730>739	None	None	None
733	719	Spring Lake Fayet WS	None	None	None
733	721	FBragg Fayett. WS	None	None	None
733	740	FayettevillePOH_CrossWW	None	None	None
733	770	FayettevilleRockfishCreek	None	None	None
739	740	Fayetteville_Routed_Flow	None	None	None
740	741	Cumberland 45%	None	None	None
740	770	740>770	None	None	None
760	733	Fay. Glenville WD	None	Pattern	None
760	740	Glenville release	Pattern	None	None
770	771	Monsanto Demand	None	None	None
770	773	Hoke 100%	None	None	None
770	775	Cumberland 40%	None	None	None
770	777	770.777	None	None	None
771	770	Monsanto WW	None	None	None
772	770	Raeford WW	None	None	None
774	770	Oak Resins WW	None	None	None
777	780	L&D #3 Outflow	None	None	None
780	781	Dupont Wsupply	None	None	None
780	783	Cumberland 15%	None	None	None
780	785	Bladen Bluffs WD	None	None	None
780	790	780>790	None	None	None
781	790	Dupont WW	None	None	None
785	790	LCFWSAWW_nc0078344	None	None	None
790	800	L&D #2 Outflow	None	None	None
800	801	Bladen 20%	None	None	None
800	810	800>810	None	None	None
810	811	Bladen 60%	None	None	None
810	820	810>820	None	None	None
820	821	Bladen Other 20%	None	None	None
820	823	Wilmington Demand	None	None	None
820	825	Lower CF WSA Demand	None	None	None
820	999	820>999	None	None	None
904	224	Archdale WW to HP	None	None	None
910	280	Franklinville WW	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
921	321	Orange Co. To GrMeb	None	None	None
921	1106	Orange Co. To Hillsb.	None	None	None
921	1162	Orange Co. to Durham	None	None	None
923	520	HollySprings WW NC0063096	None	None	None
930	497	Western Wake Discharge	None	None	None
940	540	Broadway WW_nc0059242	None	Pattern	None
960	790	Elizabethtwon WW to CFR	None	None	None
962	790	Dahaner WW	None	None	None
1010	1060	Orange pond inflow	None	None	None
1010	1062	1010>1062	None	None	None
1046	1100	Or-Ala WW NC0082759	None	None	None
1050	1052	1050>1052	None	None	None
1050	1080	1050>1080	OCL	None	None
1060	1080	1060>1080	OCL	None	None
1080	1046	1080>1046	None	None	None
1080	1100	1080>1100	None	None	None
1100	1105	Ben Johntson Release	None	None	None
1100	1106	Hillsborough Withdrawal	None	None	None
1105	1110	1105.1110	None	None	None
1105	1116	PiedmontMinerals WD	None	None	None
1106	1109	Hills WW	None	None	None
1109	1115	Hills WW Disch.	None	None	None
1110	1107	Hills Channel Loss	None	None	None
1110	1115	1110>1115	None	None	None
1115	1112	1115>1112	None	None	None
1115	1120	Quarry Transfer	None	None	None
1115	1205	1115>1205	None	None	None
1120	1151	Teer delivery	None	None	None
1140	1120	LM>TQ	None	None	None
1140	1142	1140>1142	None	None	None
1140	1151	1140>1151	None	None	None
1140	1300	Flat River Release	None	None	None
1151	431	OWASA Durham (Jordan) WS	None	None	None
1151	471	Durham to Cary WS	None	None	None
1151	1106	Hills Durham WS (JL)	None	None	None
1151	1162	Durham Demand	None	None	None
1151	1306	Raleigh interconnect	None	None	None
1162	453	Dur. Dur. Co. Triangle WW	None	None	None
1162	463	DurhamSDWRF	None	None	None
1162	1163	DurhamNDWRF	None	None	None
1163	1300	Durham North WW Disch	None	None	None
1200	1120	LR>TQ	None	None	None
1200	1151	1200>1151	None	None	None
1200	1202	1200>1202	None	None	None
1200	1205	L.River Min Release	OCL	None	None
1205	1300	1205>1300	None	None	None
1230	1300	Beaverdam to Falls	None	None	Mirror
1250	1254	Holt WD	None	None	None
1250	1300	1250>1300	None	None	None
1252	1270	Kerr>Rogers transfer	None	None	None
1254	1256	SGWASA WD	None	None	None
1254	1258	Creedmor WD	None	None	None
1256	1259	SGWASA WW_nc0026824	None	None	None
1258	1259	Creedmor WW_nc0007625	None	None	None
1259	1300	SGWASA Total WW	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
1270	1258	Creedmor Demand	None	None	None
1270	1300	1270>1300	None	None	None
1290	1320	Smith Creek	None	None	None
1300	471	ral-cary interconnect	None	None	None
1300	923	HollySprings Interconnect	None	None	None
1300	1302	1300>1302	None	None	None
1300	1306	Falls EMJ WD	None	OCL	None
1300	1310	Falls Release	OCL	None	None
1306	1320	RalSmithCrWW_nc0030759	None	None	None
1306	1500	RalLitCrWW_nc0079316	None	None	None
1306	1620	RaleighNeuseWWTPnc0029033	None	None	None
1306	1706	Fuquay-Varina from Raleig	None	None	None
1307	1320	Riverplace WW	None	None	None
1310	1320	Lagged Falls Release	None	None	None
1320	1318	Henderson/Frank/Louisburg	None	None	None
1320	1600	1320>1600	None	None	None
1400	1412	1400>1412	None	None	None
1401	1424	Cary NWRF NC0048879	None	None	None
1402	1412	1402>1412	None	None	None
1403	1424	1403>1424	None	None	None
1404	1412	1404>1412	None	None	None
1405	1480	Apex WW Discharge	None	None	None
1406	1412	1406>1412	None	None	None
1407	1480	Motiva WW	None	None	None
1408	1412	1408>1412	None	None	None
1409	1480	Fuquay WW	None	None	None
1410	1412	1410>1412	None	None	None
1412	1416	1412>1416	None	None	None
1414	1416	1414>1416	None	None	None
1416	1424	1416>1424	None	None	None
1418	1424	1418>1424	None	None	None
1420	1440	1420>1440	None	None	None
1422	1424	1422>1424	None	None	None
1424	1600	Crabtree Creek	None	None	None
1440	1306	1440>1306	None	OCL	None
1440	1700	Swift Creek	OCL	None	None
1445	1450	1445>1450	None	None	None
1450	1620	Walnut Ck Confluence	None	None	None
1471	1480	Cary SCWRF	None	None	None
1480	1482	1480>1482	None	None	None
1480	1700	Middle Creek Gage Flow	None	None	None
1500	1502	1500>1502	None	None	None
1500	1520	1500>1520	OCL	None	None
1506	1560	Wilson WW	None	None	None
1520	1506	1520>1506	None	None	None
1520	1560	Contentnea Creek	None	None	None
1528	1506	Tar River Emer	None	None	Mirror
1560	1562	1560>1562	None	None	None
1560	1570	Hookerton gage flow	None	None	None
1563	1560	Stantonsburg WW	None	None	None
1565	1560	Snow Hill WWTP	None	None	None
1567	1570	Farmville_WWTP	None	None	None
1569	1570	1569>1570	None	None	None
1570	1850	1570>1850	None	None	None
1600	1620	1600>1620	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
1620	1630	1620>1630	None	None	None
1630	1632	1630>1632	None	None	None
1630	1640	Clayton Gage Flow	OCL	None	None
1640	1650	Lagged Clayton Gage	None	None	None
1643	1650	TransMontaigne Discharge	None	None	None
1645	1650	Magellan Terminals Disch.	None	None	None
1646	1630	ClaytWW_nc0064564_0025453	None	None	None
1646	1650	Johnston Co WTP WW	None	None	None
1646	1675	Johnston WW	None	None	None
1646	1706	Johnston Co. To F-V	None	None	None
1646	1756	Johnston Co. To Benson	None	Pattern	None
1646	1757	JCo Benson WW	None	None	None
1647	1649	Active Quarry Spill	None	None	None
1647	1654	Active Quarry WD	None	None	None
1648	1649	Aband Quarry Spill	None	None	None
1648	1654	Aband Quarry WD	None	None	None
1650	1654	JCo WD Intake 1	None	None	None
1650	1660	1650>1660	None	None	None
1652	1653	Quarry Refill	None	OCL	None
1652	1654	JCo Intake 2 WS	None	None	None
1653	1647	Active Quarry Refill	None	None	None
1653	1648	Aband Quarry Refill	None	None	None
1654	1646	JCo Total WD	None	None	None
1660	1666	Smithfield WD	None	None	None
1660	1700	1660>1700	None	None	None
1666	1675	Smithfield WW	None	None	None
1675	1700	JohnstonCoWWTP_nc0064556	None	None	None
1675	1747	Kenly WWTP_nc0064891	None	None	None
1700	1652	JCo Intake 2 WD	None	OCL	None
1700	1760	1700>1760	None	None	None
1705	1300	Hawthorne WWTP	None	None	None
1706	554	Fuquay WW to Harnett Co	None	Pattern	None
1706	1409	Fuquay WW_nc00516_0066150	None	Pattern	None
1740	1306	Raleigh LRR WD	None	OCL	None
1740	1747	Little River	None	None	None
1747	1750	1747>1750	None	None	None
1750	1752	1750>1752	None	None	None
1750	1755	Little R Gage flow	None	None	None
1753	1755	Princeton WW	None	None	None
1755	1775	Little R to Neuse Conf	None	None	None
1756	1757	Benson WW	None	None	None
1757	1760	Benson WWTP	None	None	None
1759	1760	Jerry_G_Williams Disch.	None	None	None
1760	1766	Progress WS	None	None	None
1760	1770	1760>1770	None	None	None
1766	1770	1766>1770	None	None	None
1770	1775	1770>1775	None	None	None
1775	1780	1775>1780	None	None	None
1775	1786	Goldsboro WS	None	None	None
1780	1782	1780>1782	None	None	None
1780	1790	Goldsboro Gage Flow	None	None	None
1786	1780	Goldsboro WWTP	None	None	None
1787	1800	La Grange WWTP	None	None	None
1790	1795	Lagged Goldsboro Gage	None	None	None
1795	1800	1790>1800	None	None	None

U/S Number	D/S Number	Name	Min Flow	Max Flow	MaxRev Flow
1795	1806	NRWASA WD	None	None	None
1800	1802	1800>1802	None	None	None
1800	1850	Kinston gage flow	None	None	None
1806	1795	NRWASA WTP WW	None	None	None
1806	1845	NRWASA Cont. WW	None	None	None
1806	1850	Kinston/NRW WW NC0024236	None	None	None
1845	1850	CSD_WWTP	None	None	None
1847	1850	Unifi-Kinston WW	None	None	None
1850	1900	1850>1900	None	None	None
1900	1902	1900>1902	None	None	None
1900	1906	Weyerhauser Supply	None	None	None
1900	1999	1900>1999	None	None	None
1906	1999	Weyerhauser Discharge	None	None	None
1999	2000	Terminal	None	None	None

Reservoir Nodes

Number	Name	Dead Storage	Dead Stor Units	Lower Rule	Upper Rule	Max Storage	Max Stor Units
030	Reidsville Dam	667.0	FT	Pattern	Pattern	695.0	FT
070	Old Stony Creek Res	520.3	FT	Pattern	Pattern	535.8	FT
112	Lake Higgins	739.6	FT	None	None	763.9	FT
120	Brandt Res	730.3	FT	Pattern	Pattern	741.5	FT
140	Lake Townsend	698.5	FT	Pattern	Pattern	715.5	FT
220	High Point Res	725.0	FT	Pattern	Pattern	757.0	FT
270	Randleman Res	630.0	FT	Pattern	Pattern	682.0	FT
300	Ramseur Res	480.0	FT	Pattern	Pattern	491.0	FT
320	Graham Mebane Res	510.0	FT	Pattern	Pattern	540.0	FT
324	Siler City Upper Reservoir	566.4	FT	Pattern	Pattern	586.4	FT
325	Siler City Lower Reservoir	546.5	FT	Pattern	Pattern	559.0	FT
340	Mackintosh Res	500.0	FT	Pattern	Pattern	560.0	FT
390	Cane Creek Res	442.0	FT	Pattern	Pattern	505.0	FT
395	Stone Quarry	0.0	MG	Pattern	Pattern	200.0	MG
430	Univ Lake	336.6	FT	Pattern	Pattern	348.7	FT
470	Jordan Lake	150.0	FT	Pattern	Pattern	275.0	FT
520	Harris Lake	191.0	FT	Pattern	Pattern	240.0	FT
528	Aux Reservoir	210.0	FT	None	None	252.0	FT
555	Lillington Routing	0.0	AF	None	None	999.0	KAF
739	Fayetteville_Routing	0.0	AF	None	None	999.0	KAF
760	Glenville Res	107.0	FT	Pattern	Pattern	113.1	FT
777	L&D #3	0.0	AF	None	None	0.0	AF
790	L&D #2	0.0	AF	None	None	0.0	AF
1010	Orange Upstream Pond	635.0	FT	None	None	643.0	FT
1050	West Fork Eno Reservoir	603.0	FT	Pattern	Pattern	633.0	FT
1060	Lake Orange	601.7	FT	Pattern	Pattern	615.0	FT
1080	Corp. Lake	528.0	FT	None	None	538.0	FT
1100	Lake Ben Johnston	501.0	FT	None	None	515.0	FT
1120	Teer Quarry	154.0	FT	None	None	300.0	FT
1140	Lake Michie	312.5	FT	Pattern	Pattern	341.0	FT
1200	Little River Res.	296.0	FT	Pattern	Pattern	355.0	FT
1230	Beaverdam Lake	230.0	FT	Pattern	Pattern	289.2	FT
1250	Lake Holt_Butner	320.0	FT	Pattern	Pattern	356.0	FT
1270	Lake Rogers	274.0	FT	Pattern	Pattern	281.0	FT
1290	Wake Forest Lake	279.0	FT	Pattern	Pattern	296.8	FT
1300	Falls Lake	236.5	FT	Pattern	Pattern	289.2	FT
1310	Lag Falls Release	0.0	AF	None	None	999.0	KAF
1400	#1	289.0	FT	None	None	321.5	FT
1402	#2	307.5	FT	None	None	341.5	FT
1404	#3	323.5	FT	None	None	358.5	FT
1406	#5A	286.5	FT	None	None	329.0	FT

Number	Name	Dead Storage	Dead Stor Units	Lower Rule	Upper Rule	Max Storage	Max Stor Units
1408	#18	300.0	FT	None	None	334.0	FT
1410	#20A	286.0	FT	None	None	328.7	FT
1412	#23 (Lake Crabtree)	256.0	FT	None	None	298.0	FT
1414	#11A	277.4	FT	None	None	331.5	FT
1416	#25	215.5	FT	None	None	274.1	FT
1418	#22B	315.0	FT	None	None	354.0	FT
1420	Lake Wheeler	275.0	FT	Pattern	Pattern	285.0	FT
1422	#13	234.0	FT	None	None	285.0	FT
1440	Lake Benson	228.0	FT	Pattern	Pattern	234.0	FT
1445	Lake Johnson	312.0	FT	None	None	343.3	FT
1450	Lake Raleigh	264.0	FT	None	None	288.0	FT
1500	Buckhorn Reservoir	120.0	FT	Pattern	Pattern	148.0	FT
1640	Lag Clayton Gage	0.0	AF	None	None	999.0	KAF
1647	JCo Active Quarry	5504.0	AF	None	None	450.0	FT
1648	JCo Aband Quarry	632.0	AF	None	None	275.0	FT
1740	Little River Reservoir (Raleigh proposed)	236.0	FT	None	None	260.0	FT
1790	Lag Goldsboro Gage	0.0	AF	None	None	999.0	KAF

Reservoir Rules

Number	Name	Units	Month	Day	Upper Rule	Lower Rule	julSort
030	Reidsville Dam	ft	1	1	691.00	679.00	1
030	Reidsville Dam	ft	12	31	691.00	679.00	366
070	Old Stony Creek Res	ft	1	1	535.80	525.50	1
070	Old Stony Creek Res	ft	12	31	535.80	525.50	366
120	Brandt Res	FT	1	1	741.54	730.34	1
120	Brandt Res	FT	12	31	741.54	730.34	366
140	Lake Townsend	FT	1	1	715.52	698.52	1
140	Lake Townsend	FT	12	31	715.52	698.52	366
220	High Point Res	ft	1	1	756.00	740.00	1
220	High Point Res	ft	12	31	756.00	740.00	366
270	Randleman Res	ft	1	1	682.00	647.00	1
270	Randleman Res	ft	12	31	682.00	647.00	366
300	Ramseur Res	ft	1	1	491.00	480.00	1
300	Ramseur Res	ft	12	31	491.00	480.00	366
320	Graham Mebane Res	ft	1	1	530.00	510.00	1
320	Graham Mebane Res	ft	12	31	530.00	510.00	366
324	Siler City Upper	FT	1	1	586.35	566.35	1
324	Siler City Upper	FT	12	31	586.35	566.35	366
325	Siler City Lowerr	FT	1	1	559.00	558.00	1
325	Siler City Lower	FT	12	31	559.00	558.00	366
340	Mackintosh Res	ft	1	1	551.50	505.00	1
340	Mackintosh Res	ft	12	31	551.50	505.00	366
390	Cane Creek Res	FT	1	1	500.00	460.00	1
390	Cane Creek Res	FT	12	31	500.00	460.00	366
395	Stone Quarry	MG	1	1	200.00	0.00	1
395	Stone Quarry	MG	12	31	200.00	0.00	366
430	Univ Lake	FT	1	1	348.70	336.60	1
430	Univ Lake	FT	12	31	348.70	336.60	366
470	Jordan Lake	ft	1	1	216.00	202.00	1
470	Jordan Lake	ft	12	31	216.00	202.00	366
520	Harris Lake	FT	1	1	220.00	195.00	1
520	Harris Lake	FT	12	31	220.00	195.00	366
760	Glenville Res	FT	1	1	113.00	112.20	1
760	Glenville Res	FT	12	31	113.00	112.20	366
1050	WFER	FT	1	1	633.00	603.00	1
1050	WFER	FT	12	31	633.00	603.00	366
1060	Lake Orange	FT	1	1	615.00	601.70	1
1060	Lake Orange	FT	12	31	615.00	601.70	366
1140	Lake Michie	FT	1	1	341.00	312.50	1
1140	Lake Michie	FT	12	31	341.00	312.50	366
1200	Little River Res.	FT	1	1	355.00	326.00	1

Number	Name	Units	Month	Day	Upper Rule	Lower Rule	julSort
1200	Little River Res.	FT	12	31	355.00	326.00	366
1230	Beaverdam Lake	FT	1	1	251.50	236.50	1
1230	Beaverdam Lake	FT	12	31	251.50	236.50	366
1250	Lake Holt_Butner	FT	1	1	356.00	320.00	1
1250	Lake Holt_Butner	FT	12	31	356.00	320.00	366
1270	Lake Rogers	FT	1	1	281.00	274.00	1
1270	Lake Rogers	FT	12	31	281.00	274.00	366
1290	Wake Forest Lake	FT	1	1	296.80	279.00	1
1290	Wake Forest Lake	FT	12	31	296.80	279.00	366
1300	Falls Lake	FT	1	1	251.50	236.50	1
1300	Falls Lake	FT	12	31	251.50	236.50	366
1420	Lake Wheeler	FT	1	1	285.00	285.00	1
1420	Lake Wheeler	FT	12	31	285.00	285.00	366
1440	Lake Benson	FT	1	1	234.00	232.00	1
1440	Lake Benson	FT	12	31	234.00	232.00	366
1500	Buckhorn Reservoir	FT	1	1	148.00	120.00	1
1500	Buckhorn Reservoir	FT	12	31	148.00	120.00	366

Reservoir SAE Data

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
030	Reidsville Dam	665	ft	0	af	0	acre
030	Reidsville Dam	667	ft	150	af	0	acre
030	Reidsville Dam	670	ft	307	af	11	acre
030	Reidsville Dam	675	ft	1841	af	132	acre
030	Reidsville Dam	680	ft	3990	af	363	acre
030	Reidsville Dam	685	ft	6138	af	680	acre
030	Reidsville Dam	690	ft	8593	af	1181	acre
030	Reidsville Dam	695	ft	11416	af	1600	acre
030	Reidsville Dam	700	ft	14371	af	2500	acre
070	Old Stony Creek Res	520.3	ft	800	af	0	acre
070	Old Stony Creek Res	521.2	ft	800	af	10	acre
070	Old Stony Creek Res	525.5	ft	2800	af	120	acre
070	Old Stony Creek Res	535.8	ft	3600	af	220	acre
070	Old Stony Creek Res	536.1	ft	3700	af	250	acre
112	Lake Higgins	739.61	FT	0.336264	AF	0	ACRE
112	Lake Higgins	740.61	FT	8.203874	AF	0.683656	ACRE
112	Lake Higgins	741.61	FT	20.42585	AF	1.702155	ACRE
112	Lake Higgins	742.61	FT	36.5342	AF	3.044516	ACRE
112	Lake Higgins	743.61	FT	59.28273	AF	4.940227	ACRE
112	Lake Higgins	744.61	FT	87.51223	AF	7.292686	ACRE
112	Lake Higgins	745.61	FT	121.1829	AF	10.09857	ACRE
112	Lake Higgins	746.61	FT	161.0952	AF	13.4246	ACRE
112	Lake Higgins	747.61	FT	209.7251	AF	17.47709	ACRE
112	Lake Higgins	748.61	FT	269.0744	AF	22.42287	ACRE
112	Lake Higgins	749.61	FT	337.3826	AF	28.11522	ACRE
112	Lake Higgins	750.61	FT	413.8118	AF	34.48432	ACRE
112	Lake Higgins	751.61	FT	497.1289	AF	41.42741	ACRE
112	Lake Higgins	752.61	FT	587.0084	AF	48.91737	ACRE
112	Lake Higgins	753.61	FT	686.2745	AF	57.18954	ACRE
112	Lake Higgins	754.61	FT	796.7448	AF	66.3954	ACRE
112	Lake Higgins	755.61	FT	920.2461	AF	76.68718	ACRE
112	Lake Higgins	756.61	FT	1055.226	AF	87.93551	ACRE
112	Lake Higgins	757.61	FT	1209.046	AF	100.7539	ACRE
112	Lake Higgins	758.61	FT	1374.69	AF	114.5575	ACRE
112	Lake Higgins	759.61	FT	1552.933	AF	129.4111	ACRE
112	Lake Higgins	760.61	FT	1743.301	AF	145.2751	ACRE
112	Lake Higgins	761.61	FT	1943.794	AF	161.9828	ACRE
112	Lake Higgins	762.61	FT	2154.639	AF	179.5533	ACRE
112	Lake Higgins	763.61	FT	2374.57	AF	197.8809	ACRE
112	Lake Higgins	763.69	FT	2393.274	AF	199.4395	ACRE
112	Lake Higgins	763.78	FT	2412.037	AF	201.0031	ACRE
112	Lake Higgins	763.86	FT	2430.86	AF	202.5716	ACRE

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
120	Brandt Res	730.34	FT	0	AF	0	ACRE
120	Brandt Res	730.54	FT	46.40633	AF	3.867194	ACRE
120	Brandt Res	731.54	FT	306.51	AF	25.5425	ACRE
120	Brandt Res	732.54	FT	611.4856	AF	50.95713	ACRE
120	Brandt Res	733.54	FT	951.6678	AF	79.30565	ACRE
120	Brandt Res	734.54	FT	1325.793	AF	110.4828	ACRE
120	Brandt Res	736.54	FT	2177.393	AF	181.4494	ACRE
120	Brandt Res	737.54	FT	2655.759	AF	221.3132	ACRE
120	Brandt Res	738.54	FT	3173.361	AF	264.4468	ACRE
120	Brandt Res	739.54	FT	3806.294	AF	317.1912	ACRE
120	Brandt Res	740.54	FT	4575.421	AF	381.2851	ACRE
120	Brandt Res	741.54	FT	5377.734	AF	448.1445	ACRE
140	Lake Townsend	698.52	FT	0	AF	0	ACRE
140	Lake Townsend	699.52	FT	541.5193	AF	45.12661	ACRE
140	Lake Townsend	700.52	FT	1121.948	AF	93.49564	ACRE
140	Lake Townsend	701.52	FT	1739.66	AF	144.9716	ACRE
140	Lake Townsend	702.52	FT	2400.651	AF	200.0543	ACRE
140	Lake Townsend	703.52	FT	3102.964	AF	258.5804	ACRE
140	Lake Townsend	704.52	FT	3846.99	AF	320.5825	ACRE
140	Lake Townsend	705.52	FT	4646.22	AF	387.185	ACRE
140	Lake Townsend	706.52	FT	5554.262	AF	462.8552	ACRE
140	Lake Townsend	707.52	FT	6514.071	AF	542.8392	ACRE
140	Lake Townsend	708.52	FT	7533.766	AF	627.8138	ACRE
140	Lake Townsend	709.52	FT	8606.742	AF	717.2285	ACRE
140	Lake Townsend	710.52	FT	9737.465	AF	811.4554	ACRE
140	Lake Townsend	711.52	FT	10940.08	AF	911.6734	ACRE
140	Lake Townsend	712.52	FT	12218.93	AF	1018.245	ACRE
140	Lake Townsend	713.52	FT	13568.52	AF	1130.71	ACRE
140	Lake Townsend	714.52	FT	15012.91	AF	1251.076	ACRE
140	Lake Townsend	715.52	FT	16527.04	AF	1377.254	ACRE
220	High Point Res	722.5	ft	0	af	0	acre
220	High Point Res	725	ft	61	af	20	acre
220	High Point Res	730	ft	153	af	60	acre
220	High Point Res	735	ft	307	af	100	acre
220	High Point Res	740	ft	614	af	140	acre
220	High Point Res	745	ft	1228	af	180	acre
220	High Point Res	750	ft	1841	af	220	acre
220	High Point Res	755	ft	3069	af	260	acre
220	High Point Res	757	ft	3683	af	275	acre
270	Randleman Res	630	ft	0	af	0	acre
270	Randleman Res	631	ft	200	af	50	acre
270	Randleman Res	635	ft	1228	af	300	acre
270	Randleman Res	640	ft	2762	af	430	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
270	Randleman Res	645	ft	4910	af	550	acre
270	Randleman Res	650	ft	7672	af	690	acre
270	Randleman Res	655	ft	11355	af	910	acre
270	Randleman Res	660	ft	15958	af	1200	acre
270	Randleman Res	665	ft	22096	af	1520	acre
270	Randleman Res	670	ft	29768	af	1890	acre
270	Randleman Res	675	ft	39282	af	2340	acre
270	Randleman Res	680	ft	50637	af	2850	acre
270	Randleman Res	682	ft	62000	af	3230	acre
300	Ramseur Res	475	ft	0	af	0	acre
300	Ramseur Res	480	ft	400	af	80	acre
300	Ramseur Res	490	ft	1221	af	90	acre
300	Ramseur Res	495	ft	1620	af	95	acre
320	Graham Mebane Res	505	ft	0	af	0	acre
320	Graham Mebane Res	510	ft	156	af	68	acre
320	Graham Mebane Res	515	ft	805	af	189	acre
320	Graham Mebane Res	520	ft	2103	af	330	acre
320	Graham Mebane Res	525	ft	4157	af	485	acre
320	Graham Mebane Res	530	ft	7052	af	843	acre
320	Graham Mebane Res	535	ft	10860	af	843	acre
320	Graham Mebane Res	540	ft	15645	af	1073	acre
324	Siler City Upper Reservoir	562.35	FT	0	AF	4.09	ACRE
324	Siler City Upper Reservoir	572.35	FT	158.04	AF	27.52	ACRE
324	Siler City Upper Reservoir	582.35	FT	891.48	AF	119.17	ACRE
324	Siler City Upper Reservoir	586.45	FT	1459.35	AF	157.84	ACRE
325	Siler City Lower Reservoir	522	FT	0	AF	19.01	ACRE
325	Siler City Lower Reservoir	523	FT	9.87	AF	20.21	ACRE
325	Siler City Lower Reservoir	524	FT	29.98	AF	21	ACRE
325	Siler City Lower Reservoir	526	FT	72.39	AF	22.53	ACRE
325	Siler City Lower Reservoir	528	FT	117.74	AF	24.08	ACRE
325	Siler City Lower Reservoir	530	FT	174.49	AF	33.35	ACRE
325	Siler City Lower Reservoir	532	FT	260.31	AF	52.47	ACRE
325	Siler City Lower Reservoir	534	FT	385.83	AF	73.04	ACRE
325	Siler City Lower Reservoir	536	FT	560.76	AF	101.88	ACRE
325	Siler City Lower Reservoir	538	FT	794.59	AF	131.94	ACRE
325	Siler City Lower Reservoir	540	FT	1087.32	AF	160.78	ACRE
325	Siler City Lower Reservoir	542	FT	1431.11	AF	183.01	ACRE
325	Siler City Lower Reservoir	544	FT	1820.29	AF	206.17	ACRE
325	Siler City Lower Reservoir	546	FT	2255.45	AF	228.99	ACRE
325	Siler City Lower Reservoir	548	FT	2737.77	AF	253.33	ACRE
325	Siler City Lower Reservoir	550	FT	3271.5	AF	280.39	ACRE
325	Siler City Lower Reservoir	552	FT	3857.02	AF	305.13	ACRE
325	Siler City Lower Reservoir	554	FT	4495.03	AF	332.88	ACRE

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
325	Siler City Lower Reservoir	556	FT	5188.59	AF	360.69	ACRE
325	Siler City Lower Reservoir	558	FT	5938.88	AF	388.22	ACRE
325	Siler City Lower Reservoir	560	FT	6746.19	AF	417.71	ACRE
340	Mackintosh Res	495	ft	10	af	1	acre
340	Mackintosh Res	500	ft	189	af	37	acre
340	Mackintosh Res	505	ft	378	af	70	acre
340	Mackintosh Res	510	ft	661	af	103	acre
340	Mackintosh Res	515	ft	1322	af	172	acre
340	Mackintosh Res	520	ft	2266	af	254	acre
340	Mackintosh Res	525	ft	3872	af	361	acre
340	Mackintosh Res	530	ft	6043	af	492	acre
340	Mackintosh Res	535	ft	8971	af	624	acre
340	Mackintosh Res	540	ft	12465	af	739	acre
340	Mackintosh Res	545	ft	16430	af	919	acre
340	Mackintosh Res	550	ft	21530	af	1059	acre
340	Mackintosh Res	555	ft	27200	af	1301	acre
340	Mackintosh Res	560	ft	34700	af	1493	acre
390	Cane Creek Res	442	FT	0	AF	0	acre
390	Cane Creek Res	443	FT	0	AF	0	acre
390	Cane Creek Res	444	FT	0	AF	0	acre
390	Cane Creek Res	446	FT	3	AF	3	acre
390	Cane Creek Res	448	FT	13	AF	7	acre
390	Cane Creek Res	450	FT	29	AF	10	acre
390	Cane Creek Res	452	FT	53	AF	15	acre
390	Cane Creek Res	454	FT	90	AF	23	acre
390	Cane Creek Res	456	FT	143	AF	30	acre
390	Cane Creek Res	458	FT	213	AF	40	acre
390	Cane Creek Res	460	FT	307	AF	52	acre
390	Cane Creek Res	462	FT	419	AF	62	acre
390	Cane Creek Res	464	FT	553	AF	71	acre
390	Cane Creek Res	466	FT	704	AF	81	acre
390	Cane Creek Res	468	FT	877	AF	92	acre
390	Cane Creek Res	470	FT	1073	AF	104	acre
390	Cane Creek Res	472	FT	1298	AF	121	acre
390	Cane Creek Res	474	FT	1560	AF	141	acre
390	Cane Creek Res	476	FT	1862	AF	161	acre
390	Cane Creek Res	478	FT	2205	AF	182	acre
390	Cane Creek Res	480	FT	2589	AF	202	acre
390	Cane Creek Res	482	FT	3015	AF	224	acre
390	Cane Creek Res	484	FT	3484	AF	246	acre
390	Cane Creek Res	486	FT	3997	AF	267	acre
390	Cane Creek Res	488	FT	4557	AF	293	acre
390	Cane Creek Res	490	FT	5167	AF	318	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
390	Cane Creek Res	492	FT	5833	AF	348	acre
390	Cane Creek Res	494	FT	6568	AF	388	acre
390	Cane Creek Res	496	FT	7381	AF	426	acre
390	Cane Creek Res	498	FT	8270	AF	463	acre
390	Cane Creek Res	500	FT	9232	AF	501	acre
390	Cane Creek Res	505	FT	10813	AF	523	acre
390	Cane Creek Res	515	FT	15591	AF	666	acre
395	Stone Quarry	342	FT	0	AF	0	acre
395	Stone Quarry	342.5	FT	0	AF	1	acre
395	Stone Quarry	350	FT	8	AF	2	acre
395	Stone Quarry	360	FT	26	AF	2	acre
395	Stone Quarry	370	FT	51	AF	3	acre
395	Stone Quarry	380	FT	85	AF	4	acre
395	Stone Quarry	390	FT	124	AF	4	acre
395	Stone Quarry	400	FT	167	AF	5	acre
395	Stone Quarry	410	FT	216	AF	5	acre
395	Stone Quarry	420	FT	270	AF	6	acre
395	Stone Quarry	430	FT	328	AF	6	acre
395	Stone Quarry	440	FT	390	AF	7	acre
395	Stone Quarry	450	FT	457	AF	7	acre
395	Stone Quarry	460	FT	534	AF	8	acre
395	Stone Quarry	470	FT	617	AF	9	acre
395	Stone Quarry	480	FT	706	AF	10	acre
395	Stone Quarry	490	FT	810	AF	11	acre
430	Univ Lake	336.6	FT	0	AF	0	ACRE
430	Univ Lake	337.3	FT	56	AF	105	ACRE
430	Univ Lake	338.3	FT	136	AF	112	ACRE
430	Univ Lake	339.3	FT	221	AF	119	ACRE
430	Univ Lake	340.3	FT	310	AF	126	ACRE
430	Univ Lake	341.3	FT	412	AF	132	ACRE
430	Univ Lake	342.3	FT	515	AF	142	ACRE
430	Univ Lake	343.3	FT	624	AF	151	ACRE
430	Univ Lake	344.3	FT	740	AF	161	ACRE
430	Univ Lake	345.3	FT	864	AF	170	ACRE
430	Univ Lake	346.3	FT	1007	AF	183	ACRE
430	Univ Lake	347.3	FT	1161	AF	195	ACRE
430	Univ Lake	348.3	FT	1316	AF	207	ACRE
430	Univ Lake	348.7	FT	1378	AF	212	ACRE
470	Jordan Lake	150	ft	0	af	0	acre
470	Jordan Lake	160	ft	90	af	50	acre
470	Jordan Lake	170	ft	960	af	150	acre
470	Jordan Lake	180	ft	4700	af	670	acre
470	Jordan Lake	190	ft	20430	af	2510	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
470	Jordan Lake	200	ft	62140	af	5840	acre
470	Jordan Lake	202	ft	74700	af	6660	acre
470	Jordan Lake	210	ft	142220	af	10490	acre
470	Jordan Lake	216	ft	215130	af	13940	acre
470	Jordan Lake	220	ft	276240	af	16520	acre
470	Jordan Lake	230	ft	476610	af	23700	acre
470	Jordan Lake	240	ft	753560	af	31810	acre
470	Jordan Lake	250	ft	1120000	af	40590	acre
470	Jordan Lake	260	ft	1570000	af	50290	acre
470	Jordan Lake	269	ft	2070000	af	59870	acre
470	Jordan Lake	275	ft	4000000	af	60000	acre
520	Harris Lake	190	FT	4067	AF	0	ACRE
520	Harris Lake	191	FT	5000	AF	0	ACRE
520	Harris Lake	195	FT	8303	AF	983	ACRE
520	Harris Lake	200	FT	14538	AF	1416	ACRE
520	Harris Lake	205	FT	23158	AF	1922	ACRE
520	Harris Lake	210	FT	34418	AF	2460	ACRE
520	Harris Lake	215	FT	48470	AF	3000	ACRE
520	Harris Lake	220	FT	65009	AF	3461	ACRE
520	Harris Lake	225	FT	86654	AF	4512	ACRE
520	Harris Lake	230	FT	111102	AF	5090	ACRE
520	Harris Lake	235	FT	143119	AF	6675	ACRE
520	Harris Lake	240	FT	179189	AF	7503	ACRE
528	Aux Reservoir	210	FT	0	AF	0	acre
528	Aux Reservoir	220	FT	100	AF	30	acre
528	Aux Reservoir	230	FT	750	AF	95	acre
528	Aux Reservoir	240	FT	2000	AF	180	acre
528	Aux Reservoir	250	FT	4500	AF	330	acre
528	Aux Reservoir	252	FT	5000	AF	350	acre
760	Glenville Res	107	ft	0	af	0	acre
760	Glenville Res	108	ft	40	af	0	acre
760	Glenville Res	110	ft	130	af	19	acre
760	Glenville Res	113.1	ft	231	af	37	acre
760	Glenville Res	113.2	ft	231	af	40	acre
1010	Orange Upstream Pond	635	FT	0	AF	0	acre
1010	Orange Upstream Pond	635.5	FT	5	AF	0	acre
1010	Orange Upstream Pond	643	FT	414	AF	130	acre
1050	West Fork Eno Reservoir	593	FT	0	AF	0	acre
1050	West Fork Eno Reservoir	595	FT	0	AF	0	acre
1050	West Fork Eno Reservoir	597	FT	2	AF	1	acre
1050	West Fork Eno Reservoir	599	FT	5	AF	2	acre
1050	West Fork Eno Reservoir	601	FT	12	AF	5	acre
1050	West Fork Eno Reservoir	603	FT	24	AF	9	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1050	West Fork Eno Reservoir	605	FT	42	AF	14	acre
1050	West Fork Eno Reservoir	607	FT	70	AF	19	acre
1050	West Fork Eno Reservoir	609	FT	109	AF	25	acre
1050	West Fork Eno Reservoir	611	FT	163	AF	33	acre
1050	West Fork Eno Reservoir	613	FT	234	AF	42	acre
1050	West Fork Eno Reservoir	615	FT	325	AF	52	acre
1050	West Fork Eno Reservoir	617	FT	439	AF	62	acre
1050	West Fork Eno Reservoir	619	FT	581	AF	72	acre
1050	West Fork Eno Reservoir	621	FT	754	AF	85	acre
1050	West Fork Eno Reservoir	623	FT	963	AF	99	acre
1050	West Fork Eno Reservoir	625	FT	1211	AF	113	acre
1050	West Fork Eno Reservoir	627	FT	1503	AF	135	acre
1050	West Fork Eno Reservoir	629	FT	1844	AF	156	acre
1050	West Fork Eno Reservoir	631	FT	2238	AF	180	acre
1050	West Fork Eno Reservoir	633	FT	2412	AF	206	acre
1050	West Fork Eno Reservoir	634	FT	2581	AF	220	acre
1050	West Fork Eno Reservoir	635	FT	2821	AF	233	acre
1060	Lake Orange	590	FT	0	AF	0	acre
1060	Lake Orange	591	FT	15	AF	0	acre
1060	Lake Orange	600.4	FT	153	AF	35	acre
1060	Lake Orange	601	FT	172	AF	39	acre
1060	Lake Orange	601.7	FT	199	AF	44	acre
1060	Lake Orange	602	FT	211	AF	47	acre
1060	Lake Orange	603	FT	258	AF	55	acre
1060	Lake Orange	604	FT	313	AF	63	acre
1060	Lake Orange	605	FT	376	AF	69	acre
1060	Lake Orange	606	FT	447	AF	74	acre
1060	Lake Orange	607	FT	526	AF	80	acre
1060	Lake Orange	608	FT	613	AF	86	acre
1060	Lake Orange	609	FT	708	AF	92	acre
1060	Lake Orange	610	FT	811	AF	99	acre
1060	Lake Orange	611	FT	922	AF	114	acre
1060	Lake Orange	612	FT	1041	AF	128	acre
1060	Lake Orange	613	FT	1168	AF	140	acre
1060	Lake Orange	614	FT	1302	AF	152	acre
1060	Lake Orange	615	FT	1455	AF	160	acre
1060	Lake Orange	616	FT	1631	AF	168	acre
1060	Lake Orange	618	FT	1986	AF	188	acre
1060	Lake Orange	620	FT	2381	AF	206	acre
1060	Lake Orange	626	FT	3560	AF	258	acre
1080	Corp. Lake	528	FT	0	AF	0	acre
1080	Corp. Lake	528.5	FT	0.3	AF	0	acre
1080	Corp. Lake	529	FT	0.6	AF	1	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1080	Corp. Lake	530	FT	2.7	AF	3	acre
1080	Corp. Lake	531	FT	6	AF	5	acre
1080	Corp. Lake	532	FT	12	AF	6	acre
1080	Corp. Lake	533	FT	19	AF	8	acre
1080	Corp. Lake	534	FT	27	AF	10	acre
1080	Corp. Lake	535	FT	38	AF	12	acre
1080	Corp. Lake	536	FT	51	AF	14	acre
1080	Corp. Lake	537	FT	67	AF	17	acre
1080	Corp. Lake	538	FT	86	AF	23	acre
1080	Corp. Lake	540	FT	150	AF	33	acre
1080	Corp. Lake	542	FT	233	AF	45	acre
1080	Corp. Lake	544	FT	333	AF	59	acre
1080	Corp. Lake	546	FT	470	AF	74	acre
1080	Corp. Lake	548	FT	645	AF	89	acre
1100	Lake Ben Johnston	501	FT	0	AF	0	acre
1100	Lake Ben Johnston	502	FT	0.3	AF	0	acre
1100	Lake Ben Johnston	503	FT	1	AF	1	acre
1100	Lake Ben Johnston	504	FT	2.4	AF	1	acre
1100	Lake Ben Johnston	505	FT	4.4	AF	2	acre
1100	Lake Ben Johnston	506	FT	7.3	AF	3	acre
1100	Lake Ben Johnston	507	FT	11	AF	4	acre
1100	Lake Ben Johnston	508	FT	15	AF	5	acre
1100	Lake Ben Johnston	509	FT	21	AF	6	acre
1100	Lake Ben Johnston	510	FT	27	AF	7	acre
1100	Lake Ben Johnston	511	FT	34	AF	8	acre
1100	Lake Ben Johnston	512	FT	42	AF	9	acre
1100	Lake Ben Johnston	513	FT	52	AF	10	acre
1100	Lake Ben Johnston	514	FT	62	AF	11	acre
1100	Lake Ben Johnston	515	FT	74	AF	12	acre
1100	Lake Ben Johnston	516	FT	87	AF	14	acre
1100	Lake Ben Johnston	518	FT	117	AF	17	acre
1100	Lake Ben Johnston	520	FT	150	AF	21	acre
1120	Teer Quarry	104	FT	0	AF	0	acre
1120	Teer Quarry	105	FT	2	AF	0	acre
1120	Teer Quarry	106	FT	4	AF	3	acre
1120	Teer Quarry	108	FT	9	AF	3	acre
1120	Teer Quarry	110	FT	16	AF	4	acre
1120	Teer Quarry	112	FT	24	AF	4	acre
1120	Teer Quarry	114	FT	32	AF	4	acre
1120	Teer Quarry	116	FT	41	AF	5	acre
1120	Teer Quarry	118	FT	50	AF	5	acre
1120	Teer Quarry	120	FT	59	AF	5	acre
1120	Teer Quarry	122	FT	70	AF	5	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1120	Teer Quarry	124	FT	80	AF	5	acre
1120	Teer Quarry	126	FT	94	AF	9	acre
1120	Teer Quarry	128	FT	112	AF	10	acre
1120	Teer Quarry	130	FT	132	AF	11	acre
1120	Teer Quarry	132	FT	155	AF	13	acre
1120	Teer Quarry	134	FT	181	AF	13	acre
1120	Teer Quarry	136	FT	209	AF	14	acre
1120	Teer Quarry	138	FT	238	AF	15	acre
1120	Teer Quarry	140	FT	268	AF	15	acre
1120	Teer Quarry	142	FT	299	AF	16	acre
1120	Teer Quarry	144	FT	331	AF	16	acre
1120	Teer Quarry	146	FT	364	AF	17	acre
1120	Teer Quarry	148	FT	397	AF	17	acre
1120	Teer Quarry	150	FT	430	AF	17	acre
1120	Teer Quarry	152	FT	467	AF	20	acre
1120	Teer Quarry	154	FT	507	AF	20	acre
1120	Teer Quarry	156	FT	548	AF	21	acre
1120	Teer Quarry	158	FT	591	AF	22	acre
1120	Teer Quarry	160	FT	635	AF	22	acre
1120	Teer Quarry	162	FT	682	AF	26	acre
1120	Teer Quarry	164	FT	735	AF	27	acre
1120	Teer Quarry	166	FT	792	AF	30	acre
1120	Teer Quarry	168	FT	851	AF	30	acre
1120	Teer Quarry	170	FT	910	AF	30	acre
1120	Teer Quarry	172	FT	969	AF	30	acre
1120	Teer Quarry	174	FT	1028	AF	30	acre
1120	Teer Quarry	176	FT	1086	AF	30	acre
1120	Teer Quarry	178	FT	1145	AF	30	acre
1120	Teer Quarry	180	FT	1204	AF	30	acre
1120	Teer Quarry	182	FT	1263	AF	30	acre
1120	Teer Quarry	184	FT	1322	AF	30	acre
1120	Teer Quarry	186	FT	1384	AF	32	acre
1120	Teer Quarry	188	FT	1449	AF	33	acre
1120	Teer Quarry	190	FT	1515	AF	33	acre
1120	Teer Quarry	192	FT	1582	AF	34	acre
1120	Teer Quarry	194	FT	1650	AF	34	acre
1120	Teer Quarry	196	FT	1718	AF	35	acre
1120	Teer Quarry	198	FT	1788	AF	35	acre
1120	Teer Quarry	200	FT	1857	AF	35	acre
1120	Teer Quarry	202	FT	1928	AF	35	acre
1120	Teer Quarry	204	FT	1999	AF	36	acre
1120	Teer Quarry	206	FT	2070	AF	36	acre
1120	Teer Quarry	208	FT	2142	AF	36	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1120	Teer Quarry	210	FT	2215	AF	37	acre
1120	Teer Quarry	212	FT	2288	AF	37	acre
1120	Teer Quarry	214	FT	2363	AF	37	acre
1120	Teer Quarry	216	FT	2438	AF	38	acre
1120	Teer Quarry	218	FT	2513	AF	38	acre
1120	Teer Quarry	220	FT	2590	AF	38	acre
1120	Teer Quarry	222	FT	2667	AF	39	acre
1120	Teer Quarry	224	FT	2744	AF	39	acre
1120	Teer Quarry	226	FT	2822	AF	39	acre
1120	Teer Quarry	228	FT	2901	AF	40	acre
1120	Teer Quarry	230	FT	2979	AF	39	acre
1120	Teer Quarry	232	FT	3058	AF	40	acre
1120	Teer Quarry	234	FT	3139	AF	41	acre
1120	Teer Quarry	236	FT	3221	AF	41	acre
1120	Teer Quarry	238	FT	3304	AF	42	acre
1120	Teer Quarry	240	FT	3389	AF	42	acre
1120	Teer Quarry	242	FT	3474	AF	43	acre
1120	Teer Quarry	244	FT	3560	AF	43	acre
1120	Teer Quarry	246	FT	3647	AF	44	acre
1120	Teer Quarry	248	FT	3735	AF	44	acre
1120	Teer Quarry	250	FT	3824	AF	45	acre
1120	Teer Quarry	252	FT	3915	AF	46	acre
1120	Teer Quarry	254	FT	4008	AF	47	acre
1120	Teer Quarry	256	FT	4103	AF	48	acre
1120	Teer Quarry	258	FT	4199	AF	48	acre
1120	Teer Quarry	260	FT	4297	AF	49	acre
1120	Teer Quarry	262	FT	4395	AF	49	acre
1120	Teer Quarry	264	FT	4494	AF	50	acre
1120	Teer Quarry	266	FT	4595	AF	50	acre
1120	Teer Quarry	268	FT	4696	AF	51	acre
1120	Teer Quarry	270	FT	4798	AF	51	acre
1120	Teer Quarry	272	FT	4902	AF	52	acre
1120	Teer Quarry	274	FT	5006	AF	53	acre
1120	Teer Quarry	276	FT	5112	AF	53	acre
1120	Teer Quarry	278	FT	5218	AF	54	acre
1120	Teer Quarry	280	FT	5326	AF	54	acre
1120	Teer Quarry	282	FT	5435	AF	55	acre
1120	Teer Quarry	284	FT	5546	AF	56	acre
1120	Teer Quarry	286	FT	5661	AF	58	acre
1120	Teer Quarry	288	FT	5778	AF	58	acre
1120	Teer Quarry	290	FT	5895	AF	58	acre
1120	Teer Quarry	292	FT	6011	AF	58	acre
1120	Teer Quarry	294	FT	6128	AF	58	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1120	Teer Quarry	296	FT	6245	AF	58	acre
1120	Teer Quarry	298	FT	6362	AF	58	acre
1120	Teer Quarry	300	FT	6479	AF	58	acre
1120	Teer Quarry	302	FT	6595	AF	58	acre
1120	Teer Quarry	304	FT	6712	AF	58	acre
1120	Teer Quarry	306	FT	6829	AF	58	acre
1120	Teer Quarry	308	FT	6946	AF	58	acre
1120	Teer Quarry	310	FT	7063	AF	58	acre
1120	Teer Quarry	312	FT	7179	AF	58	acre
1120	Teer Quarry	314	FT	7296	AF	58	acre
1120	Teer Quarry	316	FT	7413	AF	58	acre
1120	Teer Quarry	318	FT	7530	AF	58	acre
1140	Lake Michie	266	FT	0	AF	0	acre
1140	Lake Michie	267	FT	0	AF	0	acre
1140	Lake Michie	268	FT	0	AF	0	acre
1140	Lake Michie	269	FT	0.1	AF	0	acre
1140	Lake Michie	270	FT	0.1	AF	0	acre
1140	Lake Michie	271	FT	0.3	AF	0	acre
1140	Lake Michie	272	FT	3.4	AF	0.2	acre
1140	Lake Michie	273	FT	7.3	AF	0.5	acre
1140	Lake Michie	274	FT	11.8	AF	1	acre
1140	Lake Michie	275	FT	16.9	AF	1	acre
1140	Lake Michie	276	FT	23	AF	1	acre
1140	Lake Michie	277	FT	32	AF	2	acre
1140	Lake Michie	278	FT	42	AF	3	acre
1140	Lake Michie	279	FT	55	AF	4	acre
1140	Lake Michie	280	FT	70	AF	4	acre
1140	Lake Michie	281	FT	86	AF	5	acre
1140	Lake Michie	282	FT	106	AF	7	acre
1140	Lake Michie	283	FT	128	AF	8	acre
1140	Lake Michie	284	FT	152	AF	10	acre
1140	Lake Michie	285	FT	178	AF	11	acre
1140	Lake Michie	286	FT	207	AF	13	acre
1140	Lake Michie	287	FT	245	AF	16	acre
1140	Lake Michie	288	FT	286	AF	18	acre
1140	Lake Michie	289	FT	329	AF	21	acre
1140	Lake Michie	290	FT	375	AF	24	acre
1140	Lake Michie	291	FT	424	AF	27	acre
1140	Lake Michie	292	FT	476	AF	30	acre
1140	Lake Michie	293	FT	530	AF	34	acre
1140	Lake Michie	294	FT	587	AF	37	acre
1140	Lake Michie	295	FT	646	AF	41	acre
1140	Lake Michie	296	FT	709	AF	45	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1140	Lake Michie	297	FT	779	AF	49	acre
1140	Lake Michie	298	FT	854	AF	54	acre
1140	Lake Michie	299	FT	932	AF	59	acre
1140	Lake Michie	300	FT	1014	AF	64	acre
1140	Lake Michie	301	FT	1099	AF	70	acre
1140	Lake Michie	302	FT	1191	AF	75	acre
1140	Lake Michie	303	FT	1286	AF	81	acre
1140	Lake Michie	304	FT	1385	AF	88	acre
1140	Lake Michie	305	FT	1487	AF	94	acre
1140	Lake Michie	306	FT	1594	AF	101	acre
1140	Lake Michie	307	FT	1710	AF	108	acre
1140	Lake Michie	308	FT	1830	AF	116	acre
1140	Lake Michie	309	FT	1955	AF	124	acre
1140	Lake Michie	310	FT	2085	AF	132	acre
1140	Lake Michie	311	FT	2219	AF	144	acre
1140	Lake Michie	312	FT	2363	AF	147	acre
1140	Lake Michie	313	FT	2512	AF	152	acre
1140	Lake Michie	314	FT	2667	AF	157	acre
1140	Lake Michie	315	FT	2826	AF	163	acre
1140	Lake Michie	316	FT	2992	AF	168	acre
1140	Lake Michie	317	FT	3169	AF	181	acre
1140	Lake Michie	318	FT	3355	AF	190	acre
1140	Lake Michie	319	FT	3548	AF	197	acre
1140	Lake Michie	320	FT	3752	AF	208	acre
1140	Lake Michie	321	FT	3965	AF	217	acre
1140	Lake Michie	322	FT	4191	AF	232	acre
1140	Lake Michie	323	FT	4427	AF	241	acre
1140	Lake Michie	324	FT	4675	AF	253	acre
1140	Lake Michie	325	FT	4933	AF	263	acre
1140	Lake Michie	326	FT	5204	AF	278	acre
1140	Lake Michie	327	FT	5493	AF	295	acre
1140	Lake Michie	328	FT	5795	AF	308	acre
1140	Lake Michie	329	FT	6109	AF	320	acre
1140	Lake Michie	330	FT	6437	AF	335	acre
1140	Lake Michie	331	FT	6778	AF	349	acre
1140	Lake Michie	332	FT	7140	AF	369	acre
1140	Lake Michie	333	FT	7517	AF	385	acre
1140	Lake Michie	334	FT	7910	AF	401	acre
1140	Lake Michie	335	FT	8318	AF	415	acre
1140	Lake Michie	336	FT	8740	AF	428	acre
1140	Lake Michie	337	FT	9177	AF	444	acre
1140	Lake Michie	338	FT	9628	AF	457	acre
1140	Lake Michie	339	FT	10090	AF	469	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1140	Lake Michie	340	FT	10566	AF	482	acre
1140	Lake Michie	341	FT	11067	AF	509	acre
1140	Lake Michie	342	FT	11584	AF	533	acre
1200	Little River Res.	278	FT	0	AF	3	acre
1200	Little River Res.	279	FT	4	AF	6	acre
1200	Little River Res.	280	FT	11	AF	9	acre
1200	Little River Res.	281	FT	21	AF	10	acre
1200	Little River Res.	282	FT	32	AF	11	acre
1200	Little River Res.	283	FT	44	AF	13	acre
1200	Little River Res.	284	FT	58	AF	15	acre
1200	Little River Res.	285	FT	75	AF	18	acre
1200	Little River Res.	286	FT	93	AF	20	acre
1200	Little River Res.	287	FT	115	AF	23	acre
1200	Little River Res.	288	FT	139	AF	26	acre
1200	Little River Res.	289	FT	166	AF	29	acre
1200	Little River Res.	290	FT	196	AF	32	acre
1200	Little River Res.	291	FT	229	AF	35	acre
1200	Little River Res.	292	FT	266	AF	38	acre
1200	Little River Res.	293	FT	305	AF	41	acre
1200	Little River Res.	294	FT	348	AF	45	acre
1200	Little River Res.	295	FT	395	AF	49	acre
1200	Little River Res.	296	FT	446	AF	52	acre
1200	Little River Res.	297	FT	500	AF	56	acre
1200	Little River Res.	298	FT	557	AF	59	acre
1200	Little River Res.	299	FT	617	AF	62	acre
1200	Little River Res.	300	FT	680	AF	65	acre
1200	Little River Res.	301	FT	746	AF	67	acre
1200	Little River Res.	302	FT	814	AF	70	acre
1200	Little River Res.	303	FT	886	AF	73	acre
1200	Little River Res.	304	FT	960	AF	75	acre
1200	Little River Res.	305	FT	1039	AF	83	acre
1200	Little River Res.	306	FT	1126	AF	91	acre
1200	Little River Res.	307	FT	1220	AF	97	acre
1200	Little River Res.	308	FT	1320	AF	103	acre
1200	Little River Res.	309	FT	1426	AF	109	acre
1200	Little River Res.	310	FT	1537	AF	115	acre
1200	Little River Res.	311	FT	1655	AF	121	acre
1200	Little River Res.	312	FT	1779	AF	127	acre
1200	Little River Res.	313	FT	1909	AF	133	acre
1200	Little River Res.	314	FT	2044	AF	138	acre
1200	Little River Res.	315	FT	2186	AF	145	acre
1200	Little River Res.	316	FT	2334	AF	151	acre
1200	Little River Res.	317	FT	2489	AF	158	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1200	Little River Res.	318	FT	2651	AF	165	acre
1200	Little River Res.	319	FT	2819	AF	172	acre
1200	Little River Res.	320	FT	2994	AF	178	acre
1200	Little River Res.	321	FT	3176	AF	186	acre
1200	Little River Res.	322	FT	3365	AF	193	acre
1200	Little River Res.	323	FT	3562	AF	201	acre
1200	Little River Res.	324	FT	3768	AF	210	acre
1200	Little River Res.	325	FT	3982	AF	218	acre
1200	Little River Res.	326	FT	4205	AF	227	acre
1200	Little River Res.	327	FT	4436	AF	236	acre
1200	Little River Res.	328	FT	4677	AF	246	acre
1200	Little River Res.	329	FT	4928	AF	256	acre
1200	Little River Res.	330	FT	5190	AF	267	acre
1200	Little River Res.	331	FT	5461	AF	276	acre
1200	Little River Res.	332	FT	5742	AF	286	acre
1200	Little River Res.	333	FT	6033	AF	296	acre
1200	Little River Res.	334	FT	6334	AF	306	acre
1200	Little River Res.	335	FT	6645	AF	317	acre
1200	Little River Res.	336	FT	6968	AF	329	acre
1200	Little River Res.	337	FT	7302	AF	339	acre
1200	Little River Res.	338	FT	7645	AF	349	acre
1200	Little River Res.	339	FT	8000	AF	360	acre
1200	Little River Res.	340	FT	8365	AF	371	acre
1200	Little River Res.	341	FT	8741	AF	381	acre
1200	Little River Res.	342	FT	9127	AF	391	acre
1200	Little River Res.	343	FT	9524	AF	403	acre
1200	Little River Res.	344	FT	9932	AF	414	acre
1200	Little River Res.	345	FT	10351	AF	424	acre
1200	Little River Res.	346	FT	10780	AF	434	acre
1200	Little River Res.	347	FT	11219	AF	445	acre
1200	Little River Res.	348	FT	11670	AF	456	acre
1200	Little River Res.	349	FT	12132	AF	468	acre
1200	Little River Res.	350	FT	12606	AF	480	acre
1200	Little River Res.	351	FT	13091	AF	492	acre
1200	Little River Res.	352	FT	13590	AF	504	acre
1200	Little River Res.	353	FT	14101	AF	519	acre
1200	Little River Res.	354	FT	14627	AF	533	acre
1200	Little River Res.	355	FT	15164	AF	542	acre
1230	Beaverdam Lake	229	FT	0	AF	0	acre
1230	Beaverdam Lake	229.5	FT	5	AF	0	acre
1230	Beaverdam Lake	230	FT	9	AF	76	acre
1230	Beaverdam Lake	231	FT	90	AF	86	acre
1230	Beaverdam Lake	232	FT	190	AF	114	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1230	Beaverdam Lake	233	FT	312	AF	130	acre
1230	Beaverdam Lake	234	FT	451	AF	149	acre
1230	Beaverdam Lake	235	FT	603	AF	155	acre
1230	Beaverdam Lake	236	FT	758	AF	157	acre
1230	Beaverdam Lake	237	FT	917	AF	160	acre
1230	Beaverdam Lake	238	FT	1100	AF	206	acre
1230	Beaverdam Lake	239	FT	1332	AF	257	acre
1230	Beaverdam Lake	240	FT	1590	AF	260	acre
1230	Beaverdam Lake	241	FT	1873	AF	305	acre
1230	Beaverdam Lake	242	FT	2199	AF	349	acre
1230	Beaverdam Lake	243	FT	2570	AF	393	acre
1230	Beaverdam Lake	244	FT	2986	AF	438	acre
1230	Beaverdam Lake	245	FT	3439	AF	470	acre
1230	Beaverdam Lake	246	FT	3915	AF	482	acre
1230	Beaverdam Lake	247	FT	4404	AF	496	acre
1230	Beaverdam Lake	248	FT	4914	AF	524	acre
1230	Beaverdam Lake	249	FT	5455	AF	558	acre
1230	Beaverdam Lake	250	FT	6084	AF	701	acre
1230	Beaverdam Lake	251	FT	6866	AF	863	acre
1230	Beaverdam Lake	252	FT	7778	AF	960	acre
1230	Beaverdam Lake	253	FT	8750	AF	985	acre
1230	Beaverdam Lake	254	FT	9750	AF	1014	acre
1230	Beaverdam Lake	255	FT	10775	AF	1036	acre
1230	Beaverdam Lake	256	FT	11854	AF	1123	acre
1230	Beaverdam Lake	257	FT	13021	AF	1212	acre
1230	Beaverdam Lake	258	FT	14272	AF	1290	acre
1230	Beaverdam Lake	259	FT	15604	AF	1375	acre
1230	Beaverdam Lake	260	FT	17022	AF	1461	acre
1230	Beaverdam Lake	261	FT	18525	AF	1546	acre
1230	Beaverdam Lake	262	FT	20114	AF	1631	acre
1230	Beaverdam Lake	263	FT	21787	AF	1715	acre
1230	Beaverdam Lake	264	FT	23544	AF	1799	acre
1230	Beaverdam Lake	265	FT	25389	AF	1891	acre
1230	Beaverdam Lake	266	FT	27324	AF	1979	acre
1230	Beaverdam Lake	267	FT	29346	AF	2066	acre
1230	Beaverdam Lake	268	FT	31456	AF	2154	acre
1230	Beaverdam Lake	269	FT	33654	AF	2242	acre
1230	Beaverdam Lake	270	FT	35940	AF	2330	acre
1230	Beaverdam Lake	271	FT	38319	AF	2426	acre
1230	Beaverdam Lake	272	FT	40793	AF	2522	acre
1230	Beaverdam Lake	273	FT	43363	AF	2618	acre
1230	Beaverdam Lake	274	FT	46029	AF	2714	acre
1230	Beaverdam Lake	275	FT	48791	AF	2810	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1230	Beaverdam Lake	276	FT	51652	AF	2911	acre
1230	Beaverdam Lake	277	FT	54614	AF	3012	acre
1230	Beaverdam Lake	278	FT	57677	AF	3114	acre
1230	Beaverdam Lake	279	FT	60841	AF	3215	acre
1230	Beaverdam Lake	280	FT	64106	AF	3316	acre
1230	Beaverdam Lake	281	FT	67480	AF	3433	acre
1230	Beaverdam Lake	282	FT	70972	AF	3550	acre
1230	Beaverdam Lake	283	FT	74580	AF	3666	acre
1230	Beaverdam Lake	284	FT	78304	AF	3783	acre
1230	Beaverdam Lake	285	FT	82146	AF	3900	acre
1230	Beaverdam Lake	286	FT	86112	AF	4032	acre
1230	Beaverdam Lake	287	FT	90210	AF	4164	acre
1230	Beaverdam Lake	288	FT	94440	AF	4296	acre
1230	Beaverdam Lake	289	FT	98803	AF	4428	acre
1230	Beaverdam Lake	290	FT	103297	AF	4560	acre
1250	Lake Holt_Butner	295	FT	0	AF	0	acre
1250	Lake Holt_Butner	296	FT	7	AF	0	acre
1250	Lake Holt_Butner	310	FT	102	AF	5.3	acre
1250	Lake Holt_Butner	320	FT	431	AF	23	acre
1250	Lake Holt_Butner	330	FT	1162	AF	61	acre
1250	Lake Holt_Butner	346	FT	3612	AF	188	acre
1250	Lake Holt_Butner	356	FT	6331	AF	330	acre
1270	Lake Rogers	273	FT	0	AF	0	acre
1270	Lake Rogers	274	FT	3	AF	1	acre
1270	Lake Rogers	275	FT	24	AF	6	acre
1270	Lake Rogers	276	FT	73	AF	17	acre
1270	Lake Rogers	277	FT	152	AF	36	acre
1270	Lake Rogers	278	FT	255	AF	60	acre
1270	Lake Rogers	279	FT	375	AF	88	acre
1270	Lake Rogers	280	FT	512	AF	120	acre
1270	Lake Rogers	281	FT	661	AF	155	acre
1290	Wake Forest Lake	270	FT	0	AF	0	acre
1290	Wake Forest Lake	271	FT	6	AF	0	acre
1290	Wake Forest Lake	280	FT	63	AF	12	acre
1290	Wake Forest Lake	290	FT	279	AF	33	acre
1290	Wake Forest Lake	296.8	FT	565	AF	52	acre
1290	Wake Forest Lake	300	FT	752	AF	65	acre
1290	Wake Forest Lake	305	FT	1121	AF	83	acre
1290	Wake Forest Lake	310	FT	1590	AF	105	acre
1290	Wake Forest Lake	315	FT	2176	AF	130	acre
1290	Wake Forest Lake	320	FT	2900	AF	160	acre
1300	Falls Lake	199	FT	1	AF	0	acre
1300	Falls Lake	199.5	FT	2	AF	0	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1300	Falls Lake	200	FT	4	AF	4	acre
1300	Falls Lake	201	FT	9	AF	6	acre
1300	Falls Lake	202	FT	15	AF	8	acre
1300	Falls Lake	203	FT	25	AF	12	acre
1300	Falls Lake	204	FT	38	AF	15	acre
1300	Falls Lake	205	FT	55	AF	20	acre
1300	Falls Lake	206	FT	83	AF	36	acre
1300	Falls Lake	207	FT	125	AF	49	acre
1300	Falls Lake	208	FT	179	AF	59	acre
1300	Falls Lake	209	FT	244	AF	72	acre
1300	Falls Lake	210	FT	322	AF	84	acre
1300	Falls Lake	211	FT	412	AF	95	acre
1300	Falls Lake	212	FT	517	AF	116	acre
1300	Falls Lake	213	FT	650	AF	151	acre
1300	Falls Lake	214	FT	810	AF	169	acre
1300	Falls Lake	215	FT	991	AF	192	acre
1300	Falls Lake	216	FT	1204	AF	234	acre
1300	Falls Lake	217	FT	1470	AF	302	acre
1300	Falls Lake	218	FT	1824	AF	405	acre
1300	Falls Lake	219	FT	2269	AF	488	acre
1300	Falls Lake	220	FT	2792	AF	558	acre
1300	Falls Lake	221	FT	3377	AF	610	acre
1300	Falls Lake	222	FT	4022	AF	681	acre
1300	Falls Lake	223	FT	4748	AF	771	acre
1300	Falls Lake	224	FT	5551	AF	834	acre
1300	Falls Lake	225	FT	6441	AF	947	acre
1300	Falls Lake	226	FT	7430	AF	1032	acre
1300	Falls Lake	227	FT	8502	AF	1112	acre
1300	Falls Lake	228	FT	9657	AF	1198	acre
1300	Falls Lake	229	FT	10901	AF	1289	acre
1300	Falls Lake	230	FT	12241	AF	1393	acre
1300	Falls Lake	231	FT	13700	AF	1525	acre
1300	Falls Lake	232	FT	15281	AF	1638	acre
1300	Falls Lake	233	FT	16981	AF	1764	acre
1300	Falls Lake	234	FT	18816	AF	1907	acre
1300	Falls Lake	235	FT	20815	AF	2090	acre
1300	Falls Lake	236	FT	23015	AF	2308	acre
1300	Falls Lake	237	FT	25456	AF	2575	acre
1300	Falls Lake	238	FT	28292	AF	3096	acre
1300	Falls Lake	239	FT	31723	AF	3769	acre
1300	Falls Lake	240	FT	35745	AF	4275	acre
1300	Falls Lake	241	FT	40300	AF	4839	acre
1300	Falls Lake	242	FT	45349	AF	5263	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1300	Falls Lake	243	FT	50853	AF	5745	acre
1300	Falls Lake	244	FT	56928	AF	6407	acre
1300	Falls Lake	245	FT	63614	AF	6965	acre
1300	Falls Lake	246	FT	70953	AF	7714	acre
1300	Falls Lake	247	FT	78965	AF	8310	acre
1300	Falls Lake	248	FT	87759	AF	9278	acre
1300	Falls Lake	249	FT	97314	AF	9834	acre
1300	Falls Lake	250	FT	107498	AF	10533	acre
1300	Falls Lake	251	FT	118324	AF	11118	acre
1300	Falls Lake	252	FT	129821	AF	11879	acre
1300	Falls Lake	253	FT	141987	AF	12452	acre
1300	Falls Lake	254	FT	154676	AF	12925	acre
1300	Falls Lake	255	FT	167824	AF	13372	acre
1300	Falls Lake	256	FT	181495	AF	13966	acre
1300	Falls Lake	257	FT	195747	AF	14538	acre
1300	Falls Lake	258	FT	210554	AF	15080	acre
1300	Falls Lake	259	FT	225906	AF	15623	acre
1300	Falls Lake	260	FT	241796	AF	16158	acre
1300	Falls Lake	261	FT	258291	AF	16830	acre
1300	Falls Lake	262	FT	275490	AF	17572	acre
1300	Falls Lake	263	FT	293424	AF	18296	acre
1300	Falls Lake	264	FT	312077	AF	19011	acre
1300	Falls Lake	265	FT	331427	AF	19690	acre
1300	Falls Lake	266	FT	351482	AF	20419	acre
1300	Falls Lake	267	FT	372255	AF	21127	acre
1300	Falls Lake	268	FT	393728	AF	21818	acre
1300	Falls Lake	269	FT	415873	AF	22472	acre
1300	Falls Lake	270	FT	438671	AF	23125	acre
1300	Falls Lake	271	FT	462127	AF	23789	acre
1300	Falls Lake	272	FT	486248	AF	24453	acre
1300	Falls Lake	273	FT	511020	AF	25091	acre
1300	Falls Lake	274	FT	536429	AF	25729	acre
1300	Falls Lake	275	FT	562482	AF	26378	acre
1300	Falls Lake	276	FT	589194	AF	27045	acre
1300	Falls Lake	277	FT	616570	AF	27711	acre
1300	Falls Lake	278	FT	644614	AF	28377	acre
1300	Falls Lake	279	FT	673328	AF	29051	acre
1300	Falls Lake	280	FT	702718	AF	29727	acre
1300	Falls Lake	281	FT	732777	AF	30390	acre
1300	Falls Lake	282	FT	763498	AF	31054	acre
1300	Falls Lake	283	FT	794886	AF	31724	acre
1300	Falls Lake	284	FT	826945	AF	32392	acre
1300	Falls Lake	285	FT	859646	AF	33010	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1300	Falls Lake	286	FT	892967	AF	33634	acre
1300	Falls Lake	287	FT	926894	AF	34218	acre
1300	Falls Lake	288	FT	961403	AF	34802	acre
1300	Falls Lake	289	FT	996495	AF	35384	acre
1300	Falls Lake	290	FT	1032170	AF	35967	acre
1400	#1	289	FT	0	AF	0	acre
1400	#1	290	FT	5	AF	0	acre
1400	#1	305	FT	189	AF	29	acre
1400	#1	306	FT	218	AF	32	acre
1400	#1	306.9	FT	249	AF	35	acre
1400	#1	310	FT	364	AF	45	acre
1400	#1	312.5	FT	477	AF	53	acre
1400	#1	315	FT	612	AF	61	acre
1400	#1	316	FT	669	AF	64	acre
1400	#1	316.5	FT	699	AF	67	acre
1400	#1	317	FT	729	AF	70	acre
1400	#1	317.5	FT	761	AF	73	acre
1400	#1	318	FT	794	AF	76	acre
1400	#1	319	FT	867	AF	83	acre
1400	#1	320	FT	959	AF	92	acre
1400	#1	321	FT	1033	AF	99	acre
1400	#1	321.5	FT	1072	AF	103	acre
1400	#1	322	FT	1113	AF	107	acre
1400	#1	322.5	FT	1154	AF	110	acre
1400	#1	323	FT	1196	AF	114	acre
1400	#1	323.5	FT	1242	AF	119	acre
1400	#1	324	FT	1292	AF	124	acre
1402	#2	307.5	FT	0	AF	0	acre
1402	#2	326	FT	130	AF	27	acre
1402	#2	328	FT	162	AF	33	acre
1402	#2	330	FT	222	AF	40	acre
1402	#2	333	FT	339	AF	49	acre
1402	#2	333.5	FT	360	AF	51	acre
1402	#2	334.4	FT	404	AF	54	acre
1402	#2	335	FT	434	AF	55	acre
1402	#2	335.5	FT	461	AF	57	acre
1402	#2	336	FT	488	AF	60	acre
1402	#2	336.5	FT	517	AF	64	acre
1402	#2	337	FT	550	AF	68	acre
1402	#2	338	FT	616	AF	76	acre
1402	#2	339	FT	685	AF	85	acre
1402	#2	340	FT	761	AF	94	acre
1402	#2	341.5	FT	886	AF	110	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1402	#2	342	FT	913	AF	113	acre
1402	#2	342.5	FT	951	AF	118	acre
1402	#2	343	FT	989	AF	122	acre
1402	#2	343.5	FT	1027	AF	127	acre
1402	#2	344	FT	1065	AF	132	acre
1404	#3	323.5	FT	0	AF	0	acre
1404	#3	342.5	FT	224	AF	45	acre
1404	#3	344	FT	288	AF	50	acre
1404	#3	346	FT	384	AF	57	acre
1404	#3	349.5	FT	572	AF	70	acre
1404	#3	351.1	FT	681	AF	75	acre
1404	#3	352	FT	747	AF	78	acre
1404	#3	352.5	FT	785	AF	80	acre
1404	#3	353	FT	829	AF	85	acre
1404	#3	353.5	FT	869	AF	89	acre
1404	#3	354	FT	914	AF	93	acre
1404	#3	354.5	FT	956	AF	97	acre
1404	#3	355	FT	1004	AF	102	acre
1404	#3	355.5	FT	1048	AF	107	acre
1404	#3	356	FT	1095	AF	112	acre
1404	#3	357	FT	1198	AF	122	acre
1404	#3	358	FT	1297	AF	132	acre
1404	#3	358.5	FT	1349	AF	138	acre
1404	#3	359	FT	1401	AF	143	acre
1404	#3	359.5	FT	1454	AF	148	acre
1404	#3	360.5	FT	1562	AF	159	acre
1406	#5A	286.5	FT	0	AF	0	acre
1406	#5A	306.5	FT	730	AF	62	acre
1406	#5A	307	FT	752	AF	69	acre
1406	#5A	307.5	FT	772	AF	75	acre
1406	#5A	308	FT	797	AF	82	acre
1406	#5A	308.7	FT	836	AF	91	acre
1406	#5A	310	FT	925	AF	108	acre
1406	#5A	312	FT	1087	AF	134	acre
1406	#5A	314	FT	1276	AF	161	acre
1406	#5A	317	FT	1706	AF	200	acre
1406	#5A	320	FT	2218	AF	239	acre
1406	#5A	322.1	FT	2664	AF	267	acre
1406	#5A	322.6	FT	2779	AF	273	acre
1406	#5A	323.1	FT	2890	AF	280	acre
1406	#5A	323.6	FT	2996	AF	290	acre
1406	#5A	324.1	FT	3105	AF	301	acre
1406	#5A	326.1	FT	3629	AF	352	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1406	#5A	327	FT	3885	AF	376	acre
1406	#5A	327.5	FT	4024	AF	390	acre
1406	#5A	328	FT	4161	AF	403	acre
1406	#5A	329	FT	4462	AF	432	acre
1408	#18	300	FT	0	AF	0	acre
1408	#18	313	FT	103	AF	22	acre
1408	#18	314	FT	118	AF	25	acre
1408	#18	314.3	FT	123	AF	27	acre
1408	#18	320	FT	279	AF	46	acre
1408	#18	324	FT	457	AF	60	acre
1408	#18	328	FT	688	AF	74	acre
1408	#18	328.5	FT	726	AF	75	acre
1408	#18	329	FT	764	AF	77	acre
1408	#18	329.5	FT	803	AF	81	acre
1408	#18	330	FT	844	AF	85	acre
1408	#18	330.5	FT	887	AF	89	acre
1408	#18	331	FT	930	AF	94	acre
1408	#18	332	FT	973	AF	98	acre
1408	#18	333	FT	1063	AF	107	acre
1408	#18	334	FT	1203	AF	121	acre
1408	#18	334.5	FT	1253	AF	126	acre
1408	#18	335	FT	1280	AF	129	acre
1408	#18	335.5	FT	1343	AF	135	acre
1408	#18	336	FT	1388	AF	140	acre
1408	#18	336.5	FT	1433	AF	144	acre
1410	#20A	286	FT	0	AF	0	acre
1410	#20A	306.5	FT	1053	AF	160	acre
1410	#20A	307.6	FT	1053	AF	181	acre
1410	#20A	308.6	FT	1272	AF	199	acre
1410	#20A	310	FT	1594	AF	226	acre
1410	#20A	315	FT	3010	AF	319	acre
1410	#20A	318.5	FT	4243	AF	385	acre
1410	#20A	319	FT	4436	AF	403	acre
1410	#20A	319.5	FT	4651	AF	422	acre
1410	#20A	320.5	FT	5101	AF	463	acre
1410	#20A	322.5	FT	6034	AF	548	acre
1410	#20A	324.5	FT	7085	AF	643	acre
1410	#20A	328.5	FT	9402	AF	853	acre
1410	#20A	330.5	FT	10710	AF	972	acre
1410	#20A	331	FT	11075	AF	1005	acre
1410	#20A	331.5	FT	11434	AF	1038	acre
1410	#20A	332	FT	11783	AF	1069	acre
1410	#20A	332.5	FT	12148	AF	1102	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1410	#20A	333	FT	12512	AF	1135	acre
1410	#20A	333.5	FT	12898	AF	1170	acre
1412	#23 (Lake Crabtree)	256	FT	0	AF	0	acre
1412	#23 (Lake Crabtree)	276	FT	1998	AF	511	acre
1412	#23 (Lake Crabtree)	277.03	FT	2557	AF	579	acre
1412	#23 (Lake Crabtree)	279.08	FT	3902	AF	713	acre
1412	#23 (Lake Crabtree)	280.11	FT	4687	AF	781	acre
1412	#23 (Lake Crabtree)	281.91	FT	6220	AF	900	acre
1412	#23 (Lake Crabtree)	283.7	FT	7947	AF	1017	acre
1412	#23 (Lake Crabtree)	284.9	FT	9298	AF	1096	acre
1412	#23 (Lake Crabtree)	286.41	FT	10917	AF	1287	acre
1412	#23 (Lake Crabtree)	289.43	FT	14750	AF	1739	acre
1412	#23 (Lake Crabtree)	292.45	FT	19197	AF	2263	acre
1412	#23 (Lake Crabtree)	296.22	FT	25805	AF	3042	acre
1412	#23 (Lake Crabtree)	300	FT	33582	AF	3959	acre
1412	#23 (Lake Crabtree)	301	FT	37407	AF	4409	acre
1414	#11A	277.4	FT	0	AF	0	acre
1414	#11A	301	FT	360	AF	45	acre
1414	#11A	301.77	FT	391	AF	47	acre
1414	#11A	302.55	FT	427	AF	50	acre
1414	#11A	303.9	FT	491	AF	54	acre
1414	#11A	305.98	FT	599	AF	61	acre
1414	#11A	309.16	FT	786	AF	71	acre
1414	#11A	313.43	FT	1087	AF	84	acre
1414	#11A	318.14	FT	1508	AF	99	acre
1414	#11A	319.6	FT	1655	AF	104	acre
1414	#11A	322.42	FT	1996	AF	126	acre
1414	#11A	326.47	FT	2421	AF	152	acre
1414	#11A	329.44	FT	2696	AF	169	acre
1414	#11A	330.96	FT	2837	AF	178	acre
1414	#11A	331.5	FT	2881	AF	181	acre
1416	#25	215.5	FT	0	AF	0	acre
1416	#25	230	FT	969	AF	205	acre
1416	#25	232.35	FT	1266	AF	220	acre
1416	#25	234.7	FT	1563	AF	236	acre
1416	#25	237.05	FT	1860	AF	251	acre
1416	#25	239.4	FT	2156	AF	267	acre
1416	#25	241.75	FT	2453	AF	282	acre
1416	#25	244.1	FT	2750	AF	298	acre
1416	#25	246.45	FT	3047	AF	313	acre
1416	#25	248.8	FT	3344	AF	328	acre
1416	#25	251.15	FT	3641	AF	344	acre
1416	#25	253.5	FT	3937	AF	359	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1416	#25	255.85	FT	4234	AF	375	acre
1416	#25	258.5	FT	4569	AF	392	acre
1416	#25	259.29	FT	6249	AF	536	acre
1416	#25	260.38	FT	6818	AF	585	acre
1416	#25	262.34	FT	7992	AF	686	acre
1416	#25	264.74	FT	9428	AF	809	acre
1416	#25	269.1	FT	12578	AF	1079	acre
1416	#25	274.55	FT	17477	AF	1499	acre
1416	#25	280	FT	22556	AF	1935	acre
1418	#22B	315	FT	0	AF	0	acre
1418	#22B	335	FT	198	AF	36	acre
1418	#22B	336.6	FT	264	AF	43	acre
1418	#22B	340	FT	433	AF	59	acre
1418	#22B	345	FT	774	AF	81	acre
1418	#22B	349	FT	1117	AF	99	acre
1418	#22B	349.5	FT	1163	AF	103	acre
1418	#22B	350	FT	1207	AF	107	acre
1418	#22B	350.5	FT	1252	AF	111	acre
1418	#22B	351	FT	1298	AF	115	acre
1418	#22B	354	FT	1560	AF	138	acre
1418	#22B	354.3	FT	1587	AF	141	acre
1418	#22B	354.6	FT	1613	AF	143	acre
1418	#22B	355.14	FT	1661	AF	147	acre
1418	#22B	355.8	FT	1719	AF	152	acre
1418	#22B	357	FT	1824	AF	162	acre
1420	Lake Wheeler	265	FT	0	AF	0	acre
1420	Lake Wheeler	265.5	FT	50	AF	0	acre
1420	Lake Wheeler	270	FT	483	AF	214	acre
1420	Lake Wheeler	275	FT	1862	AF	317	acre
1420	Lake Wheeler	280	FT	3793	AF	435	acre
1420	Lake Wheeler	285	FT	6414	AF	572	acre
1420	Lake Wheeler	290	FT	9724	AF	745	acre
1420	Lake Wheeler	293.1	FT	12207	AF	876	acre
1420	Lake Wheeler	295	FT	14069	AF	966	acre
1420	Lake Wheeler	300	FT	19172	AF	1290	acre
1422	#13	234	FT	0	AF	0	acre
1422	#13	252	FT	445	AF	53	acre
1422	#13	253	FT	510	AF	57	acre
1422	#13	254	FT	563	AF	61	acre
1422	#13	258	FT	840	AF	77	acre
1422	#13	265	FT	1440	AF	104	acre
1422	#13	270	FT	1983	AF	123	acre
1422	#13	275	FT	2642	AF	143	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1422	#13	275.5	FT	2710	AF	147	acre
1422	#13	276	FT	2790	AF	151	acre
1422	#13	277	FT	2940	AF	159	acre
1422	#13	278	FT	3100	AF	168	acre
1422	#13	285	FT	3815	AF	207	acre
1440	Lake Benson	224	FT	0	AF	0	acre
1440	Lake Benson	224.5	FT	38	AF	0	acre
1440	Lake Benson	228	FT	277	AF	174	acre
1440	Lake Benson	232	FT	1246	AF	355	acre
1440	Lake Benson	236	FT	3046	AF	550	acre
1440	Lake Benson	240	FT	5677	AF	748	acre
1440	Lake Benson	242	FT	7269	AF	836	acre
1440	Lake Benson	244	FT	8751	AF	940	acre
1440	Lake Benson	248	FT	13251	AF	1198	acre
1445	Lake Johnson	311.4	FT	0	AF	0	acre
1445	Lake Johnson	312	FT	25	AF	0	acre
1445	Lake Johnson	312.7	FT	52	AF	3	acre
1445	Lake Johnson	316	FT	182	AF	12	acre
1445	Lake Johnson	319.2	FT	312	AF	20	acre
1445	Lake Johnson	322.5	FT	490	AF	32	acre
1445	Lake Johnson	325.8	FT	667	AF	43	acre
1445	Lake Johnson	328.1	FT	791	AF	51	acre
1445	Lake Johnson	330.4	FT	926	AF	60	acre
1445	Lake Johnson	333	FT	1081	AF	70	acre
1445	Lake Johnson	334.7	FT	1187	AF	77	acre
1445	Lake Johnson	341.2	FT	1612	AF	105	acre
1445	Lake Johnson	343.4	FT	2270	AF	148	acre
1445	Lake Johnson	344.4	FT	2422	AF	156	acre
1445	Lake Johnson	346.4	FT	2582	AF	165	acre
1445	Lake Johnson	349.4	FT	2752	AF	175	acre
1445	Lake Johnson	353.4	FT	2931	AF	183	acre
1445	Lake Johnson	358.1	FT	3061	AF	188	acre
1445	Lake Johnson	363.5	FT	3195	AF	193	acre
1445	Lake Johnson	369.7	FT	3352	AF	199	acre
1445	Lake Johnson	376.4	FT	3452	AF	203	acre
1445	Lake Johnson	385.1	FT	3872	AF	218	acre
1445	Lake Johnson	394.8	FT	4094	AF	225	acre
1450	Lake Raleigh	264	FT	0	AF	0	acre
1450	Lake Raleigh	274	FT	338	AF	68	acre
1450	Lake Raleigh	276	FT	488	AF	82	acre
1450	Lake Raleigh	278	FT	667	AF	97	acre
1450	Lake Raleigh	280	FT	871	AF	107	acre
1450	Lake Raleigh	282	FT	1101	AF	123	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1450	Lake Raleigh	284	FT	1358	AF	134	acre
1450	Lake Raleigh	286	FT	1639	AF	147	acre
1450	Lake Raleigh	288	FT	1950	AF	164	acre
1500	Buckhorn Reservoir	120	FT	0	AF	0	acre
1500	Buckhorn Reservoir	136	FT	2240	AF	740	acre
1500	Buckhorn Reservoir	137	FT	3103	AF	866	acre
1500	Buckhorn Reservoir	138	FT	3965	AF	991	acre
1500	Buckhorn Reservoir	139	FT	5073	AF	1111	acre
1500	Buckhorn Reservoir	140	FT	6181	AF	1230	acre
1500	Buckhorn Reservoir	141	FT	7562	AF	1385	acre
1500	Buckhorn Reservoir	142	FT	8946	AF	1540	acre
1500	Buckhorn Reservoir	143	FT	10643	AF	1701	acre
1500	Buckhorn Reservoir	144	FT	12343	AF	1861	acre
1500	Buckhorn Reservoir	145	FT	14307	AF	1965	acre
1500	Buckhorn Reservoir	146	FT	16271	AF	2069	acre
1500	Buckhorn Reservoir	146.5	FT	17364	AF	2128	acre
1500	Buckhorn Reservoir	147	FT	18456	AF	2186	acre
1500	Buckhorn Reservoir	147.5	FT	19549	AF	2245	acre
1500	Buckhorn Reservoir	148	FT	20641	AF	2303	acre
1500	Buckhorn Reservoir	149	FT	23066	AF	2424	acre
1500	Buckhorn Reservoir	150	FT	25487	AF	2546	acre
1500	Buckhorn Reservoir	151	FT	28188	AF	2702	acre
1500	Buckhorn Reservoir	152	FT	30888	AF	2858	acre
1500	Buckhorn Reservoir	153	FT	33887	AF	3000	acre
1500	Buckhorn Reservoir	154	FT	36888	AF	3142	acre
1500	Buckhorn Reservoir	155	FT	40178	AF	3292	acre
1500	Buckhorn Reservoir	156	FT	43468	AF	3441	acre
1500	Buckhorn Reservoir	157	FT	47031	AF	3563	acre
1500	Buckhorn Reservoir	158	FT	50594	AF	3685	acre
1500	Buckhorn Reservoir	159	FT	54417	AF	3825	acre
1500	Buckhorn Reservoir	160	FT	58241	AF	3965	acre
1647	JCo Active Quarry	0	FT	0	AF	42	acre
1647	JCo Active Quarry	450	FT	27520	AF	80	acre
1648	JCo Aband Quarry	0	FT	0	AF	7	acre
1648	JCo Aband Quarry	275	FT	3160	AF	16	acre
1740	Little River Reservoir (Raleigh proposed)	234	FT	0	AF	0	acre
1740	Little River Reservoir (Raleigh proposed)	236	FT	4	AF	6	acre
1740	Little River Reservoir (Raleigh proposed)	238	FT	41	AF	34	acre
1740	Little River Reservoir (Raleigh proposed)	240	FT	153	AF	81	acre
1740	Little River Reservoir (Raleigh proposed)	242	FT	371	AF	139	acre
1740	Little River Reservoir (Raleigh proposed)	244	FT	773	AF	270	acre
1740	Little River Reservoir (Raleigh proposed)	246	FT	1414	AF	374	acre
1740	Little River Reservoir (Raleigh proposed)	248	FT	2231	AF	444	acre

Number	Name	Elevation	Elevation Units	Storage	Storage Units	Area	Area Units
1740	Little River Reservoir (Raleigh proposed)	250	FT	3233	AF	561	acre
1740	Little River Reservoir (Raleigh proposed)	252	FT	4436	AF	643	acre
1740	Little River Reservoir (Raleigh proposed)	254	FT	5849	AF	772	acre
1740	Little River Reservoir (Raleigh proposed)	256	FT	7494	AF	875	acre
1740	Little River Reservoir (Raleigh proposed)	258	FT	9354	AF	986	acre
1740	Little River Reservoir (Raleigh proposed)	260	FT	11483	AF	1146	acre
1740	Little River Reservoir (Raleigh proposed)	262	FT	13899	AF	1271	acre
1740	Little River Reservoir (Raleigh proposed)	264	FT	16567	AF	1397	acre
1740	Little River Reservoir (Raleigh proposed)	266	FT	19495	AF	1532	acre
1740	Little River Reservoir (Raleigh proposed)	268	FT	22724	AF	1700	acre
1740	Little River Reservoir (Raleigh proposed)	270	FT	26298	AF	1875	acre
1740	Little River Reservoir (Raleigh proposed)	272	FT	30240	AF	2069	acre
1740	Little River Reservoir (Raleigh proposed)	274	FT	34578	AF	2270	acre
1740	Little River Reservoir (Raleigh proposed)	276	FT	39316	AF	2469	acre

Demand Patterns

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
031	Reidsville Demand_02-79-020	mgd	4.53	1	1	0.80	1
031	Reidsville Demand_02-79-020	mgd	4.53	1	31	0.80	31
031	Reidsville Demand_02-79-020	mgd	4.53	2	1	0.82	32
031	Reidsville Demand_02-79-020	mgd	4.53	2	29	0.82	60
031	Reidsville Demand_02-79-020	mgd	4.53	3	1	0.88	61
031	Reidsville Demand_02-79-020	mgd	4.53	3	31	0.88	91
031	Reidsville Demand_02-79-020	mgd	4.53	4	1	0.92	92
031	Reidsville Demand_02-79-020	mgd	4.53	4	30	0.92	121
031	Reidsville Demand_02-79-020	mgd	4.53	5	1	0.90	122
031	Reidsville Demand_02-79-020	mgd	4.53	5	31	0.90	152
031	Reidsville Demand_02-79-020	mgd	4.53	6	1	1.01	153
031	Reidsville Demand_02-79-020	mgd	4.53	6	30	1.01	182
031	Reidsville Demand_02-79-020	mgd	4.53	7	1	1.10	183
031	Reidsville Demand_02-79-020	mgd	4.53	7	31	1.10	213
031	Reidsville Demand_02-79-020	mgd	4.53	8	1	1.32	214
031	Reidsville Demand_02-79-020	mgd	4.53	8	31	1.32	244
031	Reidsville Demand_02-79-020	mgd	4.53	9	1	1.25	245
031	Reidsville Demand_02-79-020	mgd	4.53	9	30	1.25	274
031	Reidsville Demand_02-79-020	mgd	4.53	10	1	1.07	275
031	Reidsville Demand_02-79-020	mgd	4.53	10	31	1.07	305
031	Reidsville Demand_02-79-020	mgd	4.53	11	1	1.03	306
031	Reidsville Demand_02-79-020	mgd	4.53	11	30	1.03	335
031	Reidsville Demand_02-79-020	mgd	4.53	12	1	0.89	336
031	Reidsville Demand_02-79-020	mgd	4.53	12	31	0.89	366
123	Greensboro Total Demand_02-41-010	MGD	35.24	1	1	0.89	1
123	Greensboro Total Demand_02-41-010	MGD	35.24	1	31	0.89	31
123	Greensboro Total Demand_02-41-010	MGD	35.24	2	1	0.90	32
123	Greensboro Total Demand_02-41-010	MGD	35.24	2	29	0.90	60
123	Greensboro Total Demand_02-41-010	MGD	35.24	3	1	0.91	61
123	Greensboro Total Demand_02-41-010	MGD	35.24	3	31	0.91	91
123	Greensboro Total Demand_02-41-010	MGD	35.24	4	1	0.92	92
123	Greensboro Total Demand_02-41-010	MGD	35.24	4	30	0.92	121
123	Greensboro Total Demand_02-41-010	MGD	35.24	5	1	1.01	122
123	Greensboro Total Demand_02-41-010	MGD	35.24	5	31	1.01	152
123	Greensboro Total Demand_02-41-010	MGD	35.24	6	1	1.13	153
123	Greensboro Total Demand_02-41-010	MGD	35.24	6	30	1.13	182
123	Greensboro Total Demand_02-41-010	MGD	35.24	7	1	1.15	183
123	Greensboro Total Demand_02-41-010	MGD	35.24	7	31	1.15	213
123	Greensboro Total Demand_02-41-010	MGD	35.24	8	1	1.15	214
123	Greensboro Total Demand_02-41-010	MGD	35.24	8	31	1.15	244
123	Greensboro Total Demand_02-41-010	MGD	35.24	9	1	1.06	245
123	Greensboro Total Demand_02-41-010	MGD	35.24	9	30	1.06	274
123	Greensboro Total Demand_02-41-010	MGD	35.24	10	1	1.02	275
123	Greensboro Total Demand_02-41-010	MGD	35.24	10	31	1.02	305
123	Greensboro Total Demand_02-41-010	MGD	35.24	11	1	0.96	306
123	Greensboro Total Demand_02-41-010	MGD	35.24	11	30	0.96	335
123	Greensboro Total Demand_02-41-010	MGD	35.24	12	1	0.89	336
123	Greensboro Total Demand_02-41-010	MGD	35.24	12	31	0.89	366
223	High Point Service Area Demand_02-41-020	MGD	12.64	1	1	0.88	1
223	High Point Service Area Demand_02-41-020	MGD	12.64	1	31	0.88	31
223	High Point Service Area Demand_02-41-020	MGD	12.64	2	1	0.84	32
223	High Point Service Area Demand_02-41-020	MGD	12.64	2	29	0.84	60
223	High Point Service Area Demand_02-41-020	MGD	12.64	3	1	0.87	61
223	High Point Service Area Demand_02-41-020	MGD	12.64	3	31	0.87	91

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
223	High Point Service Area Demand_02-41-020	MGD	12.64	4	1	0.94	92
223	High Point Service Area Demand_02-41-020	MGD	12.64	4	30	0.94	121
223	High Point Service Area Demand_02-41-020	MGD	12.64	5	1	0.99	122
223	High Point Service Area Demand_02-41-020	MGD	12.64	5	31	0.99	152
223	High Point Service Area Demand_02-41-020	MGD	12.64	6	1	1.15	153
223	High Point Service Area Demand_02-41-020	MGD	12.64	6	30	1.15	182
223	High Point Service Area Demand_02-41-020	MGD	12.64	7	1	1.17	183
223	High Point Service Area Demand_02-41-020	MGD	12.64	7	31	1.17	213
223	High Point Service Area Demand_02-41-020	MGD	12.64	8	1	1.14	214
223	High Point Service Area Demand_02-41-020	MGD	12.64	8	31	1.14	244
223	High Point Service Area Demand_02-41-020	MGD	12.64	9	1	1.12	245
223	High Point Service Area Demand_02-41-020	MGD	12.64	9	30	1.12	274
223	High Point Service Area Demand_02-41-020	MGD	12.64	10	1	1.05	275
223	High Point Service Area Demand_02-41-020	MGD	12.64	10	31	1.05	305
223	High Point Service Area Demand_02-41-020	MGD	12.64	11	1	0.93	306
223	High Point Service Area Demand_02-41-020	MGD	12.64	11	30	0.93	335
223	High Point Service Area Demand_02-41-020	MGD	12.64	12	1	0.90	336
223	High Point Service Area Demand_02-41-020	MGD	12.64	12	31	0.90	366
261	City of Randleman Demand_02-76-015	MGD	0.40	1	1	0.95	1
261	City of Randleman Demand_02-76-015	MGD	0.40	1	31	0.95	31
261	City of Randleman Demand_02-76-015	MGD	0.40	2	1	0.78	32
261	City of Randleman Demand_02-76-015	MGD	0.40	2	29	0.78	60
261	City of Randleman Demand_02-76-015	MGD	0.40	3	1	0.86	61
261	City of Randleman Demand_02-76-015	MGD	0.40	3	31	0.86	91
261	City of Randleman Demand_02-76-015	MGD	0.40	4	1	0.85	92
261	City of Randleman Demand_02-76-015	MGD	0.40	4	30	0.85	121
261	City of Randleman Demand_02-76-015	MGD	0.40	5	1	1.01	122
261	City of Randleman Demand_02-76-015	MGD	0.40	5	31	1.01	152
261	City of Randleman Demand_02-76-015	MGD	0.40	6	1	1.25	153
261	City of Randleman Demand_02-76-015	MGD	0.40	6	30	1.25	182
261	City of Randleman Demand_02-76-015	MGD	0.40	7	1	1.26	183
261	City of Randleman Demand_02-76-015	MGD	0.40	7	31	1.26	213
261	City of Randleman Demand_02-76-015	MGD	0.40	8	1	0.84	214
261	City of Randleman Demand_02-76-015	MGD	0.40	8	31	0.84	244
261	City of Randleman Demand_02-76-015	MGD	0.40	9	1	1.21	245
261	City of Randleman Demand_02-76-015	MGD	0.40	9	30	1.21	274
261	City of Randleman Demand_02-76-015	MGD	0.40	10	1	1.06	275
261	City of Randleman Demand_02-76-015	MGD	0.40	10	31	1.06	305
261	City of Randleman Demand_02-76-015	MGD	0.40	11	1	0.95	306
261	City of Randleman Demand_02-76-015	MGD	0.40	11	30	0.95	335
261	City of Randleman Demand_02-76-015	MGD	0.40	12	1	0.99	336
261	City of Randleman Demand_02-76-015	MGD	0.40	12	31	0.99	366
301	Ramseur Demand_02-76-020	mgd	0.49	1	1	0.96	1
301	Ramseur Demand_02-76-020	mgd	0.49	1	31	0.96	31
301	Ramseur Demand_02-76-020	mgd	0.49	2	1	0.98	32
301	Ramseur Demand_02-76-020	mgd	0.49	2	29	0.98	60
301	Ramseur Demand_02-76-020	mgd	0.49	3	1	0.96	61
301	Ramseur Demand_02-76-020	mgd	0.49	3	31	0.96	91
301	Ramseur Demand_02-76-020	mgd	0.49	4	1	1.01	92
301	Ramseur Demand_02-76-020	mgd	0.49	4	30	1.01	121
301	Ramseur Demand_02-76-020	mgd	0.49	5	1	1.05	122
301	Ramseur Demand_02-76-020	mgd	0.49	5	31	1.05	152
301	Ramseur Demand_02-76-020	mgd	0.49	6	1	1.09	153
301	Ramseur Demand_02-76-020	mgd	0.49	6	30	1.09	182
301	Ramseur Demand_02-76-020	mgd	0.49	7	1	1.04	183

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
301	Ramseur Demand_02-76-020	mgd	0.49	7	31	1.04	213
301	Ramseur Demand_02-76-020	mgd	0.49	8	1	1.06	214
301	Ramseur Demand_02-76-020	mgd	0.49	8	31	1.06	244
301	Ramseur Demand_02-76-020	mgd	0.49	9	1	1.07	245
301	Ramseur Demand_02-76-020	mgd	0.49	9	30	1.07	274
301	Ramseur Demand_02-76-020	mgd	0.49	10	1	0.98	275
301	Ramseur Demand_02-76-020	mgd	0.49	10	31	0.98	305
301	Ramseur Demand_02-76-020	mgd	0.49	11	1	0.90	306
301	Ramseur Demand_02-76-020	mgd	0.49	11	30	0.90	335
301	Ramseur Demand_02-76-020	mgd	0.49	12	1	0.89	336
301	Ramseur Demand_02-76-020	mgd	0.49	12	31	0.89	366
321	Graham-Mebane Demand_02-01-015	mgd	3.50	1	1	0.92	1
321	Graham-Mebane Demand_02-01-015	mgd	3.50	1	31	0.92	31
321	Graham-Mebane Demand_02-01-015	mgd	3.50	2	1	0.91	32
321	Graham-Mebane Demand_02-01-015	mgd	3.50	2	29	0.91	60
321	Graham-Mebane Demand_02-01-015	mgd	3.50	3	1	0.92	61
321	Graham-Mebane Demand_02-01-015	mgd	3.50	3	31	0.92	91
321	Graham-Mebane Demand_02-01-015	mgd	3.50	4	1	0.94	92
321	Graham-Mebane Demand_02-01-015	mgd	3.50	4	30	0.94	121
321	Graham-Mebane Demand_02-01-015	mgd	3.50	5	1	1.01	122
321	Graham-Mebane Demand_02-01-015	mgd	3.50	5	31	1.01	152
321	Graham-Mebane Demand_02-01-015	mgd	3.50	6	1	1.10	153
321	Graham-Mebane Demand_02-01-015	mgd	3.50	6	30	1.10	182
321	Graham-Mebane Demand_02-01-015	mgd	3.50	7	1	1.15	183
321	Graham-Mebane Demand_02-01-015	mgd	3.50	7	31	1.15	213
321	Graham-Mebane Demand_02-01-015	mgd	3.50	8	1	1.11	214
321	Graham-Mebane Demand_02-01-015	mgd	3.50	8	31	1.11	244
321	Graham-Mebane Demand_02-01-015	mgd	3.50	9	1	1.10	245
321	Graham-Mebane Demand_02-01-015	mgd	3.50	9	30	1.10	274
321	Graham-Mebane Demand_02-01-015	mgd	3.50	10	1	1.01	275
321	Graham-Mebane Demand_02-01-015	mgd	3.50	10	31	1.01	305
321	Graham-Mebane Demand_02-01-015	mgd	3.50	11	1	0.94	306
321	Graham-Mebane Demand_02-01-015	mgd	3.50	11	30	0.94	335
321	Graham-Mebane Demand_02-01-015	mgd	3.50	12	1	0.91	336
321	Graham-Mebane Demand_02-01-015	mgd	3.50	12	31	0.91	366
327	Siler City Demand_03-19-010	MGD	2.38	1	1	1.06	1
327	Siler City Demand_03-19-010	MGD	2.38	1	31	1.06	31
327	Siler City Demand_03-19-010	MGD	2.38	2	1	1.03	32
327	Siler City Demand_03-19-010	MGD	2.38	2	29	1.03	60
327	Siler City Demand_03-19-010	MGD	2.38	3	1	0.99	61
327	Siler City Demand_03-19-010	MGD	2.38	3	31	0.99	91
327	Siler City Demand_03-19-010	MGD	2.38	4	1	1.00	92
327	Siler City Demand_03-19-010	MGD	2.38	4	30	1.00	121
327	Siler City Demand_03-19-010	MGD	2.38	5	1	1.02	122
327	Siler City Demand_03-19-010	MGD	2.38	5	31	1.02	152
327	Siler City Demand_03-19-010	MGD	2.38	6	1	1.04	153
327	Siler City Demand_03-19-010	MGD	2.38	6	30	1.04	182
327	Siler City Demand_03-19-010	MGD	2.38	7	1	1.03	183
327	Siler City Demand_03-19-010	MGD	2.38	7	31	1.03	213
327	Siler City Demand_03-19-010	MGD	2.38	8	1	1.09	214
327	Siler City Demand_03-19-010	MGD	2.38	8	31	1.09	244
327	Siler City Demand_03-19-010	MGD	2.38	9	1	1.02	245
327	Siler City Demand_03-19-010	MGD	2.38	9	30	1.02	274
327	Siler City Demand_03-19-010	MGD	2.38	10	1	0.90	275
327	Siler City Demand_03-19-010	MGD	2.38	10	31	0.90	305

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
327	Siler City Demand_03-19-010	MGD	2.38	11	1	0.92	306
327	Siler City Demand_03-19-010	MGD	2.38	11	30	0.92	335
327	Siler City Demand_03-19-010	MGD	2.38	12	1	0.90	336
327	Siler City Demand_03-19-010	MGD	2.38	12	31	0.90	366
341	Burlington Demand_02-01-010	MGD	15.03	1	1	0.98	1
341	Burlington Demand_02-01-010	MGD	15.03	1	31	0.98	31
341	Burlington Demand_02-01-010	MGD	15.03	2	1	1.00	32
341	Burlington Demand_02-01-010	MGD	15.03	2	29	1.00	60
341	Burlington Demand_02-01-010	MGD	15.03	3	1	0.98	61
341	Burlington Demand_02-01-010	MGD	15.03	3	31	0.98	91
341	Burlington Demand_02-01-010	MGD	15.03	4	1	1.00	92
341	Burlington Demand_02-01-010	MGD	15.03	4	30	1.00	121
341	Burlington Demand_02-01-010	MGD	15.03	5	1	1.02	122
341	Burlington Demand_02-01-010	MGD	15.03	5	31	1.02	152
341	Burlington Demand_02-01-010	MGD	15.03	6	1	1.08	153
341	Burlington Demand_02-01-010	MGD	15.03	6	30	1.08	182
341	Burlington Demand_02-01-010	MGD	15.03	7	1	1.06	183
341	Burlington Demand_02-01-010	MGD	15.03	7	31	1.06	213
341	Burlington Demand_02-01-010	MGD	15.03	8	1	1.02	214
341	Burlington Demand_02-01-010	MGD	15.03	8	31	1.02	244
341	Burlington Demand_02-01-010	MGD	15.03	9	1	1.04	245
341	Burlington Demand_02-01-010	MGD	15.03	9	30	1.04	274
341	Burlington Demand_02-01-010	MGD	15.03	10	1	0.99	275
341	Burlington Demand_02-01-010	MGD	15.03	10	31	0.99	305
341	Burlington Demand_02-01-010	MGD	15.03	11	1	0.91	306
341	Burlington Demand_02-01-010	MGD	15.03	11	30	0.91	335
341	Burlington Demand_02-01-010	MGD	15.03	12	1	0.95	336
341	Burlington Demand_02-01-010	MGD	15.03	12	31	0.95	366
401	Pittsboro Demand_03-19-015	mgd	0.60	1	1	0.90	1
401	Pittsboro Demand_03-19-015	mgd	0.60	1	31	0.90	31
401	Pittsboro Demand_03-19-015	mgd	0.60	2	1	0.95	32
401	Pittsboro Demand_03-19-015	mgd	0.60	2	29	0.95	60
401	Pittsboro Demand_03-19-015	mgd	0.60	3	1	0.91	61
401	Pittsboro Demand_03-19-015	mgd	0.60	3	31	0.91	91
401	Pittsboro Demand_03-19-015	mgd	0.60	4	1	0.96	92
401	Pittsboro Demand_03-19-015	mgd	0.60	4	30	0.96	121
401	Pittsboro Demand_03-19-015	mgd	0.60	5	1	1.02	122
401	Pittsboro Demand_03-19-015	mgd	0.60	5	31	1.02	152
401	Pittsboro Demand_03-19-015	mgd	0.60	6	1	1.09	153
401	Pittsboro Demand_03-19-015	mgd	0.60	6	30	1.09	182
401	Pittsboro Demand_03-19-015	mgd	0.60	7	1	1.08	183
401	Pittsboro Demand_03-19-015	mgd	0.60	7	31	1.08	213
401	Pittsboro Demand_03-19-015	mgd	0.60	8	1	1.15	214
401	Pittsboro Demand_03-19-015	mgd	0.60	8	31	1.15	244
401	Pittsboro Demand_03-19-015	mgd	0.60	9	1	1.11	245
401	Pittsboro Demand_03-19-015	mgd	0.60	9	30	1.11	274
401	Pittsboro Demand_03-19-015	mgd	0.60	10	1	0.98	275
401	Pittsboro Demand_03-19-015	mgd	0.60	10	31	0.98	305
401	Pittsboro Demand_03-19-015	mgd	0.60	11	1	0.94	306
401	Pittsboro Demand_03-19-015	mgd	0.60	11	30	0.94	335
401	Pittsboro Demand_03-19-015	mgd	0.60	12	1	0.89	336
401	Pittsboro Demand_03-19-015	mgd	0.60	12	31	0.89	366
431	OWASA Demand_03-68-010	MGD	7.70	1	1	0.89	1
431	OWASA Demand_03-68-010	MGD	7.70	1	31	0.89	31
431	OWASA Demand_03-68-010	MGD	7.70	2	1	0.89	32

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
431	OWASA Demand_03-68-010	MGD	7.70	2	29	0.89	60
431	OWASA Demand_03-68-010	MGD	7.70	3	1	0.90	61
431	OWASA Demand_03-68-010	MGD	7.70	3	31	0.90	91
431	OWASA Demand_03-68-010	MGD	7.70	4	1	0.97	92
431	OWASA Demand_03-68-010	MGD	7.70	4	30	0.97	121
431	OWASA Demand_03-68-010	MGD	7.70	5	1	1.00	122
431	OWASA Demand_03-68-010	MGD	7.70	5	31	1.00	152
431	OWASA Demand_03-68-010	MGD	7.70	6	1	1.08	153
431	OWASA Demand_03-68-010	MGD	7.70	6	30	1.08	182
431	OWASA Demand_03-68-010	MGD	7.70	7	1	1.11	183
431	OWASA Demand_03-68-010	MGD	7.70	7	31	1.11	213
431	OWASA Demand_03-68-010	MGD	7.70	8	1	1.13	214
431	OWASA Demand_03-68-010	MGD	7.70	8	31	1.13	244
431	OWASA Demand_03-68-010	MGD	7.70	9	1	1.14	245
431	OWASA Demand_03-68-010	MGD	7.70	9	30	1.14	274
431	OWASA Demand_03-68-010	MGD	7.70	10	1	1.07	275
431	OWASA Demand_03-68-010	MGD	7.70	10	31	1.07	305
431	OWASA Demand_03-68-010	MGD	7.70	11	1	0.96	306
431	OWASA Demand_03-68-010	MGD	7.70	11	30	0.96	335
431	OWASA Demand_03-68-010	MGD	7.70	12	1	0.82	336
431	OWASA Demand_03-68-010	MGD	7.70	12	31	0.82	366
471	Cary Apex water supply	MGD	18.40	1	1	0.75	1
471	Cary Apex water supply	MGD	18.40	1	31	0.75	31
471	Cary Apex water supply	MGD	18.40	2	1	0.75	32
471	Cary Apex water supply	MGD	18.40	2	29	0.75	60
471	Cary Apex water supply	MGD	18.40	3	1	0.85	61
471	Cary Apex water supply	MGD	18.40	3	31	0.85	91
471	Cary Apex water supply	MGD	18.40	4	1	0.91	92
471	Cary Apex water supply	MGD	18.40	4	30	0.91	121
471	Cary Apex water supply	MGD	18.40	5	1	1.14	122
471	Cary Apex water supply	MGD	18.40	5	31	1.14	152
471	Cary Apex water supply	MGD	18.40	6	1	1.39	153
471	Cary Apex water supply	MGD	18.40	6	30	1.39	182
471	Cary Apex water supply	MGD	18.40	7	1	1.32	183
471	Cary Apex water supply	MGD	18.40	7	31	1.32	213
471	Cary Apex water supply	MGD	18.40	8	1	1.25	214
471	Cary Apex water supply	MGD	18.40	8	31	1.25	244
471	Cary Apex water supply	MGD	18.40	9	1	1.08	245
471	Cary Apex water supply	MGD	18.40	9	30	1.08	274
471	Cary Apex water supply	MGD	18.40	10	1	1.00	275
471	Cary Apex water supply	MGD	18.40	10	31	1.00	305
471	Cary Apex water supply	MGD	18.40	11	1	0.81	306
471	Cary Apex water supply	MGD	18.40	11	30	0.81	335
471	Cary Apex water supply	MGD	18.40	12	1	0.75	336
471	Cary Apex water supply	MGD	18.40	12	31	0.75	366
473	Chatham Co. North Demand	mgd	2.20	1	1	0.66	1
473	Chatham Co. North Demand	mgd	2.20	1	31	0.66	31
473	Chatham Co. North Demand	mgd	2.20	2	1	0.67	32
473	Chatham Co. North Demand	mgd	2.20	2	29	0.67	60
473	Chatham Co. North Demand	mgd	2.20	3	1	0.74	61
473	Chatham Co. North Demand	mgd	2.20	3	31	0.74	91
473	Chatham Co. North Demand	mgd	2.20	4	1	0.93	92
473	Chatham Co. North Demand	mgd	2.20	4	30	0.93	121
473	Chatham Co. North Demand	mgd	2.20	5	1	1.17	122
473	Chatham Co. North Demand	mgd	2.20	5	31	1.17	152

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
473	Chatham Co. North Demand	mgd	2.20	6	1	1.37	153
473	Chatham Co. North Demand	mgd	2.20	6	30	1.37	182
473	Chatham Co. North Demand	mgd	2.20	7	1	1.36	183
473	Chatham Co. North Demand	mgd	2.20	7	31	1.36	213
473	Chatham Co. North Demand	mgd	2.20	8	1	1.28	214
473	Chatham Co. North Demand	mgd	2.20	8	31	1.28	244
473	Chatham Co. North Demand	mgd	2.20	9	1	1.24	245
473	Chatham Co. North Demand	mgd	2.20	9	30	1.24	274
473	Chatham Co. North Demand	mgd	2.20	10	1	1.06	275
473	Chatham Co. North Demand	mgd	2.20	10	31	1.06	305
473	Chatham Co. North Demand	mgd	2.20	11	1	0.75	306
473	Chatham Co. North Demand	mgd	2.20	11	30	0.75	335
473	Chatham Co. North Demand	mgd	2.20	12	1	0.71	336
473	Chatham Co. North Demand	mgd	2.20	12	31	0.71	366
474	RTP Demand	mgd	0.60	1	1	0.68	1
474	RTP Demand	mgd	0.60	1	31	0.68	31
474	RTP Demand	mgd	0.60	2	1	0.70	32
474	RTP Demand	mgd	0.60	2	29	0.70	60
474	RTP Demand	mgd	0.60	3	1	0.83	61
474	RTP Demand	mgd	0.60	3	31	0.83	91
474	RTP Demand	mgd	0.60	4	1	0.80	92
474	RTP Demand	mgd	0.60	4	30	0.80	121
474	RTP Demand	mgd	0.60	5	1	1.09	122
474	RTP Demand	mgd	0.60	5	31	1.09	152
474	RTP Demand	mgd	0.60	6	1	1.41	153
474	RTP Demand	mgd	0.60	6	30	1.41	182
474	RTP Demand	mgd	0.60	7	1	1.36	183
474	RTP Demand	mgd	0.60	7	31	1.36	213
474	RTP Demand	mgd	0.60	8	1	1.40	214
474	RTP Demand	mgd	0.60	8	31	1.40	244
474	RTP Demand	mgd	0.60	9	1	1.15	245
474	RTP Demand	mgd	0.60	9	30	1.15	274
474	RTP Demand	mgd	0.60	10	1	1.01	275
474	RTP Demand	mgd	0.60	10	31	1.01	305
474	RTP Demand	mgd	0.60	11	1	0.85	306
474	RTP Demand	mgd	0.60	11	30	0.85	335
474	RTP Demand	mgd	0.60	12	1	0.72	336
474	RTP Demand	mgd	0.60	12	31	0.72	366
475	Jordan Make Up Demand	mgd	0.00	1	1	0.82	1
475	Jordan Make Up Demand	mgd	0.00	1	31	0.82	31
475	Jordan Make Up Demand	mgd	0.00	2	1	0.74	32
475	Jordan Make Up Demand	mgd	0.00	2	28	0.74	59
475	Jordan Make Up Demand	mgd	0.00	3	1	0.90	61
475	Jordan Make Up Demand	mgd	0.00	3	31	0.90	91
475	Jordan Make Up Demand	mgd	0.00	4	1	0.95	92
475	Jordan Make Up Demand	mgd	0.00	4	30	0.95	121
475	Jordan Make Up Demand	mgd	0.00	5	1	1.17	122
475	Jordan Make Up Demand	mgd	0.00	5	31	1.17	152
475	Jordan Make Up Demand	mgd	0.00	6	1	1.14	153
475	Jordan Make Up Demand	mgd	0.00	6	30	1.14	182
475	Jordan Make Up Demand	mgd	0.00	7	1	1.16	183
475	Jordan Make Up Demand	mgd	0.00	7	31	1.16	213
475	Jordan Make Up Demand	mgd	0.00	8	1	1.18	214
475	Jordan Make Up Demand	mgd	0.00	8	31	1.18	244
475	Jordan Make Up Demand	mgd	0.00	9	1	1.06	245

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
475	Jordan Make Up Demand	mgd	0.00	9	30	1.06	274
475	Jordan Make Up Demand	mgd	0.00	10	1	1.09	275
475	Jordan Make Up Demand	mgd	0.00	10	31	1.09	305
475	Jordan Make Up Demand	mgd	0.00	11	1	0.93	306
475	Jordan Make Up Demand	mgd	0.00	11	30	0.93	335
475	Jordan Make Up Demand	mgd	0.00	12	1	0.85	336
475	Jordan Make Up Demand	mgd	0.00	12	31	0.85	366
477	Morrisville demand	mgd	1.70	1	1	0.73	1
477	Morrisville demand	mgd	1.70	1	31	0.73	31
477	Morrisville demand	mgd	1.70	2	1	0.65	32
477	Morrisville demand	mgd	1.70	2	29	0.65	60
477	Morrisville demand	mgd	1.70	3	1	0.84	61
477	Morrisville demand	mgd	1.70	3	31	0.84	91
477	Morrisville demand	mgd	1.70	4	1	0.84	92
477	Morrisville demand	mgd	1.70	4	30	0.84	121
477	Morrisville demand	mgd	1.70	5	1	1.13	122
477	Morrisville demand	mgd	1.70	5	31	1.13	152
477	Morrisville demand	mgd	1.70	6	1	1.47	153
477	Morrisville demand	mgd	1.70	6	30	1.47	182
477	Morrisville demand	mgd	1.70	7	1	1.38	183
477	Morrisville demand	mgd	1.70	7	31	1.38	213
477	Morrisville demand	mgd	1.70	8	1	1.32	214
477	Morrisville demand	mgd	1.70	8	31	1.32	244
477	Morrisville demand	mgd	1.70	9	1	1.09	245
477	Morrisville demand	mgd	1.70	9	30	1.09	274
477	Morrisville demand	mgd	1.70	10	1	1.00	275
477	Morrisville demand	mgd	1.70	10	31	1.00	305
477	Morrisville demand	mgd	1.70	11	1	0.84	306
477	Morrisville demand	mgd	1.70	11	30	0.84	335
477	Morrisville demand	mgd	1.70	12	1	0.74	336
477	Morrisville demand	mgd	1.70	12	31	0.74	366
483	Performance Fibers / Allied Signal Demand	mgd	0.20	1	1	0.88	1
483	Performance Fibers / Allied Signal Demand	mgd	0.20	1	31	0.88	31
483	Performance Fibers / Allied Signal Demand	mgd	0.20	2	1	0.91	32
483	Performance Fibers / Allied Signal Demand	mgd	0.20	2	29	0.91	60
483	Performance Fibers / Allied Signal Demand	mgd	0.20	3	1	0.93	61
483	Performance Fibers / Allied Signal Demand	mgd	0.20	3	31	0.93	91
483	Performance Fibers / Allied Signal Demand	mgd	0.20	4	1	0.96	92
483	Performance Fibers / Allied Signal Demand	mgd	0.20	4	30	0.96	121
483	Performance Fibers / Allied Signal Demand	mgd	0.20	5	1	1.06	122
483	Performance Fibers / Allied Signal Demand	mgd	0.20	5	31	1.06	152
483	Performance Fibers / Allied Signal Demand	mgd	0.20	6	1	1.18	153
483	Performance Fibers / Allied Signal Demand	mgd	0.20	6	30	1.18	182
483	Performance Fibers / Allied Signal Demand	mgd	0.20	7	1	1.19	183
483	Performance Fibers / Allied Signal Demand	mgd	0.20	7	31	1.19	213
483	Performance Fibers / Allied Signal Demand	mgd	0.20	8	1	1.14	214
483	Performance Fibers / Allied Signal Demand	mgd	0.20	8	31	1.14	244
483	Performance Fibers / Allied Signal Demand	mgd	0.20	9	1	1.05	245
483	Performance Fibers / Allied Signal Demand	mgd	0.20	9	30	1.05	274
483	Performance Fibers / Allied Signal Demand	mgd	0.20	10	1	0.94	275
483	Performance Fibers / Allied Signal Demand	mgd	0.20	10	31	0.94	305
483	Performance Fibers / Allied Signal Demand	mgd	0.20	11	1	0.89	306
483	Performance Fibers / Allied Signal Demand	mgd	0.20	11	30	0.89	335
483	Performance Fibers / Allied Signal Demand	mgd	0.20	12	1	0.88	336
483	Performance Fibers / Allied Signal Demand	mgd	0.20	12	31	0.88	366

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
487	Progress Cape Fear water supply	mgd	218.30	1	1	0.86	1
487	Progress Cape Fear water supply	mgd	218.30	1	31	0.86	31
487	Progress Cape Fear water supply	mgd	218.30	2	1	0.88	32
487	Progress Cape Fear water supply	mgd	218.30	2	29	0.88	60
487	Progress Cape Fear water supply	mgd	218.30	3	1	0.88	61
487	Progress Cape Fear water supply	mgd	218.30	3	31	0.88	91
487	Progress Cape Fear water supply	mgd	218.30	4	1	0.91	92
487	Progress Cape Fear water supply	mgd	218.30	4	30	0.91	121
487	Progress Cape Fear water supply	mgd	218.30	5	1	1.03	122
487	Progress Cape Fear water supply	mgd	218.30	5	31	1.03	152
487	Progress Cape Fear water supply	mgd	218.30	6	1	1.09	153
487	Progress Cape Fear water supply	mgd	218.30	6	30	1.09	182
487	Progress Cape Fear water supply	mgd	218.30	7	1	1.20	183
487	Progress Cape Fear water supply	mgd	218.30	7	31	1.20	213
487	Progress Cape Fear water supply	mgd	218.30	8	1	1.15	214
487	Progress Cape Fear water supply	mgd	218.30	8	31	1.15	244
487	Progress Cape Fear water supply	mgd	218.30	9	1	1.06	245
487	Progress Cape Fear water supply	mgd	218.30	9	30	1.06	274
487	Progress Cape Fear water supply	mgd	218.30	10	1	0.97	275
487	Progress Cape Fear water supply	mgd	218.30	10	31	0.97	305
487	Progress Cape Fear water supply	mgd	218.30	11	1	1.01	306
487	Progress Cape Fear water supply	mgd	218.30	11	30	1.01	335
487	Progress Cape Fear water supply	mgd	218.30	12	1	0.95	336
487	Progress Cape Fear water supply	mgd	218.30	12	31	0.95	366
491	Sanford Water Supply	mgd	6.52	1	1	0.90	1
491	Sanford Water Supply	mgd	6.52	1	31	0.90	31
491	Sanford Water Supply	mgd	6.52	2	1	0.89	32
491	Sanford Water Supply	mgd	6.52	2	29	0.89	60
491	Sanford Water Supply	mgd	6.52	3	1	0.90	61
491	Sanford Water Supply	mgd	6.52	3	31	0.90	91
491	Sanford Water Supply	mgd	6.52	4	1	0.95	92
491	Sanford Water Supply	mgd	6.52	4	30	0.95	121
491	Sanford Water Supply	mgd	6.52	5	1	1.02	122
491	Sanford Water Supply	mgd	6.52	5	31	1.02	152
491	Sanford Water Supply	mgd	6.52	6	1	1.11	153
491	Sanford Water Supply	mgd	6.52	6	30	1.11	182
491	Sanford Water Supply	mgd	6.52	7	1	1.13	183
491	Sanford Water Supply	mgd	6.52	7	31	1.13	213
491	Sanford Water Supply	mgd	6.52	8	1	1.14	214
491	Sanford Water Supply	mgd	6.52	8	31	1.14	244
491	Sanford Water Supply	mgd	6.52	9	1	1.09	245
491	Sanford Water Supply	mgd	6.52	9	30	1.09	274
491	Sanford Water Supply	mgd	6.52	10	1	1.04	275
491	Sanford Water Supply	mgd	6.52	10	31	1.04	305
491	Sanford Water Supply	mgd	6.52	11	1	0.95	306
491	Sanford Water Supply	mgd	6.52	11	30	0.95	335
491	Sanford Water Supply	mgd	6.52	12	1	0.89	336
491	Sanford Water Supply	mgd	6.52	12	31	0.89	366
521	Progress Harris water supply	mgd	20.00	1	1	1.00	1
521	Progress Harris water supply	mgd	20.00	1	31	1.00	31
521	Progress Harris water supply	mgd	20.00	2	1	1.00	32
521	Progress Harris water supply	mgd	20.00	2	29	1.00	60
521	Progress Harris water supply	mgd	20.00	3	1	1.00	61
521	Progress Harris water supply	mgd	20.00	3	31	1.00	91
521	Progress Harris water supply	mgd	20.00	4	1	1.00	92

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
521	Progress Harris water supply	mgd	20.00	4	30	1.00	121
521	Progress Harris water supply	mgd	20.00	5	1	1.00	122
521	Progress Harris water supply	mgd	20.00	5	31	1.00	152
521	Progress Harris water supply	mgd	20.00	6	1	1.00	153
521	Progress Harris water supply	mgd	20.00	6	30	1.00	182
521	Progress Harris water supply	mgd	20.00	7	1	1.00	183
521	Progress Harris water supply	mgd	20.00	7	31	1.00	213
521	Progress Harris water supply	mgd	20.00	8	1	1.00	214
521	Progress Harris water supply	mgd	20.00	8	31	1.00	244
521	Progress Harris water supply	mgd	20.00	9	1	1.00	245
521	Progress Harris water supply	mgd	20.00	9	30	1.00	274
521	Progress Harris water supply	mgd	20.00	10	1	1.00	275
521	Progress Harris water supply	mgd	20.00	10	31	1.00	305
521	Progress Harris water supply	mgd	20.00	11	1	1.00	306
521	Progress Harris water supply	mgd	20.00	11	30	1.00	335
521	Progress Harris water supply	mgd	20.00	12	1	1.00	336
521	Progress Harris water supply	mgd	20.00	12	31	1.00	366
551	Harnett County water supply	mgd	15.80	1	1	0.69	1
551	Harnett County water supply	mgd	15.80	1	31	0.69	31
551	Harnett County water supply	mgd	15.80	2	1	0.71	32
551	Harnett County water supply	mgd	15.80	2	29	0.71	60
551	Harnett County water supply	mgd	15.80	3	1	0.72	61
551	Harnett County water supply	mgd	15.80	3	31	0.72	91
551	Harnett County water supply	mgd	15.80	4	1	0.82	92
551	Harnett County water supply	mgd	15.80	4	30	0.82	121
551	Harnett County water supply	mgd	15.80	5	1	0.94	122
551	Harnett County water supply	mgd	15.80	5	31	0.94	152
551	Harnett County water supply	mgd	15.80	6	1	1.07	153
551	Harnett County water supply	mgd	15.80	6	30	1.07	182
551	Harnett County water supply	mgd	15.80	7	1	1.01	183
551	Harnett County water supply	mgd	15.80	7	31	1.01	213
551	Harnett County water supply	mgd	15.80	8	1	0.95	214
551	Harnett County water supply	mgd	15.80	8	31	0.95	244
551	Harnett County water supply	mgd	15.80	9	1	0.87	245
551	Harnett County water supply	mgd	15.80	9	30	0.87	274
551	Harnett County water supply	mgd	15.80	10	1	0.80	275
551	Harnett County water supply	mgd	15.80	10	31	0.80	305
551	Harnett County water supply	mgd	15.80	11	1	0.76	306
551	Harnett County water supply	mgd	15.80	11	30	0.76	335
551	Harnett County water supply	mgd	15.80	12	1	0.76	336
551	Harnett County water supply	mgd	15.80	12	31	0.73	366
601	Pilgrims Pride WTP	mgd	0.97	1	1	1.00	1
601	Pilgrims Pride WTP	mgd	0.97	1	31	1.00	31
601	Pilgrims Pride WTP	mgd	0.97	2	1	0.99	32
601	Pilgrims Pride WTP	mgd	0.97	2	29	0.99	60
601	Pilgrims Pride WTP	mgd	0.97	3	1	1.08	61
601	Pilgrims Pride WTP	mgd	0.97	3	31	1.08	91
601	Pilgrims Pride WTP	mgd	0.97	4	1	0.98	92
601	Pilgrims Pride WTP	mgd	0.97	4	30	0.98	121
601	Pilgrims Pride WTP	mgd	0.97	5	1	1.08	122
601	Pilgrims Pride WTP	mgd	0.97	5	31	1.08	152
601	Pilgrims Pride WTP	mgd	0.97	6	1	1.08	153
601	Pilgrims Pride WTP	mgd	0.97	6	30	1.08	182
601	Pilgrims Pride WTP	mgd	0.97	7	1	0.98	183
601	Pilgrims Pride WTP	mgd	0.97	7	31	0.98	213

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
601	Pilgrims Pride WTP	mgd	0.97	8	1	1.04	214
601	Pilgrims Pride WTP	mgd	0.97	8	31	1.04	244
601	Pilgrims Pride WTP	mgd	0.97	9	1	1.21	245
601	Pilgrims Pride WTP	mgd	0.97	9	30	1.21	274
601	Pilgrims Pride WTP	mgd	0.97	10	1	0.91	275
601	Pilgrims Pride WTP	mgd	0.97	10	31	0.91	305
601	Pilgrims Pride WTP	mgd	0.97	11	1	0.81	306
601	Pilgrims Pride WTP	mgd	0.97	11	30	0.81	335
601	Pilgrims Pride WTP	mgd	0.97	12	1	0.87	336
601	Pilgrims Pride WTP	mgd	0.97	12	31	0.87	366
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	1	1	0.92	1
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	1	31	0.92	31
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	2	1	0.98	32
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	2	29	0.98	60
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	3	1	0.74	61
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	3	31	0.74	91
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	4	1	0.72	92
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	4	30	0.72	121
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	5	1	0.77	122
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	5	31	0.77	152
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	6	1	1.00	153
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	6	30	1.00	182
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	7	1	1.13	183
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	7	31	1.13	213
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	8	1	0.97	214
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	8	31	0.97	244
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	9	1	1.11	245
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	9	30	1.11	274
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	10	1	1.09	275
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	10	31	1.09	305
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	11	1	1.34	306
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	11	30	1.34	335
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	12	1	1.22	336
605	Goldston-Gulf WS PWS 03-19-025	mgd	0.00	12	31	1.22	366
663	Dunn Demand	mgd	3.41	1	1	0.93	1
663	Dunn Demand	mgd	3.41	1	31	0.93	31
663	Dunn Demand	mgd	3.41	2	1	0.88	32
663	Dunn Demand	mgd	3.41	2	29	0.88	60
663	Dunn Demand	mgd	3.41	3	1	0.90	61
663	Dunn Demand	mgd	3.41	3	31	0.90	91
663	Dunn Demand	mgd	3.41	4	1	0.96	92
663	Dunn Demand	mgd	3.41	4	30	0.96	121
663	Dunn Demand	mgd	3.41	5	1	1.04	122
663	Dunn Demand	mgd	3.41	5	31	1.04	152
663	Dunn Demand	mgd	3.41	6	1	1.14	153
663	Dunn Demand	mgd	3.41	6	30	1.14	182
663	Dunn Demand	mgd	3.41	7	1	1.14	183
663	Dunn Demand	mgd	3.41	7	31	1.14	213
663	Dunn Demand	mgd	3.41	8	1	1.10	214
663	Dunn Demand	mgd	3.41	8	31	1.10	244
663	Dunn Demand	mgd	3.41	9	1	1.05	245
663	Dunn Demand	mgd	3.41	9	30	1.05	274
663	Dunn Demand	mgd	3.41	10	1	1.00	275
663	Dunn Demand	mgd	3.41	10	31	1.00	305
663	Dunn Demand	mgd	3.41	11	1	0.95	306

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
663	Dunn Demand	mgd	3.41	11	30	0.95	335
663	Dunn Demand	mgd	3.41	12	1	0.91	336
663	Dunn Demand	mgd	3.41	12	31	0.91	366
701	Carthage Demand_03-63-025	mgd	0.30	1	1	0.93	1
701	Carthage Demand_03-63-025	mgd	0.30	1	31	0.93	31
701	Carthage Demand_03-63-025	mgd	0.30	2	1	0.82	32
701	Carthage Demand_03-63-025	mgd	0.30	2	29	0.82	60
701	Carthage Demand_03-63-025	mgd	0.30	3	1	0.86	61
701	Carthage Demand_03-63-025	mgd	0.30	3	31	0.86	91
701	Carthage Demand_03-63-025	mgd	0.30	4	1	1.02	92
701	Carthage Demand_03-63-025	mgd	0.30	4	30	1.02	121
701	Carthage Demand_03-63-025	mgd	0.30	5	1	1.08	122
701	Carthage Demand_03-63-025	mgd	0.30	5	31	1.08	152
701	Carthage Demand_03-63-025	mgd	0.30	6	1	1.14	153
701	Carthage Demand_03-63-025	mgd	0.30	6	30	1.14	182
701	Carthage Demand_03-63-025	mgd	0.30	7	1	1.19	183
701	Carthage Demand_03-63-025	mgd	0.30	7	31	1.19	213
701	Carthage Demand_03-63-025	mgd	0.30	8	1	1.13	214
701	Carthage Demand_03-63-025	mgd	0.30	8	31	1.13	244
701	Carthage Demand_03-63-025	mgd	0.30	9	1	1.16	245
701	Carthage Demand_03-63-025	mgd	0.30	9	30	1.16	274
701	Carthage Demand_03-63-025	mgd	0.30	10	1	0.89	275
701	Carthage Demand_03-63-025	mgd	0.30	10	31	0.89	305
701	Carthage Demand_03-63-025	mgd	0.30	11	1	0.88	306
701	Carthage Demand_03-63-025	mgd	0.30	11	30	0.88	335
701	Carthage Demand_03-63-025	mgd	0.30	12	1	0.89	336
701	Carthage Demand_03-63-025	mgd	0.30	12	31	0.89	366
719	Spring Lake WS_03-26-020	AF	0.00	1	1	0.00	1
719	Spring Lake WS_03-26-020	AF	0.00	12	31	0.00	366
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	1	1	0.97	1
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	1	31	0.97	31
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	2	1	0.93	32
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	2	29	0.93	60
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	3	1	0.87	61
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	3	31	0.87	91
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	4	1	0.90	92
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	4	30	0.90	121
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	5	1	1.05	122
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	5	31	1.05	152
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	6	1	1.17	153
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	6	30	1.17	182
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	7	1	1.14	183
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	7	31	1.14	213
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	8	1	1.14	214
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	8	31	1.14	244
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	9	1	1.05	245
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	9	30	1.05	274
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	10	1	0.98	275
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	10	31	0.98	305
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	11	1	0.94	306
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	11	30	0.94	335
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	12	1	0.88	336
721	Old North Ut. FBragg Demand_50-26-019	mgd	4.80	12	31	0.88	366
733	FayettevillePWC Demand_03-26-010	MGD	28.50	1	1	0.85	1
733	FayettevillePWC Demand_03-26-010	MGD	28.50	1	31	0.85	31

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
733	FayettevillePWC Demand_03-26-010	MGD	28.50	2	1	0.85	32
733	FayettevillePWC Demand_03-26-010	MGD	28.50	2	29	0.85	60
733	FayettevillePWC Demand_03-26-010	MGD	28.50	3	1	0.90	61
733	FayettevillePWC Demand_03-26-010	MGD	28.50	3	31	0.90	91
733	FayettevillePWC Demand_03-26-010	MGD	28.50	4	1	0.98	92
733	FayettevillePWC Demand_03-26-010	MGD	28.50	4	30	0.98	121
733	FayettevillePWC Demand_03-26-010	MGD	28.50	5	1	1.07	122
733	FayettevillePWC Demand_03-26-010	MGD	28.50	5	31	1.07	152
733	FayettevillePWC Demand_03-26-010	MGD	28.50	6	1	1.23	153
733	FayettevillePWC Demand_03-26-010	MGD	28.50	6	30	1.23	182
733	FayettevillePWC Demand_03-26-010	MGD	28.50	7	1	1.17	183
733	FayettevillePWC Demand_03-26-010	MGD	28.50	7	31	1.17	213
733	FayettevillePWC Demand_03-26-010	MGD	28.50	8	1	1.16	214
733	FayettevillePWC Demand_03-26-010	MGD	28.50	8	31	1.16	244
733	FayettevillePWC Demand_03-26-010	MGD	28.50	9	1	1.08	245
733	FayettevillePWC Demand_03-26-010	MGD	28.50	9	30	1.08	274
733	FayettevillePWC Demand_03-26-010	MGD	28.50	10	1	0.95	275
733	FayettevillePWC Demand_03-26-010	MGD	28.50	10	31	0.95	305
733	FayettevillePWC Demand_03-26-010	MGD	28.50	11	1	0.90	306
733	FayettevillePWC Demand_03-26-010	MGD	28.50	11	30	0.90	335
733	FayettevillePWC Demand_03-26-010	MGD	28.50	12	1	0.87	336
733	FayettevillePWC Demand_03-26-010	MGD	28.50	12	31	0.87	366
771	Monsanto water supply	mgd	0.00	1	1	1.94	1
771	Monsanto water supply	mgd	0.00	1	31	1.94	31
771	Monsanto water supply	mgd	0.00	2	1	2.15	32
771	Monsanto water supply	mgd	0.00	2	29	2.15	60
771	Monsanto water supply	mgd	0.00	3	1	1.94	61
771	Monsanto water supply	mgd	0.00	3	31	1.94	91
771	Monsanto water supply	mgd	0.00	4	1	2.01	92
771	Monsanto water supply	mgd	0.00	4	30	2.01	121
771	Monsanto water supply	mgd	0.00	5	1	1.94	122
771	Monsanto water supply	mgd	0.00	5	31	1.94	152
771	Monsanto water supply	mgd	0.00	6	1	2.01	153
771	Monsanto water supply	mgd	0.00	6	30	2.01	182
771	Monsanto water supply	mgd	0.00	7	1	0.00	183
771	Monsanto water supply	mgd	0.00	7	31	0.00	213
771	Monsanto water supply	mgd	0.00	8	1	0.00	214
771	Monsanto water supply	mgd	0.00	8	31	0.00	244
771	Monsanto water supply	mgd	0.00	9	1	0.00	245
771	Monsanto water supply	mgd	0.00	9	30	0.00	274
771	Monsanto water supply	mgd	0.00	10	1	0.00	275
771	Monsanto water supply	mgd	0.00	10	31	0.00	305
771	Monsanto water supply	mgd	0.00	11	1	0.00	306
771	Monsanto water supply	mgd	0.00	11	30	0.00	335
771	Monsanto water supply	mgd	0.00	12	1	0.00	336
771	Monsanto water supply	mgd	0.00	12	31	0.00	366
781	Dupont WS	mgd	11.17	1	1	0.73	1
781	Dupont WS	mgd	11.17	1	31	0.73	31
781	Dupont WS	mgd	11.17	2	1	0.76	32
781	Dupont WS	mgd	11.17	2	29	0.76	60
781	Dupont WS	mgd	11.17	3	1	0.78	61
781	Dupont WS	mgd	11.17	3	31	0.78	91
781	Dupont WS	mgd	11.17	4	1	0.91	92
781	Dupont WS	mgd	11.17	4	30	0.91	121
781	Dupont WS	mgd	11.17	5	1	1.12	122

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
781	Dupont WS	mgd	11.17	5	31	1.12	152
781	Dupont WS	mgd	11.17	6	1	1.32	153
781	Dupont WS	mgd	11.17	6	30	1.32	182
781	Dupont WS	mgd	11.17	7	1	1.51	183
781	Dupont WS	mgd	11.17	7	31	1.51	213
781	Dupont WS	mgd	11.17	8	1	1.46	214
781	Dupont WS	mgd	11.17	8	31	1.46	244
781	Dupont WS	mgd	11.17	9	1	0.99	245
781	Dupont WS	mgd	11.17	9	30	0.99	274
781	Dupont WS	mgd	11.17	10	1	0.88	275
781	Dupont WS	mgd	11.17	10	31	0.88	305
781	Dupont WS	mgd	11.17	11	1	0.80	306
781	Dupont WS	mgd	11.17	11	30	0.80	335
781	Dupont WS	mgd	11.17	12	1	0.76	336
781	Dupont WS	mgd	11.17	12	31	0.76	366
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	1	1	1.00	1
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	1	31	1.00	31
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	2	1	1.00	32
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	2	29	1.00	60
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	3	1	1.00	61
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	3	31	1.00	91
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	4	1	1.00	92
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	4	30	1.00	121
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	5	1	1.00	122
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	5	31	1.00	152
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	6	1	1.00	153
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	6	30	1.00	182
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	7	1	1.00	183
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	7	31	1.00	213
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	8	1	1.00	214
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	8	31	1.00	244
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	9	1	1.00	245
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	9	30	1.00	274
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	10	1	1.00	275
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	10	31	1.00	305
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	11	1	1.00	306
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	11	30	1.00	335
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	12	1	1.00	336
785	LCFWSA_BladenBluff Demand_50-09-012	mgd	2.25	12	31	1.00	366
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	1	1	0.85	1
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	1	31	0.85	31
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	2	1	0.86	32
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	2	29	0.86	60
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	3	1	0.89	61
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	3	31	0.89	91
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	4	1	0.98	92
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	4	30	0.98	121
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	5	1	1.11	122
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	5	31	1.11	152
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	6	1	1.20	153
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	6	30	1.20	182
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	7	1	1.17	183
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	7	31	1.17	213
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	8	1	1.13	214
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	8	31	1.13	244

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	9	1	1.07	245
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	9	30	1.07	274
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	10	1	0.97	275
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	10	31	0.97	305
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	11	1	0.89	306
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	11	30	0.89	335
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	12	1	0.87	336
823	Cape Fear PUA-Wilmington Demand_04-65-010	mgd	4.67	12	31	0.87	366
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	1	1	0.90	1
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	1	31	0.90	31
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	2	1	0.85	32
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	2	29	0.85	60
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	3	1	0.92	61
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	3	31	0.92	91
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	4	1	1.09	92
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	4	30	1.09	121
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	5	1	1.14	122
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	5	31	1.14	152
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	6	1	1.11	153
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	6	30	1.11	182
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	7	1	1.32	183
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	7	31	1.32	213
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	8	1	1.00	214
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	8	31	1.00	244
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	9	1	0.86	245
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	9	30	0.86	274
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	10	1	0.76	275
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	10	31	0.76	305
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	11	1	0.96	306
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	11	30	0.96	335
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	12	1	0.90	336
825	LCFWSA_KingsBluff Demand_50-09-013	MGD	25.54	12	31	0.90	366
903	Jamestown Demand_02-41-030	mgd	0.45	1	1	0.90	1
903	Jamestown Demand_02-41-030	mgd	0.45	1	31	0.90	31
903	Jamestown Demand_02-41-030	mgd	0.45	2	1	0.96	32
903	Jamestown Demand_02-41-030	mgd	0.45	2	29	0.96	60
903	Jamestown Demand_02-41-030	mgd	0.45	3	1	0.92	61
903	Jamestown Demand_02-41-030	mgd	0.45	3	31	0.92	91
903	Jamestown Demand_02-41-030	mgd	0.45	4	1	1.04	92
903	Jamestown Demand_02-41-030	mgd	0.45	4	30	1.04	121
903	Jamestown Demand_02-41-030	mgd	0.45	5	1	1.05	122
903	Jamestown Demand_02-41-030	mgd	0.45	5	31	1.05	152
903	Jamestown Demand_02-41-030	mgd	0.45	6	1	1.18	153
903	Jamestown Demand_02-41-030	mgd	0.45	6	30	1.18	182
903	Jamestown Demand_02-41-030	mgd	0.45	7	1	1.17	183
903	Jamestown Demand_02-41-030	mgd	0.45	7	31	1.17	213
903	Jamestown Demand_02-41-030	mgd	0.45	8	1	1.15	214
903	Jamestown Demand_02-41-030	mgd	0.45	8	31	1.15	244
903	Jamestown Demand_02-41-030	mgd	0.45	9	1	1.09	245
903	Jamestown Demand_02-41-030	mgd	0.45	9	30	1.09	274
903	Jamestown Demand_02-41-030	mgd	0.45	10	1	0.91	275
903	Jamestown Demand_02-41-030	mgd	0.45	10	31	0.91	305
903	Jamestown Demand_02-41-030	mgd	0.45	11	1	0.84	306
903	Jamestown Demand_02-41-030	mgd	0.45	11	30	0.84	335
903	Jamestown Demand_02-41-030	mgd	0.45	12	1	0.79	336

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
903	Jamestown Demand_02-41-030	mgd	0.45	12	31	0.79	366
904	Archdale Demand Randleman_02-76-030	mgd	0.70	1	1	0.97	1
904	Archdale Demand Randleman_02-76-030	mgd	0.70	1	31	0.97	31
904	Archdale Demand Randleman_02-76-030	mgd	0.70	2	1	1.00	32
904	Archdale Demand Randleman_02-76-030	mgd	0.70	2	29	1.00	60
904	Archdale Demand Randleman_02-76-030	mgd	0.70	3	1	0.97	61
904	Archdale Demand Randleman_02-76-030	mgd	0.70	3	31	0.97	91
904	Archdale Demand Randleman_02-76-030	mgd	0.70	4	1	0.95	92
904	Archdale Demand Randleman_02-76-030	mgd	0.70	4	30	0.95	121
904	Archdale Demand Randleman_02-76-030	mgd	0.70	5	1	1.00	122
904	Archdale Demand Randleman_02-76-030	mgd	0.70	5	31	1.00	152
904	Archdale Demand Randleman_02-76-030	mgd	0.70	6	1	1.07	153
904	Archdale Demand Randleman_02-76-030	mgd	0.70	6	30	1.07	182
904	Archdale Demand Randleman_02-76-030	mgd	0.70	7	1	1.01	183
904	Archdale Demand Randleman_02-76-030	mgd	0.70	7	31	1.01	213
904	Archdale Demand Randleman_02-76-030	mgd	0.70	8	1	1.06	214
904	Archdale Demand Randleman_02-76-030	mgd	0.70	8	31	1.06	244
904	Archdale Demand Randleman_02-76-030	mgd	0.70	9	1	0.93	245
904	Archdale Demand Randleman_02-76-030	mgd	0.70	9	30	0.93	274
904	Archdale Demand Randleman_02-76-030	mgd	0.70	10	1	1.10	275
904	Archdale Demand Randleman_02-76-030	mgd	0.70	10	31	1.10	305
904	Archdale Demand Randleman_02-76-030	mgd	0.70	11	1	0.98	306
904	Archdale Demand Randleman_02-76-030	mgd	0.70	11	30	0.98	335
904	Archdale Demand Randleman_02-76-030	mgd	0.70	12	1	0.96	336
904	Archdale Demand Randleman_02-76-030	mgd	0.70	12	31	0.96	366
906	Randolph Co Demand Randleman	mgd	1.25	1	1	1.00	1
906	Randolph Co Demand Randleman	mgd	1.25	1	31	1.00	31
906	Randolph Co Demand Randleman	mgd	1.25	2	1	1.00	32
906	Randolph Co Demand Randleman	mgd	1.25	2	29	1.00	60
906	Randolph Co Demand Randleman	mgd	1.25	3	1	1.00	61
906	Randolph Co Demand Randleman	mgd	1.25	3	31	1.00	91
906	Randolph Co Demand Randleman	mgd	1.25	4	1	1.00	92
906	Randolph Co Demand Randleman	mgd	1.25	4	30	1.00	121
906	Randolph Co Demand Randleman	mgd	1.25	5	1	1.00	122
906	Randolph Co Demand Randleman	mgd	1.25	5	31	1.00	152
906	Randolph Co Demand Randleman	mgd	1.25	6	1	1.00	153
906	Randolph Co Demand Randleman	mgd	1.25	6	30	1.00	182
906	Randolph Co Demand Randleman	mgd	1.25	7	1	1.00	183
906	Randolph Co Demand Randleman	mgd	1.25	7	31	1.00	213
906	Randolph Co Demand Randleman	mgd	1.25	8	1	1.00	214
906	Randolph Co Demand Randleman	mgd	1.25	8	31	1.00	244
906	Randolph Co Demand Randleman	mgd	1.25	9	1	1.00	245
906	Randolph Co Demand Randleman	mgd	1.25	9	30	1.00	274
906	Randolph Co Demand Randleman	mgd	1.25	10	1	1.00	275
906	Randolph Co Demand Randleman	mgd	1.25	10	31	1.00	305
906	Randolph Co Demand Randleman	mgd	1.25	11	1	1.00	306
906	Randolph Co Demand Randleman	mgd	1.25	11	30	1.00	335
906	Randolph Co Demand Randleman	mgd	1.25	12	1	1.00	336
906	Randolph Co Demand Randleman	mgd	1.25	12	31	1.00	366
921	Orange Co Demand Jordan	mgd	0.00	1	1	0.96	1
921	Orange Co Demand Jordan	mgd	0.00	1	31	0.96	31
921	Orange Co Demand Jordan	mgd	0.00	2	1	0.94	32
921	Orange Co Demand Jordan	mgd	0.00	2	29	0.94	60
921	Orange Co Demand Jordan	mgd	0.00	3	1	0.94	61
921	Orange Co Demand Jordan	mgd	0.00	3	31	0.94	91

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
921	Orange Co Demand Jordan	mgd	0.00	4	1	0.95	92
921	Orange Co Demand Jordan	mgd	0.00	4	30	0.95	121
921	Orange Co Demand Jordan	mgd	0.00	5	1	1.01	122
921	Orange Co Demand Jordan	mgd	0.00	5	31	1.01	152
921	Orange Co Demand Jordan	mgd	0.00	6	1	1.05	153
921	Orange Co Demand Jordan	mgd	0.00	6	30	1.05	182
921	Orange Co Demand Jordan	mgd	0.00	7	1	1.07	183
921	Orange Co Demand Jordan	mgd	0.00	7	31	1.07	213
921	Orange Co Demand Jordan	mgd	0.00	8	1	1.08	214
921	Orange Co Demand Jordan	mgd	0.00	8	31	1.08	244
921	Orange Co Demand Jordan	mgd	0.00	9	1	1.06	245
921	Orange Co Demand Jordan	mgd	0.00	9	30	1.06	274
921	Orange Co Demand Jordan	mgd	0.00	10	1	1.00	275
921	Orange Co Demand Jordan	mgd	0.00	10	31	1.00	305
921	Orange Co Demand Jordan	mgd	0.00	11	1	0.96	306
921	Orange Co Demand Jordan	mgd	0.00	11	30	0.96	335
921	Orange Co Demand Jordan	mgd	0.00	12	1	0.96	336
921	Orange Co Demand Jordan	mgd	0.00	12	31	0.96	366
923	Holly Springs Demand_03-92-050	MGD	1.78	1	1	0.78	1
923	Holly Springs Demand_03-92-050	MGD	1.78	1	31	0.78	31
923	Holly Springs Demand_03-92-050	MGD	1.78	2	1	0.74	32
923	Holly Springs Demand_03-92-050	MGD	1.78	2	29	0.74	60
923	Holly Springs Demand_03-92-050	MGD	1.78	3	1	0.80	61
923	Holly Springs Demand_03-92-050	MGD	1.78	3	31	0.80	91
923	Holly Springs Demand_03-92-050	MGD	1.78	4	1	0.94	92
923	Holly Springs Demand_03-92-050	MGD	1.78	4	30	0.94	121
923	Holly Springs Demand_03-92-050	MGD	1.78	5	1	1.08	122
923	Holly Springs Demand_03-92-050	MGD	1.78	5	31	1.08	152
923	Holly Springs Demand_03-92-050	MGD	1.78	6	1	1.22	153
923	Holly Springs Demand_03-92-050	MGD	1.78	6	30	1.22	182
923	Holly Springs Demand_03-92-050	MGD	1.78	7	1	1.22	183
923	Holly Springs Demand_03-92-050	MGD	1.78	7	31	1.22	213
923	Holly Springs Demand_03-92-050	MGD	1.78	8	1	1.20	214
923	Holly Springs Demand_03-92-050	MGD	1.78	8	31	1.20	244
923	Holly Springs Demand_03-92-050	MGD	1.78	9	1	1.13	245
923	Holly Springs Demand_03-92-050	MGD	1.78	9	30	1.13	274
923	Holly Springs Demand_03-92-050	MGD	1.78	10	1	1.10	275
923	Holly Springs Demand_03-92-050	MGD	1.78	10	31	1.10	305
923	Holly Springs Demand_03-92-050	MGD	1.78	11	1	0.92	306
923	Holly Springs Demand_03-92-050	MGD	1.78	11	30	0.92	335
923	Holly Springs Demand_03-92-050	MGD	1.78	12	1	0.84	336
923	Holly Springs Demand_03-92-050	MGD	1.78	12	31	0.84	366
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	1	1	0.95	1
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	1	31	0.95	31
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	2	1	0.93	32
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	2	29	0.93	60
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	3	1	0.91	61
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	3	31	0.91	91
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	4	1	0.98	92
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	4	30	0.98	121
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	5	1	1.03	122
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	5	31	1.03	152
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	6	1	1.06	153
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	6	30	1.06	182
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	7	1	1.08	183

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	7	31	1.08	213
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	8	1	1.09	214
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	8	31	1.09	244
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	9	1	1.05	245
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	9	30	1.05	274
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	10	1	1.01	275
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	10	31	1.01	305
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	11	1	0.97	306
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	11	30	0.97	335
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	12	1	0.96	336
1046	Orange_Alamance Demand_03-68-020	MGD	0.18	12	31	0.96	366
1106	Hillsborough Demand_03-68-015	MGD	1.16	1	1	0.97	1
1106	Hillsborough Demand_03-68-015	MGD	1.16	1	31	0.97	31
1106	Hillsborough Demand_03-68-015	MGD	1.16	2	1	0.94	32
1106	Hillsborough Demand_03-68-015	MGD	1.16	2	29	0.94	60
1106	Hillsborough Demand_03-68-015	MGD	1.16	3	1	0.96	61
1106	Hillsborough Demand_03-68-015	MGD	1.16	3	31	0.96	91
1106	Hillsborough Demand_03-68-015	MGD	1.16	4	1	0.95	92
1106	Hillsborough Demand_03-68-015	MGD	1.16	4	30	0.95	121
1106	Hillsborough Demand_03-68-015	MGD	1.16	5	1	1.00	122
1106	Hillsborough Demand_03-68-015	MGD	1.16	5	31	1.00	152
1106	Hillsborough Demand_03-68-015	MGD	1.16	6	1	1.02	153
1106	Hillsborough Demand_03-68-015	MGD	1.16	6	30	1.02	182
1106	Hillsborough Demand_03-68-015	MGD	1.16	7	1	1.05	183
1106	Hillsborough Demand_03-68-015	MGD	1.16	7	31	1.05	213
1106	Hillsborough Demand_03-68-015	MGD	1.16	8	1	1.07	214
1106	Hillsborough Demand_03-68-015	MGD	1.16	8	31	1.07	244
1106	Hillsborough Demand_03-68-015	MGD	1.16	9	1	1.05	245
1106	Hillsborough Demand_03-68-015	MGD	1.16	9	30	1.05	274
1106	Hillsborough Demand_03-68-015	MGD	1.16	10	1	1.00	275
1106	Hillsborough Demand_03-68-015	MGD	1.16	10	31	1.00	305
1106	Hillsborough Demand_03-68-015	MGD	1.16	11	1	0.97	306
1106	Hillsborough Demand_03-68-015	MGD	1.16	11	30	0.97	335
1106	Hillsborough Demand_03-68-015	MGD	1.16	12	1	0.97	336
1106	Hillsborough Demand_03-68-015	MGD	1.16	12	31	0.97	366
1116	Piedmont Minerals Demand	mgd	0.00	1	1	1.00	1
1116	Piedmont Minerals Demand	mgd	0.00	1	31	1.00	31
1116	Piedmont Minerals Demand	mgd	0.00	2	1	1.00	32
1116	Piedmont Minerals Demand	mgd	0.00	2	29	1.00	60
1116	Piedmont Minerals Demand	mgd	0.00	3	1	1.00	61
1116	Piedmont Minerals Demand	mgd	0.00	3	31	1.00	91
1116	Piedmont Minerals Demand	mgd	0.00	4	1	1.00	92
1116	Piedmont Minerals Demand	mgd	0.00	4	30	1.00	121
1116	Piedmont Minerals Demand	mgd	0.00	5	1	1.00	122
1116	Piedmont Minerals Demand	mgd	0.00	5	31	1.00	152
1116	Piedmont Minerals Demand	mgd	0.00	6	1	1.00	153
1116	Piedmont Minerals Demand	mgd	0.00	6	30	1.00	182
1116	Piedmont Minerals Demand	mgd	0.00	7	1	1.00	183
1116	Piedmont Minerals Demand	mgd	0.00	7	31	1.00	213
1116	Piedmont Minerals Demand	mgd	0.00	8	1	1.00	214
1116	Piedmont Minerals Demand	mgd	0.00	8	31	1.00	244
1116	Piedmont Minerals Demand	mgd	0.00	9	1	1.00	245
1116	Piedmont Minerals Demand	mgd	0.00	9	30	1.00	274
1116	Piedmont Minerals Demand	mgd	0.00	10	1	1.00	275
1116	Piedmont Minerals Demand	mgd	0.00	10	31	1.00	305

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1116	Piedmont Minerals Demand	mgd	0.00	11	1	1.00	306
1116	Piedmont Minerals Demand	mgd	0.00	11	30	1.00	335
1116	Piedmont Minerals Demand	mgd	0.00	12	1	1.00	336
1116	Piedmont Minerals Demand	mgd	0.00	12	31	1.00	366
1162	Durham Service Area Demand	MGD	28.23	1	1	0.83	1
1162	Durham Service Area Demand	MGD	28.23	1	31	0.83	31
1162	Durham Service Area Demand	MGD	28.23	2	1	0.85	32
1162	Durham Service Area Demand	MGD	28.23	2	29	0.85	60
1162	Durham Service Area Demand	MGD	28.23	3	1	0.90	61
1162	Durham Service Area Demand	MGD	28.23	3	31	0.90	91
1162	Durham Service Area Demand	MGD	28.23	4	1	0.97	92
1162	Durham Service Area Demand	MGD	28.23	4	30	0.97	121
1162	Durham Service Area Demand	MGD	28.23	5	1	1.03	122
1162	Durham Service Area Demand	MGD	28.23	5	31	1.03	152
1162	Durham Service Area Demand	MGD	28.23	6	1	1.16	153
1162	Durham Service Area Demand	MGD	28.23	6	30	1.16	182
1162	Durham Service Area Demand	MGD	28.23	7	1	1.17	183
1162	Durham Service Area Demand	MGD	28.23	7	31	1.17	213
1162	Durham Service Area Demand	MGD	28.23	8	1	1.18	214
1162	Durham Service Area Demand	MGD	28.23	8	31	1.18	244
1162	Durham Service Area Demand	MGD	28.23	9	1	1.12	245
1162	Durham Service Area Demand	MGD	28.23	9	30	1.12	274
1162	Durham Service Area Demand	MGD	28.23	10	1	1.01	275
1162	Durham Service Area Demand	MGD	28.23	10	31	1.01	305
1162	Durham Service Area Demand	MGD	28.23	11	1	0.90	306
1162	Durham Service Area Demand	MGD	28.23	11	30	0.90	335
1162	Durham Service Area Demand	MGD	28.23	12	1	0.85	336
1162	Durham Service Area Demand	MGD	28.23	12	31	0.85	366
1256	SGWASA Demand_02-39-107	MGD	2.99	1	1	0.91	1
1256	SGWASA Demand_02-39-107	MGD	2.99	1	31	0.91	31
1256	SGWASA Demand_02-39-107	MGD	2.99	2	1	0.89	32
1256	SGWASA Demand_02-39-107	MGD	2.99	2	29	0.89	60
1256	SGWASA Demand_02-39-107	MGD	2.99	3	1	0.96	61
1256	SGWASA Demand_02-39-107	MGD	2.99	3	31	0.96	91
1256	SGWASA Demand_02-39-107	MGD	2.99	4	1	1.04	92
1256	SGWASA Demand_02-39-107	MGD	2.99	4	30	1.04	121
1256	SGWASA Demand_02-39-107	MGD	2.99	5	1	1.01	122
1256	SGWASA Demand_02-39-107	MGD	2.99	5	31	1.01	152
1256	SGWASA Demand_02-39-107	MGD	2.99	6	1	1.07	153
1256	SGWASA Demand_02-39-107	MGD	2.99	6	30	1.07	182
1256	SGWASA Demand_02-39-107	MGD	2.99	7	1	1.10	183
1256	SGWASA Demand_02-39-107	MGD	2.99	7	31	1.10	213
1256	SGWASA Demand_02-39-107	MGD	2.99	8	1	1.11	214
1256	SGWASA Demand_02-39-107	MGD	2.99	8	31	1.11	244
1256	SGWASA Demand_02-39-107	MGD	2.99	9	1	1.06	245
1256	SGWASA Demand_02-39-107	MGD	2.99	9	30	1.06	274
1256	SGWASA Demand_02-39-107	MGD	2.99	10	1	1.04	275
1256	SGWASA Demand_02-39-107	MGD	2.99	10	31	1.04	305
1256	SGWASA Demand_02-39-107	MGD	2.99	11	1	0.94	306
1256	SGWASA Demand_02-39-107	MGD	2.99	11	30	0.94	335
1256	SGWASA Demand_02-39-107	MGD	2.99	12	1	0.88	336
1256	SGWASA Demand_02-39-107	MGD	2.99	12	31	0.88	366
1258	Creedmor Demand_02-39-015	MGD	0.32	1	1	0.99	1
1258	Creedmor Demand_02-39-015	MGD	0.32	1	31	0.99	31
1258	Creedmor Demand_02-39-015	MGD	0.32	2	1	0.92	32

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1258	Creedmor Demand_02-39-015	MGD	0.32	2	29	0.92	60
1258	Creedmor Demand_02-39-015	MGD	0.32	3	1	0.96	61
1258	Creedmor Demand_02-39-015	MGD	0.32	3	31	0.96	91
1258	Creedmor Demand_02-39-015	MGD	0.32	4	1	1.08	92
1258	Creedmor Demand_02-39-015	MGD	0.32	4	30	1.08	121
1258	Creedmor Demand_02-39-015	MGD	0.32	5	1	1.03	122
1258	Creedmor Demand_02-39-015	MGD	0.32	5	31	1.03	152
1258	Creedmor Demand_02-39-015	MGD	0.32	6	1	1.06	153
1258	Creedmor Demand_02-39-015	MGD	0.32	6	30	1.06	182
1258	Creedmor Demand_02-39-015	MGD	0.32	7	1	1.05	183
1258	Creedmor Demand_02-39-015	MGD	0.32	7	31	1.05	213
1258	Creedmor Demand_02-39-015	MGD	0.32	8	1	1.07	214
1258	Creedmor Demand_02-39-015	MGD	0.32	8	31	1.07	244
1258	Creedmor Demand_02-39-015	MGD	0.32	9	1	1.04	245
1258	Creedmor Demand_02-39-015	MGD	0.32	9	30	1.04	274
1258	Creedmor Demand_02-39-015	MGD	0.32	10	1	0.90	275
1258	Creedmor Demand_02-39-015	MGD	0.32	10	31	0.90	305
1258	Creedmor Demand_02-39-015	MGD	0.32	11	1	0.93	306
1258	Creedmor Demand_02-39-015	MGD	0.32	11	30	0.93	335
1258	Creedmor Demand_02-39-015	MGD	0.32	12	1	0.98	336
1258	Creedmor Demand_02-39-015	MGD	0.32	12	31	0.98	366
1306	Raleigh Demand_03-92-010	MGD	52.00	1	1	0.86	1
1306	Raleigh Demand_03-92-010	MGD	52.00	1	31	0.86	31
1306	Raleigh Demand_03-92-010	MGD	52.00	2	1	0.87	32
1306	Raleigh Demand_03-92-010	MGD	52.00	2	29	0.87	60
1306	Raleigh Demand_03-92-010	MGD	52.00	3	1	0.88	61
1306	Raleigh Demand_03-92-010	MGD	52.00	3	31	0.88	91
1306	Raleigh Demand_03-92-010	MGD	52.00	4	1	0.94	92
1306	Raleigh Demand_03-92-010	MGD	52.00	4	30	0.94	121
1306	Raleigh Demand_03-92-010	MGD	52.00	5	1	1.04	122
1306	Raleigh Demand_03-92-010	MGD	52.00	5	31	1.04	152
1306	Raleigh Demand_03-92-010	MGD	52.00	6	1	1.15	153
1306	Raleigh Demand_03-92-010	MGD	52.00	6	30	1.15	182
1306	Raleigh Demand_03-92-010	MGD	52.00	7	1	1.18	183
1306	Raleigh Demand_03-92-010	MGD	52.00	7	31	1.18	213
1306	Raleigh Demand_03-92-010	MGD	52.00	8	1	1.16	214
1306	Raleigh Demand_03-92-010	MGD	52.00	8	31	1.16	244
1306	Raleigh Demand_03-92-010	MGD	52.00	9	1	1.11	245
1306	Raleigh Demand_03-92-010	MGD	52.00	9	30	1.11	274
1306	Raleigh Demand_03-92-010	MGD	52.00	10	1	1.01	275
1306	Raleigh Demand_03-92-010	MGD	52.00	10	31	1.01	305
1306	Raleigh Demand_03-92-010	MGD	52.00	11	1	0.90	306
1306	Raleigh Demand_03-92-010	MGD	52.00	11	30	0.90	335
1306	Raleigh Demand_03-92-010	MGD	52.00	12	1	0.89	336
1306	Raleigh Demand_03-92-010	MGD	52.00	12	31	0.87	366
1506	Wilson Demand_04-98-010	MGD	8.96	1	1	0.88	1
1506	Wilson Demand_04-98-010	MGD	8.96	1	31	0.88	31
1506	Wilson Demand_04-98-010	MGD	8.96	2	1	0.88	32
1506	Wilson Demand_04-98-010	MGD	8.96	2	29	0.88	60
1506	Wilson Demand_04-98-010	MGD	8.96	3	1	0.88	61
1506	Wilson Demand_04-98-010	MGD	8.96	3	31	0.88	91
1506	Wilson Demand_04-98-010	MGD	8.96	4	1	0.97	92
1506	Wilson Demand_04-98-010	MGD	8.96	4	30	0.97	121
1506	Wilson Demand_04-98-010	MGD	8.96	5	1	1.07	122
1506	Wilson Demand_04-98-010	MGD	8.96	5	31	1.07	152

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1506	Wilson Demand_04-98-010	MGD	8.96	6	1	1.17	153
1506	Wilson Demand_04-98-010	MGD	8.96	6	30	1.17	182
1506	Wilson Demand_04-98-010	MGD	8.96	7	1	1.11	183
1506	Wilson Demand_04-98-010	MGD	8.96	7	31	1.11	213
1506	Wilson Demand_04-98-010	MGD	8.96	8	1	1.21	214
1506	Wilson Demand_04-98-010	MGD	8.96	8	31	1.21	244
1506	Wilson Demand_04-98-010	MGD	8.96	9	1	1.02	245
1506	Wilson Demand_04-98-010	MGD	8.96	9	30	1.02	274
1506	Wilson Demand_04-98-010	MGD	8.96	10	1	0.99	275
1506	Wilson Demand_04-98-010	MGD	8.96	10	31	0.99	305
1506	Wilson Demand_04-98-010	MGD	8.96	11	1	0.91	306
1506	Wilson Demand_04-98-010	MGD	8.96	11	30	0.91	335
1506	Wilson Demand_04-98-010	MGD	8.96	12	1	0.89	336
1506	Wilson Demand_04-98-010	MGD	8.96	12	31	0.89	366
1646	Johnston County Demand_03-51-070	MGD	8.56	1	1	0.88	1
1646	Johnston County Demand_03-51-070	MGD	8.56	1	31	0.88	31
1646	Johnston County Demand_03-51-070	MGD	8.56	2	1	0.90	32
1646	Johnston County Demand_03-51-070	MGD	8.56	2	29	0.90	60
1646	Johnston County Demand_03-51-070	MGD	8.56	3	1	0.90	61
1646	Johnston County Demand_03-51-070	MGD	8.56	3	31	0.90	91
1646	Johnston County Demand_03-51-070	MGD	8.56	4	1	0.95	92
1646	Johnston County Demand_03-51-070	MGD	8.56	4	30	0.95	121
1646	Johnston County Demand_03-51-070	MGD	8.56	5	1	1.04	122
1646	Johnston County Demand_03-51-070	MGD	8.56	5	31	1.04	152
1646	Johnston County Demand_03-51-070	MGD	8.56	6	1	1.16	153
1646	Johnston County Demand_03-51-070	MGD	8.56	6	30	1.16	182
1646	Johnston County Demand_03-51-070	MGD	8.56	7	1	1.19	183
1646	Johnston County Demand_03-51-070	MGD	8.56	7	31	1.19	213
1646	Johnston County Demand_03-51-070	MGD	8.56	8	1	1.11	214
1646	Johnston County Demand_03-51-070	MGD	8.56	8	31	1.11	244
1646	Johnston County Demand_03-51-070	MGD	8.56	9	1	1.07	245
1646	Johnston County Demand_03-51-070	MGD	8.56	9	30	1.07	274
1646	Johnston County Demand_03-51-070	MGD	8.56	10	1	0.99	275
1646	Johnston County Demand_03-51-070	MGD	8.56	10	31	0.99	305
1646	Johnston County Demand_03-51-070	MGD	8.56	11	1	0.93	306
1646	Johnston County Demand_03-51-070	MGD	8.56	11	30	0.93	335
1646	Johnston County Demand_03-51-070	MGD	8.56	12	1	0.89	336
1646	Johnston County Demand_03-51-070	MGD	8.56	12	31	0.89	366
1666	Smithfield Demand_03-51-010	MGD	2.96	1	1	0.85	1
1666	Smithfield Demand_03-51-010	MGD	2.96	1	31	0.85	31
1666	Smithfield Demand_03-51-010	MGD	2.96	2	1	0.85	32
1666	Smithfield Demand_03-51-010	MGD	2.96	2	29	0.85	60
1666	Smithfield Demand_03-51-010	MGD	2.96	3	1	0.81	61
1666	Smithfield Demand_03-51-010	MGD	2.96	3	31	0.81	91
1666	Smithfield Demand_03-51-010	MGD	2.96	4	1	0.95	92
1666	Smithfield Demand_03-51-010	MGD	2.96	4	30	0.95	121
1666	Smithfield Demand_03-51-010	MGD	2.96	5	1	1.04	122
1666	Smithfield Demand_03-51-010	MGD	2.96	5	31	1.04	152
1666	Smithfield Demand_03-51-010	MGD	2.96	6	1	1.23	153
1666	Smithfield Demand_03-51-010	MGD	2.96	6	30	1.23	182
1666	Smithfield Demand_03-51-010	MGD	2.96	7	1	1.23	183
1666	Smithfield Demand_03-51-010	MGD	2.96	7	31	1.23	213
1666	Smithfield Demand_03-51-010	MGD	2.96	8	1	1.21	214
1666	Smithfield Demand_03-51-010	MGD	2.96	8	31	1.21	244
1666	Smithfield Demand_03-51-010	MGD	2.96	9	1	1.09	245

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1666	Smithfield Demand_03-51-010	MGD	2.96	9	30	1.09	274
1666	Smithfield Demand_03-51-010	MGD	2.96	10	1	1.01	275
1666	Smithfield Demand_03-51-010	MGD	2.96	10	31	1.01	305
1666	Smithfield Demand_03-51-010	MGD	2.96	11	1	0.83	306
1666	Smithfield Demand_03-51-010	MGD	2.96	11	30	0.83	335
1666	Smithfield Demand_03-51-010	MGD	2.96	12	1	0.92	336
1666	Smithfield Demand_03-51-010	MGD	2.96	12	31	0.92	366
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	1	1	0.86	1
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	1	31	0.86	31
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	2	1	0.99	32
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	2	29	0.99	60
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	3	1	0.84	61
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	3	31	0.84	91
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	4	1	1.07	92
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	4	30	1.07	121
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	5	1	0.96	122
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	5	31	0.96	152
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	6	1	1.22	153
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	6	30	1.22	182
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	7	1	1.17	183
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	7	31	1.17	213
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	8	1	1.13	214
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	8	31	1.13	244
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	9	1	0.95	245
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	9	30	0.95	274
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	10	1	1.01	275
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	10	31	1.01	305
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	11	1	0.85	306
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	11	30	0.85	335
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	12	1	0.89	336
1706	Fuquay-Varina Demand_03-92-055	MGD	1.87	12	31	0.89	366
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	1	1	0.45	1
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	1	31	0.45	31
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	2	1	0.78	32
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	2	29	0.78	60
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	3	1	0.64	61
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	3	31	0.64	91
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	4	1	0.92	92
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	4	30	0.92	121
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	5	1	0.95	122
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	5	31	0.95	152
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	6	1	1.38	153
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	6	30	1.38	182
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	7	1	1.97	183
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	7	31	1.97	213
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	8	1	1.08	214
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	8	31	1.08	244
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	9	1	1.64	245
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	9	30	1.64	274
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	10	1	0.51	275
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	10	31	0.51	305
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	11	1	0.66	306
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	11	30	0.66	335
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	12	1	1.02	336
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	12	31	1.02	366

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1786	Goldsboro Demand_04-96-010	MGD	4.78	1	1	0.95	1
1786	Goldsboro Demand_04-96-010	MGD	4.78	1	31	0.95	31
1786	Goldsboro Demand_04-96-010	MGD	4.78	2	1	0.93	32
1786	Goldsboro Demand_04-96-010	MGD	4.78	2	29	0.93	60
1786	Goldsboro Demand_04-96-010	MGD	4.78	3	1	0.95	61
1786	Goldsboro Demand_04-96-010	MGD	4.78	3	31	0.95	91
1786	Goldsboro Demand_04-96-010	MGD	4.78	4	1	0.98	92
1786	Goldsboro Demand_04-96-010	MGD	4.78	4	30	0.98	121
1786	Goldsboro Demand_04-96-010	MGD	4.78	5	1	1.01	122
1786	Goldsboro Demand_04-96-010	MGD	4.78	5	31	1.01	152
1786	Goldsboro Demand_04-96-010	MGD	4.78	6	1	1.08	153
1786	Goldsboro Demand_04-96-010	MGD	4.78	6	30	1.08	182
1786	Goldsboro Demand_04-96-010	MGD	4.78	7	1	1.09	183
1786	Goldsboro Demand_04-96-010	MGD	4.78	7	31	1.09	213
1786	Goldsboro Demand_04-96-010	MGD	4.78	8	1	1.12	214
1786	Goldsboro Demand_04-96-010	MGD	4.78	8	31	1.12	244
1786	Goldsboro Demand_04-96-010	MGD	4.78	9	1	1.04	245
1786	Goldsboro Demand_04-96-010	MGD	4.78	9	30	1.04	274
1786	Goldsboro Demand_04-96-010	MGD	4.78	10	1	0.99	275
1786	Goldsboro Demand_04-96-010	MGD	4.78	10	31	0.99	305
1786	Goldsboro Demand_04-96-010	MGD	4.78	11	1	0.94	306
1786	Goldsboro Demand_04-96-010	MGD	4.78	11	30	0.94	335
1786	Goldsboro Demand_04-96-010	MGD	4.78	12	1	0.93	336
1786	Goldsboro Demand_04-96-010	MGD	4.78	12	31	0.93	366
1806	Neuse Regional WASA_60-54-001	MGD	7.82	1	1	0.91	1
1806	Neuse Regional WASA_60-54-001	MGD	7.82	1	31	0.91	31
1806	Neuse Regional WASA_60-54-001	MGD	7.82	2	1	0.89	32
1806	Neuse Regional WASA_60-54-001	MGD	7.82	2	28	0.89	59
1806	Neuse Regional WASA_60-54-001	MGD	7.82	3	1	0.88	61
1806	Neuse Regional WASA_60-54-001	MGD	7.82	3	31	0.88	91
1806	Neuse Regional WASA_60-54-001	MGD	7.82	4	1	1.04	92
1806	Neuse Regional WASA_60-54-001	MGD	7.82	4	30	1.04	121
1806	Neuse Regional WASA_60-54-001	MGD	7.82	5	1	0.99	122
1806	Neuse Regional WASA_60-54-001	MGD	7.82	5	31	0.99	152
1806	Neuse Regional WASA_60-54-001	MGD	7.82	6	1	1.07	153
1806	Neuse Regional WASA_60-54-001	MGD	7.82	6	30	1.07	182
1806	Neuse Regional WASA_60-54-001	MGD	7.82	7	1	1.06	183
1806	Neuse Regional WASA_60-54-001	MGD	7.82	7	31	1.06	213
1806	Neuse Regional WASA_60-54-001	MGD	7.82	8	1	1.07	214
1806	Neuse Regional WASA_60-54-001	MGD	7.82	8	31	1.07	244
1806	Neuse Regional WASA_60-54-001	MGD	7.82	9	1	1.03	245
1806	Neuse Regional WASA_60-54-001	MGD	7.82	9	30	1.03	274
1806	Neuse Regional WASA_60-54-001	MGD	7.82	10	1	1.02	275
1806	Neuse Regional WASA_60-54-001	MGD	7.82	10	31	1.02	305
1806	Neuse Regional WASA_60-54-001	MGD	7.82	11	1	1.01	306
1806	Neuse Regional WASA_60-54-001	MGD	7.82	11	30	1.01	335
1806	Neuse Regional WASA_60-54-001	MGD	7.82	12	1	1.02	336
1806	Neuse Regional WASA_60-54-001	MGD	7.82	12	31	1.02	366
1906	Weyerhauser Demand	MGD	14.47	1	1	0.95	1
1906	Weyerhauser Demand	MGD	14.47	1	31	0.95	31
1906	Weyerhauser Demand	MGD	14.47	2	1	0.91	32
1906	Weyerhauser Demand	MGD	14.47	2	29	0.91	60
1906	Weyerhauser Demand	MGD	14.47	3	1	0.93	61
1906	Weyerhauser Demand	MGD	14.47	3	31	0.93	91
1906	Weyerhauser Demand	MGD	14.47	4	1	1.00	92

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1906	Weyerhauser Demand	MGD	14.47	4	30	1.00	121
1906	Weyerhauser Demand	MGD	14.47	5	1	1.02	122
1906	Weyerhauser Demand	MGD	14.47	5	31	1.02	152
1906	Weyerhauser Demand	MGD	14.47	6	1	1.02	153
1906	Weyerhauser Demand	MGD	14.47	6	30	1.02	182
1906	Weyerhauser Demand	MGD	14.47	7	1	1.17	183
1906	Weyerhauser Demand	MGD	14.47	7	31	1.17	213
1906	Weyerhauser Demand	MGD	14.47	8	1	1.05	214
1906	Weyerhauser Demand	MGD	14.47	8	31	1.05	244
1906	Weyerhauser Demand	MGD	14.47	9	1	0.83	245
1906	Weyerhauser Demand	MGD	14.47	9	30	0.83	274
1906	Weyerhauser Demand	MGD	14.47	10	1	1.03	275
1906	Weyerhauser Demand	MGD	14.47	10	31	1.03	305
1906	Weyerhauser Demand	MGD	14.47	11	1	1.09	306
1906	Weyerhauser Demand	MGD	14.47	11	30	1.09	335
1906	Weyerhauser Demand	MGD	14.47	12	1	1.00	336
1906	Weyerhauser Demand	MGD	14.47	12	31	1.00	366
1162	Durham Service Area Demand	MGD	24.80	2	1	0.85	32
1162	Durham Service Area Demand	MGD	24.80	2	29	0.85	60
1162	Durham Service Area Demand	MGD	24.80	3	1	0.92	61
1162	Durham Service Area Demand	MGD	24.80	3	31	0.92	91
1162	Durham Service Area Demand	MGD	24.80	4	1	0.94	92
1162	Durham Service Area Demand	MGD	24.80	4	30	0.94	121
1162	Durham Service Area Demand	MGD	24.80	5	1	1.00	122
1162	Durham Service Area Demand	MGD	24.80	5	31	1.00	152
1162	Durham Service Area Demand	MGD	24.80	6	1	1.07	153
1162	Durham Service Area Demand	MGD	24.80	6	30	1.07	182
1162	Durham Service Area Demand	MGD	24.80	7	1	1.13	183
1162	Durham Service Area Demand	MGD	24.80	7	31	1.13	213
1162	Durham Service Area Demand	MGD	24.80	8	1	1.12	214
1162	Durham Service Area Demand	MGD	24.80	8	31	1.12	244
1162	Durham Service Area Demand	MGD	24.80	9	1	1.08	245
1162	Durham Service Area Demand	MGD	24.80	9	30	1.08	274
1162	Durham Service Area Demand	MGD	24.80	10	1	1.04	275
1162	Durham Service Area Demand	MGD	24.80	10	31	1.04	305
1162	Durham Service Area Demand	MGD	24.80	11	1	0.95	306
1162	Durham Service Area Demand	MGD	24.80	11	30	0.95	335
1162	Durham Service Area Demand	MGD	24.80	12	1	0.94	336
1162	Durham Service Area Demand	MGD	24.80	12	31	0.94	366
1256	SGWASA Demand_02-39-107	MGD	3.50	1	1	0.97	1
1256	SGWASA Demand_02-39-107	MGD	3.50	1	31	0.97	31
1256	SGWASA Demand_02-39-107	MGD	3.50	2	1	0.97	32
1256	SGWASA Demand_02-39-107	MGD	3.50	2	29	0.97	60
1256	SGWASA Demand_02-39-107	MGD	3.50	3	1	0.96	61
1256	SGWASA Demand_02-39-107	MGD	3.50	3	31	0.96	91
1256	SGWASA Demand_02-39-107	MGD	3.50	4	1	0.94	92
1256	SGWASA Demand_02-39-107	MGD	3.50	4	30	0.94	121
1256	SGWASA Demand_02-39-107	MGD	3.50	5	1	0.97	122
1256	SGWASA Demand_02-39-107	MGD	3.50	5	31	0.97	152
1256	SGWASA Demand_02-39-107	MGD	3.50	6	1	1.03	153
1256	SGWASA Demand_02-39-107	MGD	3.50	6	30	1.03	182
1256	SGWASA Demand_02-39-107	MGD	3.50	7	1	0.99	183
1256	SGWASA Demand_02-39-107	MGD	3.50	7	31	0.99	213
1256	SGWASA Demand_02-39-107	MGD	3.50	8	1	1.00	214
1256	SGWASA Demand_02-39-107	MGD	3.50	8	31	1.00	244

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1256	SGWASA Demand_02-39-107	MGD	3.50	9	1	0.97	245
1256	SGWASA Demand_02-39-107	MGD	3.50	9	30	0.97	274
1256	SGWASA Demand_02-39-107	MGD	3.50	10	1	1.12	275
1256	SGWASA Demand_02-39-107	MGD	3.50	10	31	1.12	305
1256	SGWASA Demand_02-39-107	MGD	3.50	11	1	1.06	306
1256	SGWASA Demand_02-39-107	MGD	3.50	11	30	1.06	335
1256	SGWASA Demand_02-39-107	MGD	3.50	12	1	1.03	336
1256	SGWASA Demand_02-39-107	MGD	3.50	12	31	1.03	366
1258	Creedmor Demand_02-39-015	MGD	0.40	1	1	0.94	1
1258	Creedmor Demand_02-39-015	MGD	0.40	1	31	0.94	31
1258	Creedmor Demand_02-39-015	MGD	0.40	2	1	0.92	32
1258	Creedmor Demand_02-39-015	MGD	0.40	2	29	0.92	60
1258	Creedmor Demand_02-39-015	MGD	0.40	3	1	0.89	61
1258	Creedmor Demand_02-39-015	MGD	0.40	3	31	0.89	91
1258	Creedmor Demand_02-39-015	MGD	0.40	4	1	0.90	92
1258	Creedmor Demand_02-39-015	MGD	0.40	4	30	0.90	121
1258	Creedmor Demand_02-39-015	MGD	0.40	5	1	1.02	122
1258	Creedmor Demand_02-39-015	MGD	0.40	5	31	1.02	152
1258	Creedmor Demand_02-39-015	MGD	0.40	6	1	1.00	153
1258	Creedmor Demand_02-39-015	MGD	0.40	6	30	1.00	182
1258	Creedmor Demand_02-39-015	MGD	0.40	7	1	1.06	183
1258	Creedmor Demand_02-39-015	MGD	0.40	7	31	1.06	213
1258	Creedmor Demand_02-39-015	MGD	0.40	8	1	1.03	214
1258	Creedmor Demand_02-39-015	MGD	0.40	8	31	1.03	244
1258	Creedmor Demand_02-39-015	MGD	0.40	9	1	1.17	245
1258	Creedmor Demand_02-39-015	MGD	0.40	9	30	1.17	274
1258	Creedmor Demand_02-39-015	MGD	0.40	10	1	1.10	275
1258	Creedmor Demand_02-39-015	MGD	0.40	10	31	1.10	305
1258	Creedmor Demand_02-39-015	MGD	0.40	11	1	1.00	306
1258	Creedmor Demand_02-39-015	MGD	0.40	11	30	1.00	335
1258	Creedmor Demand_02-39-015	MGD	0.40	12	1	0.96	336
1258	Creedmor Demand_02-39-015	MGD	0.40	12	31	0.96	366
1306	Raleigh Demand_03-92-010	MGD	50.00	1	1	0.83	1
1306	Raleigh Demand_03-92-010	MGD	50.00	1	31	0.83	31
1306	Raleigh Demand_03-92-010	MGD	50.00	2	1	0.85	32
1306	Raleigh Demand_03-92-010	MGD	50.00	2	29	0.85	60
1306	Raleigh Demand_03-92-010	MGD	50.00	3	1	0.84	61
1306	Raleigh Demand_03-92-010	MGD	50.00	3	31	0.84	91
1306	Raleigh Demand_03-92-010	MGD	50.00	4	1	0.98	92
1306	Raleigh Demand_03-92-010	MGD	50.00	4	30	0.98	121
1306	Raleigh Demand_03-92-010	MGD	50.00	5	1	1.07	122
1306	Raleigh Demand_03-92-010	MGD	50.00	5	31	1.07	152
1306	Raleigh Demand_03-92-010	MGD	50.00	6	1	1.12	153
1306	Raleigh Demand_03-92-010	MGD	50.00	6	30	1.12	182
1306	Raleigh Demand_03-92-010	MGD	50.00	7	1	1.19	183
1306	Raleigh Demand_03-92-010	MGD	50.00	7	31	1.19	213
1306	Raleigh Demand_03-92-010	MGD	50.00	8	1	1.11	214
1306	Raleigh Demand_03-92-010	MGD	50.00	8	31	1.11	244
1306	Raleigh Demand_03-92-010	MGD	50.00	9	1	1.18	245
1306	Raleigh Demand_03-92-010	MGD	50.00	9	30	1.18	274
1306	Raleigh Demand_03-92-010	MGD	50.00	10	1	1.06	275
1306	Raleigh Demand_03-92-010	MGD	50.00	10	31	1.06	305
1306	Raleigh Demand_03-92-010	MGD	50.00	11	1	0.92	306
1306	Raleigh Demand_03-92-010	MGD	50.00	11	30	0.92	335
1306	Raleigh Demand_03-92-010	MGD	50.00	12	1	0.85	336

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1306	Raleigh Demand_03-92-010	MGD	50.00	12	31	0.85	366
1506	Wilson Demand_04-98-010	MGD	8.96	1	1	0.88	1
1506	Wilson Demand_04-98-010	MGD	8.96	1	31	0.88	31
1506	Wilson Demand_04-98-010	MGD	8.96	2	1	0.88	32
1506	Wilson Demand_04-98-010	MGD	8.96	2	29	0.88	60
1506	Wilson Demand_04-98-010	MGD	8.96	3	1	0.88	61
1506	Wilson Demand_04-98-010	MGD	8.96	3	31	0.88	91
1506	Wilson Demand_04-98-010	MGD	8.96	4	1	0.97	92
1506	Wilson Demand_04-98-010	MGD	8.96	4	30	0.97	121
1506	Wilson Demand_04-98-010	MGD	8.96	5	1	1.07	122
1506	Wilson Demand_04-98-010	MGD	8.96	5	31	1.07	152
1506	Wilson Demand_04-98-010	MGD	8.96	6	1	1.17	153
1506	Wilson Demand_04-98-010	MGD	8.96	6	30	1.17	182
1506	Wilson Demand_04-98-010	MGD	8.96	7	1	1.11	183
1506	Wilson Demand_04-98-010	MGD	8.96	7	31	1.11	213
1506	Wilson Demand_04-98-010	MGD	8.96	8	1	1.21	214
1506	Wilson Demand_04-98-010	MGD	8.96	8	31	1.21	244
1506	Wilson Demand_04-98-010	MGD	8.96	9	1	1.02	245
1506	Wilson Demand_04-98-010	MGD	8.96	9	30	1.02	274
1506	Wilson Demand_04-98-010	MGD	8.96	10	1	0.99	275
1506	Wilson Demand_04-98-010	MGD	8.96	10	31	0.99	305
1506	Wilson Demand_04-98-010	MGD	8.96	11	1	0.91	306
1506	Wilson Demand_04-98-010	MGD	8.96	11	30	0.91	335
1506	Wilson Demand_04-98-010	MGD	8.96	12	1	0.89	336
1506	Wilson Demand_04-98-010	MGD	8.96	12	31	0.89	366
1646	Johnston County Demand_03-51-070	MGD	8.90	1	1	1.00	1
1646	Johnston County Demand_03-51-070	MGD	8.90	1	31	1.00	31
1646	Johnston County Demand_03-51-070	MGD	8.90	2	1	0.99	32
1646	Johnston County Demand_03-51-070	MGD	8.90	2	29	0.99	60
1646	Johnston County Demand_03-51-070	MGD	8.90	3	1	1.00	61
1646	Johnston County Demand_03-51-070	MGD	8.90	3	31	1.00	91
1646	Johnston County Demand_03-51-070	MGD	8.90	4	1	0.95	92
1646	Johnston County Demand_03-51-070	MGD	8.90	4	30	0.95	121
1646	Johnston County Demand_03-51-070	MGD	8.90	5	1	0.95	122
1646	Johnston County Demand_03-51-070	MGD	8.90	5	31	0.95	152
1646	Johnston County Demand_03-51-070	MGD	8.90	6	1	1.00	153
1646	Johnston County Demand_03-51-070	MGD	8.90	6	30	1.00	182
1646	Johnston County Demand_03-51-070	MGD	8.90	7	1	1.11	183
1646	Johnston County Demand_03-51-070	MGD	8.90	7	31	1.11	213
1646	Johnston County Demand_03-51-070	MGD	8.90	8	1	0.96	214
1646	Johnston County Demand_03-51-070	MGD	8.90	8	31	0.96	244
1646	Johnston County Demand_03-51-070	MGD	8.90	9	1	0.92	245
1646	Johnston County Demand_03-51-070	MGD	8.90	9	30	0.92	274
1646	Johnston County Demand_03-51-070	MGD	8.90	10	1	1.01	275
1646	Johnston County Demand_03-51-070	MGD	8.90	10	31	1.01	305
1646	Johnston County Demand_03-51-070	MGD	8.90	11	1	1.09	306
1646	Johnston County Demand_03-51-070	MGD	8.90	11	30	1.09	335
1646	Johnston County Demand_03-51-070	MGD	8.90	12	1	1.00	336
1646	Johnston County Demand_03-51-070	MGD	8.90	12	31	1.00	366
1666	Smithfield Demand_03-51-010	MGD	2.96	1	1	0.88	1
1666	Smithfield Demand_03-51-010	MGD	2.96	1	31	0.88	31
1666	Smithfield Demand_03-51-010	MGD	2.96	2	1	0.81	32
1666	Smithfield Demand_03-51-010	MGD	2.96	2	29	0.81	60
1666	Smithfield Demand_03-51-010	MGD	2.96	3	1	0.83	61
1666	Smithfield Demand_03-51-010	MGD	2.96	3	31	0.83	91

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1666	Smithfield Demand_03-51-010	MGD	2.96	4	1	0.96	92
1666	Smithfield Demand_03-51-010	MGD	2.96	4	30	0.96	121
1666	Smithfield Demand_03-51-010	MGD	2.96	5	1	1.27	122
1666	Smithfield Demand_03-51-010	MGD	2.96	5	31	1.27	152
1666	Smithfield Demand_03-51-010	MGD	2.96	6	1	1.26	153
1666	Smithfield Demand_03-51-010	MGD	2.96	6	30	1.26	182
1666	Smithfield Demand_03-51-010	MGD	2.96	7	1	1.19	183
1666	Smithfield Demand_03-51-010	MGD	2.96	7	31	1.19	213
1666	Smithfield Demand_03-51-010	MGD	2.96	8	1	1.17	214
1666	Smithfield Demand_03-51-010	MGD	2.96	8	31	1.17	244
1666	Smithfield Demand_03-51-010	MGD	2.96	9	1	1.20	245
1666	Smithfield Demand_03-51-010	MGD	2.96	9	30	1.20	274
1666	Smithfield Demand_03-51-010	MGD	2.96	10	1	1.02	275
1666	Smithfield Demand_03-51-010	MGD	2.96	10	31	1.02	305
1666	Smithfield Demand_03-51-010	MGD	2.96	11	1	0.77	306
1666	Smithfield Demand_03-51-010	MGD	2.96	11	30	0.77	335
1666	Smithfield Demand_03-51-010	MGD	2.96	12	1	0.64	336
1666	Smithfield Demand_03-51-010	MGD	2.96	12	31	0.64	366
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	1	1	0.58	1
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	1	31	0.58	31
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	2	1	0.92	32
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	2	29	0.92	60
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	3	1	0.77	61
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	3	31	0.77	91
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	4	1	1.22	92
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	4	30	1.22	121
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	5	1	0.90	122
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	5	31	0.90	152
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	6	1	1.65	153
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	6	30	1.65	182
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	7	1	1.36	183
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	7	31	1.36	213
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	8	1	1.66	214
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	8	31	1.66	244
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	9	1	0.65	245
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	9	30	0.65	274
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	10	1	1.33	275
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	10	31	1.33	305
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	11	1	0.49	306
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	11	30	0.49	335
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	12	1	0.48	336
1766	Progress Lee Steam Plant Demand_CUR0001	MGD	8.91	12	31	0.48	366
1786	Goldsboro Demand_04-96-010	MGD	4.78	1	1	0.96	1
1786	Goldsboro Demand_04-96-010	MGD	4.78	1	31	0.96	31
1786	Goldsboro Demand_04-96-010	MGD	4.78	2	1	0.93	32
1786	Goldsboro Demand_04-96-010	MGD	4.78	2	29	0.93	60
1786	Goldsboro Demand_04-96-010	MGD	4.78	3	1	0.91	61
1786	Goldsboro Demand_04-96-010	MGD	4.78	3	31	0.91	91
1786	Goldsboro Demand_04-96-010	MGD	4.78	4	1	0.97	92
1786	Goldsboro Demand_04-96-010	MGD	4.78	4	30	0.97	121
1786	Goldsboro Demand_04-96-010	MGD	4.78	5	1	1.06	122
1786	Goldsboro Demand_04-96-010	MGD	4.78	5	31	1.06	152
1786	Goldsboro Demand_04-96-010	MGD	4.78	6	1	1.21	153
1786	Goldsboro Demand_04-96-010	MGD	4.78	6	30	1.21	182
1786	Goldsboro Demand_04-96-010	MGD	4.78	7	1	1.14	183

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1786	Goldsboro Demand_04-96-010	MGD	4.78	7	31	1.14	213
1786	Goldsboro Demand_04-96-010	MGD	4.78	8	1	1.08	214
1786	Goldsboro Demand_04-96-010	MGD	4.78	8	31	1.08	244
1786	Goldsboro Demand_04-96-010	MGD	4.78	9	1	1.02	245
1786	Goldsboro Demand_04-96-010	MGD	4.78	9	30	1.02	274
1786	Goldsboro Demand_04-96-010	MGD	4.78	10	1	0.98	275
1786	Goldsboro Demand_04-96-010	MGD	4.78	10	31	0.98	305
1786	Goldsboro Demand_04-96-010	MGD	4.78	11	1	0.89	306
1786	Goldsboro Demand_04-96-010	MGD	4.78	11	30	0.89	335
1786	Goldsboro Demand_04-96-010	MGD	4.78	12	1	0.84	336
1786	Goldsboro Demand_04-96-010	MGD	4.78	12	31	0.84	366
1806	Neuse Regional WASA_60-54-001	MGD	7.82	1	1	0.93	1
1806	Neuse Regional WASA_60-54-001	MGD	7.82	1	31	0.93	31
1806	Neuse Regional WASA_60-54-001	MGD	7.82	2	1	0.91	32
1806	Neuse Regional WASA_60-54-001	MGD	7.82	2	28	0.91	59
1806	Neuse Regional WASA_60-54-001	MGD	7.82	3	1	0.95	61
1806	Neuse Regional WASA_60-54-001	MGD	7.82	3	31	0.95	91
1806	Neuse Regional WASA_60-54-001	MGD	7.82	4	1	0.98	92
1806	Neuse Regional WASA_60-54-001	MGD	7.82	4	30	0.98	121
1806	Neuse Regional WASA_60-54-001	MGD	7.82	5	1	1.08	122
1806	Neuse Regional WASA_60-54-001	MGD	7.82	5	31	1.08	152
1806	Neuse Regional WASA_60-54-001	MGD	7.82	6	1	1.11	153
1806	Neuse Regional WASA_60-54-001	MGD	7.82	6	30	1.11	182
1806	Neuse Regional WASA_60-54-001	MGD	7.82	7	1	1.09	183
1806	Neuse Regional WASA_60-54-001	MGD	7.82	7	31	1.09	213
1806	Neuse Regional WASA_60-54-001	MGD	7.82	8	1	1.11	214
1806	Neuse Regional WASA_60-54-001	MGD	7.82	8	31	1.11	244
1806	Neuse Regional WASA_60-54-001	MGD	7.82	9	1	1.04	245
1806	Neuse Regional WASA_60-54-001	MGD	7.82	9	30	1.04	274
1806	Neuse Regional WASA_60-54-001	MGD	7.82	10	1	0.99	275
1806	Neuse Regional WASA_60-54-001	MGD	7.82	10	31	0.99	305
1806	Neuse Regional WASA_60-54-001	MGD	7.82	11	1	0.91	306
1806	Neuse Regional WASA_60-54-001	MGD	7.82	11	30	0.91	335
1806	Neuse Regional WASA_60-54-001	MGD	7.82	12	1	0.90	336
1806	Neuse Regional WASA_60-54-001	MGD	7.82	12	31	0.90	366
1906	Weyerhauser Demand	MGD	14.40	1	1	0.95	1
1906	Weyerhauser Demand	MGD	14.40	1	31	0.95	31
1906	Weyerhauser Demand	MGD	14.40	2	1	0.91	32
1906	Weyerhauser Demand	MGD	14.40	2	29	0.91	60
1906	Weyerhauser Demand	MGD	14.40	3	1	0.93	61
1906	Weyerhauser Demand	MGD	14.40	3	31	0.93	91
1906	Weyerhauser Demand	MGD	14.40	4	1	1.00	92
1906	Weyerhauser Demand	MGD	14.40	4	30	1.00	121
1906	Weyerhauser Demand	MGD	14.40	5	1	1.02	122
1906	Weyerhauser Demand	MGD	14.40	5	31	1.02	152
1906	Weyerhauser Demand	MGD	14.40	6	1	1.02	153
1906	Weyerhauser Demand	MGD	14.40	6	30	1.02	182
1906	Weyerhauser Demand	MGD	14.40	7	1	1.17	183
1906	Weyerhauser Demand	MGD	14.40	7	31	1.17	213
1906	Weyerhauser Demand	MGD	14.40	8	1	1.05	214
1906	Weyerhauser Demand	MGD	14.40	8	31	1.05	244
1906	Weyerhauser Demand	MGD	14.40	9	1	0.83	245
1906	Weyerhauser Demand	MGD	14.40	9	30	0.83	274
1906	Weyerhauser Demand	MGD	14.40	10	1	1.03	275
1906	Weyerhauser Demand	MGD	14.40	10	31	1.03	305

Node No.	Name	Units	Factor	Month	Day	Demand	julSort
1906	Weyerhauser Demand	MGD	14.40	11	1	1.09	306
1906	Weyerhauser Demand	MGD	14.40	11	30	1.09	335
1906	Weyerhauser Demand	MGD	14.40	12	1	1.00	336
1906	Weyerhauser Demand	MGD	14.40	12	31	1.00	366

Lookup Tables - Wastewater Return Patterns, Spillway Curves, Etc.

Name	Interp	Independent	Dependent
1400Outflow	Interp	305	0
1400Outflow	Interp	306	47
1400Outflow	Interp	306.9	83
1400Outflow	Interp	310	92
1400Outflow	Interp	312.5	98
1400Outflow	Interp	315	104
1400Outflow	Interp	316	106
1400Outflow	Interp	316.5	264
1400Outflow	Interp	317	615
1400Outflow	Interp	317.5	1120
1400Outflow	Interp	318	1373
1400Outflow	Interp	319	3399
1400Outflow	Interp	320	5481
1400Outflow	Interp	321	7998
1400Outflow	Interp	321.5	9377
1400Outflow	Interp	322	11654
1400Outflow	Interp	322.5	15020
1400Outflow	Interp	323	19186
1400Outflow	Interp	323.5	23410
1400Outflow	Interp	324	28020
1402Outflow	Interp	326	0
1402Outflow	Interp	328	10
1402Outflow	Interp	330	15.3
1402Outflow	Interp	333	20.6
1402Outflow	Interp	333.5	38
1402Outflow	Interp	334.4	96
1402Outflow	Interp	335	97.8
1402Outflow	Interp	335.5	99
1402Outflow	Interp	336	179
1402Outflow	Interp	336.5	356.2
1402Outflow	Interp	337	612.3
1402Outflow	Interp	338	1325.5
1402Outflow	Interp	339	2282.6
1402Outflow	Interp	340	3489.7
1402Outflow	Interp	341.5	5630
1402Outflow	Interp	342	7323.7
1402Outflow	Interp	342.5	10010
1402Outflow	Interp	343	13250
1402Outflow	Interp	343.5	17050
1402Outflow	Interp	344	21116.7
1404Outflow	Interp	342.5	0
1404Outflow	Interp	344	12.8

Name	Interp	Independent	Dependent
1404Outflow	Interp	346	22
1404Outflow	Interp	349.5	32
1404Outflow	Interp	351.1	151
1404Outflow	Interp	352	154
1404Outflow	Interp	352.5	155
1404Outflow	Interp	353	314
1404Outflow	Interp	353.5	665
1404Outflow	Interp	354	1170
1404Outflow	Interp	354.5	1796
1404Outflow	Interp	355	2567
1404Outflow	Interp	355.5	3452
1404Outflow	Interp	356	4423
1404Outflow	Interp	357	6735
1404Outflow	Interp	358	9433
1404Outflow	Interp	358.5	10920
1404Outflow	Interp	359	13552
1404Outflow	Interp	359.5	17990
1404Outflow	Interp	360.5	28800
1406Outflow	Interp	306.5	0
1406Outflow	Interp	307	14.8
1406Outflow	Interp	307.5	41.9
1406Outflow	Interp	308	76.9
1406Outflow	Interp	308.7	135.5
1406Outflow	Interp	310	139.5
1406Outflow	Interp	312	145.6
1406Outflow	Interp	314	151.4
1406Outflow	Interp	317	159.7
1406Outflow	Interp	320	167.5
1406Outflow	Interp	322.1	172.8
1406Outflow	Interp	322.6	278
1406Outflow	Interp	323.1	470.4
1406Outflow	Interp	323.6	719.5
1406Outflow	Interp	324.1	1014.5
1406Outflow	Interp	326.1	2553.6
1406Outflow	Interp	327	3770
1406Outflow	Interp	327.5	5470
1406Outflow	Interp	328	7880
1406Outflow	Interp	329	14820
1408Outflow	Interp	313	0
1408Outflow	Interp	314	47
1408Outflow	Interp	314.3	66
1408Outflow	Interp	320	84
1408Outflow	Interp	324	94

Name	Interp	Independent	Dependent
1408Outflow	Interp	328	104
1408Outflow	Interp	328.5	105
1408Outflow	Interp	329	106
1408Outflow	Interp	329.5	301
1408Outflow	Interp	330	732
1408Outflow	Interp	330.5	1350
1408Outflow	Interp	331	2117
1408Outflow	Interp	332	4087
1408Outflow	Interp	333	6687
1408Outflow	Interp	334	9756
1408Outflow	Interp	334.5	11480
1408Outflow	Interp	335	14292
1408Outflow	Interp	335.5	18830
1408Outflow	Interp	336	24560
1408Outflow	Interp	336.5	31050
1410Outflow	Interp	306.5	0
1410Outflow	Interp	307.6	76
1410Outflow	Interp	308.6	225
1410Outflow	Interp	310	235
1410Outflow	Interp	315	268
1410Outflow	Interp	318.5	289
1410Outflow	Interp	319	372
1410Outflow	Interp	319.5	585
1410Outflow	Interp	320.5	1251
1410Outflow	Interp	322.5	3662
1410Outflow	Interp	324.5	7372
1410Outflow	Interp	328.5	18742
1410Outflow	Interp	330.5	26300
1410Outflow	Interp	331	29430
1410Outflow	Interp	331.5	32900
1410Outflow	Interp	332	39020
1410Outflow	Interp	332.5	44910
1410Outflow	Interp	333	51190
1410Outflow	Interp	333.5	57110
1412Outflow	Interp	276	0
1412Outflow	Interp	277	162.4
1412Outflow	Interp	279.1	843.9
1412Outflow	Interp	280.1	1299.3
1412Outflow	Interp	281.9	1376.9
1412Outflow	Interp	283.7	1447.2
1412Outflow	Interp	284.9	1492.2
1412Outflow	Interp	286.4	2177.3
1412Outflow	Interp	289.4	5352.3

Name	Interp	Independent	Dependent
1412Outflow	Interp	292.5	10287.1
1412Outflow	Interp	296.2	17930
1412Outflow	Interp	300	27361.9
1412Outflow	Interp	301	29526.6
1414Outflow	Interp	301	0
1414Outflow	Interp	301.8	32.8
1414Outflow	Interp	302.6	79.5
1414Outflow	Interp	303.9	82.7
1414Outflow	Interp	306	87.4
1414Outflow	Interp	309.2	94.1
1414Outflow	Interp	313.4	102.5
1414Outflow	Interp	318.1	111
1414Outflow	Interp	319.6	879.1
1414Outflow	Interp	322.4	2362.8
1414Outflow	Interp	326.5	9510.1
1414Outflow	Interp	329.4	14962.5
1414Outflow	Interp	331	17744.5
1414Outflow	Interp	331.5	18634.5
1416Outflow	Interp	230	0
1416Outflow	Interp	232.4	152.6
1416Outflow	Interp	234.7	421
1416Outflow	Interp	237.1	750.1
1416Outflow	Interp	239.4	1143.5
1416Outflow	Interp	241.8	1526.1
1416Outflow	Interp	244.1	1890.1
1416Outflow	Interp	246.5	2104
1416Outflow	Interp	248.8	2315
1416Outflow	Interp	251.2	2520.6
1416Outflow	Interp	253.5	2716.9
1416Outflow	Interp	255.9	2907.8
1416Outflow	Interp	258.5	3096
1416Outflow	Interp	259.3	3695.3
1416Outflow	Interp	260.4	4411.4
1416Outflow	Interp	262.3	7133.6
1416Outflow	Interp	264.7	11803.7
1416Outflow	Interp	269.1	23166.7
1416Outflow	Interp	274.6	41322.8
1416Outflow	Interp	280	63291.1
1418Outflow	Interp	335	0
1418Outflow	Interp	336.6	94
1418Outflow	Interp	340	101
1418Outflow	Interp	345	111
1418Outflow	Interp	349	119

Name	Interp	Independent	Dependent
1418Outflow	Interp	349.5	181.6
1418Outflow	Interp	350	312.7
1418Outflow	Interp	350.5	520.7
1418Outflow	Interp	351	776.2
1418Outflow	Interp	354	4914
1418Outflow	Interp	354.3	5540.2
1418Outflow	Interp	354.6	6336.3
1418Outflow	Interp	355.1	8470.1
1418Outflow	Interp	355.8	11605.5
1418Outflow	Interp	357	18689.1
1422Outflow	Interp	252	0
1422Outflow	Interp	253	56
1422Outflow	Interp	254	122
1422Outflow	Interp	258	132
1422Outflow	Interp	265	151
1422Outflow	Interp	270	164
1422Outflow	Interp	275	175
1422Outflow	Interp	275.5	311
1422Outflow	Interp	276	653
1422Outflow	Interp	277	1864
1422Outflow	Interp	278	3718
1422Outflow	Interp	285	4719
AlliedSignalWW_NC0001899	Lower	1	1.14
AlliedSignalWW_NC0001899	Lower	2	2.05
AlliedSignalWW_NC0001899	Lower	3	0.74
AlliedSignalWW_NC0001899	Lower	4	0.6
AlliedSignalWW_NC0001899	Lower	5	0.71
AlliedSignalWW_NC0001899	Lower	6	0.98
AlliedSignalWW_NC0001899	Lower	7	0.65
AlliedSignalWW_NC0001899	Lower	8	0.7
AlliedSignalWW_NC0001899	Lower	9	1.42
AlliedSignalWW_NC0001899	Lower	10	1.2
AlliedSignalWW_NC0001899	Lower	11	0.71
AlliedSignalWW_NC0001899	Lower	12	0.76
ApexWRFReturn	Lower	1	0.86
ApexWRFReturn	Lower	2	1.06
ApexWRFReturn	Lower	3	1.07
ApexWRFReturn	Lower	4	0.93
ApexWRFReturn	Lower	5	0.99
ApexWRFReturn	Lower	6	0.89
ApexWRFReturn	Lower	7	0.89
ApexWRFReturn	Lower	8	1.18
ApexWRFReturn	Lower	9	1.25

Name	Interp	Independent	Dependent
ApexWRFReturn	Lower	10	0.97
ApexWRFReturn	Lower	11	0.94
ApexWRFReturn	Lower	12	0.94
ArchdaleWW	Lower	1	0.91
ArchdaleWW	Lower	2	1.09
ArchdaleWW	Lower	3	0.94
ArchdaleWW	Lower	4	1.13
ArchdaleWW	Lower	5	1.18
ArchdaleWW	Lower	6	0.89
ArchdaleWW	Lower	7	0.75
ArchdaleWW	Lower	8	0.77
ArchdaleWW	Lower	9	0.84
ArchdaleWW	Lower	10	0.92
ArchdaleWW	Lower	11	1.08
AydenGriftonWW	Lower	1	0.23
AydenGriftonWW	Lower	2	0.27
AydenGriftonWW	Lower	3	0.23
AydenGriftonWW	Lower	4	0.16
AydenGriftonWW	Lower	5	0.14
AydenGriftonWW	Lower	6	0.13
AydenGriftonWW	Lower	7	0.13
AydenGriftonWW	Lower	8	0.15
AydenGriftonWW	Lower	9	0.15
AydenGriftonWW	Lower	10	0.16
AydenGriftonWW	Lower	11	0.16
AydenGriftonWW	Lower	12	0.16
BensonWW_nc0020389	Lower	1	0.28
BensonWW_nc0020389	Lower	2	0.42
BensonWW_nc0020389	Lower	3	0.37
BensonWW_nc0020389	Lower	4	0.26
BensonWW_nc0020389	Lower	5	0.3
BensonWW_nc0020389	Lower	6	0.31
BensonWW_nc0020389	Lower	7	0.28
BensonWW_nc0020389	Lower	8	0.38
BensonWW_nc0020389	Lower	9	0.47
BensonWW_nc0020389	Lower	10	0.29
BensonWW_nc0020389	Lower	11	0.31
BensonWW_nc0020389	Lower	12	0.32
BurlingtonEastWW_NC0023868	Lower	1	2.09
BurlingtonEastWW_NC0023868	Lower	2	2.06
BurlingtonEastWW_NC0023868	Lower	3	2.09
BurlingtonEastWW_NC0023868	Lower	4	1.59
BurlingtonEastWW_NC0023868	Lower	5	1.86

Name	Interp	Independent	Dependent
BurlingtonEastWW_NC0023868	Lower	6	1.38
BurlingtonEastWW_NC0023868	Lower	7	1.46
BurlingtonEastWW_NC0023868	Lower	8	1.38
BurlingtonEastWW_NC0023868	Lower	9	1.59
BurlingtonEastWW_NC0023868	Lower	10	1.35
BurlingtonEastWW_NC0023868	Lower	11	1.32
BurlingtonEastWW_NC0023868	Lower	12	1.54
BurlingtonMackintoshWW_NC0023828	Lower	1	0.04
BurlingtonMackintoshWW_NC0023828	Lower	2	0.04
BurlingtonMackintoshWW_NC0023828	Lower	3	0.04
BurlingtonMackintoshWW_NC0023828	Lower	4	0.03
BurlingtonMackintoshWW_NC0023828	Lower	5	0.03
BurlingtonMackintoshWW_NC0023828	Lower	6	0.03
BurlingtonMackintoshWW_NC0023828	Lower	7	0.03
BurlingtonMackintoshWW_NC0023828	Lower	8	0.03
BurlingtonMackintoshWW_NC0023828	Lower	9	0.03
BurlingtonMackintoshWW_NC0023828	Lower	10	0.03
BurlingtonMackintoshWW_NC0023828	Lower	11	0.03
BurlingtonMackintoshWW_NC0023828	Lower	12	0.04
BurlingtonSouthsideWW_NC0023876	Lower	1	1
BurlingtonSouthsideWW_NC0023876	Lower	2	1
BurlingtonSouthsideWW_NC0023876	Lower	3	1
BurlingtonSouthsideWW_NC0023876	Lower	4	1
BurlingtonSouthsideWW_NC0023876	Lower	5	1
BurlingtonSouthsideWW_NC0023876	Lower	6	1
BurlingtonSouthsideWW_NC0023876	Lower	7	1
BurlingtonSouthsideWW_NC0023876	Lower	8	1
BurlingtonSouthsideWW_NC0023876	Lower	9	1
BurlingtonSouthsideWW_NC0023876	Lower	10	1
BurlingtonSouthsideWW_NC0023876	Lower	11	1
BurlingtonSouthsideWW_NC0023876	Lower	12	1
BurlingtonTotalWWRF	Lower	1	0.82
BurlingtonTotalWWRF	Lower	2	0.85
BurlingtonTotalWWRF	Lower	3	0.95
BurlingtonTotalWWRF	Lower	4	0.98
BurlingtonTotalWWRF	Lower	5	0.83
BurlingtonTotalWWRF	Lower	6	0.69
BurlingtonTotalWWRF	Lower	7	0.7
BurlingtonTotalWWRF	Lower	8	0.76
BurlingtonTotalWWRF	Lower	9	0.74
BurlingtonTotalWWRF	Lower	10	0.74
BurlingtonTotalWWRF	Lower	11	0.87
BurlingtonTotalWWRF	Lower	12	0.89

Name	Interp	Independent	Dependent
CaryApexReturn	Lower	1	1.06
CaryApexReturn	Lower	2	1.06
CaryApexReturn	Lower	3	0.92
CaryApexReturn	Lower	4	0.86
CaryApexReturn	Lower	5	0.69
CaryApexReturn	Lower	6	0.57
CaryApexReturn	Lower	7	0.6
CaryApexReturn	Lower	8	0.63
CaryApexReturn	Lower	9	0.73
CaryApexReturn	Lower	10	0.79
CaryApexReturn	Lower	11	0.97
CaryApexReturn	Lower	12	1.05
CaryApexWTFReturn	Lower	1	0.18
CaryApexWTFReturn	Lower	2	0.19
CaryApexWTFReturn	Lower	3	0.16
CaryApexWTFReturn	Lower	4	0.14
CaryApexWTFReturn	Lower	5	0.15
CaryApexWTFReturn	Lower	6	0.11
CaryApexWTFReturn	Lower	7	0.12
CaryApexWTFReturn	Lower	8	0.12
CaryApexWTFReturn	Lower	9	0.15
CaryApexWTFReturn	Lower	10	0.15
CaryApexWTFReturn	Lower	11	0.16
CaryApexWTFReturn	Lower	12	0.17
CaryNWRFReturn	Lower	1	1.05
CaryNWRFReturn	Lower	2	1.01
CaryNWRFReturn	Lower	3	1.08
CaryNWRFReturn	Lower	4	1.03
CaryNWRFReturn	Lower	5	0.97
CaryNWRFReturn	Lower	6	0.95
CaryNWRFReturn	Lower	7	0.94
CaryNWRFReturn	Lower	8	0.94
CaryNWRFReturn	Lower	9	0.96
CaryNWRFReturn	Lower	10	0.99
CaryNWRFReturn	Lower	11	1.02
CaryNWRFReturn	Lower	12	1.05
CarySWRFReturn	Lower	1	1.06
CarySWRFReturn	Lower	2	1.11
CarySWRFReturn	Lower	3	1.15
CarySWRFReturn	Lower	4	1.07
CarySWRFReturn	Lower	5	0.98
CarySWRFReturn	Lower	6	0.97
CarySWRFReturn	Lower	7	0.9

Name	Interp	Independent	Dependent
CarySWRFReturn	Lower	8	0.95
CarySWRFReturn	Lower	9	0.93
CarySWRFReturn	Lower	10	0.94
CarySWRFReturn	Lower	11	0.96
CarySWRFReturn	Lower	12	0.99
ClaytReturn_nc0064564&nc0025453	Lower	1	0.33
ClaytReturn_nc0064564&nc0025453	Lower	2	0.31
ClaytReturn_nc0064564&nc0025453	Lower	3	0.32
ClaytReturn_nc0064564&nc0025453	Lower	4	0.28
ClaytReturn_nc0064564&nc0025453	Lower	5	0.23
ClaytReturn_nc0064564&nc0025453	Lower	6	0.2
ClaytReturn_nc0064564&nc0025453	Lower	7	0.2
ClaytReturn_nc0064564&nc0025453	Lower	8	0.22
ClaytReturn_nc0064564&nc0025453	Lower	9	0.23
ClaytReturn_nc0064564&nc0025453	Lower	10	0.25
ClaytReturn_nc0064564&nc0025453	Lower	11	0.28
ClaytReturn_nc0064564&nc0025453	Lower	12	0.31
ConeMillsWW	Lower	1	0
ConeMillsWW	Lower	2	0
ConeMillsWW	Lower	3	0
ConeMillsWW	Lower	4	0
ConeMillsWW	Lower	5	0
ConeMillsWW	Lower	6	0
ConeMillsWW	Lower	7	0
ConeMillsWW	Lower	8	0
ConeMillsWW	Lower	9	0
ConeMillsWW	Lower	10	0
ConeMillsWW	Lower	11	0
ConeMillsWW	Lower	12	0
DunnWW_nc0078955	Lower	1	0.06
DunnWW_nc0078955	Lower	2	0.05
DunnWW_nc0078955	Lower	3	0.04
DunnWW_nc0078955	Lower	4	0.04
DunnWW_nc0078955	Lower	5	0.04
DunnWW_nc0078955	Lower	6	0.03
DunnWW_nc0078955	Lower	7	0.04
DunnWW_nc0078955	Lower	8	0.04
DunnWW_nc0078955	Lower	9	0.05
DunnWW_nc0078955	Lower	10	0.04
DunnWW_nc0078955	Lower	11	0.04
DunnWW_nc0078955	Lower	12	0.04
DunnWWTP_nc0043176	Lower	1	0.78
DunnWWTP_nc0043176	Lower	2	0.87

Name	Interp	Independent	Dependent
DunnWWTP_nc0043176	Lower	3	0.92
DunnWWTP_nc0043176	Lower	4	0.78
DunnWWTP_nc0043176	Lower	5	0.55
DunnWWTP_nc0043176	Lower	6	0.43
DunnWWTP_nc0043176	Lower	7	0.43
DunnWWTP_nc0043176	Lower	8	0.55
DunnWWTP_nc0043176	Lower	9	0.54
DunnWWTP_nc0043176	Lower	10	0.51
DunnWWTP_nc0043176	Lower	11	0.6
DunnWWTP_nc0043176	Lower	12	0.72
DupontWW_nc0003573	Lower	1	1
DupontWW_nc0003573	Lower	2	1
DupontWW_nc0003573	Lower	3	1
DupontWW_nc0003573	Lower	4	1
DupontWW_nc0003573	Lower	5	1
DupontWW_nc0003573	Lower	6	1
DupontWW_nc0003573	Lower	7	1
DupontWW_nc0003573	Lower	8	1
DupontWW_nc0003573	Lower	9	1
DupontWW_nc0003573	Lower	10	1
DupontWW_nc0003573	Lower	11	1
DupontWW_nc0003573	Lower	12	1
DurhamCtyTriangleWW_nc0026051	Lower	1	0.16
DurhamCtyTriangleWW_nc0026051	Lower	2	0.16
DurhamCtyTriangleWW_nc0026051	Lower	3	0.16
DurhamCtyTriangleWW_nc0026051	Lower	4	0.14
DurhamCtyTriangleWW_nc0026051	Lower	5	0.12
DurhamCtyTriangleWW_nc0026051	Lower	6	0.1
DurhamCtyTriangleWW_nc0026051	Lower	7	0.1
DurhamCtyTriangleWW_nc0026051	Lower	8	0.1
DurhamCtyTriangleWW_nc0026051	Lower	9	0.11
DurhamCtyTriangleWW_nc0026051	Lower	10	0.12
DurhamCtyTriangleWW_nc0026051	Lower	11	0.14
DurhamCtyTriangleWW_nc0026051	Lower	12	0.15
DurhamReclamationW_nc0047597	Lower	1	0.45
DurhamReclamationW_nc0047597	Lower	2	0.47
DurhamReclamationW_nc0047597	Lower	3	0.45
DurhamReclamationW_nc0047597	Lower	4	0.4
DurhamReclamationW_nc0047597	Lower	5	0.35
DurhamReclamationW_nc0047597	Lower	6	0.3
DurhamReclamationW_nc0047597	Lower	7	0.29
DurhamReclamationW_nc0047597	Lower	8	0.28
DurhamReclamationW_nc0047597	Lower	9	0.32

Name	Interp	Independent	Dependent
DurhamReclamationW_nc0047597	Lower	10	0.34
DurhamReclamationW_nc0047597	Lower	11	0.41
DurhamReclamationW_nc0047597	Lower	12	0.44
DurhamReturn_nc0023841	Lower	1	0.41
DurhamReturn_nc0023841	Lower	2	0.4
DurhamReturn_nc0023841	Lower	3	0.4
DurhamReturn_nc0023841	Lower	4	0.35
DurhamReturn_nc0023841	Lower	5	0.3
DurhamReturn_nc0023841	Lower	6	0.26
DurhamReturn_nc0023841	Lower	7	0.24
DurhamReturn_nc0023841	Lower	8	0.23
DurhamReturn_nc0023841	Lower	9	0.28
DurhamReturn_nc0023841	Lower	10	0.29
DurhamReturn_nc0023841	Lower	11	0.39
DurhamReturn_nc0023841	Lower	12	0.4
FallsSpillway	Interp	264.8	0
FallsSpillway	Interp	265	200
FallsSpillway	Interp	266	700
FallsSpillway	Interp	267	1400
FallsSpillway	Interp	268	2100
FallsSpillway	Interp	269	3000
FallsSpillway	Interp	270	3800
FallsSpillway	Interp	271	5000
FallsSpillway	Interp	272	6000
FallsSpillway	Interp	273	7400
FallsSpillway	Interp	274	8600
FallsSpillway	Interp	275	10200
FallsSpillway	Interp	276	11800
FallsSpillway	Interp	277	13400
FallsSpillway	Interp	278	15000
FallsSpillway	Interp	279	17000
FallsSpillway	Interp	280	18800
FallsSpillway	Interp	281	20800
FallsSpillway	Interp	282	22800
FallsSpillway	Interp	283	25000
FallsSpillway	Interp	284	27400
FallsSpillway	Interp	285	29800
FallsSpillway	Interp	286	32400
FallsSpillway	Interp	287	35000
FallsSpillway	Interp	288	37400
FallsSvcGate	Interp	268	11954
FallsSvcGate	Interp	269	12056
FallsSvcGate	Interp	270	12157

Name	Interp	Independent	Dependent
FallsSvcGate	Interp	271	12259
FallsSvcGate	Interp	272	12360
FallsSvcGate	Interp	273	12462
FallsSvcGate	Interp	274	12563
FallsSvcGate	Interp	275	12664
FallsSvcGate	Interp	276	12766
FallsSvcGate	Interp	277	12867
FallsSvcGate	Interp	278	12969
FallsSvcGate	Interp	279	13070
FallsSvcGate	Interp	280	13171
FallsSvcGate	Interp	281	13273
FallsSvcGate	Interp	282	13374
FallsSvcGate	Interp	283	13476
FallsSvcGate	Interp	284	13577
FallsSvcGate	Interp	285	13679
FallsSvcGate	Interp	286	13780
FallsSvcGate	Interp	287	13881
FallsSvcGate	Interp	288	13983
FallsSvcGate	Interp	289	14084
Fay_Glenville_WD	Lower	1	0.24
Fay_Glenville_WD	Lower	2	0.27
Fay_Glenville_WD	Lower	3	0.26
Fay_Glenville_WD	Lower	4	0.21
Fay_Glenville_WD	Lower	5	0.13
Fay_Glenville_WD	Lower	6	0.14
Fay_Glenville_WD	Lower	7	0.1
Fay_Glenville_WD	Lower	8	0.12
Fay_Glenville_WD	Lower	9	0.14
Fay_Glenville_WD	Lower	10	0.14
Fay_Glenville_WD	Lower	11	0.2
Fay_Glenville_WD	Lower	12	0.23
Fay_POHoffer_WD	Lower	1	0.76
Fay_POHoffer_WD	Lower	2	0.74
Fay_POHoffer_WD	Lower	3	0.74
Fay_POHoffer_WD	Lower	4	0.79
Fay_POHoffer_WD	Lower	5	0.87
Fay_POHoffer_WD	Lower	6	0.86
Fay_POHoffer_WD	Lower	7	0.9
Fay_POHoffer_WD	Lower	8	0.89
Fay_POHoffer_WD	Lower	9	0.87
Fay_POHoffer_WD	Lower	10	0.86
Fay_POHoffer_WD	Lower	11	0.8
Fay_POHoffer_WD	Lower	12	0.77

Name	Interp	Independent	Dependent
FayPOHofferWW_NC0076783	Lower	1	0.57
FayPOHofferWW_NC0076783	Lower	2	0.59
FayPOHofferWW_NC0076783	Lower	3	0.57
FayPOHofferWW_NC0076783	Lower	4	0.5
FayPOHofferWW_NC0076783	Lower	5	0.43
FayPOHofferWW_NC0076783	Lower	6	0.39
FayPOHofferWW_NC0076783	Lower	7	0.4
FayPOHofferWW_NC0076783	Lower	8	0.42
FayPOHofferWW_NC0076783	Lower	9	0.46
FayPOHofferWW_NC0076783	Lower	10	0.48
FayPOHofferWW_NC0076783	Lower	11	0.5
FayPOHofferWW_NC0076783	Lower	12	0.53
FayRockfishCkWW_NC0050105	Lower	1	0.59
FayRockfishCkWW_NC0050105	Lower	2	0.6
FayRockfishCkWW_NC0050105	Lower	3	0.57
FayRockfishCkWW_NC0050105	Lower	4	0.53
FayRockfishCkWW_NC0050105	Lower	5	0.47
FayRockfishCkWW_NC0050105	Lower	6	0.41
FayRockfishCkWW_NC0050105	Lower	7	0.43
FayRockfishCkWW_NC0050105	Lower	8	0.45
FayRockfishCkWW_NC0050105	Lower	9	0.48
FayRockfishCkWW_NC0050105	Lower	10	0.52
FayRockfishCkWW_NC0050105	Lower	11	0.57
FayRockfishCkWW_NC0050105	Lower	12	0.58
FtBraggWW_NC0003964	Lower	1	1.21
FtBraggWW_NC0003964	Lower	2	1.26
FtBraggWW_NC0003964	Lower	3	1.31
FtBraggWW_NC0003964	Lower	4	1.21
FtBraggWW_NC0003964	Lower	5	1.04
FtBraggWW_NC0003964	Lower	6	1
FtBraggWW_NC0003964	Lower	7	1.01
FtBraggWW_NC0003964	Lower	8	1.02
FtBraggWW_NC0003964	Lower	9	1.09
FtBraggWW_NC0003964	Lower	10	1.09
FtBraggWW_NC0003964	Lower	11	1.17
FtBraggWW_NC0003964	Lower	12	1.23
FuquayReturn_nc0066516&nc0066150	Lower	1	0.41
FuquayReturn_nc0066516&nc0066150	Lower	2	0.39
FuquayReturn_nc0066516&nc0066150	Lower	3	0.41
FuquayReturn_nc0066516&nc0066150	Lower	4	0.33
FuquayReturn_nc0066516&nc0066150	Lower	5	0.3
FuquayReturn_nc0066516&nc0066150	Lower	6	0.28
FuquayReturn_nc0066516&nc0066150	Lower	7	0.25

Name	Interp	Independent	Dependent
FuquayReturn_nc0066516&nc0066150	Lower	8	0.27
FuquayReturn_nc0066516&nc0066150	Lower	9	0.33
FuquayReturn_nc0066516&nc0066150	Lower	10	0.3
FuquayReturn_nc0066516&nc0066150	Lower	11	0.38
FuquayReturn_nc0066516&nc0066150	Lower	12	0.38
FuquayReturn_toHarnettCo	Lower	1	0.59
FuquayReturn_toHarnettCo	Lower	2	0.56
FuquayReturn_toHarnettCo	Lower	3	0.59
FuquayReturn_toHarnettCo	Lower	4	0.48
FuquayReturn_toHarnettCo	Lower	5	0.43
FuquayReturn_toHarnettCo	Lower	6	0.4
FuquayReturn_toHarnettCo	Lower	7	0.36
FuquayReturn_toHarnettCo	Lower	8	0.39
FuquayReturn_toHarnettCo	Lower	9	0.48
FuquayReturn_toHarnettCo	Lower	10	0.43
FuquayReturn_toHarnettCo	Lower	11	0.55
FuquayReturn_toHarnettCo	Lower	12	0.54
GBMitchellWTPNC0081426	Lower	1	0.02
GBMitchellWTPNC0081426	Lower	2	0.02
GBMitchellWTPNC0081426	Lower	3	0.02
GBMitchellWTPNC0081426	Lower	4	0.02
GBMitchellWTPNC0081426	Lower	5	0.02
GBMitchellWTPNC0081426	Lower	6	0.02
GBMitchellWTPNC0081426	Lower	7	0.03
GBMitchellWTPNC0081426	Lower	8	0.02
GBMitchellWTPNC0081426	Lower	9	0.02
GBMitchellWTPNC0081426	Lower	10	0.01
GBMitchellWTPNC0081426	Lower	11	0.02
GBMitchellWTPNC0081426	Lower	12	0.02
GBNBuffaloCrWWNC0024325	Lower	1	0.29
GBNBuffaloCrWWNC0024325	Lower	2	0.28
GBNBuffaloCrWWNC0024325	Lower	3	0.27
GBNBuffaloCrWWNC0024325	Lower	4	0.28
GBNBuffaloCrWWNC0024325	Lower	5	0.3
GBNBuffaloCrWWNC0024325	Lower	6	0.3
GBNBuffaloCrWWNC0024325	Lower	7	0.3
GBNBuffaloCrWWNC0024325	Lower	8	0.3
GBNBuffaloCrWWNC0024325	Lower	9	0.29
GBNBuffaloCrWWNC0024325	Lower	10	0.29
GBNBuffaloCrWWNC0024325	Lower	11	0.25
GBNBuffaloCrWWNC0024325	Lower	12	0.25
GBOzborneWWNC0047384	Lower	1	0.73
GBOzborneWWNC0047384	Lower	2	0.74

Name	Interp	Independent	Dependent
GBOzborneWWNC0047384	Lower	3	0.75
GBOzborneWWNC0047384	Lower	4	0.74
GBOzborneWWNC0047384	Lower	5	0.72
GBOzborneWWNC0047384	Lower	6	0.72
GBOzborneWWNC0047384	Lower	7	0.72
GBOzborneWWNC0047384	Lower	8	0.72
GBOzborneWWNC0047384	Lower	9	0.73
GBOzborneWWNC0047384	Lower	10	0.73
GBOzborneWWNC0047384	Lower	11	0.77
GBOzborneWWNC0047384	Lower	12	0.77
GBTownsendWTPNC0081671	Lower	1	0.12
GBTownsendWTPNC0081671	Lower	2	0.09
GBTownsendWTPNC0081671	Lower	3	0.11
GBTownsendWTPNC0081671	Lower	4	0.11
GBTownsendWTPNC0081671	Lower	5	0.1
GBTownsendWTPNC0081671	Lower	6	0.11
GBTownsendWTPNC0081671	Lower	7	0.12
GBTownsendWTPNC0081671	Lower	8	0.16
GBTownsendWTPNC0081671	Lower	9	0.16
GBTownsendWTPNC0081671	Lower	10	0.17
GBTownsendWTPNC0081671	Lower	11	0.17
GBTownsendWTPNC0081671	Lower	12	0.16
GoldsReturn_nc0023949	Lower	1	1.66
GoldsReturn_nc0023949	Lower	2	1.82
GoldsReturn_nc0023949	Lower	3	1.75
GoldsReturn_nc0023949	Lower	4	1.45
GoldsReturn_nc0023949	Lower	5	1.35
GoldsReturn_nc0023949	Lower	6	1.08
GoldsReturn_nc0023949	Lower	7	1.02
GoldsReturn_nc0023949	Lower	8	1
GoldsReturn_nc0023949	Lower	9	1.31
GoldsReturn_nc0023949	Lower	10	1.28
GoldsReturn_nc0023949	Lower	11	1.53
GoldsReturn_nc0023949	Lower	12	1.64
GrMebTotWW_nc0045292	Lower	1	0.91
GrMebTotWW_nc0045292	Lower	2	0.94
GrMebTotWW_nc0045292	Lower	3	0.99
GrMebTotWW_nc0045292	Lower	4	0.86
GrMebTotWW_nc0045292	Lower	5	0.75
GrMebTotWW_nc0045292	Lower	6	0.68
GrMebTotWW_nc0045292	Lower	7	0.56
GrMebTotWW_nc0045292	Lower	8	0.58
GrMebTotWW_nc0045292	Lower	9	0.61

Name	Interp	Independent	Dependent
GrMebTotWW_nc0045292	Lower	10	0.66
GrMebTotWW_nc0045292	Lower	11	0.83
GrMebTotWW_nc0045292	Lower	12	0.91
Harris_Spill	interp	220	0
Harris_Spill	interp	222	500
Harris_Spill	interp	223	750
Harris_Spill	interp	224	1250
Harris_Spill	interp	226	2200
Harris_Spill	interp	228	3500
Harris_Spill	interp	230	5000
Harris_Spill	interp	234	8700
Harris_Spill	interp	240	15500
HighPointWW	Lower	1	1.13
HighPointWW	Lower	2	1.21
HighPointWW	Lower	3	1.34
HighPointWW	Lower	4	1.23
HighPointWW	Lower	5	1.11
HighPointWW	Lower	6	0.87
HighPointWW	Lower	7	0.91
HighPointWW	Lower	8	0.86
HighPointWW	Lower	9	1
HighPointWW	Lower	10	1.01
HighPointWW	Lower	11	1.14
HighPointWW	Lower	12	1.21
HillsReturn_nc0026433	Lower	1	0.69
HillsReturn_nc0026433	Lower	2	0.74
HillsReturn_nc0026433	Lower	3	0.77
HillsReturn_nc0026433	Lower	4	0.71
HillsReturn_nc0026433	Lower	5	0.58
HillsReturn_nc0026433	Lower	6	0.61
HillsReturn_nc0026433	Lower	7	0.53
HillsReturn_nc0026433	Lower	8	0.55
HillsReturn_nc0026433	Lower	9	0.58
HillsReturn_nc0026433	Lower	10	0.56
HillsReturn_nc0026433	Lower	11	0.68
HillsReturn_nc0026433	Lower	12	0.73
HollySpringsWW_nc0063098	Lower	1	0.94
HollySpringsWW_nc0063098	Lower	2	1.02
HollySpringsWW_nc0063098	Lower	3	1.04
HollySpringsWW_nc0063098	Lower	4	0.83
HollySpringsWW_nc0063098	Lower	5	0.69
HollySpringsWW_nc0063098	Lower	6	0.62
HollySpringsWW_nc0063098	Lower	7	0.59

Name	Interp	Independent	Dependent
HollySpringsWW_nc0063098	Lower	8	0.66
HollySpringsWW_nc0063098	Lower	9	0.67
HollySpringsWW_nc0063098	Lower	10	0.67
HollySpringsWW_nc0063098	Lower	11	0.81
HollySpringsWW_nc0063098	Lower	12	0.93
JohnstonCFlow	Interp	198	0
JohnstonCFlow	Interp	199	1
JohnstonCFlow	Interp	203	9
JohnstonCFlow	Interp	204	10
JohnstonCFlow	Interp	218	19
JohnstonCFlow	Interp	219	20
JohnstonCFlow	Interp	936	24
JohnstonCFlow	Interp	937	30
JohnstReturn_nc0030716	Lower	1	0.34
JohnstReturn_nc0030716	Lower	2	0.33
JohnstReturn_nc0030716	Lower	3	0.35
JohnstReturn_nc0030716	Lower	4	0.26
JohnstReturn_nc0030716	Lower	5	0.21
JohnstReturn_nc0030716	Lower	6	0.2
JohnstReturn_nc0030716	Lower	7	0.18
JohnstReturn_nc0030716	Lower	8	0.21
JohnstReturn_nc0030716	Lower	9	0.2
JohnstReturn_nc0030716	Lower	10	0.21
JohnstReturn_nc0030716	Lower	11	0.28
JohnstReturn_nc0030716	Lower	12	0.31
JordanHydro	Interp	150	494.19
JordanHydro	Interp	160	526.5
JordanHydro	Interp	170	558.69
JordanHydro	Interp	180	590.75
JordanHydro	Interp	190	622.67
JordanHydro	Interp	200	680.42
JordanHydro	Interp	210	713.29
JordanHydro	Interp	220	737.37
JordanHydro	Interp	230	769.52
JordanHydro	Interp	240	801.5
JordanHydro	Interp	250	921.54
JordanHydro	Interp	260	956.48
JordanHydro	Interp	270	991.19
JordanHydro	Interp	280	1025.67
JordanHydro	Interp	290	1059.9
JordanHydro	Interp	300	1123.16
JordanHydro	Interp	310	1157.79
JordanHydro	Interp	320	1192.13

Name	Interp	Independent	Dependent
JordanHydro	Interp	330	1226.19
JordanHydro	Interp	340	1259.96
JordanHydro	Interp	350	1308.08
JordanHydro	Interp	360	1341.6
JordanHydro	Interp	370	1374.8
JordanHydro	Interp	380	1409.59
JordanHydro	Interp	390	1442.16
JordanHydro	Interp	400	1479.91
JordanHydro	Interp	410	1511.88
JordanHydro	Interp	420	1543.48
JordanHydro	Interp	430	1574.7
JordanHydro	Interp	440	1607.3
JordanHydro	Interp	450	1644.4
JordanHydro	Interp	460	1674.58
JordanHydro	Interp	470	1704.33
JordanHydro	Interp	480	1733.65
JordanHydro	Interp	490	1759.12
JordanHydro	Interp	500	1790.87
JordanHydro	Interp	510	1818.85
JordanHydro	Interp	520	1846.37
JordanHydro	Interp	530	1873.41
JordanHydro	Interp	540	1899.96
JordanHydro	Interp	550	1924.72
JordanHydro	Interp	560	2051.34
JordanHydro	Interp	570	2085.64
JordanHydro	Interp	580	2119.81
JordanHydro	Interp	590	2153.85
JordanHydro	Interp	600	2246.33
JordanHydro	Interp	610	2281.02
JordanHydro	Interp	620	2315.57
JordanHydro	Interp	630	2349.99
JordanHydro	Interp	640	2384.27
JordanHydro	Interp	650	2418.4
JordanHydro	Interp	660	2452.39
JordanHydro	Interp	670	2486.22
JordanHydro	Interp	680	2519.92
JordanHydro	Interp	690	2547.46
JordanHydro	Interp	700	2616.16
JordanHydro	Interp	710	2649.76
JordanHydro	Interp	720	2683.21
JordanHydro	Interp	730	2716.49
JordanHydro	Interp	740	2749.61
JordanHydro	Interp	750	2786.36

Name	Interp	Independent	Dependent
JordanHydro	Interp	760	2819.18
JordanHydro	Interp	770	2851.83
JordanHydro	Interp	780	2884.31
JordanHydro	Interp	790	2916.62
JordanHydro	Interp	800	2959.82
JordanHydro	Interp	810	2991.88
JordanHydro	Interp	820	3023.76
JordanHydro	Interp	830	3055.45
JordanHydro	Interp	840	3086.96
JordanHydro	Interp	850	3118.27
JordanHydro	Interp	860	3149.39
JordanHydro	Interp	870	3183.84
JordanHydro	Interp	880	3214.61
JordanHydro	Interp	890	3245.17
JordanHydro	Interp	900	3288.81
JordanHydro	Interp	910	3319.08
JordanHydro	Interp	920	3349.15
JordanHydro	Interp	930	3379.01
JordanHydro	Interp	940	3408.66
JordanHydro	Interp	950	3438.09
JordanHydro	Interp	960	3467.3
JordanHydro	Interp	970	3489.53
JordanHydro	Interp	980	3518.25
JordanHydro	Interp	990	3546.74
JordanHydro	Interp	1000	3581.74
JordanHydro	Interp	1100	3849.44
JordanHydro	Interp	1200	3849.44
JordanHydro	Interp	1300	3849.44
JordanHydro	Interp	1400	3849.44
JordanHydro	Interp	1500	3849.44
JordanHydro	Interp	1600	3849.44
JordanHydro	Interp	1700	3849.44
JordanHydro	Interp	1800	3849.44
JordanHydro	Interp	1900	3849.44
JordanHydro	Interp	2000	3849.44
JordanHydro	Interp	2100	3849.44
JordanHydro	Interp	2200	3849.44
JordanHydro	Interp	2300	3849.44
JordanHydro	Interp	2400	3849.44
JordanHydro	Interp	2500	3849.44
JordanHydro	Interp	2600	3849.44
JordanHydro	Interp	2700	3849.44
JordanHydro	Interp	2800	3849.44

Name	Interp	Independent	Dependent
JordanHydro	Interp	2900	3849.44
JordanHydro	Interp	3000	3849.44
JordanHydro	Interp	3100	3849.44
JordanHydro	Interp	3200	3849.44
JordanHydro	Interp	3300	3849.44
JordanHydro	Interp	3400	3849.44
JordanHydro	Interp	3500	3849.44
JordanHydro	Interp	3600	3849.44
JordanHydro	Interp	3700	3849.44
JordanHydro	Interp	3800	3849.44
JordanHydro	Interp	3900	3849.44
JordanHydro	Interp	4000	3849.44
JordanHydro	Interp	4100	3849.44
JordanHydro	Interp	4200	3849.44
JordanHydro	Interp	4300	3849.44
JordanHydro	Interp	4400	3849.44
JordanHydro	Interp	4500	3849.44
JordanHydro	Interp	4600	3849.44
JordanHydro	Interp	4700	3849.44
JordanHydro	Interp	4800	3849.44
JordanHydro	Interp	4900	3849.44
JordanHydro	Interp	5000	3849.44
JordanHydro	Interp	5100	3849.44
JordanHydro	Interp	5200	3849.44
JordanHydro	Interp	5300	3849.44
JordanHydro	Interp	5400	3849.44
JordanHydro	Interp	5500	3849.44
JordanHydro	Interp	5600	3849.44
JordanHydro	Interp	5700	3849.44
JordanHydro	Interp	5800	3849.44
JordanHydro	Interp	5900	3849.44
JordanHydro	Interp	6000	3849.44
JordanHydro	Interp	6100	3849.44
JordanHydro	Interp	6200	3849.44
JordanHydro	Interp	6300	3849.44
JordanHydro	Interp	6400	3849.44
JordanHydro	Interp	6500	3849.44
JordanHydro	Interp	6600	3849.44
JordanHydro	Interp	6700	3849.44
JordanHydro	Interp	6800	3849.44
JordanHydro	Interp	6900	3849.44
JordanHydro	Interp	7000	3849.44
JordanSpillway	Interp	240	0

Name	Interp	Independent	Dependent
JordanSpillway	Interp	241	1500
JordanSpillway	Interp	241.2	2000
JordanSpillway	Interp	241.4	2450
JordanSpillway	Interp	241.6	3000
JordanSpillway	Interp	241.8	3600
JordanSpillway	Interp	242	4300
JordanSpillway	Interp	242.5	6600
JordanSpillway	Interp	243	9500
JordanSpillway	Interp	243.5	12250
JordanSpillway	Interp	244	15500
JordanSpillway	Interp	244.5	19000
JordanSpillway	Interp	245	23000
JordanSpillway	Interp	245.5	27000
JordanSpillway	Interp	246	31500
JordanSpillway	Interp	246.5	36000
JordanSpillway	Interp	247	41000
JordanSpillway	Interp	247.5	46000
JordanSpillway	Interp	248	49500
JordanSpillway	Interp	249	60500
JordanSpillway	Interp	250	73500
JordanSpillway	Interp	251	84000
JordanSpillway	Interp	252	96800
JordanSpillway	Interp	253	110500
JordanSpillway	Interp	254	126500
JordanSpillway	Interp	255	142500
JordanSpillway	Interp	256	158500
JordanSpillway	Interp	257	175500
JordanSpillway	Interp	258	192000
JordanSpillway	Interp	259	209000
JordanSpillway	Interp	260	226500
JordanSpillway	Interp	261	244000
JordanSpillway	Interp	262	261500
JordanSpillway	Interp	263	279400
JordanSpillway	Interp	264	293500
KenlyReturn_nc0064891	Lower	1	0.07
KenlyReturn_nc0064891	Lower	2	0.06
KenlyReturn_nc0064891	Lower	3	0.07
KenlyReturn_nc0064891	Lower	4	0.05
KenlyReturn_nc0064891	Lower	5	0.04
KenlyReturn_nc0064891	Lower	6	0.03
KenlyReturn_nc0064891	Lower	7	0.03
KenlyReturn_nc0064891	Lower	8	0.03
KenlyReturn_nc0064891	Lower	9	0.04

Name	Interp	Independent	Dependent
KenlyReturn_nc0064891	Lower	10	0.04
KenlyReturn_nc0064891	Lower	11	0.05
KenlyReturn_nc0064891	Lower	12	0.06
KinstonWW_nc0024236	Lower	1	0.8
KinstonWW_nc0024236	Lower	2	0.9
KinstonWW_nc0024236	Lower	3	0.87
KinstonWW_nc0024236	Lower	4	0.6
KinstonWW_nc0024236	Lower	5	0.5
KinstonWW_nc0024236	Lower	6	0.46
KinstonWW_nc0024236	Lower	7	0.45
KinstonWW_nc0024236	Lower	8	0.52
KinstonWW_nc0024236	Lower	9	0.58
KinstonWW_nc0024236	Lower	10	0.6
KinstonWW_nc0024236	Lower	11	0.6
KinstonWW_nc0024236	Lower	12	0.67
MonsantoWW_NC0003719	Lower	1	0.07
MonsantoWW_NC0003719	Lower	2	0.06
MonsantoWW_NC0003719	Lower	3	0.06
MonsantoWW_NC0003719	Lower	4	0.07
MonsantoWW_NC0003719	Lower	5	0.04
MonsantoWW_NC0003719	Lower	6	0.06
MonsantoWW_NC0003719	Lower	7	0.05
MonsantoWW_NC0003719	Lower	8	0.07
MonsantoWW_NC0003719	Lower	9	0.08
MonsantoWW_NC0003719	Lower	10	0.07
MonsantoWW_NC0003719	Lower	11	0.07
MonsantoWW_NC0003719	Lower	12	0.07
MorrisReturn	Lower	1	1.13
MorrisReturn	Lower	2	1.27
MorrisReturn	Lower	3	0.99
MorrisReturn	Lower	4	0.98
MorrisReturn	Lower	5	0.73
MorrisReturn	Lower	6	0.56
MorrisReturn	Lower	7	0.6
MorrisReturn	Lower	8	0.63
MorrisReturn	Lower	9	0.76
MorrisReturn	Lower	10	0.83
MorrisReturn	Lower	11	0.99
MorrisReturn	Lower	12	1.11
NorthChathamWTP_nc0084093	Lower	1	0.18
NorthChathamWTP_nc0084093	Lower	2	0.16
NorthChathamWTP_nc0084093	Lower	3	0.19
NorthChathamWTP_nc0084093	Lower	4	0.12

Name	Interp	Independent	Dependent
NorthChathamWTP_nc0084093	Lower	5	0.14
NorthChathamWTP_nc0084093	Lower	6	0.1
NorthChathamWTP_nc0084093	Lower	7	0.12
NorthChathamWTP_nc0084093	Lower	8	0.12
NorthChathamWTP_nc0084093	Lower	9	0.12
NorthChathamWTP_nc0084093	Lower	10	0.13
NorthChathamWTP_nc0084093	Lower	11	0.13
NorthChathamWTP_nc0084093	Lower	12	0.16
NRWASAReturnWTP_nc0088111	Lower	1	0.08
NRWASAReturnWTP_nc0088111	Lower	2	0.08
NRWASAReturnWTP_nc0088111	Lower	3	0.07
NRWASAReturnWTP_nc0088111	Lower	4	0.06
NRWASAReturnWTP_nc0088111	Lower	5	0.07
NRWASAReturnWTP_nc0088111	Lower	6	0.05
NRWASAReturnWTP_nc0088111	Lower	7	0.04
NRWASAReturnWTP_nc0088111	Lower	8	0.06
NRWASAReturnWTP_nc0088111	Lower	9	0.06
NRWASAReturnWTP_nc0088111	Lower	10	0.08
NRWASAReturnWTP_nc0088111	Lower	11	0.08
NRWASAReturnWTP_nc0088111	Lower	12	0.09
OrAlaReturn_nc0082759	Lower	1	0.09
OrAlaReturn_nc0082759	Lower	2	0.11
OrAlaReturn_nc0082759	Lower	3	0.09
OrAlaReturn_nc0082759	Lower	4	0.13
OrAlaReturn_nc0082759	Lower	5	0.1
OrAlaReturn_nc0082759	Lower	6	0.1
OrAlaReturn_nc0082759	Lower	7	0.09
OrAlaReturn_nc0082759	Lower	8	0.08
OrAlaReturn_nc0082759	Lower	9	0.07
OrAlaReturn_nc0082759	Lower	10	0.08
OrAlaReturn_nc0082759	Lower	11	0.08
OrAlaReturn_nc0082759	Lower	12	0.08
OWASA_WW_nc0025241	Lower	1	1.06
OWASA_WW_nc0025241	Lower	2	1.09
OWASA_WW_nc0025241	Lower	3	1.09
OWASA_WW_nc0025241	Lower	4	0.99
OWASA_WW_nc0025241	Lower	5	0.9
OWASA_WW_nc0025241	Lower	6	0.85
OWASA_WW_nc0025241	Lower	7	0.82
OWASA_WW_nc0025241	Lower	8	0.85
OWASA_WW_nc0025241	Lower	9	0.87
OWASA_WW_nc0025241	Lower	10	0.87
OWASA_WW_nc0025241	Lower	11	0.97

Name	Interp	Independent	Dependent
OWASA_WW_nc0025241	Lower	12	1.1
PiggybackGate	Interp	208.8	0
PiggybackGate	Interp	210	4.8
PiggybackGate	Interp	215	23.2
PiggybackGate	Interp	220	31.6
PiggybackGate	Interp	225	38
PiggybackGate	Interp	230	44
PiggybackGate	Interp	235	48.4
PiggybackGate	Interp	240	53.2
PiggybackGate	Interp	245	57.6
PiggybackGate	Interp	249	60.4
PiggybackGate	Interp	250	61.2
PiggybackGate	Interp	251.5	62.4
PiggybackGate	Interp	255	65.2
PiggybackGate	Interp	260	68.4
PiggybackGate	Interp	265	71.6
PiggybackGate	Interp	270	75.6
PiggybackGate	Interp	275	78
PiggybackGate	Interp	280	80.8
PiggybackGate	Interp	285	83.6
PilgrimsPride_nc0083852	Lower	1	0.11
PilgrimsPride_nc0083852	Lower	2	0.06
PilgrimsPride_nc0083852	Lower	3	0.07
PilgrimsPride_nc0083852	Lower	4	0.06
PilgrimsPride_nc0083852	Lower	5	0.06
PilgrimsPride_nc0083852	Lower	6	0.03
PilgrimsPride_nc0083852	Lower	7	0.04
PilgrimsPride_nc0083852	Lower	8	0.03
PilgrimsPride_nc0083852	Lower	9	0.05
PilgrimsPride_nc0083852	Lower	10	0.03
PilgrimsPride_nc0083852	Lower	11	0.04
PilgrimsPride_nc0083852	Lower	12	0.05
PittsboroWW_nc0020354	Lower	1	0.69
PittsboroWW_nc0020354	Lower	2	0.68
PittsboroWW_nc0020354	Lower	3	0.81
PittsboroWW_nc0020354	Lower	4	0.69
PittsboroWW_nc0020354	Lower	5	0.51
PittsboroWW_nc0020354	Lower	6	0.46
PittsboroWW_nc0020354	Lower	7	0.43
PittsboroWW_nc0020354	Lower	8	0.43
PittsboroWW_nc0020354	Lower	9	0.46
PittsboroWW_nc0020354	Lower	10	0.47
PittsboroWW_nc0020354	Lower	11	0.63

Name	Interp	Independent	Dependent
PittsboroWW_nc0020354	Lower	12	0.73
ProgressCapeFearWW_nc0003433	Lower	1	1
ProgressCapeFearWW_nc0003433	Lower	2	1
ProgressCapeFearWW_nc0003433	Lower	3	1
ProgressCapeFearWW_nc0003433	Lower	4	1
ProgressCapeFearWW_nc0003433	Lower	5	0.99
ProgressCapeFearWW_nc0003433	Lower	6	0.98
ProgressCapeFearWW_nc0003433	Lower	7	0.97
ProgressCapeFearWW_nc0003433	Lower	8	0.96
ProgressCapeFearWW_nc0003433	Lower	9	0.98
ProgressCapeFearWW_nc0003433	Lower	10	0.99
ProgressCapeFearWW_nc0003433	Lower	11	1
ProgressCapeFearWW_nc0003433	Lower	12	1
ProgressHarrisWW_nc0039586	Lower	1	0.65
ProgressHarrisWW_nc0039586	Lower	2	0.66
ProgressHarrisWW_nc0039586	Lower	3	0.66
ProgressHarrisWW_nc0039586	Lower	4	0.64
ProgressHarrisWW_nc0039586	Lower	5	0.64
ProgressHarrisWW_nc0039586	Lower	6	0.64
ProgressHarrisWW_nc0039586	Lower	7	0.67
ProgressHarrisWW_nc0039586	Lower	8	0.64
ProgressHarrisWW_nc0039586	Lower	9	0.64
ProgressHarrisWW_nc0039586	Lower	10	0.59
ProgressHarrisWW_nc0039586	Lower	11	0.34
ProgressHarrisWW_nc0039586	Lower	12	0.62
RaleighReturn_nc0029033	Lower	1	0.97
RaleighReturn_nc0029033	Lower	2	0.97
RaleighReturn_nc0029033	Lower	3	1
RaleighReturn_nc0029033	Lower	4	0.91
RaleighReturn_nc0029033	Lower	5	0.81
RaleighReturn_nc0029033	Lower	6	0.72
RaleighReturn_nc0029033	Lower	7	0.68
RaleighReturn_nc0029033	Lower	8	0.73
RaleighReturn_nc0029033	Lower	9	0.78
RaleighReturn_nc0029033	Lower	10	0.81
RaleighReturn_nc0029033	Lower	11	0.91
RaleighReturn_nc0029033	Lower	12	0.95
RalLitCrReturn_nc0079316	Lower	1	0.02
RalLitCrReturn_nc0079316	Lower	2	0.02
RalLitCrReturn_nc0079316	Lower	3	0.02
RalLitCrReturn_nc0079316	Lower	4	0.02
RalLitCrReturn_nc0079316	Lower	5	0.01
RalLitCrReturn_nc0079316	Lower	6	0.01

Name	Interp	Independent	Dependent
RalLitCrReturn_nc0079316	Lower	7	0.01
RalLitCrReturn_nc0079316	Lower	8	0.01
RalLitCrReturn_nc0079316	Lower	9	0.01
RalLitCrReturn_nc0079316	Lower	10	0.01
RalLitCrReturn_nc0079316	Lower	11	0.01
RalLitCrReturn_nc0079316	Lower	12	0.02
RalSmithCrReturn_nc0030759	Lower	1	0.58
RalSmithCrReturn_nc0030759	Lower	2	0.56
RalSmithCrReturn_nc0030759	Lower	3	0.55
RalSmithCrReturn_nc0030759	Lower	4	0.5
RalSmithCrReturn_nc0030759	Lower	5	0.44
RalSmithCrReturn_nc0030759	Lower	6	0.39
RalSmithCrReturn_nc0030759	Lower	7	0.38
RalSmithCrReturn_nc0030759	Lower	8	0.41
RalSmithCrReturn_nc0030759	Lower	9	0.43
RalSmithCrReturn_nc0030759	Lower	10	0.47
RalSmithCrReturn_nc0030759	Lower	11	0.56
RalSmithCrReturn_nc0030759	Lower	12	0.59
RamseurWW_NC0026565	Lower	1	0.39
RamseurWW_NC0026565	Lower	2	0.4
RamseurWW_NC0026565	Lower	3	0.44
RamseurWW_NC0026565	Lower	4	0.39
RamseurWW_NC0026565	Lower	5	0.32
RamseurWW_NC0026565	Lower	6	0.27
RamseurWW_NC0026565	Lower	7	0.26
RamseurWW_NC0026565	Lower	8	0.25
RamseurWW_NC0026565	Lower	9	0.26
RamseurWW_NC0026565	Lower	10	0.3
RamseurWW_NC0026565	Lower	11	0.41
RamseurWW_NC0026565	Lower	12	0.43
RandlemanWW_NC0025445	Lower	1	1
RandlemanWW_NC0025445	Lower	2	1
RandlemanWW_NC0025445	Lower	3	1
RandlemanWW_NC0025445	Lower	4	1
RandlemanWW_NC0025445	Lower	5	1
RandlemanWW_NC0025445	Lower	6	1
RandlemanWW_NC0025445	Lower	7	1
RandlemanWW_NC0025445	Lower	8	1
RandlemanWW_NC0025445	Lower	9	1
RandlemanWW_NC0025445	Lower	10	1
RandlemanWW_NC0025445	Lower	11	1
RandlemanWW_NC0025445	Lower	12	1
ReidsvilleWTP_WW_nc0046345	Lower	1	0.14

Name	Interp	Independent	Dependent
ReidsvilleWTP_WW_nc0046345	Lower	2	0.25
ReidsvilleWTP_WW_nc0046345	Lower	3	0.06
ReidsvilleWTP_WW_nc0046345	Lower	4	0.13
ReidsvilleWTP_WW_nc0046345	Lower	5	0.17
ReidsvilleWTP_WW_nc0046345	Lower	6	0.02
ReidsvilleWTP_WW_nc0046345	Lower	7	0.03
ReidsvilleWTP_WW_nc0046345	Lower	8	0.03
ReidsvilleWTP_WW_nc0046345	Lower	9	0.02
ReidsvilleWTP_WW_nc0046345	Lower	10	0.05
ReidsvilleWTP_WW_nc0046345	Lower	11	0.06
ReidsvilleWTP_WW_nc0046345	Lower	12	0.14
ReidsvilleWWTP_NC0024881	Lower	1	0.61
ReidsvilleWWTP_NC0024881	Lower	2	0.62
ReidsvilleWWTP_NC0024881	Lower	3	0.56
ReidsvilleWWTP_NC0024881	Lower	4	0.53
ReidsvilleWWTP_NC0024881	Lower	5	0.55
ReidsvilleWWTP_NC0024881	Lower	6	0.51
ReidsvilleWWTP_NC0024881	Lower	7	0.44
ReidsvilleWWTP_NC0024881	Lower	8	0.39
ReidsvilleWWTP_NC0024881	Lower	9	0.4
ReidsvilleWWTP_NC0024881	Lower	10	0.44
ReidsvilleWWTP_NC0024881	Lower	11	0.46
ReidsvilleWWTP_NC0024881	Lower	12	0.51
RTPReturn	Lower	1	0.73
RTPReturn	Lower	2	0.72
RTPReturn	Lower	3	0.6
RTPReturn	Lower	4	0.63
RTPReturn	Lower	5	0.46
RTPReturn	Lower	6	0.35
RTPReturn	Lower	7	0.37
RTPReturn	Lower	8	0.36
RTPReturn	Lower	9	0.44
RTPReturn	Lower	10	0.5
RTPReturn	Lower	11	0.59
RTPReturn	Lower	12	0.7
Sanford_WWTP_nc0024147	Lower	1	0.71
Sanford_WWTP_nc0024147	Lower	2	0.75
Sanford_WWTP_nc0024147	Lower	3	0.8
Sanford_WWTP_nc0024147	Lower	4	0.67
Sanford_WWTP_nc0024147	Lower	5	0.56
Sanford_WWTP_nc0024147	Lower	6	0.52
Sanford_WWTP_nc0024147	Lower	7	0.52
Sanford_WWTP_nc0024147	Lower	8	0.52

Name	Interp	Independent	Dependent
Sanford_WWTP_nc0024147	Lower	9	0.54
Sanford_WWTP_nc0024147	Lower	10	0.54
Sanford_WWTP_nc0024147	Lower	11	0.65
Sanford_WWTP_nc0024147	Lower	12	0.69
SanfordWW_nc0002861&nc0059242	Lower	1	0.16
SanfordWW_nc0002861&nc0059242	Lower	2	0.16
SanfordWW_nc0002861&nc0059242	Lower	3	0.16
SanfordWW_nc0002861&nc0059242	Lower	4	0.12
SanfordWW_nc0002861&nc0059242	Lower	5	0.09
SanfordWW_nc0002861&nc0059242	Lower	6	0.08
SanfordWW_nc0002861&nc0059242	Lower	7	0.07
SanfordWW_nc0002861&nc0059242	Lower	8	0.08
SanfordWW_nc0002861&nc0059242	Lower	9	0.08
SanfordWW_nc0002861&nc0059242	Lower	10	0.07
SanfordWW_nc0002861&nc0059242	Lower	11	0.08
SanfordWW_nc0002861&nc0059242	Lower	12	0.09
SfieldReturn	Lower	1	1.08
SfieldReturn	Lower	2	1.09
SfieldReturn	Lower	3	1.18
SfieldReturn	Lower	4	0.79
SfieldReturn	Lower	5	0.62
SfieldReturn	Lower	6	0.52
SfieldReturn	Lower	7	0.5
SfieldReturn	Lower	8	0.56
SfieldReturn	Lower	9	0.59
SfieldReturn	Lower	10	0.63
SfieldReturn	Lower	11	0.95
SfieldReturn	Lower	12	0.91
SGWASAReturn_nc0026824	Lower	1	0.7
SGWASAReturn_nc0026824	Lower	2	0.74
SGWASAReturn_nc0026824	Lower	3	0.76
SGWASAReturn_nc0026824	Lower	4	0.59
SGWASAReturn_nc0026824	Lower	5	0.64
SGWASAReturn_nc0026824	Lower	6	0.54
SGWASAReturn_nc0026824	Lower	7	0.48
SGWASAReturn_nc0026824	Lower	8	0.52
SGWASAReturn_nc0026824	Lower	9	0.53
SGWASAReturn_nc0026824	Lower	10	0.53
SGWASAReturn_nc0026824	Lower	11	0.7
SGWASAReturn_nc0026824	Lower	12	0.76
SilerCityWW_nc0026441	Lower	1	0.96
SilerCityWW_nc0026441	Lower	2	0.97
SilerCityWW_nc0026441	Lower	3	1

Name	Interp	Independent	Dependent
SilerCityWW_nc0026441	Lower	4	1
SilerCityWW_nc0026441	Lower	5	0.89
SilerCityWW_nc0026441	Lower	6	0.82
SilerCityWW_nc0026441	Lower	7	0.74
SilerCityWW_nc0026441	Lower	8	0.72
SilerCityWW_nc0026441	Lower	9	0.82
SilerCityWW_nc0026441	Lower	10	1
SilerCityWW_nc0026441	Lower	11	0.99
SilerCityWW_nc0026441	Lower	12	1
SpringLakeWWTP_NC0030970	Lower	1	0.91
SpringLakeWWTP_NC0030970	Lower	2	0.98
SpringLakeWWTP_NC0030970	Lower	3	1.06
SpringLakeWWTP_NC0030970	Lower	4	0.95
SpringLakeWWTP_NC0030970	Lower	5	0.87
SpringLakeWWTP_NC0030970	Lower	6	1.05
SpringLakeWWTP_NC0030970	Lower	7	0.82
SpringLakeWWTP_NC0030970	Lower	8	0.83
SpringLakeWWTP_NC0030970	Lower	9	0.86
SpringLakeWWTP_NC0030970	Lower	10	0.83
SpringLakeWWTP_NC0030970	Lower	11	0.85
SpringLakeWWTP_NC0030970	Lower	12	0.94
Total_HarnettWW	Lower	1	0.63
Total_HarnettWW	Lower	2	0.68
Total_HarnettWW	Lower	3	0.68
Total_HarnettWW	Lower	4	0.6
Total_HarnettWW	Lower	5	0.48
Total_HarnettWW	Lower	6	0.48
Total_HarnettWW	Lower	7	0.48
Total_HarnettWW	Lower	8	0.55
Total_HarnettWW	Lower	9	0.54
Total_HarnettWW	Lower	10	0.55
Total_HarnettWW	Lower	11	0.59
Total_HarnettWW	Lower	12	0.64
WestWakeWRFReturn	Lower	1	0.98
WestWakeWRFReturn	Lower	2	1.05
WestWakeWRFReturn	Lower	3	1.04
WestWakeWRFReturn	Lower	4	1.01
WestWakeWRFReturn	Lower	5	0.96
WestWakeWRFReturn	Lower	6	0.96
WestWakeWRFReturn	Lower	7	0.93
WestWakeWRFReturn	Lower	8	1.03
WestWakeWRFReturn	Lower	9	0.97
WestWakeWRFReturn	Lower	10	0.96

Name	Interp	Independent	Dependent
WestWakeWRFReturn	Lower	11	0.97
WestWakeWRFReturn	Lower	12	0.97
WeyerhaeuserWW_nc0023442	Lower	1	0.22
WeyerhaeuserWW_nc0023442	Lower	2	0.18
WeyerhaeuserWW_nc0023442	Lower	3	0.15
WeyerhaeuserWW_nc0023442	Lower	4	0.33
WeyerhaeuserWW_nc0023442	Lower	5	0.21
WeyerhaeuserWW_nc0023442	Lower	6	0.25
WeyerhaeuserWW_nc0023442	Lower	7	0.17
WeyerhaeuserWW_nc0023442	Lower	8	0.19
WeyerhaeuserWW_nc0023442	Lower	9	0.11
WeyerhaeuserWW_nc0023442	Lower	10	0.19
WeyerhaeuserWW_nc0023442	Lower	11	0.1
WeyerhaeuserWW_nc0023442	Lower	12	0.06
WeyerReturn_nc0003191	Lower	1	0.92
WeyerReturn_nc0003191	Lower	2	0.97
WeyerReturn_nc0003191	Lower	3	0.95
WeyerReturn_nc0003191	Lower	4	0.96
WeyerReturn_nc0003191	Lower	5	0.98
WeyerReturn_nc0003191	Lower	6	0.95
WeyerReturn_nc0003191	Lower	7	0.95
WeyerReturn_nc0003191	Lower	8	0.97
WeyerReturn_nc0003191	Lower	9	1.28
WeyerReturn_nc0003191	Lower	10	0.84
WeyerReturn_nc0003191	Lower	11	0.96
WeyerReturn_nc0003191	Lower	12	0.94
WilsonReturn_nc0023906	Lower	1	1.13
WilsonReturn_nc0023906	Lower	2	1.17
WilsonReturn_nc0023906	Lower	3	1.21
WilsonReturn_nc0023906	Lower	4	0.96
WilsonReturn_nc0023906	Lower	5	0.74
WilsonReturn_nc0023906	Lower	6	0.62
WilsonReturn_nc0023906	Lower	7	0.58
WilsonReturn_nc0023906	Lower	8	0.62
WilsonReturn_nc0023906	Lower	9	0.75
WilsonReturn_nc0023906	Lower	10	0.7
WilsonReturn_nc0023906	Lower	11	0.9
WilsonReturn_nc0023906	Lower	12	1.01

Independent Wastewater Return Patterns

Node No.	Name	units	factor	Month	Day	Inflow	julSort
148	Martin Marietta-Hicone WW Return	mgd	0	1	1	1	1
148	Martin Marietta-Hicone WW Return	mgd	0	1	31	1	31
148	Martin Marietta-Hicone WW Return	mgd	0	2	1	1	32
148	Martin Marietta-Hicone WW Return	mgd	0	2	29	1	60
148	Martin Marietta-Hicone WW Return	mgd	0	3	1	1	61
148	Martin Marietta-Hicone WW Return	mgd	0	3	31	1	91
148	Martin Marietta-Hicone WW Return	mgd	0	4	1	1	92
148	Martin Marietta-Hicone WW Return	mgd	0	4	30	1	121
148	Martin Marietta-Hicone WW Return	mgd	0	5	1	1	122
148	Martin Marietta-Hicone WW Return	mgd	0	5	31	1	152
148	Martin Marietta-Hicone WW Return	mgd	0	6	1	1	153
148	Martin Marietta-Hicone WW Return	mgd	0	6	30	1	182
148	Martin Marietta-Hicone WW Return	mgd	0	7	1	1	183
148	Martin Marietta-Hicone WW Return	mgd	0	7	31	1	213
148	Martin Marietta-Hicone WW Return	mgd	0	8	1	1	214
148	Martin Marietta-Hicone WW Return	mgd	0	8	31	1	244
148	Martin Marietta-Hicone WW Return	mgd	0	9	1	1	245
148	Martin Marietta-Hicone WW Return	mgd	0	9	30	1	274
148	Martin Marietta-Hicone WW Return	mgd	0	10	1	1	275
148	Martin Marietta-Hicone WW Return	mgd	0	10	31	1	305
148	Martin Marietta-Hicone WW Return	mgd	0	11	1	1	306
148	Martin Marietta-Hicone WW Return	mgd	0	11	30	1	335
148	Martin Marietta-Hicone WW Return	mgd	0	12	1	1	336
148	Martin Marietta-Hicone WW Return	mgd	0	12	31	1	366
192	Colonial Pipeline WW Return	mgd	0.1	1	1	1.2	1
192	Colonial Pipeline WW Return	mgd	0.1	1	31	1.2	31
192	Colonial Pipeline WW Return	mgd	0.1	2	1	2.46	32
192	Colonial Pipeline WW Return	mgd	0.1	2	29	2.46	60
192	Colonial Pipeline WW Return	mgd	0.1	3	1	0.47	61
192	Colonial Pipeline WW Return	mgd	0.1	3	31	0.47	91
192	Colonial Pipeline WW Return	mgd	0.1	4	1	0.53	92
192	Colonial Pipeline WW Return	mgd	0.1	4	30	0.53	121
192	Colonial Pipeline WW Return	mgd	0.1	5	1	0.47	122
192	Colonial Pipeline WW Return	mgd	0.1	5	31	0.47	152
192	Colonial Pipeline WW Return	mgd	0.1	6	1	0.95	153
192	Colonial Pipeline WW Return	mgd	0.1	6	30	0.95	182
192	Colonial Pipeline WW Return	mgd	0.1	7	1	0.35	183
192	Colonial Pipeline WW Return	mgd	0.1	7	31	0.35	213
192	Colonial Pipeline WW Return	mgd	0.1	8	1	0.38	214
192	Colonial Pipeline WW Return	mgd	0.1	8	31	0.38	244
192	Colonial Pipeline WW Return	mgd	0.1	9	1	1.96	245
192	Colonial Pipeline WW Return	mgd	0.1	9	30	1.96	274
192	Colonial Pipeline WW Return	mgd	0.1	10	1	0.36	275
192	Colonial Pipeline WW Return	mgd	0.1	10	31	0.36	305
192	Colonial Pipeline WW Return	mgd	0.1	11	1	0.15	306
192	Colonial Pipeline WW Return	mgd	0.1	11	30	0.15	335
192	Colonial Pipeline WW Return	mgd	0.1	12	1	2.73	336
192	Colonial Pipeline WW Return	mgd	0.1	12	31	2.73	366
282	Asheboro WW Return_nc0026123	mgd	3.6	5	31	0.98	152
282	Asheboro WW Return_nc0026123	mgd	3.6	6	1	0.94	153
282	Asheboro WW Return_nc0026123	mgd	3.6	6	30	0.94	182
282	Asheboro WW Return_nc0026123	mgd	3.6	7	1	0.87	183
282	Asheboro WW Return_nc0026123	mgd	3.6	7	31	0.87	213
282	Asheboro WW Return_nc0026123	mgd	3.6	8	1	0.86	214

Node No.	Name	units	factor	Month	Day	Inflow	julSort
282	Asheboro WW Return_nc0026123	mgd	3.6	8	31	0.86	244
282	Asheboro WW Return_nc0026123	mgd	3.6	9	1	0.91	245
282	Asheboro WW Return_nc0026123	mgd	3.6	9	30	0.91	274
282	Asheboro WW Return_nc0026123	mgd	3.6	10	1	0.9	275
282	Asheboro WW Return_nc0026123	mgd	3.6	10	31	0.9	305
282	Asheboro WW Return_nc0026123	mgd	3.6	11	1	0.96	306
282	Asheboro WW Return_nc0026123	mgd	3.6	11	30	0.96	335
282	Asheboro WW Return_nc0026123	mgd	3.6	12	1	1.05	336
282	Asheboro WW Return_nc0026123	mgd	3.6	12	31	1.05	366
282	Asheboro WW Return_nc0026123	mgd	3.6	1	1	1.06	1
282	Asheboro WW Return_nc0026123	mgd	3.6	1	31	1.06	31
282	Asheboro WW Return_nc0026123	mgd	3.6	2	1	1.12	32
282	Asheboro WW Return_nc0026123	mgd	3.6	2	29	1.12	60
282	Asheboro WW Return_nc0026123	mgd	3.6	3	1	1.23	61
282	Asheboro WW Return_nc0026123	mgd	3.6	3	31	1.23	91
282	Asheboro WW Return_nc0026123	mgd	3.6	4	1	1.13	92
282	Asheboro WW Return_nc0026123	mgd	3.6	4	30	1.13	121
282	Asheboro WW Return_nc0026123	mgd	3.6	5	1	0.98	122
464	Fearington Utilities WW_nc0043559	mgd	0.01	1	1	0.14	1
464	Fearington Utilities WW_nc0043559	mgd	0.01	1	31	0.14	31
464	Fearington Utilities WW_nc0043559	mgd	0.01	2	1	0.14	32
464	Fearington Utilities WW_nc0043559	mgd	0.01	2	29	0.14	60
464	Fearington Utilities WW_nc0043559	mgd	0.01	3	1	0.14	61
464	Fearington Utilities WW_nc0043559	mgd	0.01	3	31	0.14	91
464	Fearington Utilities WW_nc0043559	mgd	0.01	4	1	0.14	92
464	Fearington Utilities WW_nc0043559	mgd	0.01	4	30	0.14	121
464	Fearington Utilities WW_nc0043559	mgd	0.01	5	1	0.14	122
464	Fearington Utilities WW_nc0043559	mgd	0.01	5	31	0.14	152
464	Fearington Utilities WW_nc0043559	mgd	0.01	6	1	0.14	153
464	Fearington Utilities WW_nc0043559	mgd	0.01	6	30	0.14	182
464	Fearington Utilities WW_nc0043559	mgd	0.01	7	1	0.14	183
464	Fearington Utilities WW_nc0043559	mgd	0.01	7	31	0.14	213
464	Fearington Utilities WW_nc0043559	mgd	0.01	8	1	0.14	214
464	Fearington Utilities WW_nc0043559	mgd	0.01	8	31	0.14	244
464	Fearington Utilities WW_nc0043559	mgd	0.01	9	1	0.14	245
464	Fearington Utilities WW_nc0043559	mgd	0.01	9	30	0.14	274
464	Fearington Utilities WW_nc0043559	mgd	0.01	10	1	0.14	275
464	Fearington Utilities WW_nc0043559	mgd	0.01	10	31	0.14	305
464	Fearington Utilities WW_nc0043559	mgd	0.01	11	1	0.14	306
464	Fearington Utilities WW_nc0043559	mgd	0.01	11	30	0.14	335
464	Fearington Utilities WW_nc0043559	mgd	0.01	12	1	0.14	336
464	Fearington Utilities WW_nc0043559	mgd	0.01	12	31	0.14	366
591	Robbins Demand_03-63-015	mgd	1	1	1	1.17	1
591	Robbins Demand_03-63-015	mgd	1	1	31	1.17	31
591	Robbins Demand_03-63-015	mgd	1	2	1	1.3	32
591	Robbins Demand_03-63-015	mgd	1	2	29	1.3	60
591	Robbins Demand_03-63-015	mgd	1	3	1	1.4	61
591	Robbins Demand_03-63-015	mgd	1	3	31	1.4	91
591	Robbins Demand_03-63-015	mgd	1	4	1	1.04	92
591	Robbins Demand_03-63-015	mgd	1	4	30	1.04	121
591	Robbins Demand_03-63-015	mgd	1	5	1	0.85	122
591	Robbins Demand_03-63-015	mgd	1	5	31	0.85	152
591	Robbins Demand_03-63-015	mgd	1	6	1	0.67	153
591	Robbins Demand_03-63-015	mgd	1	6	30	0.67	182
591	Robbins Demand_03-63-015	mgd	1	7	1	0.61	183

Node No.	Name	units	factor	Month	Day	Inflow	julSort
591	Robbins Demand_03-63-015	mgd	1	7	31	0.61	213
591	Robbins Demand_03-63-015	mgd	1	8	1	0.55	214
591	Robbins Demand_03-63-015	mgd	1	8	31	0.55	244
591	Robbins Demand_03-63-015	mgd	1	9	1	0.76	245
591	Robbins Demand_03-63-015	mgd	1	9	30	0.76	274
591	Robbins Demand_03-63-015	mgd	1	10	1	0.7	275
591	Robbins Demand_03-63-015	mgd	1	10	31	0.7	305
591	Robbins Demand_03-63-015	mgd	1	11	1	0.88	306
591	Robbins Demand_03-63-015	mgd	1	11	30	0.88	335
591	Robbins Demand_03-63-015	mgd	1	12	1	1.08	336
591	Robbins Demand_03-63-015	mgd	1	12	31	1.08	366
592	Star WWTP Return_nc0058548	mgd	0.05	1	1	0.07	1
592	Star WWTP Return_nc0058548	mgd	0.05	1	31	0.07	31
592	Star WWTP Return_nc0058548	mgd	0.05	2	1	0.08	32
592	Star WWTP Return_nc0058548	mgd	0.05	2	29	0.08	60
592	Star WWTP Return_nc0058548	mgd	0.05	3	1	0.09	61
592	Star WWTP Return_nc0058548	mgd	0.05	3	31	0.09	91
592	Star WWTP Return_nc0058548	mgd	0.05	4	1	0.07	92
592	Star WWTP Return_nc0058548	mgd	0.05	4	30	0.07	121
592	Star WWTP Return_nc0058548	mgd	0.05	5	1	0.06	122
592	Star WWTP Return_nc0058548	mgd	0.05	5	31	0.06	152
592	Star WWTP Return_nc0058548	mgd	0.05	6	1	0.06	153
592	Star WWTP Return_nc0058548	mgd	0.05	6	30	0.06	182
592	Star WWTP Return_nc0058548	mgd	0.05	7	1	0.06	183
592	Star WWTP Return_nc0058548	mgd	0.05	7	31	0.06	213
592	Star WWTP Return_nc0058548	mgd	0.05	8	1	0.05	214
592	Star WWTP Return_nc0058548	mgd	0.05	8	31	0.05	244
592	Star WWTP Return_nc0058548	mgd	0.05	9	1	0.05	245
592	Star WWTP Return_nc0058548	mgd	0.05	9	30	0.05	274
592	Star WWTP Return_nc0058548	mgd	0.05	10	1	0.05	275
592	Star WWTP Return_nc0058548	mgd	0.05	10	31	0.05	305
592	Star WWTP Return_nc0058548	mgd	0.05	11	1	0.05	306
592	Star WWTP Return_nc0058548	mgd	0.05	11	30	0.05	335
592	Star WWTP Return_nc0058548	mgd	0.05	12	1	0.06	336
592	Star WWTP Return_nc0058548	mgd	0.05	12	31	0.06	366
772	Raeford WWTP Return_nc0026514	mgd	4.1	1	1	0.93	1
772	Raeford WWTP Return_nc0026514	mgd	4.1	1	31	0.93	31
772	Raeford WWTP Return_nc0026514	mgd	4.1	2	1	1.11	32
772	Raeford WWTP Return_nc0026514	mgd	4.1	2	29	1.11	60
772	Raeford WWTP Return_nc0026514	mgd	4.1	3	1	1.02	61
772	Raeford WWTP Return_nc0026514	mgd	4.1	3	31	1.02	91
772	Raeford WWTP Return_nc0026514	mgd	4.1	4	1	1.3	92
772	Raeford WWTP Return_nc0026514	mgd	4.1	4	30	1.3	121
772	Raeford WWTP Return_nc0026514	mgd	4.1	5	1	1.37	122
772	Raeford WWTP Return_nc0026514	mgd	4.1	5	31	1.37	152
772	Raeford WWTP Return_nc0026514	mgd	4.1	6	1	1.16	153
772	Raeford WWTP Return_nc0026514	mgd	4.1	6	30	1.16	182
772	Raeford WWTP Return_nc0026514	mgd	4.1	7	1	1.09	183
772	Raeford WWTP Return_nc0026514	mgd	4.1	7	31	1.09	213
772	Raeford WWTP Return_nc0026514	mgd	4.1	8	1	1.08	214
772	Raeford WWTP Return_nc0026514	mgd	4.1	8	31	1.08	244
772	Raeford WWTP Return_nc0026514	mgd	4.1	9	1	0.65	245
772	Raeford WWTP Return_nc0026514	mgd	4.1	9	30	0.65	274
772	Raeford WWTP Return_nc0026514	mgd	4.1	10	1	0.86	275
772	Raeford WWTP Return_nc0026514	mgd	4.1	10	31	0.86	305

Node No.	Name	units	factor	Month	Day	Inflow	julSort
772	Raeford WWTP Return_nc0026514	mgd	4.1	11	1	0.84	306
772	Raeford WWTP Return_nc0026514	mgd	4.1	11	30	0.84	335
772	Raeford WWTP Return_nc0026514	mgd	4.1	12	1	0.58	336
772	Raeford WWTP Return_nc0026514	mgd	4.1	12	31	0.58	366
910	Franklinville WW NC007820	mgd	0.04	1	1	1.1	1
910	Franklinville WW NC007820	mgd	0.04	1	31	1.1	31
910	Franklinville WW NC007820	mgd	0.04	2	1	1.09	32
910	Franklinville WW NC007820	mgd	0.04	2	29	1.09	60
910	Franklinville WW NC007820	mgd	0.04	3	1	1.2	61
910	Franklinville WW NC007820	mgd	0.04	3	31	1.2	91
910	Franklinville WW NC007820	mgd	0.04	4	1	1.14	92
910	Franklinville WW NC007820	mgd	0.04	4	30	1.14	121
910	Franklinville WW NC007820	mgd	0.04	5	1	0.98	122
910	Franklinville WW NC007820	mgd	0.04	5	31	0.98	152
910	Franklinville WW NC007820	mgd	0.04	6	1	0.92	153
910	Franklinville WW NC007820	mgd	0.04	6	30	0.92	182
910	Franklinville WW NC007820	mgd	0.04	7	1	0.8	183
910	Franklinville WW NC007820	mgd	0.04	7	31	0.8	213
910	Franklinville WW NC007820	mgd	0.04	8	1	0.8	214
910	Franklinville WW NC007820	mgd	0.04	8	31	0.8	244
910	Franklinville WW NC007820	mgd	0.04	9	1	0.88	245
910	Franklinville WW NC007820	mgd	0.04	9	30	0.88	274
910	Franklinville WW NC007820	mgd	0.04	10	1	0.87	275
910	Franklinville WW NC007820	mgd	0.04	10	31	0.87	305
910	Franklinville WW NC007820	mgd	0.04	11	1	1.03	306
910	Franklinville WW NC007820	mgd	0.04	11	30	1.03	335
910	Franklinville WW NC007820	mgd	0.04	12	1	1.18	336
910	Franklinville WW NC007820	mgd	0.04	12	31	1.18	366
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	1	1	1.19	1
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	1	31	1.19	31
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	2	1	1.21	32
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	2	29	1.21	60
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	3	1	1.16	61
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	3	31	1.16	91
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	4	1	1	92
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	4	30	1	121
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	5	1	0.87	122
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	5	31	0.87	152
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	6	1	0.82	153
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	6	30	0.82	182
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	7	1	0.85	183
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	7	31	0.85	213
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	8	1	0.87	214
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	8	31	0.87	244
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	9	1	0.94	245
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	9	30	0.94	274
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	10	1	0.97	275
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	10	31	0.97	305
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	11	1	1.05	306
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	11	30	1.05	335
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	12	1	1.07	336
960	Elizabethtown WWTP Return_nc0026671	mgd	1.25	12	31	1.07	366
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	1	1	0	1
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	1	31	0	31
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	2	1	4.21	32

Node No.	Name	units	factor	Month	Day	Inflow	julSort
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	2	29	4.21	60
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	3	1	0	61
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	3	31	0	91
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	4	1	0	92
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	4	30	0	121
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	5	1	0	122
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	5	31	0	152
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	6	1	0	153
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	6	30	0	182
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	7	1	0	183
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	7	31	0	213
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	8	1	0	214
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	8	31	0	244
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	9	1	0	245
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	9	30	0	274
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	10	1	0	275
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	10	31	0	305
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	11	1	7.79	306
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	11	30	7.79	335
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	12	1	7.79	336
1307	Riverplace II LLC Discharge_nc0001376	mgd	0.1	12	31	7.79	366
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	1	1	1	1
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	1	31	1	31
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	2	1	1	32
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	2	29	1	60
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	3	1	1	61
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	3	31	1	91
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	4	1	1	92
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	4	30	1	121
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	5	1	1	122
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	5	31	1	152
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	6	1	1	153
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	6	30	1	182
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	7	1	1	183
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	7	31	1	213
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	8	1	1	214
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	8	31	1	244
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	9	1	1	245
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	9	30	1	274
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	10	1	1	275
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	10	31	1	305
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	11	1	1	306
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	11	30	1	335
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	12	1	1	336
1407	Motiva Enterprises WW_nc0022217	mgd	0.17	12	31	1	366
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	1	1	1.11	1
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	1	31	1.11	31
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	2	1	1.57	32
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	2	29	1.57	60
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	3	1	1.16	61
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	3	31	1.16	91
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	4	1	0.83	92
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	4	30	0.83	121
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	5	1	1.14	122
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	5	31	1.14	152

Node No.	Name	units	factor	Month	Day	Inflow	julSort
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	6	1	1.02	153
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	6	30	1.02	182
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	7	1	0.88	183
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	7	31	0.88	213
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	8	1	1.05	214
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	8	31	1.05	244
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	9	1	0.96	245
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	9	30	0.96	274
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	10	1	0.7	275
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	10	31	0.7	305
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	11	1	0.76	306
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	11	30	0.76	335
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	12	1	0.76	336
1563	Stantonsburg WWTP_nc0007536	mgd	0.22	12	31	0.76	366
1565	Snow Hill WWTP_nc0020842	mgd	0.19	1	1	0.9	1
1565	Snow Hill WWTP_nc0020842	mgd	0.19	1	31	0.9	31
1565	Snow Hill WWTP_nc0020842	mgd	0.19	2	1	0.96	32
1565	Snow Hill WWTP_nc0020842	mgd	0.19	2	29	0.96	60
1565	Snow Hill WWTP_nc0020842	mgd	0.19	3	1	0.93	61
1565	Snow Hill WWTP_nc0020842	mgd	0.19	3	31	0.93	91
1565	Snow Hill WWTP_nc0020842	mgd	0.19	4	1	0.92	92
1565	Snow Hill WWTP_nc0020842	mgd	0.19	4	30	0.92	121
1565	Snow Hill WWTP_nc0020842	mgd	0.19	5	1	1.06	122
1565	Snow Hill WWTP_nc0020842	mgd	0.19	5	31	1.06	152
1565	Snow Hill WWTP_nc0020842	mgd	0.19	6	1	1.01	153
1565	Snow Hill WWTP_nc0020842	mgd	0.19	6	30	1.01	182
1565	Snow Hill WWTP_nc0020842	mgd	0.19	7	1	1.02	183
1565	Snow Hill WWTP_nc0020842	mgd	0.19	7	31	1.02	213
1565	Snow Hill WWTP_nc0020842	mgd	0.19	8	1	1.14	214
1565	Snow Hill WWTP_nc0020842	mgd	0.19	8	31	1.14	244
1565	Snow Hill WWTP_nc0020842	mgd	0.19	9	1	1.14	245
1565	Snow Hill WWTP_nc0020842	mgd	0.19	9	30	1.14	274
1565	Snow Hill WWTP_nc0020842	mgd	0.19	10	1	1.01	275
1565	Snow Hill WWTP_nc0020842	mgd	0.19	10	31	1.01	305
1565	Snow Hill WWTP_nc0020842	mgd	0.19	11	1	0.99	306
1565	Snow Hill WWTP_nc0020842	mgd	0.19	11	30	0.99	335
1565	Snow Hill WWTP_nc0020842	mgd	0.19	12	1	0.99	336
1565	Snow Hill WWTP_nc0020842	mgd	0.19	12	31	0.99	366
1567	Farmville WWTP_nc0029572	mgd	1.26	1	1	1.1	1
1567	Farmville WWTP_nc0029572	mgd	1.26	1	31	1.1	31
1567	Farmville WWTP_nc0029572	mgd	1.26	2	1	1.18	32
1567	Farmville WWTP_nc0029572	mgd	1.26	2	29	1.18	60
1567	Farmville WWTP_nc0029572	mgd	1.26	3	1	1.08	61
1567	Farmville WWTP_nc0029572	mgd	1.26	3	31	1.08	91
1567	Farmville WWTP_nc0029572	mgd	1.26	4	1	1.19	92
1567	Farmville WWTP_nc0029572	mgd	1.26	4	30	1.19	121
1567	Farmville WWTP_nc0029572	mgd	1.26	5	1	0.98	122
1567	Farmville WWTP_nc0029572	mgd	1.26	5	31	0.98	152
1567	Farmville WWTP_nc0029572	mgd	1.26	6	1	0.9	153
1567	Farmville WWTP_nc0029572	mgd	1.26	6	30	0.9	182
1567	Farmville WWTP_nc0029572	mgd	1.26	7	1	0.8	183
1567	Farmville WWTP_nc0029572	mgd	1.26	7	31	0.8	213
1567	Farmville WWTP_nc0029572	mgd	1.26	8	1	0.83	214
1567	Farmville WWTP_nc0029572	mgd	1.26	8	31	0.83	244
1567	Farmville WWTP_nc0029572	mgd	1.26	9	1	0.97	245

Node No.	Name	units	factor	Month	Day	Inflow	julSort
1567	Farmville WWTP_nc0029572	mgd	1.26	9	30	0.97	274
1567	Farmville WWTP_nc0029572	mgd	1.26	10	1	0.87	275
1567	Farmville WWTP_nc0029572	mgd	1.26	10	31	0.87	305
1567	Farmville WWTP_nc0029572	mgd	1.26	11	1	1.05	306
1567	Farmville WWTP_nc0029572	mgd	1.26	11	30	1.05	335
1567	Farmville WWTP_nc0029572	mgd	1.26	12	1	1.06	336
1567	Farmville WWTP_nc0029572	mgd	1.26	12	31	1.06	366
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	1	1	0.9	1
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	1	31	0.9	31
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	2	1	1.02	32
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	2	28	1.02	59
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	3	1	0.88	61
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	3	31	0.88	91
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	4	1	0.85	92
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	4	30	0.85	121
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	5	1	0.92	122
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	5	31	0.92	152
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	6	1	0.98	153
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	6	30	0.98	182
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	7	1	0.9	183
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	7	31	0.9	213
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	8	1	1.17	214
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	8	31	1.17	244
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	9	1	1.26	245
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	9	30	1.26	274
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	10	1	1.02	275
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	10	31	1.02	305
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	11	1	1.05	306
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	11	30	1.05	335
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	12	1	1.06	336
1569	Maury Sant. Dist WWTP_nc0061492	mgd	0.12	12	31	1.06	366
1643	TransMontaigne WW_nc0003549	mgd	0.07	1	1	0	1
1643	TransMontaigne WW_nc0003549	mgd	0.07	1	31	0	31
1643	TransMontaigne WW_nc0003549	mgd	0.07	2	1	2.21	32
1643	TransMontaigne WW_nc0003549	mgd	0.07	2	29	2.21	60
1643	TransMontaigne WW_nc0003549	mgd	0.07	3	1	1.79	61
1643	TransMontaigne WW_nc0003549	mgd	0.07	3	31	1.79	91
1643	TransMontaigne WW_nc0003549	mgd	0.07	4	1	0	92
1643	TransMontaigne WW_nc0003549	mgd	0.07	4	30	0	121
1643	TransMontaigne WW_nc0003549	mgd	0.07	5	1	4.3	122
1643	TransMontaigne WW_nc0003549	mgd	0.07	5	31	4.3	152
1643	TransMontaigne WW_nc0003549	mgd	0.07	6	1	0	153
1643	TransMontaigne WW_nc0003549	mgd	0.07	6	30	0	182
1643	TransMontaigne WW_nc0003549	mgd	0.07	7	1	0	183
1643	TransMontaigne WW_nc0003549	mgd	0.07	7	31	0	213
1643	TransMontaigne WW_nc0003549	mgd	0.07	8	1	3.52	214
1643	TransMontaigne WW_nc0003549	mgd	0.07	8	31	3.52	244
1643	TransMontaigne WW_nc0003549	mgd	0.07	9	1	0.17	245
1643	TransMontaigne WW_nc0003549	mgd	0.07	9	30	0.17	274
1643	TransMontaigne WW_nc0003549	mgd	0.07	10	1	0	275
1643	TransMontaigne WW_nc0003549	mgd	0.07	10	31	0	305
1643	TransMontaigne WW_nc0003549	mgd	0.07	11	1	0	306
1643	TransMontaigne WW_nc0003549	mgd	0.07	11	30	0	335
1643	TransMontaigne WW_nc0003549	mgd	0.07	12	1	0	336
1643	TransMontaigne WW_nc0003549	mgd	0.07	12	31	0	366

Node No.	Name	units	factor	Month	Day	Inflow	julSort
1645	Magellan Terminals WW_nc0052311	mgd	0.08	1	1	0.63	1
1645	Magellan Terminals WW_nc0052311	mgd	0.08	1	31	0.63	31
1645	Magellan Terminals WW_nc0052311	mgd	0.08	2	1	0.5	32
1645	Magellan Terminals WW_nc0052311	mgd	0.08	2	29	0.5	60
1645	Magellan Terminals WW_nc0052311	mgd	0.08	3	1	0.52	61
1645	Magellan Terminals WW_nc0052311	mgd	0.08	3	31	0.52	91
1645	Magellan Terminals WW_nc0052311	mgd	0.08	4	1	0.56	92
1645	Magellan Terminals WW_nc0052311	mgd	0.08	4	30	0.56	121
1645	Magellan Terminals WW_nc0052311	mgd	0.08	5	1	0.42	122
1645	Magellan Terminals WW_nc0052311	mgd	0.08	5	31	0.42	152
1645	Magellan Terminals WW_nc0052311	mgd	0.08	6	1	5.86	153
1645	Magellan Terminals WW_nc0052311	mgd	0.08	6	30	5.86	182
1645	Magellan Terminals WW_nc0052311	mgd	0.08	7	1	0.52	183
1645	Magellan Terminals WW_nc0052311	mgd	0.08	7	31	0.52	213
1645	Magellan Terminals WW_nc0052311	mgd	0.08	8	1	0.65	214
1645	Magellan Terminals WW_nc0052311	mgd	0.08	8	31	0.65	244
1645	Magellan Terminals WW_nc0052311	mgd	0.08	9	1	0.52	245
1645	Magellan Terminals WW_nc0052311	mgd	0.08	9	30	0.52	274
1645	Magellan Terminals WW_nc0052311	mgd	0.08	10	1	0.57	275
1645	Magellan Terminals WW_nc0052311	mgd	0.08	10	31	0.57	305
1645	Magellan Terminals WW_nc0052311	mgd	0.08	11	1	0.51	306
1645	Magellan Terminals WW_nc0052311	mgd	0.08	11	30	0.51	335
1645	Magellan Terminals WW_nc0052311	mgd	0.08	12	1	0.51	336
1645	Magellan Terminals WW_nc0052311	mgd	0.08	12	31	0.51	366
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	12	31	1.03	366
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	1	1	0.87	1
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	1	31	0.87	31
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	2	1	1.02	32
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	2	29	1.02	60
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	3	1	0.94	61
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	3	31	0.94	91
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	4	1	0.96	92
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	4	30	0.96	121
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	5	1	0.93	122
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	5	31	0.93	152
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	6	1	0.99	153
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	6	30	0.99	182
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	7	1	1.06	183
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	7	31	1.06	213
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	8	1	1.19	214
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	8	31	1.19	244
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	9	1	1.03	245
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	9	30	1.03	274
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	10	1	0.96	275
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	10	31	0.96	305
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	11	1	1.03	306
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	11	30	1.03	335
1705	Aqua NC Inc. Hawthorne WWTP_nc0049662	mgd	0.14	12	1	1.03	336
1753	Princeton WWTP_nc0026662	mgd	0.19	1	1	0.55	1
1753	Princeton WWTP_nc0026662	mgd	0.19	1	31	0.55	31
1753	Princeton WWTP_nc0026662	mgd	0.19	2	1	1.3	32
1753	Princeton WWTP_nc0026662	mgd	0.19	2	29	1.3	60
1753	Princeton WWTP_nc0026662	mgd	0.19	3	1	1.72	61
1753	Princeton WWTP_nc0026662	mgd	0.19	3	31	1.72	91
1753	Princeton WWTP_nc0026662	mgd	0.19	4	1	1.32	92

Node No.	Name	units	factor	Month	Day	Inflow	julSort
1753	Princeton WWTP_nc0026662	mgd	0.19	4	30	1.32	121
1753	Princeton WWTP_nc0026662	mgd	0.19	5	1	1.27	122
1753	Princeton WWTP_nc0026662	mgd	0.19	5	31	1.27	152
1753	Princeton WWTP_nc0026662	mgd	0.19	6	1	1.27	153
1753	Princeton WWTP_nc0026662	mgd	0.19	6	30	1.27	182
1753	Princeton WWTP_nc0026662	mgd	0.19	7	1	0.84	183
1753	Princeton WWTP_nc0026662	mgd	0.19	7	31	0.84	213
1753	Princeton WWTP_nc0026662	mgd	0.19	8	1	0.85	214
1753	Princeton WWTP_nc0026662	mgd	0.19	8	31	0.85	244
1753	Princeton WWTP_nc0026662	mgd	0.19	9	1	0.86	245
1753	Princeton WWTP_nc0026662	mgd	0.19	9	30	0.86	274
1753	Princeton WWTP_nc0026662	mgd	0.19	10	1	0.59	275
1753	Princeton WWTP_nc0026662	mgd	0.19	10	31	0.59	305
1753	Princeton WWTP_nc0026662	mgd	0.19	11	1	0.69	306
1753	Princeton WWTP_nc0026662	mgd	0.19	11	30	0.69	335
1753	Princeton WWTP_nc0026662	mgd	0.19	12	1	0.69	336
1753	Princeton WWTP_nc0026662	mgd	0.19	12	31	0.69	366
1759	Jerry_G_Williams WW	mgd	0.14	1	1	1	1
1759	Jerry_G_Williams WW	mgd	0.14	1	31	1	31
1759	Jerry_G_Williams WW	mgd	0.14	2	1	1	32
1759	Jerry_G_Williams WW	mgd	0.14	2	29	1	60
1759	Jerry_G_Williams WW	mgd	0.14	3	1	1	61
1759	Jerry_G_Williams WW	mgd	0.14	3	31	1	91
1759	Jerry_G_Williams WW	mgd	0.14	4	1	1	92
1759	Jerry_G_Williams WW	mgd	0.14	4	30	1	121
1759	Jerry_G_Williams WW	mgd	0.14	5	1	1	122
1759	Jerry_G_Williams WW	mgd	0.14	5	31	1	152
1759	Jerry_G_Williams WW	mgd	0.14	6	1	1	153
1759	Jerry_G_Williams WW	mgd	0.14	6	30	1	182
1759	Jerry_G_Williams WW	mgd	0.14	7	1	1	183
1759	Jerry_G_Williams WW	mgd	0.14	7	31	1	213
1759	Jerry_G_Williams WW	mgd	0.14	8	1	1	214
1759	Jerry_G_Williams WW	mgd	0.14	8	31	1	244
1759	Jerry_G_Williams WW	mgd	0.14	9	1	1	245
1759	Jerry_G_Williams WW	mgd	0.14	9	30	1	274
1759	Jerry_G_Williams WW	mgd	0.14	10	1	1	275
1759	Jerry_G_Williams WW	mgd	0.14	10	31	1	305
1759	Jerry_G_Williams WW	mgd	0.14	11	1	1	306
1759	Jerry_G_Williams WW	mgd	0.14	11	30	1	335
1759	Jerry_G_Williams WW	mgd	0.14	12	1	1	336
1759	Jerry_G_Williams WW	mgd	0.14	12	31	1	366
1787	La Grange WWTP_nc0021644	mgd	0.38	1	1	1.05	1
1787	La Grange WWTP_nc0021644	mgd	0.38	1	31	1.05	31
1787	La Grange WWTP_nc0021644	mgd	0.38	2	1	1.11	32
1787	La Grange WWTP_nc0021644	mgd	0.38	2	29	1.11	60
1787	La Grange WWTP_nc0021644	mgd	0.38	3	1	1.08	61
1787	La Grange WWTP_nc0021644	mgd	0.38	3	31	1.08	91
1787	La Grange WWTP_nc0021644	mgd	0.38	4	1	1.05	92
1787	La Grange WWTP_nc0021644	mgd	0.38	4	30	1.05	121
1787	La Grange WWTP_nc0021644	mgd	0.38	5	1	0.9	122
1787	La Grange WWTP_nc0021644	mgd	0.38	5	31	0.9	152
1787	La Grange WWTP_nc0021644	mgd	0.38	6	1	0.76	153
1787	La Grange WWTP_nc0021644	mgd	0.38	6	30	0.76	182
1787	La Grange WWTP_nc0021644	mgd	0.38	7	1	0.83	183
1787	La Grange WWTP_nc0021644	mgd	0.38	7	31	0.83	213

Node No.	Name	units	factor	Month	Day	Inflow	julSort
1787	La Grange WWTP_nc0021644	mgd	0.38	8	1	0.9	214
1787	La Grange WWTP_nc0021644	mgd	0.38	8	31	0.9	244
1787	La Grange WWTP_nc0021644	mgd	0.38	9	1	1.26	245
1787	La Grange WWTP_nc0021644	mgd	0.38	9	30	1.26	274
1787	La Grange WWTP_nc0021644	mgd	0.38	10	1	0.87	275
1787	La Grange WWTP_nc0021644	mgd	0.38	10	31	0.87	305
1787	La Grange WWTP_nc0021644	mgd	0.38	11	1	1.04	306
1787	La Grange WWTP_nc0021644	mgd	0.38	11	30	1.04	335
1787	La Grange WWTP_nc0021644	mgd	0.38	12	1	1.17	336
1787	La Grange WWTP_nc0021644	mgd	0.38	12	31	1.17	366

Arc Minimum Flows

U/S Number	D/S Number	Name	Units	Month	Day	Min Flow	julSort
030	040	Reidsville release	cfs	1	1	3.5	1
030	040	Reidsville release	cfs	12	31	3.5	366
120	140	Brandt release	cfs	1	1	3	1
120	140	Brandt release	cfs	12	31	3	366
220	230	High Pt release	cfs	1	1	1.3	1
220	230	High Pt release	cfs	12	31	1.3	366
320	100	GraMebane release	cfs	1	1	2	1
320	100	GraMebane release	cfs	12	31	2	366
390	370	Cane Creek release	cfs	1	1	0.22	1
390	370	Cane Creek release	cfs	12	31	0.22	366
760	740	Glenville release	cfs	1	1	4	1
760	740	Glenville release	cfs	12	31	4	366
140	145	G/T release	OCL Defined				
270	280	Randleman release	OCL Defined				
325	328	325>328	OCL Defined				
470	480	Jordan release	OCL Defined				
550	555	Lillington_Unrouted_Flow	OCL Defined				
1050	1080	1050>1080	OCL Defined				
1060	1080	1060>1080	OCL Defined				
1200	1205	L.River Min Release	OCL Defined				
1300	1310	Falls Release	OCL Defined				
1440	1700	Swift Creek	OCL Defined				
1500	1520	1500>1520	OCL Defined				
1630	1640	Clayton Gage Flow	OCL Defined				

County Agricultural Data

Crop	Units	Alamance	Bladen	Caswell	Chatham	Cumberland	Durham	Forsyth
IrrTobacco	acres	1072	21	1604	129	490	65	100
Turf	acres	40	1067	0	0	283	0	0
Golf	acres	414	91	0	385	725	420	0
ContNurs	acres	3	5	0	66	11	2.4	0
FieldNurs	acres	3	0	0	5	6	6.2	0
IrrCotton	acres	0	0	0	0	161	0	0
IrrEarlySoy	acres	0	0	0	0	0	0	0
IrrLateSoy	acres	4	1209	0	0	393	0	0
IrrCorn	acres	17	195	0	0	283	57.8	0
IrrVeg	acres	116	60	3	133	1609	11.5	10
IrrPas&Hay	acres	127	5881	193	294	825	0	146
IrrPeanut	acres	0	138	0	0	72	0	0
IrrBlueberry	acres	0	3725	0	5	0	0	14
IrrStrawberry	acres	8	3	8	21	20	0	19
IrrFruit	acres	0	20	0	10	0	0	0
Beef Cattle	animals	16600	5800	10100	32400	4500	2068.4	5100
Dairy Cows	animals	1800	0	0	1600	0	0	0
Horses	animals	834	952	274	1942	953	235.9	1715
Pigs	animals	1100	867000	0	5000	119000	0	0
Chickens	animals	1110000	3000000	0	9820000	850000	0	0
Turkeys	animals	0	1300000	0	0	0	0	0
OtherAnimal	animals	271	307	77	2458	120	423.6	394

Crop	Units	Guilford	Harnett	Hoke	Lee	Montgom	Moore	Orange
IrrTobacco	acres	1898	2805	75	978	0	1037	45.9
Turf	acres	30	42	400	0	250	250	163
Golf	acres	1974	518	173	380	0	2795	148.5
ContNurs	acres	715	88	7	6	3	144	0.5
FieldNurs	acres	266	429	8	0	23	293	6.1
IrrCotton	acres	0	0	0	0	0	94	0
IrrEarlySoy	acres	0	0	0	0	0	0	0
IrrLateSoy	acres	0	42	215	0	0	0	0
IrrCorn	acres	79	127	0	89	0	108	0
IrrVeg	acres	134	2000	12	320	10	292	8.6
IrrPas&Hay	acres	7109		808	41	145	244	0
IrrPeanut	acres	0	0	0	0	0	0	0
IrrBlueberry	acres	7	5	1	0	0	2	0.5
IrrStrawberry	acres	32	25	2	18	0	12	1.5
IrrFruit	acres	13	0	2	30	0	22	0
Beef Cattle	animals	13800	9000	0	3700	6200	9000	3874.2
Dairy Cows	animals	1700	0	0	0	0	0	33.4
Horses	animals	4030.5	948	618.5	379	223	2407.5	150.4
Pigs	animals	9300	75000	84000	4200	27000	44000	0
Chickens	animals	355000	6500000	600000	1625000	4875000	8750000	0
Turkeys	animals	0	0	0	0	0	0	0
OtherAnimal	animals	545	334	280	1000	42	975	459

Crop	Units	Randolph	Rockingha	Wake	Craven	Franklin	Granville	Greene
IrrTobacco	acres	478	2639	1795.8	64.6	267.9	280.3	181
Turf	acres	0	0	66.5	0	20	0	0
Golf	acres	173	759	1170	136	0	0	22
ContNurs	acres	8	38	12.8	0.6	3.5	0	0
FieldNurs	acres	23	13	544.2	83	126	0	0
IrrCotton	acres	0	0	0	0	0	0	0
IrrEarlySoy	acres	0	0	0	0	0.8	0	0
IrrLateSoy	acres	0	58	0	0	1.4	0	0
IrrCorn	acres	0	398	164.1	0	0	0	330
IrrVeg	acres	77	9	385.1	1	34	92.5	50.6
IrrPas&Hay	acres	838	335	0	137.8	0	0	451.6
IrrPeanut	acres	0	0	0	0	0	0	0
IrrBlueberry	acres	2	10	4.3	0	0	0	0
IrrStrawberry	acres	7	18	8.5	1.4	1.8	0	0
IrrFruit	acres	5	4	0	0	0.8	0	0
Beef Cattle	animals	35600	10000	3733.2	0	0	889.9	114
Dairy Cows	animals	4400	700	649	0	0	0	0
Horses	animals	1903	2620.5	791.2	0	0	241.2	0
Pigs	animals	31700	6000	693	0	0	0	0
Chickens	animals	13275000	0	2085.4	0	0	0	0
Turkeys	animals	0	0	0	0	0	0	0
OtherAnimal	animals	1166	731	1984.4	0	0	0	0

Crop	Units	Johnston	Lenoir	Nash	Person	Pitt	Wayne	Wilson
IrrTobacco	acres	1880	366.6	327.9	134.3	12.2	530	108.5
Turf	acres	37.5	75	0	0	0	0	0
Golf	acres	367.5	22	0	0	364	315	0
ContNurs	acres	11.9	2.9	3.9	0	2.7	5	3.4
FieldNurs	acres	208.8	20	86.2	0	61.9	51	364.1
IrrCotton	acres	0	0	8.5	0	0	0	0
IrrEarlySoy	acres	0	0	0.2	0	0	0	0
IrrLateSoy	acres	0	0	0.2	0	0	0	0
IrrCorn	acres	370.5	414.5	20.2	0	0.7	95.2	0
IrrVeg	acres	87.3	82.3	383.6	0	8	134.7	456.8
IrrPas&Hay	acres	43.1	0	0	0	0	0	401
IrrPeanut	acres	0	0	6.6	0	25.6	0	0
IrrBlueberry	acres	0	0	0	0	0	0	0
IrrStrawberry	acres	21	0	3.2	0.9	0	0	5
IrrFruit	acres	0	0	0.4	0	0	0	0
Beef Cattle	animals	2316.2	327.8	0	2260.8	244.8	1281.9	864.5
Dairy Cows	animals	0	0	0	40	0	0	0
Horses	animals	0	0	0	64.7	5	0	132.8
Pigs	animals	0	0	0	0	0	0	0
Chickens	animals	0	0	0	0	0	0	0
Turkeys	animals	0	0	0	0	0	0	0
OtherAnimal	animals	3295.8	8.5	0	0	7.4	46.6	0

Crop Irrigation Coefficients

Name	Month	Day	Value
IrrCoef_Beef	1	1	12
IrrCoef_Beef	12	31	12
IrrCoef_Blueberry	1	1	0
IrrCoef_Blueberry	2	28	0
IrrCoef_Blueberry	3	1	1
IrrCoef_Blueberry	4	14	1
IrrCoef_Blueberry	4	15	0.178571
IrrCoef_Blueberry	9	30	0.178571
IrrCoef_Blueberry	10	1	0
IrrCoef_Blueberry	12	31	0
IrrCoef_Chicken	1	1	9
IrrCoef_Chicken	12	31	9
IrrCoef_ContNurs	1	1	0.2
IrrCoef_ContNurs	3	31	0.2
IrrCoef_ContNurs	4	1	0.5
IrrCoef_ContNurs	5	31	0.5
IrrCoef_ContNurs	6	1	0.75
IrrCoef_ContNurs	8	31	0.75
IrrCoef_ContNurs	9	1	0.5
IrrCoef_ContNurs	10	31	0.5
IrrCoef_ContNurs	11	1	0.2
IrrCoef_ContNurs	12	31	0.2
IrrCoef_Corn	1	1	0
IrrCoef_Corn	4	23	0
IrrCoef_Corn	5	4	0.02
IrrCoef_Corn	5	14	0.039
IrrCoef_Corn	5	23	0.0543
IrrCoef_Corn	5	24	0.056
IrrCoef_Corn	6	2	0.0722
IrrCoef_Corn	6	3	0.074
IrrCoef_Corn	6	12	0.0974
IrrCoef_Corn	6	13	0.1
IrrCoef_Corn	6	18	0.115
IrrCoef_Corn	6	23	0.1425
IrrCoef_Corn	7	2	0.21675
IrrCoef_Corn	7	3	0.225
IrrCoef_Corn	7	4	0.229
IrrCoef_Corn	7	5	0.233
IrrCoef_Corn	7	6	0.237
IrrCoef_Corn	7	7	0.241
IrrCoef_Corn	7	8	0.245
IrrCoef_Corn	7	9	0.247
IrrCoef_Corn	7	10	0.249
IrrCoef_Corn	7	11	0.251
IrrCoef_Corn	7	12	0.253
IrrCoef_Corn	7	13	0.255
IrrCoef_Corn	7	17	0.261
IrrCoef_Corn	7	18	0.2625
IrrCoef_Corn	7	22	0.2565
IrrCoef_Corn	7	23	0.255
IrrCoef_Corn	8	1	0.23925
IrrCoef_Corn	8	2	0.2375
IrrCoef_Corn	8	11	0.206
IrrCoef_Corn	8	12	0.2025
IrrCoef_Corn	8	21	0.1665
IrrCoef_Corn	8	22	0.1625
IrrCoef_Corn	8	31	0.12875
IrrCoef_Corn	9	1	0.125

Name	Month	Day	Value
IrrCoef_OtherAnimal	1	1	2
IrrCoef_OtherAnimal	12	31	2
IrrCoef_PastHay	1	1	0
IrrCoef_PastHay	4	30	0
IrrCoef_PastHay	5	1	0.142857
IrrCoef_PastHay	9	30	0.142857
IrrCoef_PastHay	10	1	0
IrrCoef_PastHay	12	31	0
IrrCoef_Peanut	1	1	0
IrrCoef_Peanut	5	7	0
IrrCoef_Peanut	5	8	0.00014
IrrCoef_Peanut	5	9	0.00028
IrrCoef_Peanut	5	10	0.00042
IrrCoef_Peanut	5	11	0.00056
IrrCoef_Peanut	5	12	0.0007
IrrCoef_Peanut	5	13	0.00084
IrrCoef_Peanut	5	14	0.00098
IrrCoef_Peanut	5	15	0.00112
IrrCoef_Peanut	5	16	0.00126
IrrCoef_Peanut	5	17	0.0014
IrrCoef_Peanut	5	18	0.0028
IrrCoef_Peanut	5	19	0.0042
IrrCoef_Peanut	5	20	0.0056
IrrCoef_Peanut	5	21	0.007
IrrCoef_Peanut	5	22	0.0084
IrrCoef_Peanut	5	23	0.0098
IrrCoef_Peanut	5	24	0.0112
IrrCoef_Peanut	5	25	0.0126
IrrCoef_Peanut	5	26	0.014
IrrCoef_Peanut	5	27	0.0158
IrrCoef_Peanut	5	28	0.0176
IrrCoef_Peanut	5	29	0.0194
IrrCoef_Peanut	5	30	0.0212
IrrCoef_Peanut	5	31	0.023
IrrCoef_Peanut	6	1	0.0248
IrrCoef_Peanut	6	2	0.0266
IrrCoef_Peanut	6	3	0.0284
IrrCoef_Peanut	6	4	0.0302
IrrCoef_Peanut	6	5	0.032
IrrCoef_Peanut	6	6	0.0338
IrrCoef_Peanut	6	7	0.0356
IrrCoef_Peanut	6	8	0.0374
IrrCoef_Peanut	6	9	0.0392
IrrCoef_Peanut	6	10	0.041
IrrCoef_Peanut	6	11	0.0428
IrrCoef_Peanut	6	12	0.0446
IrrCoef_Peanut	6	13	0.0464
IrrCoef_Peanut	6	14	0.0482
IrrCoef_Peanut	6	15	0.05
IrrCoef_Peanut	6	16	0.0526
IrrCoef_Peanut	6	17	0.0552
IrrCoef_Peanut	6	18	0.0578
IrrCoef_Peanut	6	19	0.0604
IrrCoef_Peanut	6	20	0.063
IrrCoef_Peanut	6	21	0.0656
IrrCoef_Peanut	6	22	0.0682
IrrCoef_Peanut	6	23	0.0708
IrrCoef_Peanut	6	24	0.0734

Name	Month	Day	Value
IrrCoef_Corn	9	10	0.0935
IrrCoef_Corn	9	11	0.09
IrrCoef_Corn	9	20	0.072
IrrCoef_Corn	9	21	0.07
IrrCoef_Corn	9	30	0.061
IrrCoef_Corn	10	1	0.06
IrrCoef_Corn	10	12	0.050833
IrrCoef_Corn	10	13	0.05
IrrCoef_Corn	10	14	0
IrrCoef_Corn	12	31	0
IrrCoef_Cotton	1	1	0
IrrCoef_Cotton	5	7	0
IrrCoef_Cotton	5	8	0.001
IrrCoef_Cotton	5	9	0.002
IrrCoef_Cotton	5	30	0.0288
IrrCoef_Cotton	5	31	0.0304
IrrCoef_Cotton	6	1	0.032
IrrCoef_Cotton	6	2	0.0336
IrrCoef_Cotton	6	3	0.0352
IrrCoef_Cotton	6	4	0.0368
IrrCoef_Cotton	6	5	0.0384
IrrCoef_Cotton	6	6	0.04
IrrCoef_Cotton	6	7	0.0417
IrrCoef_Cotton	6	8	0.0434
IrrCoef_Cotton	6	9	0.0451
IrrCoef_Cotton	6	10	0.0468
IrrCoef_Cotton	6	11	0.0485
IrrCoef_Cotton	6	12	0.0502
IrrCoef_Cotton	6	13	0.0519
IrrCoef_Cotton	6	14	0.0536
IrrCoef_Cotton	6	15	0.0553
IrrCoef_Cotton	6	16	0.057
IrrCoef_Cotton	6	17	0.0587
IrrCoef_Cotton	6	18	0.0604
IrrCoef_Cotton	6	19	0.0621
IrrCoef_Cotton	6	20	0.0638
IrrCoef_Cotton	6	21	0.0655
IrrCoef_Cotton	6	22	0.0672
IrrCoef_Cotton	6	23	0.0689
IrrCoef_Cotton	6	24	0.0706
IrrCoef_Cotton	6	25	0.0723
IrrCoef_Cotton	6	26	0.074
IrrCoef_Cotton	6	27	0.0764
IrrCoef_Cotton	6	28	0.0788
IrrCoef_Cotton	6	29	0.0812
IrrCoef_Cotton	6	30	0.0836
IrrCoef_Cotton	7	1	0.086
IrrCoef_Cotton	7	2	0.0884
IrrCoef_Cotton	7	3	0.0908
IrrCoef_Cotton	7	4	0.0932
IrrCoef_Cotton	7	5	0.0956
IrrCoef_Cotton	7	6	0.098
IrrCoef_Cotton	7	7	0.1009
IrrCoef_Cotton	7	8	0.1038
IrrCoef_Cotton	7	9	0.1067
IrrCoef_Cotton	7	10	0.1096
IrrCoef_Cotton	7	11	0.1125
IrrCoef_Cotton	7	12	0.1175
IrrCoef_Cotton	7	13	0.1225
IrrCoef_Cotton	7	14	0.1275

Name	Month	Day	Value
IrrCoef_Peanut	6	25	0.076
IrrCoef_Peanut	6	26	0.07915
IrrCoef_Peanut	6	27	0.0823
IrrCoef_Peanut	6	28	0.08545
IrrCoef_Peanut	6	29	0.0886
IrrCoef_Peanut	6	30	0.09175
IrrCoef_Peanut	7	1	0.0949
IrrCoef_Peanut	7	2	0.09805
IrrCoef_Peanut	7	3	0.1012
IrrCoef_Peanut	7	4	0.10435
IrrCoef_Peanut	7	5	0.1075
IrrCoef_Peanut	7	6	0.113
IrrCoef_Peanut	7	7	0.1185
IrrCoef_Peanut	7	8	0.124
IrrCoef_Peanut	7	9	0.1295
IrrCoef_Peanut	7	10	0.135
IrrCoef_Peanut	7	11	0.1405
IrrCoef_Peanut	7	12	0.146
IrrCoef_Peanut	7	13	0.1515
IrrCoef_Peanut	7	14	0.157
IrrCoef_Peanut	7	15	0.1625
IrrCoef_Peanut	7	16	0.168
IrrCoef_Peanut	7	17	0.1735
IrrCoef_Peanut	7	18	0.179
IrrCoef_Peanut	7	19	0.1845
IrrCoef_Peanut	7	20	0.19
IrrCoef_Peanut	7	21	0.1955
IrrCoef_Peanut	7	22	0.201
IrrCoef_Peanut	7	23	0.2065
IrrCoef_Peanut	7	24	0.212
IrrCoef_Peanut	7	25	0.2175
IrrCoef_Peanut	7	26	0.22
IrrCoef_Peanut	7	27	0.2225
IrrCoef_Peanut	7	28	0.225
IrrCoef_Peanut	7	29	0.2275
IrrCoef_Peanut	7	30	0.23
IrrCoef_Peanut	7	31	0.2325
IrrCoef_Peanut	8	1	0.235
IrrCoef_Peanut	8	2	0.2375
IrrCoef_Peanut	8	3	0.24
IrrCoef_Peanut	8	4	0.2425
IrrCoef_Peanut	8	5	0.243
IrrCoef_Peanut	8	6	0.2435
IrrCoef_Peanut	8	7	0.244
IrrCoef_Peanut	8	8	0.2445
IrrCoef_Peanut	8	9	0.245
IrrCoef_Peanut	8	10	0.2455
IrrCoef_Peanut	8	11	0.246
IrrCoef_Peanut	8	12	0.2465
IrrCoef_Peanut	8	13	0.247
IrrCoef_Peanut	8	14	0.2475
IrrCoef_Peanut	8	15	0.247
IrrCoef_Peanut	8	16	0.2465
IrrCoef_Peanut	8	17	0.246
IrrCoef_Peanut	8	18	0.2455
IrrCoef_Peanut	8	19	0.245
IrrCoef_Peanut	8	20	0.2445
IrrCoef_Peanut	8	21	0.244
IrrCoef_Peanut	8	22	0.2435
IrrCoef_Peanut	8	23	0.243

Name	Month	Day	Value
IrrCoef_Cotton	7	15	0.1325
IrrCoef_Cotton	7	16	0.1375
IrrCoef_Cotton	7	17	0.145
IrrCoef_Cotton	7	18	0.1525
IrrCoef_Cotton	7	19	0.16
IrrCoef_Cotton	7	20	0.1675
IrrCoef_Cotton	7	21	0.175
IrrCoef_Cotton	7	22	0.1825
IrrCoef_Cotton	7	23	0.19
IrrCoef_Cotton	7	24	0.1975
IrrCoef_Cotton	7	25	0.205
IrrCoef_Cotton	7	26	0.2125
IrrCoef_Cotton	7	27	0.2175
IrrCoef_Cotton	7	28	0.2225
IrrCoef_Cotton	7	29	0.2275
IrrCoef_Cotton	7	30	0.2325
IrrCoef_Cotton	7	31	0.2375
IrrCoef_Cotton	8	1	0.24
IrrCoef_Cotton	8	2	0.2425
IrrCoef_Cotton	8	3	0.245
IrrCoef_Cotton	8	4	0.2475
IrrCoef_Cotton	8	5	0.25
IrrCoef_Cotton	8	6	0.25
IrrCoef_Cotton	8	7	0.25
IrrCoef_Cotton	8	8	0.25
IrrCoef_Cotton	8	9	0.25
IrrCoef_Cotton	8	10	0.25
IrrCoef_Cotton	8	11	0.25
IrrCoef_Cotton	8	12	0.25
IrrCoef_Cotton	8	13	0.25
IrrCoef_Cotton	8	14	0.25
IrrCoef_Cotton	8	15	0.25
IrrCoef_Cotton	8	16	0.2485
IrrCoef_Cotton	8	17	0.247
IrrCoef_Cotton	8	18	0.2455
IrrCoef_Cotton	8	19	0.244
IrrCoef_Cotton	8	20	0.2425
IrrCoef_Cotton	8	21	0.241
IrrCoef_Cotton	8	22	0.2395
IrrCoef_Cotton	8	23	0.238
IrrCoef_Cotton	8	24	0.2365
IrrCoef_Cotton	8	25	0.235
IrrCoef_Cotton	8	26	0.232
IrrCoef_Cotton	8	27	0.229
IrrCoef_Cotton	8	28	0.226
IrrCoef_Cotton	8	29	0.223
IrrCoef_Cotton	8	30	0.22
IrrCoef_Cotton	8	31	0.217
IrrCoef_Cotton	9	1	0.214
IrrCoef_Cotton	9	2	0.211
IrrCoef_Cotton	9	3	0.208
IrrCoef_Cotton	9	4	0.205
IrrCoef_Cotton	9	5	0.202
IrrCoef_Cotton	9	6	0.199
IrrCoef_Cotton	9	7	0.196
IrrCoef_Cotton	9	8	0.193
IrrCoef_Cotton	9	9	0.19
IrrCoef_Cotton	9	10	0.187
IrrCoef_Cotton	9	11	0.184
IrrCoef_Cotton	9	12	0.181

Name	Month	Day	Value
IrrCoef_Peanut	8	24	0.2425
IrrCoef_Peanut	8	25	0.24075
IrrCoef_Peanut	8	26	0.239
IrrCoef_Peanut	8	27	0.23725
IrrCoef_Peanut	8	28	0.2355
IrrCoef_Peanut	8	29	0.23375
IrrCoef_Peanut	8	30	0.232
IrrCoef_Peanut	8	31	0.23025
IrrCoef_Peanut	9	1	0.2285
IrrCoef_Peanut	9	2	0.22675
IrrCoef_Peanut	9	3	0.225
IrrCoef_Peanut	9	4	0.22275
IrrCoef_Peanut	9	5	0.2205
IrrCoef_Peanut	9	6	0.21825
IrrCoef_Peanut	9	7	0.216
IrrCoef_Peanut	9	8	0.21375
IrrCoef_Peanut	9	9	0.2115
IrrCoef_Peanut	9	10	0.20925
IrrCoef_Peanut	9	11	0.207
IrrCoef_Peanut	9	12	0.20475
IrrCoef_Peanut	9	13	0.2025
IrrCoef_Peanut	9	14	0.19975
IrrCoef_Peanut	9	15	0.197
IrrCoef_Peanut	9	16	0.19425
IrrCoef_Peanut	9	17	0.1915
IrrCoef_Peanut	9	18	0.18875
IrrCoef_Peanut	9	19	0.186
IrrCoef_Peanut	9	20	0.18325
IrrCoef_Peanut	9	21	0.1805
IrrCoef_Peanut	9	22	0.17775
IrrCoef_Peanut	9	23	0.175
IrrCoef_Peanut	9	24	0.1725
IrrCoef_Peanut	9	25	0.17
IrrCoef_Peanut	9	26	0.1675
IrrCoef_Peanut	9	27	0.165
IrrCoef_Peanut	9	28	0.1625
IrrCoef_Peanut	9	29	0.16
IrrCoef_Peanut	9	30	0.1575
IrrCoef_Peanut	10	1	0.155
IrrCoef_Peanut	10	2	0.1525
IrrCoef_Peanut	10	3	0.15
IrrCoef_Peanut	10	4	0.14775
IrrCoef_Peanut	10	5	0.1455
IrrCoef_Peanut	10	6	0.14325
IrrCoef_Peanut	10	7	0.141
IrrCoef_Peanut	10	8	0.13875
IrrCoef_Peanut	10	9	0.1365
IrrCoef_Peanut	10	10	0.13425
IrrCoef_Peanut	10	11	0.132
IrrCoef_Peanut	10	12	0.12975
IrrCoef_Peanut	10	13	0.1275
IrrCoef_Peanut	10	14	0.126
IrrCoef_Peanut	10	15	0.1245
IrrCoef_Peanut	10	16	0.123
IrrCoef_Peanut	10	17	0.1215
IrrCoef_Peanut	10	18	0.12
IrrCoef_Peanut	10	19	0.1185
IrrCoef_Peanut	10	20	0.117
IrrCoef_Peanut	10	21	0.1155
IrrCoef_Peanut	10	22	0.114

Name	Month	Day	Value
IrrCoef_Cotton	9	13	0.178
IrrCoef_Cotton	9	14	0.175
IrrCoef_Cotton	9	15	0.1725
IrrCoef_Cotton	9	16	0.17
IrrCoef_Cotton	9	17	0.1675
IrrCoef_Cotton	9	18	0.165
IrrCoef_Cotton	9	19	0.1625
IrrCoef_Cotton	9	20	0.16
IrrCoef_Cotton	9	21	0.1575
IrrCoef_Cotton	9	22	0.155
IrrCoef_Cotton	9	23	0.1525
IrrCoef_Cotton	9	24	0.15
IrrCoef_Cotton	9	25	0.1475
IrrCoef_Cotton	9	26	0.145
IrrCoef_Cotton	9	27	0.1425
IrrCoef_Cotton	9	28	0.14
IrrCoef_Cotton	9	29	0.1375
IrrCoef_Cotton	9	30	0.135
IrrCoef_Cotton	10	1	0.1325
IrrCoef_Cotton	10	2	0.13
IrrCoef_Cotton	10	3	0.1275
IrrCoef_Cotton	10	4	0.125
IrrCoef_Cotton	10	5	0.12275
IrrCoef_Cotton	10	6	0.1205
IrrCoef_Cotton	10	7	0.11825
IrrCoef_Cotton	10	8	0.116
IrrCoef_Cotton	10	9	0.11375
IrrCoef_Cotton	10	10	0.1115
IrrCoef_Cotton	10	11	0.10925
IrrCoef_Cotton	10	12	0.107
IrrCoef_Cotton	10	13	0.10475
IrrCoef_Cotton	10	14	0.1025
IrrCoef_Cotton	10	15	0
IrrCoef_Cotton	12	31	0
IrrCoef_Cotton	5	10	0.003
IrrCoef_Cotton	5	11	0.004
IrrCoef_Cotton	5	12	0.005
IrrCoef_Cotton	5	13	0.006
IrrCoef_Cotton	5	14	0.007
IrrCoef_Cotton	5	15	0.008
IrrCoef_Cotton	5	16	0.009
IrrCoef_Cotton	5	17	0.01
IrrCoef_Cotton	5	18	0.0114
IrrCoef_Cotton	5	19	0.0128
IrrCoef_Cotton	5	20	0.0142
IrrCoef_Cotton	5	21	0.0156
IrrCoef_Cotton	5	22	0.017
IrrCoef_Cotton	5	23	0.0184
IrrCoef_Cotton	5	24	0.0198
IrrCoef_Cotton	5	25	0.0212
IrrCoef_Cotton	5	26	0.0226
IrrCoef_Cotton	5	27	0.024
IrrCoef_Cotton	5	28	0.0256
IrrCoef_Cotton	5	29	0.0272
IrrCoef_Dairy	1	1	40
IrrCoef_Dairy	12	31	40
IrrCoef_EarlySoy	1	1	0
IrrCoef_EarlySoy	5	20	0
IrrCoef_EarlySoy	5	21	0.001
IrrCoef_EarlySoy	5	30	0.01

Name	Month	Day	Value
IrrCoef_Peanut	10	23	0.1125
IrrCoef_Peanut	10	24	0.110417
IrrCoef_Peanut	10	25	0.108333
IrrCoef_Peanut	10	26	0.10625
IrrCoef_Peanut	10	27	0.104167
IrrCoef_Peanut	10	28	0.102083
IrrCoef_Peanut	10	29	0.1
IrrCoef_Peanut	10	30	0
IrrCoef_Peanut	12	31	0
IrrCoef_Pig	1	1	4
IrrCoef_Pig	12	31	4
IrrCoef_Strawberry	1	1	0
IrrCoef_Strawberry	2	28	0
IrrCoef_Strawberry	3	1	1
IrrCoef_Strawberry	3	31	1
IrrCoef_Strawberry	4	1	0.178571
IrrCoef_Strawberry	5	31	0.178571
IrrCoef_Strawberry	6	1	0
IrrCoef_Strawberry	9	14	0
IrrCoef_Strawberry	9	15	0.178571
IrrCoef_Strawberry	9	30	0.178571
IrrCoef_Strawberry	10	1	1
IrrCoef_Strawberry	11	15	1
IrrCoef_Strawberry	11	16	0
IrrCoef_Strawberry	12	31	0
IrrCoef_Tobacco	1	1	0
IrrCoef_Tobacco	5	20	0
IrrCoef_Tobacco	5	21	0.06
IrrCoef_Tobacco	6	10	0.06
IrrCoef_Tobacco	6	11	0.062
IrrCoef_Tobacco	6	12	0.064
IrrCoef_Tobacco	6	22	0.083333
IrrCoef_Tobacco	6	23	0.086667
IrrCoef_Tobacco	6	24	0.09
IrrCoef_Tobacco	6	25	0.0933
IrrCoef_Tobacco	6	26	0.0967
IrrCoef_Tobacco	6	27	0.1
IrrCoef_Tobacco	6	28	0.10625
IrrCoef_Tobacco	6	29	0.1125
IrrCoef_Tobacco	6	30	0.11875
IrrCoef_Tobacco	7	1	0.125
IrrCoef_Tobacco	7	2	0.133333
IrrCoef_Tobacco	7	3	0.141667
IrrCoef_Tobacco	7	4	0.15
IrrCoef_Tobacco	7	5	0.155625
IrrCoef_Tobacco	7	6	0.16125
IrrCoef_Tobacco	7	7	0.166875
IrrCoef_Tobacco	7	8	0.1725
IrrCoef_Tobacco	7	9	0.18
IrrCoef_Tobacco	7	10	0.1875
IrrCoef_Tobacco	7	11	0.195
IrrCoef_Tobacco	7	12	0.200625
IrrCoef_Tobacco	7	13	0.20625
IrrCoef_Tobacco	7	14	0.211875
IrrCoef_Tobacco	7	15	0.2175
IrrCoef_Tobacco	7	18	0.2325
IrrCoef_Tobacco	7	23	0.24
IrrCoef_Tobacco	7	24	0.241667
IrrCoef_Tobacco	7	25	0.243333
IrrCoef_Tobacco	7	26	0.245

Name	Month	Day	Value
IrrCoef_EarlySoy	5	31	0.012
IrrCoef_EarlySoy	6	19	0.05
IrrCoef_EarlySoy	6	29	0.075
IrrCoef_EarlySoy	7	9	0.11
IrrCoef_EarlySoy	7	19	0.16
IrrCoef_EarlySoy	7	29	0.2025
IrrCoef_EarlySoy	8	8	0.2375
IrrCoef_EarlySoy	8	18	0.2525
IrrCoef_EarlySoy	8	28	0.2475
IrrCoef_EarlySoy	9	7	0.21
IrrCoef_EarlySoy	9	27	0.09
IrrCoef_EarlySoy	10	7	0.059
IrrCoef_EarlySoy	10	17	0.034
IrrCoef_EarlySoy	10	27	0.019
IrrCoef_EarlySoy	10	28	0
IrrCoef_EarlySoy	12	31	0
IrrCoef_FieldNurs	1	1	0
IrrCoef_FieldNurs	4	30	0
IrrCoef_FieldNurs	5	1	0.178571
IrrCoef_FieldNurs	10	31	0.178571
IrrCoef_FieldNurs	11	1	0
IrrCoef_FieldNurs	12	31	0
IrrCoef_Fruit	1	1	0
IrrCoef_Fruit	2	28	0
IrrCoef_Fruit	3	1	1.214286
IrrCoef_Fruit	4	15	1.214286
IrrCoef_Fruit	4	16	0.178571
IrrCoef_Fruit	8	31	0.178571
IrrCoef_Fruit	9	1	0
IrrCoef_Fruit	12	31	0
IrrCoef_Golf	1	1	0.0145
IrrCoef_Golf	3	31	0.0145
IrrCoef_Golf	4	1	0.081429
IrrCoef_Golf	10	31	0.081429
IrrCoef_Golf	11	1	0.0145
IrrCoef_Golf	12	31	0.0145
IrrCoef_Horse	1	1	12
IrrCoef_Horse	12	31	12
IrrCoef_LateSoy	1	1	0
IrrCoef_LateSoy	6	20	0
IrrCoef_LateSoy	6	21	0.001
IrrCoef_LateSoy	6	30	0.01
IrrCoef_LateSoy	7	1	0.012
IrrCoef_LateSoy	7	20	0.05
IrrCoef_LateSoy	7	30	0.075
IrrCoef_LateSoy	8	9	0.11
IrrCoef_LateSoy	8	19	0.16
IrrCoef_LateSoy	8	29	0.2025
IrrCoef_LateSoy	9	8	0.2375
IrrCoef_LateSoy	9	18	0.2525
IrrCoef_LateSoy	9	28	0.2475
IrrCoef_LateSoy	10	8	0.21
IrrCoef_LateSoy	10	28	0.09
IrrCoef_LateSoy	11	7	0.059
IrrCoef_LateSoy	11	17	0.034
IrrCoef_LateSoy	11	27	0.019
IrrCoef_LateSoy	11	28	0
IrrCoef_LateSoy	12	31	0

Name	Month	Day	Value
IrrCoef_Tobacco	7	30	0.24
IrrCoef_Tobacco	7	31	0.235
IrrCoef_Tobacco	8	1	0.23
IrrCoef_Tobacco	8	2	0.225
IrrCoef_Tobacco	8	3	0.219375
IrrCoef_Tobacco	8	4	0.21375
IrrCoef_Tobacco	8	5	0.208125
IrrCoef_Tobacco	8	6	0.2025
IrrCoef_Tobacco	8	7	0.193333
IrrCoef_Tobacco	8	8	0.184167
IrrCoef_Tobacco	8	9	0.175
IrrCoef_Tobacco	8	10	0.17
IrrCoef_Tobacco	8	11	0.165
IrrCoef_Tobacco	8	12	0.16
IrrCoef_Tobacco	8	13	0.155
IrrCoef_Tobacco	8	14	0.1475
IrrCoef_Tobacco	8	18	0.125
IrrCoef_Tobacco	8	19	0.12125
IrrCoef_Tobacco	8	20	0.1175
IrrCoef_Tobacco	8	21	0.113333
IrrCoef_Tobacco	8	22	0.109167
IrrCoef_Tobacco	8	23	0.105
IrrCoef_Tobacco	8	24	0.10125
IrrCoef_Tobacco	8	25	0.0975
IrrCoef_Tobacco	8	26	0.09375
IrrCoef_Tobacco	8	27	0.09
IrrCoef_Tobacco	8	28	0.089
IrrCoef_Tobacco	8	29	0.088
IrrCoef_Tobacco	9	6	0.08
IrrCoef_Tobacco	9	7	0
IrrCoef_Tobacco	12	31	0
IrrCoef_Turf	1	1	0
IrrCoef_Turf	4	14	0
IrrCoef_Turf	4	15	0.178571
IrrCoef_Turf	10	15	0.178571
IrrCoef_Turf	10	16	0
IrrCoef_Turf	12	31	0
IrrCoef_Turkey	1	1	9
IrrCoef_Turkey	12	31	9
IrrCoef_Veg	1	1	0
IrrCoef_Veg	3	31	0
IrrCoef_Veg	4	1	0.178571
IrrCoef_Veg	8	15	0.178571
IrrCoef_Veg	8	16	0.142857
IrrCoef_Veg	10	31	0.142857
IrrCoef_Veg	11	1	0
IrrCoef_Veg	12	31	0

main.ocl

```
:INCLUDE: OCL\constants.ocl
:INCLUDE: OCL\Forecast-Trigger_Parms.ocl
:Static: statdata.mdb
:Time:   [HomeDir]\basedata\basedata.dss

:if: {[UseForecast]=1}
   :if: {[ForecastData]=cond}
      :Time:   [HomeDir]\basedata\forecasts_cond.dss
   :else:
      :Time:   [HomeDir]\basedata\forecasts_non_cond.dss
   :endif:
:endif:

:if: {[Drought_Plans_On] = 1}
   :Time:   [HomeDir]\basedata\forecasts_non_cond.dss
:endif:

:MODULE: DLL  AgricDem = modules\AgricDem.DLL


:Include: ocl\udef_list.ocl

:Commands:

// For both basins

:Include: ocl\Agric_Calculation.ocl
:Include: ocl\Agric_Allocation.ocl
:Include: ocl\filter_inflows.ocl

// For the Cape Fear

/* :Include: ocl\user_def_ops.ocl */

:Include: ocl\routing_cf.ocl
:Include: ocl\Harris_ops.ocl
:Include: ocl\drought_protocol_jordan.ocl
:Include: ocl\Greensboro_ops.ocl
:Include: ocl\owasa_ops.ocl
:Include: ocl\Jordan_ops.ocl
:Include: ocl\Randleman_ops.ocl
:Include: ocl\SilerCity_ops.ocl
:Include: ocl\Fayetteville_ops.ocl
:Include: ocl\FtBragg_ops.ocl
:Include: ocl\SpringLake_ops.ocl
:Include: ocl\drought_plans_cf.ocl
:Include: ocl\WW_Returns.ocl

// For the Neuse

:Include: ocl\routing_neuse.ocl
:Include: ocl\crabtree_ops.ocl
:Include: ocl\upper_eno_ops.ocl
:Include: ocl\durham_ops.ocl
:Include: ocl\falls_bdam_ops.ocl
:Include: ocl\falls_flood_ops.ocl
:Include: ocl\raleigh_ops.ocl
:Include: ocl\Johnston_ops.ocl
:Include: ocl\Fuquay_ops.ocl
:Include: ocl\buckhorn_Wilson_ops.ocl
:Include: ocl\drought_plans_neuse.ocl


// Misc. Cape Fear Ops.

// Set Cape Fear Arcs/Interconnects not used in basecase to zero
Constraint : {dFlow0071.0075 = 0}  // Haw R. Burl. WS
Constraint : {dFlow0075.0072 = 0}  // Haw R. Burl. WW
```

```
Constraint : {dFlow0075.1046 = 0}  // Haw R. Or-Ala WW
Constraint : {dFlow0321.0077 = 0}  // Green Level Gr-Meb WS
Constraint : {dFlow0077.0072 = 0}  // Green Level Burl WW
Constraint : {dFlow0479.0923 = 0}  // JL Holly Springs
Constraint : {dFlow0921.0321 = 0}  // Orange Co. Gr-Meb
Constraint : {dFlow0921.1106 = 0}  // Orange Co. Hills
Constraint : {dFlow0921.1162 = 0}  // Orange Co. Durham

// Misc. Neuse Ops.

/*  Set demands not used in basecase run to zero */
Set :  demand1318  {  value :  0 } /* Old Burlington Industries */

/*  Set interconnects not used in basecase run to zero */
Constraint : {dFlow1300.0471 = 0}  /* Raleigh-Cary Interconnect */
Constraint : {dFlow1300.0923 = 0}  /* Raleigh-Holly Springs Interconnect */

/* Set Creedmor WD from L. Rogers to zero - currently buying water from SGWASA */
Constraint : {dFlow1270.1258 = 0}

/*  Set inflows not used in basecase run to zero*/
Set : inflow1252  {  value :  0 } /* Kerr Lake indirect transfer*/
Set : inflow1403  {  value :  0 } /* Quarry dewatering */
Set : inflow1528  {  value :  0 } /* Tar River transfer */


// Solve model

Solve : {Priority : 1}


//  Compute the Falls/Beaverdam Jordan water quality and supply accounting after the SOLVE statement

:Include:   ocl\Falls_Bdam_WQ_WS_accounts.ocl
:Include:   ocl\Jordan_WQ_WS_Accounts.ocl


:End:
```

udef_list.ocl

```
:Udef:

// --------------------------


/* Udefs for inflow filtering */
:For:
{   [node] = {          0020, 0040, 0070, 0090, 0300, 0310, 0324, 0325, 0590, 0760, 0110, 0140, 0145, 0170, 0210, 0220,
0260, 0270, 0280, 0340, 0380, 0400, 0430, 0450, 0470,
                                        0495, 0520, 0527, 0550, 0640, 0700, 0780, 0820, 1010, 1050, 1060, 1080, 1100,
1110, 1115, 1250, 1270, 1290, 1420, 1440, 1445, 1450, 1480, 1500, 1560,
                                        1630, 1740, 1780, 1800, 1900, 0044, 0112, 0120, 0328, 0570, 0580, 0600, 0610,
0660, 0680, 0720, 0730, 0770, 0790, 1205, 1320, 1405, 1409, 1471, 1520,
                                        1600, 1620, 1650, 1660, 1700, 1747, 1750, 1755, 1760, 1775, 1795, 1570, 1850,
1999 }
}
   Udef : _TempInf[node]
   Udef : _InfDeficit[node]  init{0}
:Next:

/* Udefs for Crabtree inflow filtering */
Udef : _TempInfCrabtree
Udef : _TotInfCrabtree
Udef : _InfDeficitCrabtree  init{0}


// For Harris Ops
Udef :  _Proj_Harris_Storage
Udef :  _Proj_Harris_Elev

Udef : _30day_Harris_Spill
Udef : _Avg_30day_Harris_Inflow
Udef : _Harris_Baseflow
Udef : _TransferPumps

// For Siler City operations
Udef : _SilerCity_UsableStor init {5348.79}
Udef : _SilerCity_UsableStorPct init {1}
Udef : _SilerCityTrig2
Udef : _SilerCityTrig3
Udef : _Tier_MinRelease

// Use for the Jordan Lake drought protocol

Udef :  _JLake_Inflow    init {0}
Udef :  _Avg_JLake_Inflow
Udef :  _WQZone
Udef :  _Drought_Stage
Udef :  _Level_Drawdown

// FOR:NEXT loop to declare udefs
:FOR: { [level_num] = { 1, 2, 3, 4 } }

            Udef :  _Trigger_[level_num]_On          init {[Trigger_[level_num]_On]}
            Udef :  _Count_Trigger_[level_num]       init {0}
            Udef :  _Total_Count_Trigger_[level_num] init {0}
            Udef :  _CumDayWithinInt_[level_num]    init {0}
            Udef :  _Lill_Target_[level_num]                    init {0}
            Udef :  _Ph_[level_num]_event_count                 init {0}

:NEXT:

// Jordan hydropower generation
Udef : _Jordan_hydropower

// ------------------

/*  For the agricultural demand computations */
```

```
// FOR:NEXT loop to declare udefs
:FOR: { [county] = { 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21,
          22, 23, 24, 25, 26, 27, 28, 29, 30, 31  } }

             Udef : dem[county]

:NEXT:

// ----------------------

/*  Udefs for the Jordan Lake pool allocation */

Udef :  _JLakeInf
Udef :  _JLake_WQ_Inf
Udef :  _JLake_WS_Inf
Udef :  _Inf_avail_to_WS_pool
Udef :  _Inf_used_for_WS_pool
Udef :  _WS_Total_Demand
Udef :  _WS_Total_Deliv


// FOR:NEXT loop to declare udefs
             :FOR: {  [accounts] = { CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly }  }

                          Udef :  _Req_Refill_[Accounts]
                          Udef :  _Inf_[Accounts]
                          Udef :  _Rem_def_[Accounts]
                          Udef :  _Rem_Inf_[Accounts]
                          Udef :  _Inf_Total_[Accounts]
                          Udef :  _Storage_[Accounts]     init{ [Starting_Storage_[Accounts]] }
                          Udef :  _Stor_Final_[Accounts]
                          Udef :  _Stor_Final_Pct_[Accounts]

             :NEXT:

Udef :  _Inf_Rem_WS
Udef :  _Rem_def_Total

Udef :  _Total_WS_Storage
Udef :  _Req_Refill_WS_Pool
Udef :  _WS_Pool_Excess
Udef :  _WQ_Release
Udef :  _WQ_Storage   init {[Starting_WQ_Storage]}
Udef :  _WQ_Storage_Pct
Udef :  _Req_Refill_WQ
Udef :  _WQ_Pool_Excess


// FOR THE NEUSE
//
//

/*  Udefs for cumulative tracking variables */
Udef :  _CumWSupplyDemand   init {0}
Udef :  _CumWSupplyDelivery init {0}
Udef :  _CumWWReturn        init {0}
Udef :  _CumWSupplyWWReturn init {0}

/*  Udefs for Eno operations */
Udef :  _Orange_streamflow  init {3.376} /* Initially set to 1.1 mgd*/
Udef :  _Eno_Channel_Loss   init {0}
Udef :  _Max_Hills_WD       init {4.634} /* Initially set to 1.51 mgd */
Udef :  _Max_OrAl_WD        init {2.157} /* Initially set to 0.82 mgd */
Udef :  _Max_Pied_WD        init {1.320} /* Initially set to 0.43 mgd */
Udef :  _WFER_Tier          init {1}

/*  For proportional drawdown for Durham*/
Udef : _StorRatio   Decision { 0 , unbounded }
Udef : _StorRatio2  Decision { 0 , unbounded }
```

```
/*  Udef for Local Clayton Inflow for Falls Flood control */
Udef : _ClaytLocal init {0}

/*  Udefs for Falls/Clayton minimum flow */
Udef : ClaytonTarget_Override
Udef : ClaytonTarget_SafeFact
Udef : FLake_WQ_Threshold
Udef : FLakeMin_SafeFact

/*  Udefs for Raleigh system storage pct. - only used when Swift
    Creek WD being used. */
UDef : _Raleigh_Sys_Stor_Pct

/*  Udefs for the Falls and Beaverdam pool allocation */
Udef :  _Pct_Max_WQ_Storage
Udef :  _Pct_Max_WS_Storage
Udef :  _FLake_Max_WQ_Storage
Udef :  _FLake_Max_WS_Storage
Udef :  _Bdam_Max_WQ_Storage
Udef :  _Bdam_Max_WS_Storage
Udef :  _Bdam_Inf
Udef :  _Bdam_Inf_WS
Udef :  _Bdam_WS_Rel
Udef :  _Bdam_WS_Stor_Init
Udef :  _Bdam_WStoWQ_Spill
Udef :  _Bdam_Inf_WQ
Udef :  _Bdam_WQ_Rel
Udef :  _Bdam_WQ_Stor       init {[Bdam_WQ_Stor]  }
Udef :  _Bdam_WQtoWS_Spill
Udef :  _Bdam_WS_Stor       init {[Bdam_WS_Stor]  }
Udef :  _FLake_Inf
Udef :  _FLake_Inf_WS
Udef :  _Flake_WS_Rel
Udef :  _FLake_WS_Stor_Init
Udef :  _FLake_WStoWQ_Spill
Udef :  _FLake_Inf_WQ
Udef :  _Flake_WQ_Rel
Udef :  _FLake_WQ_Stor      init {[FLake_WQ_Stor] }
Udef :  _Total_WQ_Stor
Udef :  _FLake_WQtoWS_Spill
Udef :  _FLake_WS_Stor      init {[FLake_WS_Stor] }
Udef :  _Total_WS_Stor
Udef :  _Bdam_WS_Pct
Udef :  _Bdam_WQ_Pct
Udef :  _FLake_WS_Pct
Udef :  _FLake_WQ_Pct
Udef :  _Total_WS_Pct
Udef :  _Total_WQ_Pct


Udef :  _WtAvgRunoff

// Set usable storage & DSR udefs for drought plans
Udef : _OWASA_Max_Usable_Stor
Udef : _OWASA_Usable_Stor
Udef : _OWASA_Usable_Stor_Pct init {100}


Udef : _Burl_Max_Usable_Stor
Udef : _Burl_Usable_Stor
Udef : _Burl_Usable_Stor_Pct init {100}

Udef : _Gree_Max_Usable_Stor
Udef : _Gree_Usable_Stor
Udef : _Gree_Usable_Stor_Pct init {100}
Udef : _Gree_DSR

Udef : _High_Max_Usable_Stor
Udef : _High_Usable_Stor
```

```
Udef : _High_Usable_Stor_Pct init {100}

Udef : _Reid_Max_Usable_Stor
Udef : _Reid_Usable_Stor
Udef : _Reid_Usable_Stor_Pct init {100}
Udef : _Reid_DSR

Udef : _Rams_Max_Usable_Stor
Udef : _Rams_Usable_Stor
Udef : _Rams_Usable_Stor_Pct init {100}

Udef : _GramMeb_Max_Usable_Stor
Udef : _GramMeb_Usable_Stor
Udef : _GramMeb_Usable_Stor_Pct init {100}
Udef : _GramMeb_DSR

Udef : _Siler_Max_Usable_Stor
Udef : _Siler_Usable_Stor
Udef : _Siler_Usable_Stor_Pct init {100}

Udef : _Cary_DSR

Udef : _ChatNo_Usable_Stor_Pct init {100}

Udef : _Durham_add_sources init {0}
Udef : _Durham_usable_stor
Udef : _Max_Durham_usable_stor
Udef : _Durham_usable_pct


// Udefs for drought plan triggers
:FOR: { [Util] = { Burl, Burl1, Burl2, Gree, Gree1, Gree2, High, Reid, Rams, GramMeb, Siler, Cary, RTP, Morris, ChatNo,
Dunn, Carth, Ral, Durham, SGWASA, Wilson } }

:FOR: { [level_num] = { 1, 2, 3, 4, 5, 6 } }

   Udef :  _[Util]_Consvn_[level_num]_Demand

   Udef :  _[Util]_Trigger_[level_num]_On          init {0}
            Udef :  _[Util]_Stage_[level_num]_counter              init {0}
            Udef :  _[Util]_Ph_[level_num]_event_counter    init {0}

:NEXT:

:NEXT:

Udef : _CaryApex_WW_Consvn init{1}

:FOR: { [level_num] = { 1, 2, 3 } }

   Udef :  _OWASA_ProjInflow[level_num]
   Udef :  _OWASA_ProjDemand[level_num]
   Udef :  _OWASA_ProjMinFlow[level_num]
   Udef :  _OWASA_ProjEvap[level_num]
   Udef :  _OWASA_ProjStorage[level_num]
   Udef :  _OWASA_ProjStorage_Pct[level_num]

   Udef :  _OWASA_Consvn_[level_num]_Demand

   Udef :  _OWASA_Trigger_[level_num]_On          init {0}
            Udef :  _OWASA_Stage_[level_num]_counter         init {0}
            Udef :  _OWASA_Ph_[level_num]_event_counter     init {0}

:NEXT:

// Udefs for the Cary/Apex WW system
Udef : _CaryApexWW
Udef : _RTPWW
Udef : _MorrisWW
Udef : _CarySystemWW
```

```
// Allocate the total to the various discharge points, assigning monthly patterns and conservation factors (if any)
Udef : _CaryNorthWW
Udef : _CarySouthWW
Udef : _ApexWW
Udef : _CaryDTCWWTP
Udef : _CaryWestWakeWWTP


// ---------------------------------

// For use in output tables
:substitute: [accounts] = "CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly" // for WQ_WS
accounting for Jordan Lake
:substitute: [level_num] = "1, 2, 3, 4"  // for drought trigger and level determination for Jordan Lake drought protocol


// Natural inflows in both basins
:substitute: [InflowNd_CFear] = "0020,    0040,    0044,    0070,    0090,    0110,    0112,    0120,    0140,
        0145,    0170,    0210,    0220,    0260,    0270,    0280,    0300,    0310,    0324,    0325,
        0328,    0340,    0380,

                 0395,    0400,    0430,    0450,    0470,    0495,    0520,    0527,    0550,    0570,
        0580,    0590,    0600,    0610,    0640,    0660,    0680,    0700,    0720,    0730,    0760,
        0770,    0777,

                 0780,    0790,    0820"

:substitute: [InflowNd_Neuse] = "1010,    1050,    1060,    1080,    1100,    1110,    1115,    1140,    1200,
        1205,    1230,    1250,    1270,    1290,    1300,    1320,    1400,    1402,    1404,    1405,
        1406,    1408,    1409,

                 1410,    1412,    1414,    1416,    1418,    1420,    1422,    1440,    1445,    1450,
        1471,    1480,    1500,    1520,    1560,    1570,    1600,    1620,    1630,    1650,    1660,
        1700,    1740,

                 1747,    1750,    1755,    1760,    1775,    1780,    1795,    1800,    1850,    1900,
        1999"


// Reservoir nodes
:substitute: [ResNd_CFear] = "0030,    0070,    0112,    0120,    0140,    0220,    0270,    0300,    0320,
        0324,    0325,    0340,    0390,    0395,    0430,    0470,    0520,    0528,    0760,    0777,
        0790"
:substitute: [ResNd_Neuse] = "1010,    1050,    1060,    1080,    1100,    1120,    1140,    1200,    1230,
        1250,    1270,    1290,    1300,    1420,    1440,    1445,    1450,    1500,    1647,    1648,
        1740"

:substitute: [CrabtreeNd] = "1400, 1402, 1404, 1406, 1408, 1410, 1412, 1414, 1416, 1418, 1422"  // For Crabtree
impoundments

// for some of the Neuse reservoirs, we are not modeling with a "rule curve" - see reservoir rules table on GUI
:substitute: [ResNd_RCurves_Neuse] = "1050, 1060, 1140, 1200, 1230, 1250, 1290, 1300, 1420, 1440, 1500"


// For municipal and industrial demands
:substitute: [DemandNd_CFear] = "0031,             0123,    0223,    0261,    0301,    0321,    0327,    0341,
        0401,    0431,    0471,    0473,    0474,    0475,    0477,    0483,    0487,    0491,    0521,
        0551,    0601,    0605,

                 0663,    0701,    0719,    0721,    0733,    0771,    0781,    0785,    0823,    0825,
        0903,    0904,    0906,    0921,    0923"

:substitute: [DemandNd_Neuse] = "1046,             1106,    1116,    1162,    1256,    1258,    1306,    1506,
        1646,    1666,    1706,    1766,    1786,    1806,    1906"

//  For WW returns linked to demands
:substitute: [LinkedWWRetArc_CFear] = "0031.0040,          0341.0072,          0072.0100,          0072.0350,
        0341.0350,          0121.0140,          0122.0170,          0122.0180,          0223.0222,
        0261.0280,          0904.0224,          0301.0570,          0321.0100,
```

```
                                0401.0410,      0431.0440,      0473.0470,      1162.0453,
        1162.0463,      0483.0480,      0487.0490,      0491.0490,      0491.0610,
        0521.0520,      0554.0686,      0554.0664,      0554.0550,

                                        0554.0556,      0601.0610,      0327.0328,      0663.0680,
        0663.0690,      0733.0740,      0733.0770,      0771.0770,      0781.0790,
        0785.0790,      0923.0520,      0471.0472,      0474.0472,

                                        0477.0472,      0472.0453,      0472.0930,      0479.0470"

:substitute: [LinkedWWRetArc_Neuse] = "1046.1100,       1106.1109,      1162.1163,      1259.1300,
        1306.1620,      1306.1500,      1306.1320,      1646.1630,      1646.1675,
        1666.1675,      0663.1756,      1756.1757,      1766.1770,

                                        1675.1747,      1786.1780,      1806.1795,      1806.1850,
        1806.1845,      1506.1560,      1906.1999,      1706.1409,      1706.0554,
        0472.1401,      0472.1471,      0472.1405"

//  For independent WW returns
:substitute: [IndepWWRetNd_CFear] = "0148,      0192,      0227,      0282,      0464,      0591,      0592,      0772,
        0774,      0910,      0960,      0962"

:substitute: [IndepWWRetNd_Neuse] = "1307,      1407,      1563,      1565,      1567,      1569,      1643,      1645,
        1705,      1753,      1759,      1787,      1847"


//  For agricultural demand
:substitute: [AgricNd_CFear] = "0021,      0041,      0043,      0051,      0075,      0077,      0081,      0083,      0111,
        0161,      0211,      0231,      0263,      0281,      0311,      0331,      0361,      0371,      0381,      0403,
        0411,      0441,      0461,

         0481,      0511,      0531,      0541,      0553,      0581,      0593,      0595,      0603,      0621,      0623,
        0671,      0674,      0681,      0691,      0713,      0741,      0773,      0775,      0783,      0801,      0811,
        0821,      0940"

:substitute: [AgricNd_Neuse] = "1052,      1062,      1112,      1142,      1202,      1302,      1318,      1482,      1502,
        1562,      1632,      1752,      1756,      1782,      1802,      1902"
```

constants.ocl

```
  This file is automatically generated by the OASIS GUI.
  Any changes you make to this file will be overwritten by the program.
  To edit the Constants table, do not edit this file.  Instead, go to
  the 'OCL' tab of the GUI and edit the 'OCL Constants' table.  */

:substitute:                [Bdam_WQ_Stor] = 2663          /* Initial water quality storage for Beaverdam */
:substitute:                [Bdam_WS_Stor] = 1954          /* Initial water supply storage for Beaverdam */
:substitute:       [ClaytonTarget_Override] = 0           /* 0 = Normal Clayton target; 1 = Override target when Falls WQ
< threshold */
:substitute:       [ClaytonTarget_SafeFact] = 10           /* Pct. safety factor for Clayton minimum target */
:substitute:           [Demand_Multiplier] = 1            /* Multiplication factor used to adjust all demands in the system */
:substitute:            [Drought_Plans_On] = 0            /* 1 = Use drought plans, 0 = do not use drought plans */
:substitute:      [FLake_Max_WQ_WS_Storage] = 101705        /* Total WQ and WS storage in Falls */
:substitute:             [FLake_WQ_Stor] = 58659         /* Initial water quality storage for Falls */
:substitute:          [FLake_WQ_Threshold] = 20           /* Threshold pct. for Falls WQ storage used for Clayton override
*/
:substitute:             [FLake_WS_Stor] = 43046         /* Initial water supply storage for Falls */
:substitute:          [FLakeMin_SafeFact] = 0            /* Pct. safety factor for Falls minimum releases */
:substitute:  [Jordan_Minimum_Release_Normal] = 40          /* In cfs */
:substitute:  [Jordan_Minimum_Release_Stage_1] = 40         /* In cfs */
:substitute:  [Jordan_Minimum_Release_Stage_2] = 40         /* In cfs */
:substitute:  [Jordan_Minimum_Release_Stage_3] = 200        /* In cfs */
:substitute:  [Jordan_Minimum_Release_Stage_4] = 100        /* In cfs */
:substitute:     [Level_Change_Time_Interval] = 7          /* In days */
:substitute:   [Lillington_Increment_Stage_1] = 50         /* In cfs */
:substitute:   [Lillington_Increment_Stage_2] = 50         /* In cfs */
:substitute:   [Lillington_Increment_Stage_3] = 0          /* In cfs */
:substitute:   [Lillington_Increment_Stage_4] = 0          /* In cfs */
:substitute: [Lillington_Lower_Target_Stage_1] = 450        /* In cfs */
:substitute: [Lillington_Lower_Target_Stage_2] = 300        /* In cfs */
:substitute: [Lillington_Lower_Target_Stage_3] = 0          /* In cfs */
:substitute: [Lillington_Lower_Target_Stage_4] = 0          /* In cfs */
:substitute:       [Lillington_Target_Normal] = 600        /* In cfs */
:substitute: [Lillington_Upper_Target_Stage_1] = 600        /* In cfs */
:substitute: [Lillington_Upper_Target_Stage_2] = 450        /* In cfs */
:substitute: [Lillington_Upper_Target_Stage_3] = 0          /* In cfs */
:substitute: [Lillington_Upper_Target_Stage_4] = 0          /* In cfs */
:substitute:               [Max_WQ_Storage] = 94600        /* Total water quality storage in Jordan Lake (in acre feet) */
:substitute:            [Max_WQ_WS_Storage] = 140400       /* Total water quality and supply storage in Jordan Lake (in
acre feet) */
:substitute:               [Max_WS_Storage] = 45800        /* Total water supply storage in Jordan Lake (in acre feet) */
:substitute:      [Starting_Storage_CaryAp] = 14656        /* Initial condition for the CaryApex account (in acre feet) */
:substitute:      [Starting_Storage_Chatham] = 2748        /* Initial condition for the Chatham account (in acre feet) */
:substitute:      [Starting_Storage_Durham] = 4580         /* Initial condition for the Durham account (in acre feet) */
:substitute:       [Starting_Storage_Holly] = 916          /* Initial condition for the Holly Springs account (in acre feet) */
:substitute:      [Starting_Storage_Morris] = 1603         /* Initial condition for the Morrisville account (in acre feet) */
:substitute:      [Starting_Storage_Orange] = 458          /* Initial condition for the Orange Co. account (in acre feet) */
:substitute:       [Starting_Storage_Other] = 16946        /* Initial condition for the unallocated account (in acre feet) */
:substitute:       [Starting_Storage_OWASA] = 2290         /* Initial condition for the OWASA account (in acre feet) */
:substitute:         [Starting_Storage_RTP] = 1603         /* Initial condition for the RTP account (in acre feet) */
:substitute:          [Starting_WQ_Storage] = 94600        /* Initial Jordan Lake WQ storage (in acre feet) */
:substitute:        [Total_Max_WQ_Storage] = 61322         /* Total WQ storage for Falls and Beaverdam */
:substitute:     [Total_Max_WQ_WS_Storage] = 106322        /* Total WQ and WS storage in Falls and Beaverdam */
:substitute:        [Total_Max_WS_Storage] = 45000         /* Total WS storage for Falls and Beaverdam */
:substitute:               [Trigger_1_On] = 0           /* Initial condition for the 1st drought trigger ( 1= On) */
:substitute:               [Trigger_2_On] = 0           /* Initial condition for the 2nd drought trigger ( 1= On) */
:substitute:               [Trigger_3_On] = 0           /* Initial condition for the 3rd drought trigger ( 1= On) */
:substitute:               [Trigger_4_On] = 0           /* Initial condition for the 4th drought trigger ( 1= On) */
:substitute:       [Use_Demand_Multiplier] = 0           /* Flag tells whether to adjust all demands in the system with a
mult. factor */
:substitute:                [WQ_Fraction] = 0.674        /* Water quality storage as a fraction of the total water quality and
supply storage in Jordan Lake */
:substitute:      [WQ_Pct_Remaining_Stage_1] = 80         /* Water quality storage remaining as a fraction in Stage 1
for Jordan */
:substitute:      [WQ_Pct_Remaining_Stage_2] = 60         /* Water quality storage remaining as a fraction in Stage 2
for Jordan */
:substitute:      [WQ_Pct_Remaining_Stage_3] = 40         /* Water quality storage remaining as a fraction in Stage 3
for Jordan */
```

```
:substitute:       [WQ_Pct_Remaining_Stage_4] = 20          /* Water quality storage remaining as a fraction in Stage 4
for Jordan */
:substitute:           [WS_CaryAp_Fraction] = 0.32          /* Available water supply storage for Cary Apex (as a fraction of
the total pool) */
:substitute:          [WS_Chatham_Fraction] = 0.06          /* Available water supply storage for Chatham Co. (as a
fraction of the total pool) */
:substitute:           [WS_Durham_Fraction] = 0.1           /* Available water supply storage for Durham (as a fraction of
the total pool) */
:substitute:            [WS_Holly_Fraction] = 0.02          /* Available water supply storage for Holly Springs (as a fraction
of the total pool) */
:substitute:           [WS_Morris_Fraction] = 0.035         /* Available water supply storage for Morrisville(as a fraction of
the total pool) */
:substitute:           [WS_Orange_Fraction] = 0.01          /* Available water supply storage for Orange Co. (as a fraction
of the total pool) */
:substitute:            [WS_Other_Fraction] = 0.37          /* Available water supply storage for unallocated (as a fraction of
the total pool) */
:substitute:            [WS_OWASA_Fraction] = 0.05          /* Available water supply storage for OWASA (as a fraction of
the total pool) */
:substitute:              [WS_RTP_Fraction] = 0.035         /* Available water supply storage for RTP (as a fraction of the
total pool) */
```

agric_calculation.ocl

```
/*  Note the precip data is contained in the basedata file and for simplicity uses Jordan Lake for the Cape Fear
    and Falls Lake for the Neuse.   */

// The first 17 counties are for the Cape Fear Basin.   The next 11 are for the Neuse.  Three counties are in both basins
(Wake, Durham, and Orange).
// For the combined model, the more recent acreages (from the Neuse model) for these counties are used.

// First compute agricultural water demand for Cape Fear counties based on Jordan Lake precip. The counties are
// labeled in the Edit Agricultural Data dialog box in the GUI.  Note - counties in both basins (Durham, Orange, Wake) use
the CF precip.
:For:
{   [cty] = {01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17}
}

    RUN_MODULE: AgricDem
    {
      Input:  { [cty],                  // County number
              timesers(CFear/precip),      // Precip for Jordan Lake in inches

              pattern(IrrCoef_Tobacco),    // Water Use Coefficients for Tobacco, etc.
              pattern(IrrCoef_Turf),
              pattern(IrrCoef_Golf),
              pattern(IrrCoef_ContNurs),
              pattern(IrrCoef_FieldNurs),
              pattern(IrrCoef_Cotton),
              pattern(IrrCoef_EarlySoy),
              pattern(IrrCoef_LateSoy),
              pattern(IrrCoef_Corn),
              pattern(IrrCoef_Veg),
              pattern(IrrCoef_PastHay),
              pattern(IrrCoef_Peanut),
              pattern(IrrCoef_Blueberry),
              pattern(IrrCoef_Strawberry),
              pattern(IrrCoef_Fruit),
              pattern(IrrCoef_Beef),
              pattern(IrrCoef_Dairy),
              pattern(IrrCoef_Horse),
              pattern(IrrCoef_Pig),
              pattern(IrrCoef_Chicken),
              pattern(IrrCoef_Turkey),
              pattern(IrrCoef_OtherAnimal)
            }

      Output: { dem[cty] }
    }
:Next:

// Then compute agricultural demand for the Neuse counties based on Falls Lake precip. Note - counties in both basins
(Durham, Orange, Wake) use the CF precip.
:For:
{   [cty] = {18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28}
}

    RUN_MODULE: AgricDem
    {
      Input:  { [cty],                  // County number
              timesers(Neuse/precip),      // Precip for Falls Lake in inches

              pattern(IrrCoef_Tobacco),    // Water Use Coefficients for Tobacco, etc.
              pattern(IrrCoef_Turf),
              pattern(IrrCoef_Golf),
              pattern(IrrCoef_ContNurs),
              pattern(IrrCoef_FieldNurs),
              pattern(IrrCoef_Cotton),
              pattern(IrrCoef_EarlySoy),
              pattern(IrrCoef_LateSoy),
              pattern(IrrCoef_Corn),
              pattern(IrrCoef_Veg),
```

```
            pattern(IrrCoef_PastHay),
            pattern(IrrCoef_Peanut),
            pattern(IrrCoef_Blueberry),
            pattern(IrrCoef_Strawberry),
            pattern(IrrCoef_Fruit),
            pattern(IrrCoef_Beef),
            pattern(IrrCoef_Dairy),
            pattern(IrrCoef_Horse),
            pattern(IrrCoef_Pig),
            pattern(IrrCoef_Chicken),
            pattern(IrrCoef_Turkey),
            pattern(IrrCoef_OtherAnimal)
          }

    Output: { dem[cty] }
  }
:Next:


/*  The results are in mgd.  Now convert these to acre feet for use in the
agric_allocation.ocl file  */

// For the Cape Fear
Set : dem01 { value : convert_units {dem01, mgd, af } }
Set : dem02 { value : convert_units {dem02, mgd, af } }
Set : dem03 { value : convert_units {dem03, mgd, af } }
Set : dem04 { value : convert_units {dem04, mgd, af } }
Set : dem05 { value : convert_units {dem05, mgd, af } }
Set : dem06 { value : convert_units {dem06, mgd, af } }
Set : dem07 { value : convert_units {dem07, mgd, af } }
Set : dem08 { value : convert_units {dem08, mgd, af } }
Set : dem09 { value : convert_units {dem09, mgd, af } }
Set : dem10 { value : convert_units {dem10, mgd, af } }
Set : dem11 { value : convert_units {dem11, mgd, af } }
Set : dem12 { value : convert_units {dem12, mgd, af } }
Set : dem13 { value : convert_units {dem13, mgd, af } }
Set : dem14 { value : convert_units {dem14, mgd, af } }
Set : dem15 { value : convert_units {dem15, mgd, af } }
Set : dem16 { value : convert_units {dem16, mgd, af } }
Set : dem17 { value : convert_units {dem17, mgd, af } }

// For the Neuse
Set : dem18 { value : convert_units {dem18, mgd, af } }
Set : dem19 { value : convert_units {dem19, mgd, af } }
Set : dem20 { value : convert_units {dem20, mgd, af } }
Set : dem21 { value : convert_units {dem21, mgd, af } }
Set : dem22 { value : convert_units {dem22, mgd, af } }
Set : dem23 { value : convert_units {dem23, mgd, af } }
Set : dem24 { value : convert_units {dem24, mgd, af } }
Set : dem25 { value : convert_units {dem25, mgd, af } }
Set : dem26 { value : convert_units {dem26, mgd, af } }
Set : dem27 { value : convert_units {dem27, mgd, af } }
Set : dem28 { value : convert_units {dem28, mgd, af } }
```

agric_allocation.ocl

```
/*  Note the precip data is contained in the basedata file and for simplicity uses Jordan Lake for the Cape Fear
    and Falls Lake for the Neuse.   */

// The first 17 counties are for the Cape Fear Basin.   The next 11 are for the Neuse.  Three counties are in both basins
(Wake, Durham, and Orange).
// For the combined model, the more recent acreages (from the Neuse model) for these counties are used.

// First compute agricultural water demand for Cape Fear counties based on Jordan Lake precip. The counties are
// labeled in the Edit Agricultural Data dialog box in the GUI.  Note - counties in both basins (Durham, Orange, Wake) use
the CF precip.
:For:
{   [cty] = {01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17}
}

    RUN_MODULE: AgricDem
    {
      Input:  { [cty],                  // County number
              timesers(CFear/precip),      // Precip for Jordan Lake in inches

              pattern(IrrCoef_Tobacco),    // Water Use Coefficients for Tobacco, etc.
              pattern(IrrCoef_Turf),
              pattern(IrrCoef_Golf),
              pattern(IrrCoef_ContNurs),
              pattern(IrrCoef_FieldNurs),
              pattern(IrrCoef_Cotton),
              pattern(IrrCoef_EarlySoy),
              pattern(IrrCoef_LateSoy),
              pattern(IrrCoef_Corn),
              pattern(IrrCoef_Veg),
              pattern(IrrCoef_PastHay),
              pattern(IrrCoef_Peanut),
              pattern(IrrCoef_Blueberry),
              pattern(IrrCoef_Strawberry),
              pattern(IrrCoef_Fruit),
              pattern(IrrCoef_Beef),
              pattern(IrrCoef_Dairy),
              pattern(IrrCoef_Horse),
              pattern(IrrCoef_Pig),
              pattern(IrrCoef_Chicken),
              pattern(IrrCoef_Turkey),
              pattern(IrrCoef_OtherAnimal)
            }

      Output: { dem[cty] }
    }
:Next:

// Then compute agricultural demand for the Neuse counties based on Falls Lake precip. Note - counties in both basins
(Durham, Orange, Wake) use the CF precip.
:For:
{   [cty] = {18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28}
}

    RUN_MODULE: AgricDem
    {
      Input:  { [cty],                  // County number
              timesers(Neuse/precip),      // Precip for Falls Lake in inches

              pattern(IrrCoef_Tobacco),    // Water Use Coefficients for Tobacco, etc.
              pattern(IrrCoef_Turf),
              pattern(IrrCoef_Golf),
              pattern(IrrCoef_ContNurs),
              pattern(IrrCoef_FieldNurs),
              pattern(IrrCoef_Cotton),
              pattern(IrrCoef_EarlySoy),
              pattern(IrrCoef_LateSoy),
              pattern(IrrCoef_Corn),
              pattern(IrrCoef_Veg),
```

```
            pattern(IrrCoef_PastHay),
            pattern(IrrCoef_Peanut),
            pattern(IrrCoef_Blueberry),
            pattern(IrrCoef_Strawberry),
            pattern(IrrCoef_Fruit),
            pattern(IrrCoef_Beef),
            pattern(IrrCoef_Dairy),
            pattern(IrrCoef_Horse),
            pattern(IrrCoef_Pig),
            pattern(IrrCoef_Chicken),
            pattern(IrrCoef_Turkey),
            pattern(IrrCoef_OtherAnimal)
          }

    Output: { dem[cty] }
  }
:Next:


/*  The results are in mgd.  Now convert these to acre feet for use in the
agric_allocation.ocl file  */

// For the Cape Fear
Set : dem01 { value : convert_units {dem01, mgd, af } }
Set : dem02 { value : convert_units {dem02, mgd, af } }
Set : dem03 { value : convert_units {dem03, mgd, af } }
Set : dem04 { value : convert_units {dem04, mgd, af } }
Set : dem05 { value : convert_units {dem05, mgd, af } }
Set : dem06 { value : convert_units {dem06, mgd, af } }
Set : dem07 { value : convert_units {dem07, mgd, af } }
Set : dem08 { value : convert_units {dem08, mgd, af } }
Set : dem09 { value : convert_units {dem09, mgd, af } }
Set : dem10 { value : convert_units {dem10, mgd, af } }
Set : dem11 { value : convert_units {dem11, mgd, af } }
Set : dem12 { value : convert_units {dem12, mgd, af } }
Set : dem13 { value : convert_units {dem13, mgd, af } }
Set : dem14 { value : convert_units {dem14, mgd, af } }
Set : dem15 { value : convert_units {dem15, mgd, af } }
Set : dem16 { value : convert_units {dem16, mgd, af } }
Set : dem17 { value : convert_units {dem17, mgd, af } }

// For the Neuse
Set : dem18 { value : convert_units {dem18, mgd, af } }
Set : dem19 { value : convert_units {dem19, mgd, af } }
Set : dem20 { value : convert_units {dem20, mgd, af } }
Set : dem21 { value : convert_units {dem21, mgd, af } }
Set : dem22 { value : convert_units {dem22, mgd, af } }
Set : dem23 { value : convert_units {dem23, mgd, af } }
Set : dem24 { value : convert_units {dem24, mgd, af } }
Set : dem25 { value : convert_units {dem25, mgd, af } }
Set : dem26 { value : convert_units {dem26, mgd, af } }
Set : dem27 { value : convert_units {dem27, mgd, af } }
Set : dem28 { value : convert_units {dem28, mgd, af } }
```

filter_inflows.ocl

```
/* Sets the inflows for nodes that need to be filtered. The finalized inflows (through Sept 2004 for the Cape Fear and April 2008 for the Neuse)
   were already filtered; however, the provisional inflows from the update record routine can be negative due to time of travel or imperfect impairment
   estimations, and therefore are filtered here to prevent model infeasibility or unrealistic reservoir releases and/or demand shortages.
   All Neuse inflows are filtered except Falls/Bdam, which can have negatives due to the use of back-calculated inflows; and Michie/LRR in Durham, which are based
   on already unimpaired gages that will not be negative.  The inflows to the Crabtree Creek system are set and filtered separately in Crabtree.ocl.
   Negative back-calculated inflows for Falls/Bdam are not physically possible since we've adjusted for net evap and net withdrawals; however, reservoir storage can
   handle these negatives.  The negatives are not used in developing regressions to fill in other gages, so we do not need to adjust the negatives.
*/

// The Cape Fear inflow nodes could be expanded
:For:
{   [node] = {          0020, 0040, 0070, 0090, 0300, 0310, 0324, 0325, 0590, 0760, 0110, 0145, 0170, 0210, 0220, 0260, 0270, 0280, 0340, 0380, 0400, 0430, 0450, 0470,
                                                0495, 0520, 0527, 0550, 0700, 1010, 1050, 1060, 1080, 1100, 1110, 1115, 1250, 1270, 1290, 1420, 1440, 1445, 1450, 1500, 1560, 1630, 1740 }
}
    Set : _TempInf[node] { Value : timesers([node]/inflow) }
    Set : inflow[node] { Value : max{0, _TempInf[node] - _InfDeficit[node](-1) } }
    Set : _InfDeficit[node] { Value : max{0, _InfDeficit[node](-1) - _TempInf[node] } }

:Next:

// In addition to filtering, this also sets inflows to points of interest
// that are not contained in the basedata file, and adjusts existing inflows accordingly

// New inflows for CF

// Greensboro Haw intake
Set : _TempInf0044 { Value : timesers(0090/inflow)*(14/174.6) }
Set : inflow0044 { Value : max{0, _TempInf0044 - _InfDeficit0044(-1) } }
Set : _InfDeficit0044 { Value : max{0, _InfDeficit0044(-1) - _TempInf0044 } }

// Adj Haw gage
Set : _TempInf0090 { Value : timesers(0090/inflow)*(160.6/174.6) }
Set : inflow0090 { Value : max{0, _TempInf0090 - _InfDeficit0090(-1) } }
Set : _InfDeficit0090 { Value : max{0, _InfDeficit0090(-1) - _TempInf0090 } }

// Lake Higgins
Set : _TempInf0112 { Value : timesers(0140/inflow)*(11/84.4) }
Set : inflow0112 { Value : max{0, _TempInf0112 - _InfDeficit0112(-1) } }
Set : _InfDeficit0112 { Value : max{0, _InfDeficit0112(-1) - _TempInf0112 } }

// Brandt Reservoir
Set : _TempInf0120 { Value : timesers(0140/inflow)*(27.4/84.4) }
Set : inflow0120 { Value : max{0, _TempInf0120 - _InfDeficit0120(-1) } }
Set : _InfDeficit0120 { Value : max{0, _InfDeficit0120(-1) - _TempInf0120 } }

// Adj Townsend Inflow
Set : _TempInf0140 { Value : timesers(0140/inflow)*(46.8/84.4) }
Set : inflow0140 { Value : max{0, _TempInf0140 - _InfDeficit0140(-1) } }
Set : _InfDeficit0140 { Value : max{0, _InfDeficit0140(-1) - _TempInf0140 } }

// Rocky River Discharge
Set : _TempInf0328 { Value : (timesers(0324/inflow)+timesers(0325/inflow))*(22.8/55) }
Set : inflow0328 { Value : max{0, _TempInf0328 - _InfDeficit0328(-1) } }
Set : _InfDeficit0328 { Value : max{0, _InfDeficit0328(-1) - _TempInf0328 } }

// Ramseur Discharge
Set : _TempInf0570 { Value : timesers(0300/inflow)*(6/355) }
Set : inflow0570 { Value : max{0, _TempInf0570 - _InfDeficit0570(-1) } }
Set : _InfDeficit0570 { Value : max{0, _InfDeficit0570(-1) - _TempInf0570 } }
```

```
// Adj 590 for Robbins intake
Set : _TempInf0590 { Value : timesers(0590/inflow)*(268/400) }
Set : inflow0590 { Value : max{0, _TempInf0590 - _InfDeficit0590(-1) } }
Set : _InfDeficit0590 { Value : max{0, _InfDeficit0590(-1) - _TempInf0590 } }

// Robbins intake
Set : _TempInf0580 { Value : timesers(0590/inflow)*(132/400) }
Set : inflow0580 { Value : max{0, _TempInf0580 - _InfDeficit0580(-1) } }
Set : _InfDeficit0580 { Value : max{0, _InfDeficit0580(-1) - _TempInf0580 } }

// Pilgrims Pride intake
Set : _TempInf0600 { Value : timesers(0640/inflow)*(371/630) }
Set : inflow0600 { Value : max{0, _TempInf0600 - _InfDeficit0600(-1) } }
Set : _InfDeficit0600 { Value : max{0, _InfDeficit0600(-1) - _TempInf0600 } }

// Node 610
Set : _TempInf0610 { Value : timesers(0640/inflow)*(40/630) }
Set : inflow0610 { Value : max{0, _TempInf0610 - _InfDeficit0610(-1) } }
Set : _InfDeficit0610 { Value : max{0, _InfDeficit0610(-1) - _TempInf0610 } }

// Adj Deep Moncure Gage
Set : _TempInf0640 { Value : timesers(0640/inflow)*(219/630) - inflow0328 - inflow0570}
Set : inflow0640 { Value : max{0, _TempInf0640 - _InfDeficit0640(-1) } }
Set : _InfDeficit0640 { Value : max{0, _InfDeficit0640(-1) - _TempInf0640 } }

// Node 660
Set : _TempInf0660 { Value : timesers(0780/inflow)*(280/1372.6) }
Set : inflow0660 { Value : max{0, _TempInf0660 - _InfDeficit0660(-1) } }
Set : _InfDeficit0660 { Value : max{0, _InfDeficit0660(-1) - _TempInf0660 } }

// Node 680
Set : _TempInf0680 { Value : timesers(0780/inflow)*(20/1372.6) }
Set : inflow0680 { Value : max{0, _TempInf0680 - _InfDeficit0680(-1) } }
Set : _InfDeficit0680 { Value : max{0, _InfDeficit0680(-1) - _TempInf0680 } }

// Node 720
Set : _TempInf0720 { Value : timesers(0780/inflow)*(157/1372.6) }
Set : inflow0720 { Value : max{0, _TempInf0720 - _InfDeficit0720(-1) } }
Set : _InfDeficit0720 { Value : max{0, _InfDeficit0720(-1) - _TempInf0720 } }

// Fayetteville PWC Intake
Set : _TempInf0730 { Value : timesers(0780/inflow)*(233/1372.6) }
Set : inflow0730 { Value : max{0, _TempInf0730 - _InfDeficit0730(-1) } }
Set : _InfDeficit0730 { Value : max{0, _InfDeficit0730(-1) - _TempInf0730 } }

// Monsanto WS Intake
Set : _TempInf0770 { Value : timesers(0780/inflow)*(430/1372.6) }
Set : inflow0770 { Value : max{0, _TempInf0770 - _InfDeficit0770(-1) } }
Set : _InfDeficit0770 { Value : max{0, _InfDeficit0770(-1) - _TempInf0770 } }

// Adj CF Tarheel Gage
Set : _TempInf0780 { Value : timesers(0780/inflow)*(430/1372.6) }
Set : inflow0780 { Value : max{0, _TempInf0780 - _InfDeficit0780(-1) } }
Set : _InfDeficit0780 { Value : max{0, _InfDeficit0780(-1) - _TempInf0780 } }

// L&D #2 / Elizabethtown WWTP
Set : _TempInf0790 { Value : timesers(0820/inflow)*(168/403) }
Set : inflow0790 { Value : max{0, _TempInf0790 - _InfDeficit0790(-1) } }
Set : _InfDeficit0790 { Value : max{0, _InfDeficit0790(-1) - _TempInf0790 } }

// Adj of CF Kelly Gage
Set : _TempInf0820 { Value : timesers(0820/inflow)*(235/403) }
Set : inflow0820 { Value : max{0, _TempInf0820 - _InfDeficit0820(-1) } }
Set : _InfDeficit0820 { Value : max{0, _InfDeficit0820(-1) - _TempInf0820 } }


// New inflows for Neuse

// 205 - Little R @ Eno R
```

```
Set : _TempInf1205 { Value : timesers(1115/inflow)*(105/75) }
Set : inflow1205 { Value : max{0, _TempInf1205 - _InfDeficit1205(-1) } }
Set : _InfDeficit1205 { Value : max{0, _InfDeficit1205(-1) - _TempInf1205 } }

// Adj Falls inflow (not filtered)
Set : inflow1300 { Value : timesers(1300/inflow) - inflow1205 }

// Apex WW Discharge
Set : _TempInf1405 { Value : timesers(1480/inflow)*(0.9/83.5) }
Set : inflow1405 { Value : max{0, _TempInf1405 - _InfDeficit1405(-1) } }
Set : _InfDeficit1405 { Value : max{0, _InfDeficit1405(-1) - _TempInf1405 } }

// Fuquay-Varina WW Discharge
Set : _TempInf1409 { Value : timesers(1480/inflow)*(7.6/83.5) }
Set : inflow1409 { Value : max{0, _TempInf1409 - _InfDeficit1409(-1) } }
Set : _InfDeficit1409 { Value : max{0, _InfDeficit1409(-1) - _TempInf1409 } }

// Cary SWRF Discharge
Set : _TempInf1471 { Value : timesers(1480/inflow)*(21.5/83.5) }
Set : inflow1471 { Value : max{0, _TempInf1471 - _InfDeficit1471(-1) } }
Set : _InfDeficit1471 { Value : max{0, _InfDeficit1471(-1) - _TempInf1471 } }

// Adj Middle Ck Gage
Set : _TempInf1480 { Value : timesers(1480/inflow)*(53.5/83.5) }
Set : inflow1480 { Value : max{0, _TempInf1480 - _InfDeficit1480(-1) } }
Set : _InfDeficit1480 { Value : max{0, _InfDeficit1480(-1) - _TempInf1480 } }

// Wiggons Mill Lake
Set : _TempInf1520 { Value : timesers(1560/inflow)*(77/575) }
Set : inflow1520 { Value : max{0, _TempInf1520 - _InfDeficit1520(-1) } }
Set : _InfDeficit1520 { Value : max{0, _InfDeficit1520(-1) - _TempInf1520 } }

// Adj Contentnea Hookerton Gage
Set : _TempInf1560 { Value : timesers(1560/inflow)*(575/575) }
Set : inflow1560 { Value : max{0, _TempInf1560 - _InfDeficit1560(-1) } }
Set : _InfDeficit1560 { Value : max{0, _InfDeficit1560(-1) - _TempInf1560 } }

// Smith Confluence
Set : _TempInf1320 { Value : timesers(1630/inflow)*(23/271) }
Set : inflow1320 { Value : max{0, _TempInf1320 - _InfDeficit1320(-1) } }
Set : _InfDeficit1320 { Value : max{0, _InfDeficit1320(-1) - _TempInf1320 } }

// Crabtree Ck Confluence
Set : _TempInf1600 { Value : timesers(1630/inflow)*(90/271) }
Set : inflow1600 { Value : max{0, _TempInf1600 - _InfDeficit1600(-1) } }
Set : _InfDeficit1600 { Value : max{0, _InfDeficit1600(-1) - _TempInf1600 } }

// Walnut Ck Confluence
Set : _TempInf1620 { Value : timesers(1630/inflow)*(147/271) }
Set : inflow1620 { Value : max{0, _TempInf1620 - _InfDeficit1620(-1) } }
Set : _InfDeficit1620 { Value : max{0, _InfDeficit1620(-1) - _TempInf1620 } }

// Adj Neuse Clayton Gage
Set : _TempInf1630 { Value : timesers(1630/inflow)*(11/271) }
Set : inflow1630 { Value : max{0, _TempInf1630 - _InfDeficit1630(-1) } }
Set : _InfDeficit1630 { Value : max{0, _InfDeficit1630(-1) - _TempInf1630 } }

// Kenly WW
Set : _TempInf1747 { Value : timesers(1750/inflow)*(165.2/181.2) }
Set : inflow1747 { Value : max{0, _TempInf1747 - _InfDeficit1747(-1) } }
Set : _InfDeficit1747 { Value : max{0, _InfDeficit1747(-1) - _TempInf1747 } }

// Adj Little R Princeton Gage
Set : _TempInf1750 { Value : timesers(1750/inflow)*(16/181.2) }
Set : inflow1750 { Value : max{0, _TempInf1750 - _InfDeficit1750(-1) } }
Set : _InfDeficit1750 { Value : max{0, _InfDeficit1750(-1) - _TempInf1750 } }

// Johnston County Intake
Set : _TempInf1650 { Value : timesers(1780/inflow)*(30/918.7) }
Set : inflow1650 { Value : max{0, _TempInf1650 - _InfDeficit1650(-1) } }
```

```
Set : _InfDeficit1650 { Value : max{0, _InfDeficit1650(-1) - _TempInf1650 } }

// Neuse Smithfield
Set : _TempInf1660 { Value : timesers(1780/inflow)*(26/918.7) }
Set : inflow1660 { Value : max{0, _TempInf1660 - _InfDeficit1660(-1) } }
Set : _InfDeficit1660 { Value : max{0, _InfDeficit1660(-1) - _TempInf1660 } }

// Swift Ck Confluence
Set : _TempInf1700 { Value : timesers(1780/inflow)*(4/918.7) }
Set : inflow1700 { Value : max{0, _TempInf1700 - _InfDeficit1700(-1) } }
Set : _InfDeficit1700 { Value : max{0, _InfDeficit1700(-1) - _TempInf1700 } }

// Princeton WWTP
Set : _TempInf1755 { Value : timesers(1780/inflow)*(32/918.7) }
Set : inflow1755 { Value : max{0, _TempInf1755 - _InfDeficit1755(-1) } }
Set : _InfDeficit1755 { Value : max{0, _InfDeficit1755(-1) - _TempInf1755 } }

// Progress Energy Intake
Set : _TempInf1760 { Value : timesers(1780/inflow)*(576/918.7) }
Set : inflow1760 { Value : max{0, _TempInf1760 - _InfDeficit1760(-1) } }
Set : _InfDeficit1760 { Value : max{0, _InfDeficit1760(-1) - _TempInf1760 } }

// Little R Confluence
Set : _TempInf1775 { Value : timesers(1780/inflow)*(10/918.7) }
Set : inflow1775 { Value : max{0, _TempInf1775 - _InfDeficit1775(-1) } }
Set : _InfDeficit1775 { Value : max{0, _InfDeficit1775(-1) - _TempInf1775 } }

// Adj Neuse Goldsboro Gage
Set : _TempInf1775 { Value : timesers(1780/inflow)*(240.7/918.7) }
Set : inflow1775 { Value : max{0, _TempInf1775 - _InfDeficit1775(-1) } }
Set : _InfDeficit1775 { Value : max{0, _InfDeficit1775(-1) - _TempInf1775 } }

// NRWASA Intake
Set : _TempInf1795 { Value : timesers(1800/inflow)*(211/293) }
Set : inflow1795 { Value : max{0, _TempInf1795 - _InfDeficit1795(-1) } }
Set : _InfDeficit1795 { Value : max{0, _InfDeficit1795(-1) - _TempInf1795 } }

// Adj Neuse Kinston Gage
Set : _TempInf1800 { Value : timesers(1800/inflow)*(82/293) }
Set : inflow1800 { Value : max{0, _TempInf1800 - _InfDeficit1800(-1) } }
Set : _InfDeficit1800 { Value : max{0, _InfDeficit1800(-1) - _TempInf1800 } }

// Little Contentnea Confluence
Set : _TempInf1570 { Value : timesers(1900/inflow)*(62/625) }
Set : inflow1570 { Value : max{0, _TempInf1570 - _InfDeficit1570(-1) } }
Set : _InfDeficit1570 { Value : max{0, _InfDeficit1570(-1) - _TempInf1570 } }

// Contentnea Confluence
Set : _TempInf1850 { Value : timesers(1900/inflow)*(208/625) }
Set : inflow1850 { Value : max{0, _TempInf1850 - _InfDeficit1850(-1) } }
Set : _InfDeficit1850 { Value : max{0, _InfDeficit1850(-1) - _TempInf1850 } }

// Adj Weyerhauser Gain
Set : _TempInf1900 { Value : timesers(1900/inflow)*(355/625) }
Set : inflow1900 { Value : max{0, _TempInf1900 - _InfDeficit1900(-1) } }
Set : _InfDeficit1900 { Value : max{0, _InfDeficit1900(-1) - _TempInf1900 } }

// New Bern
Set : _TempInf1999 { Value : timesers(1900/inflow)*(10/625) }
Set : inflow1999 { Value : max{0, _TempInf1999 - _InfDeficit1999(-1) } }
Set : _InfDeficit1999 { Value : max{0, _InfDeficit1999(-1) - _TempInf1999 } }
```

WW_Returns.ocl

// Note that WW only returns are handled as inflows (see inflow pattern under the Node tab for the monthly patterns).

/* Set inflow fractions for WW returns associated with demands */

// Cape Fear River Basin discharges

Constraint ReidsvilleWW_nc0024881_WTP_WW_nc0046345 : {dFlow0031.0040 = lookup {ReidsvilleWWTP_NC0024881, month} * dDelivery0031 + lookup {ReidsvilleWTP_WW_nc0046345, month} * dDelivery0031}
Constraint BurlingtonTotalWW : {dFlow0341.0072 = lookup {BurlingtonTotalWWRF, month} * dDelivery0341}
Constraint BurlingtonEastWW_nc0023868 : {dFlow0072.0100 = lookup {BurlingtonTotalWWRF, month} * dDelivery0341 * 0.41} // Eastside is 41% of total
Constraint BurlingtonSouthsideWW_NC0023876 : {dFlow0072.0350 = lookup {BurlingtonTotalWWRF, month} * dDelivery0341 * 0.59} // Southside is 59% of total
Constraint BurlingtonMackintoshWW_NC0023828 : {dFlow0341.0350 = lookup {BurlingtonMackintoshWW_NC0023828, month} * dDelivery0341}
Constraint GreensboroLakeTownsendWW_nc0081671 : {dFlow0121.0140 = lookup {GBTownsendWTPNC0081671, month} * dDelivery0123}
Constraint GreensboroNBuffaloCrkWW_nc0024325 : {dFlow0122.0170 = lookup {GBNBuffaloCrWWNC0024325, month} * dDelivery0123 + lookup {GBMitchellWTPNC0081426, month} * dDelivery0123}
Constraint GBOzborneWWNC0047384 : {dFlow0122.0180 = lookup {GBOzborneWWNC0047384, month} * dDelivery0123}
Constraint HighPointWW_nc0081256_nc0024210 : {dFlow0223.0222 = lookup {HighPointWW, month} * dDelivery0223}
Constraint RandlemanWW_nc0025445 : {dFlow0261.0280 = lookup {RandlemanWW_nc0025445, month} * dDelivery0261}
Constraint ArchdaleWW : {dFlow0904.0224 = lookup {ArchdaleWW, month} * dDelivery0904}
Constraint RamseurWW_nc0026565 : {dFlow0301.0570 = lookup {RamseurWW_nc0026565, month} * dDelivery0301}
Constraint GrahamMebaneTotWW_nc0045292_nc0021211_nc0021474 : {dFlow0321.0100 = lookup {GrMebTotWW_nc0045292, month} * dDelivery0321}
Constraint PittsboroWW_nc0020354 : {dFlow0401.0410 = lookup {PittsboroWW_nc0020354, month} * dDelivery0401}
Constraint OWASA_WW_nc0025241 : {dFlow0431.0440 = lookup {OWASA_WW_nc0025241, month} * dDelivery0431}
Constraint NorthChathamWWWTP_nc0084093 : {dFlow0473.0470 = lookup {NorthChathamWTP_nc0084093, month} * dDelivery0473}
Constraint DurhamCtyTriangleWW_nc0026051 : {dFlow1162.0453 = lookup {DurhamCtyTriangleWW_nc0026051, month} * dDelivery1162}
Constraint DurhamReclamationWW_nc0047967 : {dFlow1162.0463 = lookup {DurhamReclamationW_nc0047597, month} * dDelivery1162}
Constraint AlliedSignalWW_NC0001899 : {dFlow0483.0480 = lookup {AlliedSignalWW_NC0001899, month} * dDelivery0483}
Constraint ProgressCapeFearWW_nc0003433 : {dFlow0487.0490 = lookup {ProgressCapeFearWW_nc0003433, month} * dDelivery0487}
Constraint SanfordWWTP_nc0002861 : {dFlow0491.0490 = lookup {SanfordWW_nc0002861&nc0059242, month} * dDelivery0491}
Constraint Sanford_WWTP_nc0024147 : {dFlow0491.0610 = lookup {Sanford_WWTP_nc0024147, month} * (dDelivery0491-dDelivery0605)}
Constraint ProgressHarrisWW_nc0039586 : {dFlow0521.0520 = 0 * dDelivery0521}
// Accounted for in the consumptive use represented by the demand value

// Use substitutes for the breakdown of Harnett Co. WW
:Substitute: [HarnettErwinWWTPs] = 0.119
:Substitute: [HarnettLillWWTP] = 0.265
:Substitute: [HarnettWTP_WW] = 0.535
:Substitute: [SouthHarnettRegionalWWTP] = 0.081

Constraint HarnettErwinWWTPs : {dFlow0554.0686 = lookup {Total_HarnettWW, month} * dDelivery0551 * [HarnettErwinWWTPs] }
Constraint HarnettLillWWTP : {dFlow0554.0664 = lookup {Total_HarnettWW, month} * dDelivery0551 * [HarnettLillWWTP] }
Constraint HarnettWTP_WW : {dFlow0554.0550 = lookup {Total_HarnettWW, month} * dDelivery0551 * [HarnettWTP_WW] }

Constraint SouthHarnettRegionalWWTP :
{dFlow0554.0556 = lookup {Total_HarnettWW, month} * dDelivery0551 * [SouthHarnettRegionalWWTP] }

Constraint PilgrimsPride_nc0083852 : {dFlow0601.0610 = lookup
{PilgrimsPride_nc0083852, month} * dDelivery0601}
Constraint SilerCityWW_nc0026441 : {dFlow0327.0328 = lookup
{SilerCityWW_nc0026441, month} * dDelivery0327}
Constraint DunnWWTP_nc0078955 : {dFlow0663.0680 = lookup
{DunnWW_nc0078955, month} * dDelivery0663}
Constraint DunnWWTP_nc0043176 : {dFlow0663.0690 = lookup
{DunnWWTP_nc0043176, month} * dDelivery0663}
Constraint FayettevillePOHoffer_CrossWWTP_nc0023957 : {dFlow0733.0740 = lookup
{FayPOHofferWW_NC0076783, month} * dDelivery0733}
Constraint FayettevilleRockfishCreekWWTP_nc0050105 : {dFlow0733.0770 = lookup
{FayRockfishCkWW_NC0050105, month} * dDelivery0733}
Constraint MonsantoWW : {dFlow0771.0770
= lookup {MonsantoWW_NC0003719, month} * dDelivery0771}
Constraint DupontWW : {dFlow0781.0790
= lookup {DupontWW_nc0003573, month} * dDelivery0781}
Constraint LCFWSA-BladenBluffsWW_nc0078344 : {dFlow0785.0790 = 0 * dDelivery0785} // No
return in 2010 scenario
Constraint HollySpringsWW_nc0063098 : {dFlow0923.0520 = lookup
{HollySpringsWW_nc0063098, month} * dDelivery0923}

// Neuse River Basin discharges

Constraint OrAlaReturn_nc0082759 : {dFlow1046.1100 = lookup
{OrAlaReturn_nc0082759, month} * dDelivery1046}
Constraint Hillsborough_nc0026433 : {dFlow1106.1109 = lookup
{HillsReturn_nc0026433, month} * dDelivery1106}
Constraint Durham_nc0023841 : {dFlow1162.1163 = lookup
{DurhamReturn_nc0023841, month} * dDelivery1162}
Constraint SGWASA_nc0026824
: {dFlow1259.1300 = lookup {SGWASAReturn_nc0026824, month} * (dDelivery1256 + ddelivery1258)} //
Includes Creedmor
Constraint Raleigh_NeuseWWTP_nc0029033 : {dFlow1306.1620 = lookup
{RaleighReturn_nc0029033, month} * dDelivery1306}
Constraint Raleigh_LittleCreek_nc0079316 : {dFlow1306.1500 = lookup
{RalLitCrReturn_nc0079316, month} * dDelivery1306 }
Constraint Raleigh_SmithCreek_nc0030759 : {dFlow1306.1320 = lookup
{RalSmithCrReturn_nc0030759, month} * 0.05 * dDelivery1306}
Constraint ClaytonWW_nc0064564&nc0025453 : {dFlow1646.1630
= lookup {ClaytReturn_nc0064564&nc0025453, month} * dDelivery1646} // Clayton demand is included in Johnst Co.
Constraint JohnstReturn_nc0030716 :
{dFlow1646.1675 = lookup {JohnstReturn_nc0030716, month} * (dDelivery1646)}
Constraint SfieldReturn
: {dFlow1666.1675 = lookup {SfieldReturn, month} * (dDelivery1666)}
Constraint BensonWW_Dun : {dFlow0663.1756
= lookup {BensonWW_nc0020389, month} * dDelivery0663}
Constraint BensonWW_nc0020389 : {dFlow1756.1757 = lookup
{BensonWW_nc0020389, month} * dDelivery0663}
Constraint ProgressEnergy : {dFlow1766.1770 = 0.0 *
dDelivery1766}
Constraint KenlyWW_nc0064891 : {dFlow1675.1747 = lookup
{KenlyReturn_nc0064891, month} * dDelivery1646}
Constraint GoldsboroWW_nc0023949
: {dFlow1786.1780 = lookup {GoldsReturn_nc0023949, month} * dDelivery1786}
Constraint NRWASA_nc0088111 : {dFlow1806.1795 = lookup
{NRWASAReturnWTP_nc0088111, month} * dDelivery1806}
Constraint KinstonWW_nc0024236 : {dFlow1806.1850
= lookup {KinstonWW_nc0024236, month} * dDelivery1806}
Constraint AydenGriftonWW : {dFlow1806.1845 = lookup
{AydenGriftonWW, month} * dDelivery1806}
Constraint WilsonWW_nc0023906 : {dFlow1506.1560 = lookup
{WilsonReturn_nc0023906, month} * dDelivery1506}
Constraint Weyerhauser_nc0003191 : {dFlow1906.1999 = lookup
{WeyerReturn_nc0003191, month} * dDelivery1906}
Constraint FuquayWW_nc00516&nc0066150
: {dflow1706.1409 = lookup {FuquayReturn_nc0066516&nc0066150, month} * dDelivery1706}

```
Constraint FuquayWWtoHarnettCo
        : {dflow1706.0554 = lookup {FuquayReturn_toHarnettCo, month} * dDelivery1706}



// Compute Cary/Apex system separately
// First compute the amount of reductions to WW discharges expected if the drought plan is active (stages 3-4 only)

:If: {[Drought_Plans_On] = 1} // First check if drought plan variable is on

Set : _CaryApex_WW_Consvn
{       Condition : _Cary_Trigger_4_On
                {
                Condition : month > 4 and month < 11
                Value     : 1 - 14 / 100 // 14% reduction for Stg. 4, May-Oct

                Condition : default
                Value     : 1 - 19 / 100 // 19% reduction for Stg. 4, Nov-Apr
                }

        Condition : _Cary_Trigger_3_On
                {
                Condition : month > 4 and month < 11
                Value     : 1 - 6 / 100 // 6% reduction for Stg. 3, May-Oct

                Condition : default
                Value     : 1 - 7 / 100 // 7% reduction for Stg. 4, Nov-Apr
                }

   Condition : default
   Value     : 1
}

:else:

Set : _CaryApex_WW_Consvn
{       Condition : default
   Value     : 1
}

:EndIf:

// Now compute various WW flows and discharges as Udefs, since they'll be used in multiple constraints

//Total WW for Cary/Apex, RTP and Morrisville
Set : _CaryApexWW                       { Value     : lookup {CaryApexReturn, month} * demand0471 *
_CaryApex_WW_Consvn }
Set : _RTPWW                            { Value     : lookup {RTPReturn, month} * demand0474 *
_CaryApex_WW_Consvn }
Set : _MorrisWW                 { Value     : lookup {MorrisReturn, month} * demand0477 * _CaryApex_WW_Consvn }
Set : _CarySystemWW             { value     : _CaryApexWW      + _RTPWW + _MorrisWW }

// Allocate the total to the various discharge points, assigning monthly patterns and conservation factors (if any)
Set : _CaryNorthWW                      { Value     : _CarySystemWW * 0.41 * lookup{CaryNWRFReturn, month}}
Set : _CarySouthWW                      { Value     : _CarySystemWW * 0.31 * lookup{CarySWRFReturn, month}}
Set : _ApexWW                                       { Value     : _CarySystemWW * 0.15 * lookup{ApexWRFReturn,
month}}
Set : _CaryDTCWWTP                      { Value     : _CarySystemWW * 0.13 }
Set : _CaryWestWakeWWTP  { Value    : _CarySystemWW * 0.00 * lookup{WestWakeWRFReturn, month}}

// Next set the constraints that will force the flows to match the udefs
Constraint CaryApexTotalWW
        : {dflow0471.0472 = (_CaryApexWW / _CarySystemWW) * (_CaryNorthWW + _CarySouthWW + _ApexWW +
_CaryDTCWWTP + _CaryWestWakeWWTP) }
Constraint RTPWW                                                                                                :
{dFlow0474.0472 = (_RTPWW               / _CarySystemWW) * (_CaryNorthWW + _CarySouthWW + _ApexWW +
_CaryDTCWWTP + _CaryWestWakeWWTP) }
Constraint MorrisvilleWW                                                                                        : {dFlow0477.0472
= (_MorrisWW        / _CarySystemWW) * (_CaryNorthWW + _CarySouthWW + _ApexWW + _CaryDTCWWTP +
_CaryWestWakeWWTP) }
```

```
Constraint CaryNorthWW                                                    : {dFlow0472.1401
= _CaryNorthWW}
Constraint CarySouthWW                                                    : {dFlow0472.1471
= _CarySouthWW}
Constraint ApexWW                                                         :
{dFlow0472.1405 = _ApexWW}
Constraint CaryDTCWWTP                                                    : {dFlow0472.0453
= _CaryDTCWWTP}
Constraint CaryWestWakeWWTP                                               :
{dFlow0472.0930 = _CaryWestWakeWWTP}

// Finally,compute the WTF discharge back into Jordan
Constraint CaryApexWTFWW
        : {dflow0479.0470 = lookup {CaryApexWTFReturn, month} * (dDelivery0471 + dDelivery0477 + dDelivery0474 +
dflow0479.1151)}
```

Routing_neuse.ocl

```
/*  Falls-to-Clayton.
       Falls Release seen at Clayton
       = .5 * yesterday's release + .5 * today's release.

    Clayton-to-Goldsboro.
       Clayton flow seen at Goldsboro
       = Average flow of previous four days

    Goldsboro-to-Kinston.
       Goldsboro flow seen at Kinston
       = Average flow of previous two days

    Nodes 310, 640 and 790 are reservoirs used for channel storage.
    The flow into these three nodes is unrouted; the release from them is routed.
    The storage in the nodes makes up the difference.

    Note that for the first day of the simulation the routed flows need to be
    estimated; the current values set the routed flows equal to the upstream flow
    for that day when the simulation is started on 01/01/1930; they may need to be
    adjusted if the run is started on a different date. */

Target FallsRout : dflow1310.1320 - .5 * dflow1300.1310
{   Condition : abs_period <= 1
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : convert_units { 49.25, cfs, af }

    Condition : default
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : .5 * flow1300.1310(-1)
}
Target ClaytRout : dflow1640.1650
{   Condition : abs_period <= 1
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : convert_units { 353.6, cfs, af }

    Condition : abs_period = 2
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : flow1630.1640(-1)

    Condition : abs_period = 3
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : ( flow1630.1640(-2) + flow1630.1640(-1) ) / 2

    Condition : abs_period = 4
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : ( flow1630.1640(-3) + flow1630.1640(-2) + flow1630.1640(-1) ) / 3

    Condition : default
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : ( flow1630.1640(-4) + flow1630.1640(-3) + flow1630.1640(-2) + flow1630.1640(-1) ) / 4
}
Target GoldsRout : dflow1790.1795
{   Condition : abs_period <= 1
    priority  : 1
```

```
    penalty+  : 10000
    penalty-  : 10000
    value     : convert_units { 1047.6, cfs, af }

    Condition : abs_period = 2
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : flow1780.1790(-1)

    Condition : default
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : ( flow1780.1790(-2) + flow1780.1790(-1) ) / 2
}
```

routing_cf.ocl

```
/*  Jordan-to-Lillington.
       Jordan Release seen at Lill.
       = .5 * yesterday's release + .5 * today's release.

    Lillington-to-Fayetville.
       Lillington flow seen at Clayton
       = Average flow of previous day

    Nodes 555 and 739 are reservoirs used for channel storage.
    The flow into these three nodes is unrouted; the release from them is routed.
    The storage in the nodes makes up the difference.

    Note that for the first day of the simulation the routed flows need to be
    estimated; the current values set the routed flows equal to the flow
    for that day when the simulation is started on 01/01/1930; they may need to be
    adjusted if the run is started on a different date. */

Target JordanRout : dflow0555.0650 - 0.5 * dflow0550.0555
{   Condition : abs_period <= 1
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : convert_units { 3711, cfs, af }

    Condition : default
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000

    value     : 0.5 * flow0550.0555(-1)
}

Target LillRout : dflow0739.0740
{   Condition : abs_period <= 1
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : convert_units { 4381, cfs, af }


    Condition : default
    priority  : 1
    penalty+  : 10000
    penalty-  : 10000
    value     : flow0730.0739(-1)
}
```

Greensboro_ops.ocl

```
/*  Operational policy for Greensboro's system */

/*  Set interconnects unused in basecase to zero */
Constraint : {dFlow0044.0140 = 0 } // Emer Intake
Constraint : {dFlow0271.0121 = 0 } // PTRA
Constraint : {dFlow0121.0903 = 0 } // High Pt WW
Constraint : {dFlow0122.0224 = 0 } // Jamestown

//  Sets the Townsend minimum release - based on stage
Set TownsendRelease : min_flow0140.0145
{   condition : elevation0140 < 709.7
    value     : convert_units { 2.0, cfs, af }

    condition : elevation0140 < 714.5
    value     : convert_units { 3.5, cfs, af }

    condition : default
    value     : convert_units { 7.0, cfs, af }
}

// Set the transfer (2 MGD constant) from Burlington
Target Burl_GB_Transfer : dflow0071.0121
{   condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 100
    Value     : convert_units { 2, mgd, af }
}

// Set targets to dictate WDs between reservoirs
Target Townsend_WD : dflow0140.0121
{   condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 100
    Value     : 0.5 * (demand0123 - flow0071.0121) // 50% (less the Burlington transfer) from Townsend, the rest will be
from Brandt
}
```

Jordan_ops.ocl

```
/*  Operational policies for Jordan Lake */

// Limit the increase in flood releases from previous day (per Terry Brown's suggestion) when Jordan is above normal pool
Target JordanFloodRelease : dflow0470.0480
{  // Above 240 ft just release uncontrolled spill
    condition : elevation0470 >= 240
    priority  : 1
    penalty+  : 10
    penalty-  : 0
    Value     : convert_units { lookup { JordanSpillway, elevation0470 }, cfs, af }

    // When Jordan is on the way back down (definied by decreasing inflows) limit the decrease in releases for a 'soft landing', making sure not to drop it below the normal pool.
    condition : elevation0470 >= 216 and inflow0470 < inflow0470(-1) and inflow0470(-1) < inflow0470(-2) and inflow0470(-2) < inflow0470(-3)
    priority  : 1
    penalty+  : 0
    penalty-  : 10
    Value     : min  {flow0470.0480(-1) - convert_units {4000, cfs, af }, storage0470 - elev_to_stor { 0470, 216 } }

    // Above 220 ft release no more than the previous days' release + 4000 cfs
    condition : elevation0470 >= 220
    priority  : 1
    penalty+  : 10
    penalty-  : 0
    Value     : flow0470.0480(-1) + convert_units {5500, cfs, af }

    // Above 216 ft release no more than the previous days' release + 4000 cfs, making sure not to drop it below the normal pool.
    condition : elevation0470 >= 216
    priority  : 1
    penalty+  : 10
    penalty-  : 0
    Value     : min { flow0470.0480(-1) + convert_units {4000, cfs, af }, storage0470 - elev_to_stor { 0470, 216 } }
}

// Set a flood target of 18,000 cfs at Lillington
Target LillingtonMaxFlow : dflow0550.0555
{   condition :  default
    priority  : 1
    penalty+  : 7
    penalty-  : 0
    Value     : convert_units {18000, cfs, af }
}

// Set a flood control target at Fayetteville of 20,000 cfs, meaning Jordan will store water to minimize chance of having flow downstream
// exceed this target.  Local inflows between Jordan and Fayetteville could cause flows to exceed this target.  However, Jordan will not curtail
// the minimum release, nor the release to meet local demands.  So the penalty for going above the 20000 cfs flow is less than the minimum release weight from Jordan (but is more than the D zone weight for Jordan).
Target FayettevilleMaxFlow : dflow0740.0770
{   condition :  default
    priority  : 1
    penalty+  : 7
    penalty-  : 0
    Value     : convert_units {20000, cfs, af }
}

/*  Constrain the return arc flow from the Holly Springs Jordan Lake demand
to be exactly equal to the delivery */
Set HollySprings_JLakeReturn :  max_flow0924.0480  { value : 1.0 * delivery0924  }



/*  The Jordan water quality and supply accounting file is evaluated after the solve statement, mainly to establish the water quality release based
```

```
        on computation of the decision variable for outflow from Jordan.  This determination is made based on weights
and min flow targets from Jordan and
        at Lillington (and points in between).  The min flow from Jordan depends on the drought protocol.  When the
Lillington target applies, the model will
        release enough water to exactly meet the target after accounting for today's inflows (namely on the Deep River)
and demands between Jordan and Lillington
        (the intent of which is to mimic how the Corps would operate).  Extra water will not be released above the target
based on how the weighting is done.

        Set delivery for the water supply users based on amount in the their accounts.  Demand will not be fulfilled if the
account has
        gone empty and there is not enough inflow to the water supply account (for simplicity, use yesterday's inflow as
factored into yesterday's storage).
        The water supply account is not allowed to go negative (see the Jordan_WQ_WS_Accounts.ocl file).  Similarly,
set the water quality release from Jordan
        (arc 470.480) based on amount in the water quality storage account, again forbidding the account to go
negative .

        Since we refer to yesterday's storage estimates, for the first day of the run, constrain deliveries and releases to
the initialized volumes
        for each account so that deliveries and releases are made */


//  Water supply releases
Constraint   Deliv_Lim_CaryAp :
        {  condition  :  abs_period = 1
           expression :  ddelivery0471 <= [WS_CaryAp_Fraction]  * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_CaryAp :
        {  condition  :  abs_period > 1
           expression :  ddelivery0471 <= _Stor_Final_CaryAp(-1)
        }

Constraint   Deliv_Lim_Chatham :
        {  condition  :  abs_period = 1
           expression :  ddelivery0473 <= [WS_Chatham_Fraction] * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_Chatham :
        {  condition  :  abs_period > 1
           expression :  ddelivery0473 <= _Stor_Final_Chatham(-1)
        }

Constraint   Deliv_Lim_RTP :
        {  condition  :  abs_period = 1
           expression :  ddelivery0474 <= [WS_RTP_Fraction]     * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_RTP :
        {  condition  :  abs_period > 1
           expression :  ddelivery0474 <= _Stor_Final_RTP(-1)
        }

Constraint   Deliv_Lim_Other :
        {  condition  :  abs_period = 1
           expression :  ddelivery0475 <= [WS_Other_Fraction]   * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_Other :
        {  condition  :  abs_period > 1
           expression :  ddelivery0475 <= _Stor_Final_Other(-1)
        }

Constraint   Deliv_Lim_Durham :
        {  condition  :  abs_period = 1
           expression :  dflow0479.1162 <= [WS_Durham_Fraction]  * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_Durham :
```

```
        { condition  :  abs_period > 1
          expression :  dflow0479.1162 <= _Stor_Final_Durham(-1)
        }

Constraint   Deliv_Lim_Morris :
        { condition  :  abs_period = 1
          expression :  ddelivery0477 <= [WS_Morris_Fraction]  * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_Morris :
        { condition  :  abs_period > 1
          expression :  ddelivery0477 <= _Stor_Final_Morris(-1)
        }

Constraint   Deliv_Lim_Orange :
        { condition  :  abs_period = 1
          expression :  ddelivery0921 <= [WS_Orange_Fraction]  * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_Orange:
        { condition  :  abs_period > 1
          expression :  ddelivery0921 <= _Stor_Final_Orange(-1)
        }


Constraint   Deliv_Lim_OWASA :
        { condition  :  abs_period = 1
          expression :  dflow0479.0431 <= [WS_OWASA_Fraction]  * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_OWASA :
        { condition  :  abs_period > 1
          expression :  dflow0479.0431 <= _Stor_Final_OWASA(-1)
        }


Constraint   Deliv_Lim_Holly :
        { condition  :  abs_period = 1
          expression :  ddelivery0924 <= [WS_Holly_Fraction]  * [Max_WS_Storage]
        }

Constraint   Deliv_Lim_Holly :
        { condition  :  abs_period > 1
          expression :  ddelivery0924 <= _Stor_Final_Holly(-1)
        }


// Water quality release


Constraint   Release_Limit_Jordan :
        { condition  :  abs_period = 1
          expression :  dflow0470.0480 <= [Max_WQ_Storage]
        }

Constraint   Release_Limit_Jordan :
        { condition  :  abs_period > 1
          expression :  dflow0470.0480 <= _WQ_Storage(-1)
        }


// Compute Jordan hydro production (total kW)
Set : _Jordan_Hydropower { Value : lookup { JordanHydro, convert_units { flow0470.0480, af, cfs } } }
```

drought_protocol.ocl

```
// Drought protocol

// Determine average inflow to WQ account over the last 14 days
Set :  _Avg_JLake_Inflow
{    condition  :  abs_period = 1
                value      :  inflow0470

                condition  :  abs_period <= 14
     value :       _JLake_WQ_Inf(-1)

     condition  :  default
     value      :  accumulate{ _JLake_WQ_Inf(-1) , -14, -1 } / 14
}

/* Determine which zone of the WQ pool the lake is in.  In the udef list, initialize the WQ storage to the starting storage as defined
   in the constants table.*/
Set :  _WQZone
{    condition   : _WQ_Storage(-1) / [Max_WQ_Storage] * 100  <= [WQ_Pct_Remaining_Stage_4] /* WQ Zone 4 (set in constants table from 0 to 20%) */
     value       : 4

     condition   : _WQ_Storage(-1) / [Max_WQ_Storage] * 100  <= [WQ_Pct_Remaining_Stage_3] /* WQ Zone 3 (set in constants table from 20 to 40%) */
     value       : 3

     condition   : _WQ_Storage(-1) / [Max_WQ_Storage] * 100  <= [WQ_Pct_Remaining_Stage_2] /* WQ Zone 2 (set in constants table from 40 to 60%) */
     value       : 2

     condition   : _WQ_Storage(-1) / [Max_WQ_Storage] * 100  <= [WQ_Pct_Remaining_Stage_1] /* WQ Zone 1 (set in constants table from 60 to 80%) */
     value       : 1

     condition   : default                                   /* WQ Zone 0 (Normal Operations) [right now, 80% and above) */
     value       : 0
}

/*  This is to set the triggers.  In all cases, the triggers and associated level counters are reset to zero when the elevation reaches 216 feet.

For the first trigger, activate it when the water quality zone reaches 1.
The triggers for other levels activate whenever the pond hits that water quality zone (or lower) and a specified number of days in the prior level has elapsed.
The specified number of days (specified in the OCL constants) is the minimum interval between levels.
In other words, the trigger will stay in place for at least a specified number of days (even if the zone drops below that level) at which time the next trigger goes on.

Each level # is associated with the water quality zone.

Note that on refill, no skipping of levels is allowed.  The WQ Zone must improve two levels before turning off the next level trigger.   */

Set : _Trigger_1_On
{   //  For first day of simulation, set to the initial value in the udef list as defined in the constants table.  User may wish to simulate conditions
                //  starting with a certain trigger condition.  Setting the WQ zone would not be adequate since there is generally a waiting period between triggers.  The trigger
                //  condition is important since it sets the minimum release from Jordan and target flow at Lillington.
                condition  :  abs_period = 1
                value      :  _Trigger_1_On(-1)

                // Turning off trigger
                condition  :  _Count_Trigger_1(-1) > 0 and elevation0470 < 216
                              {   condition  :  _Trigger_2_On(-1) = 1   // during drawdown
                                            value      :  0
```

```
                                condition  :  default              // during refill, trigger will stay on as long as pond has not
refilled to 216 feet
                                value      :  _Trigger_1_On(-1)
                        }

        // Turning on trigger

                        // The first condition is during drawdown.  WQ zone could drop to zones 2 through 4, but those
triggers cannot go on until passing through the first trigger.
                        // Once we've gotten to the second and higher triggers, the 1st trigger will turn off, as there is no
waiting period.
        condition  : _WQZone >= 1 and elevation0470 < 216 and _Trigger_2_On(-1) = 0 and _Trigger_3_On(-1) = 0
and _Trigger_4_On(-1) = 0
        Value      : 1

                        //  for turning on trigger during refill. It cannot turn on again if pond has refilled to 216 feet.
                        condition  :  _Trigger_2_On(-1) = 1 and _WQZone = 0 and elevation0470 < 216
        Value      : 1

        // Otherwise, trigger is off
        Condition : default
   Value     : 0
}

// Logic is similar for the other triggers.
Set : _Trigger_2_On
{   condition  :  abs_period = 1
        value      :  _Trigger_2_On(-1)

        // Turning off trigger
        condition  :  _Count_Trigger_2(-1) > 0 and elevation0470 < 216
                        {   condition  :  _Trigger_3_On(-1) = 1   // during drawdown
                                value      :  0

                                condition  :  _WQZone <= 0  // during refill.
                                value      :  0

                                condition  :  default
                                value      :  _Trigger_2_On(-1)
                        }

        // Turning on trigger

                        // The first condition is during drawdown
                        condition  :  _Count_Trigger_1(-1) >= [Level_Change_Time_Interval] and _WQZone >= 2 and
elevation0470 < 216
        Value      : 1

                        // The second condition is during refill. It cannot turn on again unless WQ zone is two zones higher
than yesterday.
                        condition  : _Trigger_3_On(-1) = 1 and _WQZone <= 1  and elevation0470 < 216
                        value      :  1

        // Otherwise, trigger is off
        Condition : default
   Value     : 0
}

Set : _Trigger_3_On
{   condition  :  abs_period = 1
        value      :  _Trigger_3_On(-1)

        // Turning off trigger
        condition  :  _Count_Trigger_3(-1) > 0 and elevation0470 < 216
                        {   condition  :  _Trigger_4_On(-1) > 0   // during drawdown
                                value      :  0

                                condition  :  _WQZone <= 1  // during refill
                                value      :  0
```

```
                        condition  :  default
                        value      :  _Trigger_3_On(-1)
                }

        // Turning on trigger

                // The first condition is during drawdown
                condition  :  _Count_Trigger_2(-1) >= [Level_Change_Time_Interval] and _WQZone >= 3 and
elevation0470 < 216
        Value      : 1

                // The second condition is during refill.
                condition  : _Trigger_4_On(-1) = 1 and _WQZone <= 2  and elevation0470 < 216
                value      :  1

        // Otherwise, trigger is off
        Condition : default
   Value     : 0
}

Set : _Trigger_4_On
{   condition  :  abs_period = 1
        value      :  _Trigger_4_On(-1)

        // Turning off trigger
        condition  :  _Count_Trigger_4(-1) > 0 and elevation0470 < 216
                {   condition  :  _WQZone <= 2  // during refill.
                        value      :  0

                        condition  :  default
                        value      :  _Trigger_4_On(-1)
                }
        // Turning on trigger

                // During drawdown
                condition  :  _Count_Trigger_3(-1) >= [Level_Change_Time_Interval] and _WQZone >= 4 and
elevation0470 < 216
        Value      : 1
   // Otherwise, trigger is off
        Condition : default
   Value     : 0
}

/*  The following lines set the drought stage according to which triggers are on and for how long.*/
Set :  _Drought_Stage
{   condition : _Trigger_4_On = 1
   value     : 4

   condition : _Trigger_3_On = 1
   value     : 3

   condition : _Trigger_2_On = 1
   value     : 2

   condition : _Trigger_1_On = 1
   value     : 1

   condition : _Trigger_1_On(-1) = 1 or _Trigger_2_On(-1) = 1 or _Trigger_3_On(-1) = 1 or _Trigger_4_On(-1) = 1
   value     : _WQZone

   condition : default
   value     : 0
}


// This is for determining whether the lake is drawing down based on changing WQ zones (rather than just day to day
change in WQ storage while in that zone).
// Turn the index off only if the WQ zone increases during refill.
Set :  _Level_Drawdown
{    condition  :  _Level_Drawdown(-1) = 1
```

```
      { condition  :  _Drought_Stage < _Drought_Stage(-1)
        value      :  0

        condition  :  default
        value      :  _Level_Drawdown(-1)
      }

    condition  :  _Drought_Stage > _Drought_Stage(-1)
    value      :  1

    condition  :  default
    value      :  0
}

//  These are the counters associated with each trigger

// Do FOR:NEXT loop since the counters are the same for all Jordan Lake trigger levels.  Here, DWR has chosen
// to end a trigger level when the next has been reached rather than keeping it on for the entire drought.

:FOR:
{  [Level] = { 1, 2, 3, 4}  }

            // Number of days in which counter is on and the number of days in each drought stage
            Set : _Count_Trigger_[Level]
            {
                        Condition : _Count_Trigger_[Level](-1) >= 1
            {
            Condition : _Trigger_[Level]_On = 0
            Value     : 0

            Condition : default
            Value     : _Count_Trigger_[Level](-1) + 1
            }

            Condition : _Trigger_[Level]_On = 1
            Value     : 1

            Condition : default
            Value     : 0
            }

            //  DWR included this counter for determining total # of days at each level over the simulation period.  Here the
            //            trigger stays on and is counted even if another trigger has been reached.
            Set :  _Total_Count_Trigger_[Level]
            {   Condition :  _Count_Trigger_[Level] > 0
      Value     :  _Total_Count_Trigger_[Level](-1) + 1

      Condition : default
      Value     : 0
            }

            // Establish a day counter which resets after _ days have elapsed as defined by the user for the [Level Change
Time Interval].
            // This will be used to determine adjustments to the Lillington target after the day counter reaches the time
interval
            Set :  _CumDayWithinInt_[Level]
            {   condition  :   _CumDayWithinInt_[Level](-1) = [Level_Change_Time_Interval]
                        {   condition :  _Trigger_[Level]_On = 1
                           value      :  1

                                    condition  :  default
                                    value      :  0
                        }

                        condition  :  _Trigger_[Level]_On = 1
                        value      :  _CumDayWithinInt_[Level](-1) + 1

                        condition  :  default
                        value      :  0
            }
```

```
:NEXT:

/*  These are counters to track the number of times (events) in the record each trigger level would have activated.  This is
not the same as tracking
as how often a zone is reached due to the criteria for switching levels (which include a waiting period).  Events are
arbitrarily selected to last
at least 5 days. In other words, the phase 1 counter will solve to 2 if in 2 drought years, trigger 1 is activated twice, each
time lasting at least 5 days.
If the trigger is reactivated during refill, and if it lasts for 5 days, the phase event will be counted here.  To get a better
representation of the actual
number of drought events, not the drawdown and refill events, may need to adjust this code.  */

:FOR:
{  [Level] = { 1, 2, 3, 4 }  }

            Set : _Ph_[Level]_event_count
            {   Condition : _Count_Trigger_[level]  = 5 and _Count_Trigger_[level](-1) = 4
            Value     : _Ph_[Level]_event_count(-1) + 1

            Condition : default
            Value      : _Ph_[Level]_event_count(-1)
            }

:NEXT:

// The following lines determine the Lillington target according to the drought level and the number of days at that drought
level.
// The target at Lillington steps down (on drawdown) or up (on refill) by a specified amount every specified number of days
(Level_Change_Time_Interval).*/

:FOR:
{  [Level] = { 1, 2, 3, 4 }  }

            Set :   _Lill_Target_[Level]
            {   // for moving into more restrictive drought phases (based on trigger conditions) during drawdown.  On the first
day of entering the more restrictive trigger,
                        // set the target to the upper end of the target range associated with that trigger.  Do not do this if in
the previous phase (as expressed by yesterday's
      // Lillington target value, or min_flow0550.0555(-1)), the target was at the lower end of the lower phase.  In this case,
drop down by the user-defined
      // increment right away.
      condition  :  _Drought_Stage > _Drought_Stage(-1)
         {   condition  :  min_flow0550.0555(-1) = convert_units {[Lillington_Upper_Target_Stage_[Level]], cfs, af}
                              value      :  convert_units {[Lillington_Upper_Target_Stage_[Level]] -
[Lillington_Increment_Stage_[Level]], cfs, af}

            condition  :  default
            value      :  convert_units {[Lillington_Upper_Target_Stage_[Level]], cfs, af}
         }

                        // For moving into less restrictive drought phases during refill.  Only apply the lower end of the target
range to be conservative.  For example, if the
      // range is 450 to 600 cfs, keep the target at 450 cfs throughout that period (even if longer than 7 days).
                        condition  :  _Drought_Stage < _Drought_Stage(-1)
      value      :  convert_units {[Lillington_Lower_Target_Stage_[Level]], cfs, af}

                        // if drawdown is continuing, but the drought phase has not changed
      condition  :  _Level_Drawdown = 1
                                                {  // reduce target by user-defined increments, but only when the user-defined
time interval has been reached.  The lowest value it can reach
                                                   // is the lower range of the target.  The target will be reduced even if WQ
storage is increasing while in this drought level, again to be conservative.
                                                         condition  :  _CumDayWithinInt_[Level] =
[Level_Change_Time_Interval]
                                                   value      :  max { convert_units {[Lillington_Lower_Target_Stage_[Level]], cfs, af},

            _Lill_Target_[Level](-1) -  convert_units { [Lillington_Increment_Stage_[Level]], cfs, af} }

                                                         condition  :  default
```

```
                                                value     :  _Lill_Target_[Level](-1)
                                        }

                        // if refill is occuring, but the drought phase has not changed.  Set to the lower end of the target range throughout that particular drought phase.
                        condition  :  _Level_Drawdown = 0
        value     :  _Lill_Target_[Level](-1)

            // default condition is to set the target to its upper level
                        condition  :  default
                        value     :  convert_units {[Lillington_Upper_Target_Stage_[Level]], cfs, af}
            }

:NEXT:

// Now set the min flow at Lillington based on the computed target
Set : min_flow0550.0555
{   condition  :  _Trigger_4_On = 1
            value     :  _Lill_Target_4

            condition  :  _Trigger_3_On = 1
            value     :  _Lill_Target_3

            condition  :  _Trigger_2_On = 1
            value     :  _Lill_Target_2

            condition  :  _Trigger_1_On = 1
            value     :  _Lill_Target_1

    condition  :  _Trigger_1_On(-1) = 1 or _Trigger_2_On(-1) = 1 or _Trigger_3_On(-1) = 1 or _Trigger_4_On(-1) = 1
    value     :  min_flow0550.0555(-1)

            condition  :  default  // which will apply if the lake refills
            value     :  convert_units {[Lillington_Target_Normal], cfs, af}
}

//  Adjust the min release from Jordan depending on drought trigger condition.

Set  :  min_flow0470.0480
{   // For trigger 3 and 4 conditions, reduce the minimum release if there is enough local inflow to provide a minimum of 300 cfs at Lillington.
    // The net withdrawal in this reach is approximately 90 cfs for the 2050 demand scenario, so factor this in to help meet the 300 cfs minimum.
    // Releases will be higher to meet local net withdrawals down to Lillington due to weighting.  Never release less than 40 cfs.
    condition  :  _Trigger_4_On = 1
    value     :  max { convert_units{40, cfs, af},
                    min {convert_units{ [Jordan_Minimum_Release_Stage_4], cfs, af},  convert_units {300, cfs, af} + convert_units {90, cfs, af}
                        - (inflow0550 + inflow0490 + inflow0640 + flow0620.0640) } }

    condition  :  _Trigger_3_On = 1
    value     :  max { convert_units{40, cfs, af},
                    min {convert_units{ [Jordan_Minimum_Release_Stage_3], cfs, af},  convert_units {300, cfs, af} + convert_units {90, cfs, af}
                        - (inflow0550 + inflow0490 + inflow0640 + flow0620.0640) } }

    condition  :  _Trigger_2_On = 1
    value     :  convert_units{ [Jordan_Minimum_Release_Stage_2], cfs, af}

    condition  :  _Trigger_1_On = 1
    value     :  convert_units{ [Jordan_Minimum_Release_Stage_1], cfs, af}

    condition  :  _Trigger_1_On(-1) = 1 or _Trigger_2_On(-1) = 1 or _Trigger_3_On(-1) = 1 or _Trigger_4_On(-1) = 1
    value     :  min_flow0470.0480(-1)

    condition  :  default
    value     :  convert_units{ [Jordan_Minimum_Release_Normal], cfs, af}
}
```

Jordan_WQ_WS_Accounts.ocl

```
// Note this file is included after the solve statement in the main.ocl file, so references to decision variables like flow and delivery
// have already been solved.


/* The conservation storage between elevation 202 and 216 feet consists of the water supply storage for up to six users and the
 water quality storage.

Fraction of conservation storage and inflow :
WQ = 67.38% allocated (94,600 acft.)
WS = 32.62% allocated (45,800 acft.), which is broken down by user:

The accounts are numbered as follows:

   Cary-Apex (node 471)
   Chatham County (node 473)
         Wake (RTP South) (node 474)
         Durham (arc1151)
         Morrisville  (node 477)
   Orange County (node 921)
         OWASA (arc 1151.431, via 479.1151)

         Holly Springs (arc 479.923)

         To this we add an allocation to a "dummy" account to track the unallocated water or to increase
         demands on the water supply storage without changing other allocations

         Other (node 475)

The allocations for each account are defined in the constants table */


/*  INFLOW DISTRIBUTION BY WATER SUPPLY ACCOUNT */

/* Start with Leila's spreadsheet calculating the water supply inflow distribution */

// Evap (0) since this file is included after the solve statement and we want today's evap, not tomorrow's */

Set  :  _JLakeInf     {  value :  flow0410.0470 + inflow0470 - evap0470(0) }  /* Base it on net inflow */
Set  :  _JLake_WQ_Inf {  value :  _JLakeInf * [Max_WQ_Storage] /  [Max_WQ_WS_Storage]  }
Set  :  _JLake_WS_Inf {  value :  _JLakeInf * [Max_WS_Storage] /  [Max_WQ_WS_Storage]  }

/*  Calculate total inflow available to pool to include any spillover from the water quality account. */
Set  :  _Inf_avail_to_WS_pool   {  value  :  _WQ_Pool_Excess(-1) + _JLake_WS_Inf  }

/*  Calculate the total water supply demand and delivery for all accounts */
Set  :  _WS_Total_Demand   {  value  :  demand0471 + demand0473 + demand0474 + demand0475 + 0 + demand0477 + demand0921 + 0 + 0 } // Since OWASA & Durham are arcs and not demand nodes, sub in zero, can be changed if a Jordan transfer is used. No Holly Springs either.
Set  :  _WS_Total_Deliv    {  value  :  delivery0471 + delivery0473 + delivery0474 + delivery0475 + flow0479.1151  + delivery0477 + delivery0921 + flow0479.0923 }

// Reset water supply account to 100% if elevation reaches 216 or projected water supply is full.  For the first day of simulation, use the starting storage based
// on the individual accounts as defined in the constants table.
Set  :  _Total_WS_Storage
{   condition  :  abs_period = 1
         value      :  [Starting_Storage_CaryAp] + [Starting_Storage_Chatham] + [Starting_Storage_RTP]   + [Starting_Storage_Other] + [Starting_Storage_Durham] +
                                                  [Starting_Storage_Morris] + [Starting_Storage_Orange]  + [Starting_Storage_OWASA] + [Starting_Storage_Holly]

         condition  :  elevation0470 >= 216.0 or (_Total_WS_Storage(-1) + _Inf_avail_to_WS_pool - _WS_Total_Deliv ) >= [Max_WS_Storage]
   value      :  [Max_WS_Storage]

   condition  :  default
```

```
   value     : _Total_WS_Storage(-1) + _Inf_avail_to_WS_pool - _WS_Total_Deliv
}

Set : _Req_Refill_WS_Pool   { value : [Max_WS_Storage] - _Total_WS_Storage + _WS_Total_Deliv }
Set : _WS_Pool_Excess       { value : max { 0, _JLake_WS_Inf - _Req_Refill_WS_Pool } }
Set : _Inf_used_for_WS_pool { value : min { _Inf_avail_to_WS_pool, _Req_Refill_WS_Pool } }


/*  ---------- */

// Determine required refill for each account.

Set : _Req_Refill_CaryAp
{           condition : abs_period = 1
            value     : delivery0471

            condition : default
            value         : [WS_CaryAp_Fraction] * [Max_WS_Storage] - _Stor_Final_CaryAp(-1) +  delivery0471
}

Set : _Req_Refill_Chatham
{           condition : abs_period = 1
            value     : delivery0473

            condition : default
            value         : [WS_Chatham_Fraction] * [Max_WS_Storage] - _Stor_Final_Chatham(-1) +  delivery0473
}

Set : _Req_Refill_RTP
{           condition : abs_period = 1
            value     : delivery0474

            condition : default
            value         : [WS_RTP_Fraction] * [Max_WS_Storage] - _Stor_Final_RTP(-1) +  delivery0474
}

Set : _Req_Refill_Other
{           condition : abs_period = 1
            value     : delivery0475

            condition : default
            value         : [WS_Other_Fraction] * [Max_WS_Storage] - _Stor_Final_Other(-1) +  delivery0475
}

Set : _Req_Refill_Durham
{           condition : abs_period = 1
            value     : flow0479.1151 - flow1151.0431

            condition : default
            value         : [WS_Durham_Fraction] * [Max_WS_Storage] - _Stor_Final_Durham(-1) +  flow0479.1151 -
flow1151.0431
}

Set : _Req_Refill_Morris
{           condition : abs_period = 1
            value     : delivery0477

            condition : default
            value         : [WS_Morris_Fraction] * [Max_WS_Storage] - _Stor_Final_Morris(-1) +  delivery0477
}

Set : _Req_Refill_Orange
{           condition : abs_period = 1
            value     : delivery0921

            condition : default
            value         : [WS_Orange_Fraction] * [Max_WS_Storage] - _Stor_Final_Orange(-1) +  delivery0921
}

Set : _Req_Refill_OWASA
```

```
{           condition  :  abs_period = 1
            value      :  flow1151.0431

            condition  :  default
            value          :  [WS_OWASA_Fraction] * [Max_WS_Storage] - _Stor_Final_OWASA(-1) +  flow1151.0431
}

Set  : _Req_Refill_Holly
{           condition  :  abs_period = 1
            value      :  flow0479.0923

            condition  :  default
            value          :  [WS_Holly_Fraction] * [Max_WS_Storage] - _Stor_Final_Holly(-1) +  flow0479.0923
}


/*  Establish initial inflow to the accounts */

:FOR:
{  [Account] = { CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly }  }

            // Determine initial inflow to each account
            Set  :  _Inf_[Account]  {  value  :  min { [WS_[Account]_Fraction] * _Inf_avail_to_WS_pool,
_Req_Refill_[Account] } }

:NEXT:

/*  Determine remaining inflow to be distributed */
Set  :  _Inf_Rem_WS   { value :  _Inf_used_for_WS_pool - (_Inf_CaryAp +  _Inf_Chatham + _Inf_Durham + _Inf_Other +
_Inf_RTP + _Inf_Morris

                                    +_Inf_Orange + _Inf_OWASA + _Inf_Holly ) }

/*  Determine remaining deficit by account */

:FOR:
{  [Account] = { CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly }  }

            Set  :  _Rem_def_[Account]   {  value  :  _Req_Refill_[Account] - _Inf_[Account]  }

:NEXT:

Set  :  _Rem_def_Total    {  value  :  _Rem_def_CaryAp +  _Rem_def_Chatham + _Rem_def_Durham  +
_Rem_def_Other + _Rem_def_RTP +  _Rem_def_Morris
                                                                                                                +
_Rem_def_Orange + _Rem_def_OWASA + _Rem_Def_Holly }

:FOR:
{  [Account] = { CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly }  }

            //  Distribute remaining inflow proportional to remaining deficit
            Set  :  _Rem_Inf_[Account]
                        {   condition  :  _Rem_def_total > 0
            value      :  min { _Rem_def_[Account], _Inf_Rem_WS * _Rem_def_[Account] / _Rem_def_total }

            condition  :  default
            value      :  0
                        }

            //  Compute total inflow to each pool
            Set :  _Inf_Total_[Account]  {  value  :  _Inf_[Account] + _Rem_Inf_[Account] }

:NEXT:


// Determine water supply storage in each account.  For initialization in the udef list, set equal to the starting storage
defined in the constants table.
// Set the storage to account for starting storage less the delivery plus the total inflow. If that exceeds the max storage for
that account, reset
// the account to full.  The accounts are not allowed to go negative
```

```
Set  : _Storage_CaryAp  {  value :  max { 0, min { [WS_CaryAp_Fraction]  * [Max_WS_Storage] , _Stor_Final_CaryAp(-1)
+ _Inf_Total_CaryAp  - delivery0471 } } }
Set  : _Storage_Chatham {  value :  max { 0, min { [WS_Chatham_Fraction] * [Max_WS_Storage] ,
_Stor_Final_Chatham(-1) + _Inf_Total_Chatham - delivery0473 } } }
Set  : _Storage_RTP             {  value :  max { 0, min { [WS_RTP_Fraction]     * [Max_WS_Storage] , _Stor_Final_RTP(-1)
+ _Inf_Total_RTP     - delivery0474 } } }
Set  : _Storage_Other           {  value :  max { 0, min { [WS_Other_Fraction]   * [Max_WS_Storage] , _Stor_Final_Other(-
1)   + _Inf_Total_Other   - delivery0475 } } }
Set  : _Storage_Durham          {  value :  max { 0, min { [WS_Durham_Fraction]  * [Max_WS_Storage] ,
_Stor_Final_Durham(-1)  + _Inf_Total_Durham  - flow0479.1151 - flow1151.0431 } } }
Set  : _Storage_Morris          {  value :  max { 0, min { [WS_Morris_Fraction]  * [Max_WS_Storage] , _Stor_Final_Morris(-
1)  + _Inf_Total_Morris  - delivery0477 } } }
Set  : _Storage_Orange          {  value :  max { 0, min { [WS_Orange_Fraction]  * [Max_WS_Storage] ,
_Stor_Final_Orange(-1)  + _Inf_Total_Orange  - delivery0921 } } }
Set  : _Storage_OWASA           {  value :  max { 0, min { [WS_OWASA_Fraction]   * [Max_WS_Storage] ,
_Stor_Final_OWASA(-1)   + _Inf_Total_OWASA   - flow1151.0431 } } }
Set  : _Storage_Holly           {  value :  max { 0, min { [WS_Holly_Fraction]   * [Max_WS_Storage] , _Stor_Final_Holly(-1)
+ _Inf_Total_Holly   - flow0479.0923 } } }

// Assume pools are automatically reset to full if the total water supply storage account has refilled (do this by overwriting
initial calculation).
// Account is refilled automatically when Jordan elevation reaches 216 feet.

:FOR:
{  [Account] = { CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly }  }

            Set :  _Stor_Final_[Account]
                        {  condition  :  _Total_WS_Storage >= [Max_WS_Storage]
                           value      :  [WS_[Account]_Fraction]  * [Max_WS_Storage]

                           condition  :  default
                           value      :  _Storage_[Account]
      }

:NEXT:

// Calculate pool volume as percent of max storage

:FOR:
{  [Account] = { CaryAp, Chatham, RTP, Other, Durham, Morris, Orange, OWASA, Holly }  }

            Set :  _Stor_Final_Pct_[Account]
                        {
                        condition  : [WS_[Account]_Fraction] = 0
                                    value  : 0

                        condition  : default
                                    value  : _Stor_Final_[Account] / ( [WS_[Account]_Fraction]  * [Max_WS_Storage] )  * 100  }
:NEXT:


/*  WQ ACCOUNTING */

/*  The _WQ_Release is the amount of water required to be released from Jordan Lake to meet the Lillington flow target
for days when the lake is not full.  This
            variable's value should be the same as the model's computed Jordan release when the lake is not full. It is done
by setting the WQ Release to
            the model's computed Jordan releases at the dam.  When the lake is full, we set the WQ Release to the value
that would have been required to meet the
            Lillington target were the lake not full.  So it is the Lillington target minus the Moncure flow minus the Harris
Lake release plus demands between the
   dam at Jordan Lake and Lillington minus the discharges between the dam and Lillington. */


/*  The water quality release from Jordan = outflow from Jordan.  The release is constrained in the main.ocl file to the
amount in the water
            quality storage pool plus the inflow to that account.  This way, the release will not be made if the account has
emptied. Note the outflow may
```

```
            include releasing surplus water above the rule curve, which technically would be more than the water quality
release.  But since the account
            is reset to full above the rule curve, it makes no difference.  However, to make it more realistic, set the WQ
release to the minimum flow from Jordan
            when the elevation is at 216 or above.  */
Set  :  _WQ_Release
{    condition  :  elevation0470 >= 216
              value      :  min_flow0470.0480

              condition  :  default
              value      :  flow0470.0480
}


// Initial value set in the udef list based on starting WQ storage reported in the constants table
Set  :  _WQ_Storage
 {                        condition  : elevation0470 >= 216.0
      value      : [Max_WQ_Storage]

                        // the WQ storage is not allowed to go negative
                        condition  :  default
      value      :  max { 0, min { [Max_WQ_Storage], _WQ_Storage(-1) + _JLake_WQ_Inf + _WS_Pool_Excess -
_WQ_Release } }
 }

Set  :  _WQ_Storage_Pct  {  value  :  _WQ_Storage /  [Max_WQ_Storage] * 100     }
Set  :  _Req_Refill_WQ   {  value  :  [Max_WQ_Storage] - _WQ_Storage + _WQ_Release }

Set  :  _WQ_Pool_Excess
{     condition  :  _Req_Refill_WS_Pool > _JLake_WS_Inf
      value      :  max { 0, _JLake_WQ_Inf -  _Req_Refill_WQ  }

      condition  :  default
      value      :  0
}
```

Harris_ops.ocl

```
/*  Operational policies for Harris Lake */

// Spill rating curve for Harris.

// The D zone weight is -25, so if in the spill zone, the computed spill will occur because 25 points will otherwise be lost.
// However, spill will not exceed the computed amount because 100 points will be lost, or a net loss of 100 -25, or 75
points.
// We don't want spill to occur above the computed amount in order to meet shortages downstream on the main stem.
Also, we don't
// want the spill to be curtailed for a Fayetteville max flow downstream of 20,000 cfs, which is the Corps operating target.
Jordan
// will curtail releases (but not below the minimum release), but Harris will not, so the D zone penalty is higher than the
weight
// at Fayetteville.

// If reservoir elevation is below the spill zone starting at 220 feet, only the min release (if any is set) will be met since that
arc gets a weight
// of gets a weight of 10.  The spill arc gets a weight of -10.    Note releases will not exceed the minimum when below the
spill zone since
// a weight of -100 is placed on the B zone of the arc.  Normally this is not needed but with the interplay with Jordan Lake,
the weights in the
// reservoir zones are such that we need additional confirmation that Harris won't release more than the minimum in this
arc.

// Set a udef for the projected end of day elevation will be used to determine spill from the rating curve.
Set :  _Proj_Harris_Storage  {  value :  min {max_stor0520, storage0520 + inflow0520 - ( timesers(0520/evap) / 12 *
stor_to_area{0520,storage0520} ) - delivery0531 - delivery0521 - flow0521.0520 - flow0520.0528 - flow0520.0525 } }
Set :  _Proj_Harris_Elev     {  value :  stor_to_elev {0520, _Proj_Harris_Storage}  }


Target Harris_spill: dflow0520.0526
{   Condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 0
    Value     : convert_units { Lookup{ Harris_Spill, _Proj_Harris_Elev }, cfs, af}
}
```

OWASA_ops.ocl

```
// Operations policy for OWASA's system

// Set the Stone Quarry inflow - area adjustment of the Univ. Lake inflow
// Quarry = 1.2 sq. mi., Univ. Lake = 28.7 sq. mi.

Set : inflow0395 { value : 1.2 * inflow0430 / 28.7 }


//Set to refill Stone Quarry w/ spill from Cane Ck Res.
Target CaneCk_SQ_Trans : dflow0390.0395
{   condition : storage0390 >= upper_rule0390
    priority  : 1
    penalty+  : 350
    penalty-  : 300
    Value     : max { 0, min { upper_rule0395 - storage0390 - inflow0395 + evap0395 * stor_to_area { 0395, storage0395 } /
12 ,
                inflow0390 - evap0390 * stor_to_area { 0390, storage0390 } / 12 - min_flow0390.0370 - upper_rule0390 } }

    condition : default
    priority  : 1
    penalty+  : 350
    penalty-  : 350
    Value     : 0
}


// EXISTING OPERATING POLICY

// Set the WD from Cane Creek Reservoir, depending on reservoir levels
// Stone Quarry will be utilized last.

Target CaneCkWD : dflow0390.0431
{   // If Univ. Lake full and CCR is below full, make all WDs from Univ. Lake
    condition : storage0430 >= upper_rule0430 - 0.1 and storage0390 < upper_rule0390
    priority  : 1
    penalty+  : 310
    penalty-  : 310
    Value     : 0

    // If both reservoirs are full split the WD
    condition : storage0430 >= upper_rule0430 and storage0390 >= upper_rule0390
    priority  : 1
    penalty+  : 310
    penalty-  : 310
    Value     : min { 0.5 * demand0431, max_flow0390.0431 }


    // Split WDs for the first 100 MG of drawdown (50 MG from Univ Lake)
    condition :  upper_rule0430 - storage0430 <= convert_units { 50, mg, af}
    priority  : 1
    penalty+  : 310
    penalty-  : 310
    Value     : min { 0.5 * demand0431, max_flow0390.0431 }

    // After that withdraw the majority, less 1 mgd, from Cane Creek
    condition : upper_rule0430 - storage0430 > convert_units { 50, mg, af}
    priority  : 1
    penalty+  : 310
    penalty-  : 310
    Value     : min { demand0431 - convert_units { 1, mgd, af }, max_flow0390.0431 }

    // Then draw down Cane Creek completely if Univ Lake is depleted
    condition : default
    priority  : 1
    penalty+  : 310
    penalty-  : 310
    Value     : min { demand0431, max_flow0390.0431 }
}
```

SilerCity_ops.ocl

```
/*  Minimum release policy for Siler City's Charles Turner Reservoir on the Rocky River - based on combined usable
    storage remaining in the reservoirs. */

Set : _SilerCity_UsableStor     { Value : max { 0, min { (max_stor0324 - dead_stor0324 + max_stor0325 - dead_stor0325),
(storage0324 - dead_stor0324 + storage0325 - dead_stor0325)  } } }
Set : _SilerCity_UsableStorPct { Value : _SilerCity_UsableStor  / (max_stor0324 - dead_stor0324 + max_stor0325 -
dead_stor0325) }


// Trigger when reaching tier 2
Set :  _SilerCityTrig2
{   condition :  _SilerCity_UsableStorPct < 0.7
    value     :  1

    condition :  default
    value     :  0
}


// Trigger when reaching tier 3
Set :  _SilerCityTrig3
{   condition :  _SilerCity_UsableStorPct < 0.4
    value     :  1

    condition :  default
    value     :  0
}


Set :  _Tier_MinRelease
{   // Tier 3
    condition : _SilerCityTrig3 = 1
    Value     : convert_units {pattern(Tier3_RockyRiver),cfs,af}

    // Tier 2
    condition : _SilerCityTrig2 = 1
    Value     : convert_units {pattern(Tier2_RockyRiver),cfs,af}

    // Tier 1
    condition : default
    Value     : convert_units {pattern(Tier1_RockyRiver),cfs,af}
}

// Also provide pulsing to simulate storm events (if those do not occur) of 20 cfs for 12 hours, or 20 acre feet per day, once
per month,
// whenever combined usable storage exceeds 40%.  401 Water Quality Certificate says pulses only required when no
natural events of similar
// magnitude are observed.  Assume we will provide this at the beginning of each month regardless of natural flows.

// Set min flow
Set :  min_flow0325.0328
{   condition  :  day = 1 and _SilerCity_UsableStorPct > 0.4
    value      :  max{_Tier_MinRelease, 20}

    condition  :  default
    value      :  _Tier_MinRelease
}


//  When in Tier 2, reduce delivery by 10%; when in Tier 3, reduce another 10%.
Constraint   Consvn_Tier2 :
        {   Condition  :  _SilerCityTrig2= 1
            Expression :  ddelivery0327 <= demand0327 * 0.9 }

Constraint   Consvn_Tier3 :
        {   Condition  :  _SilerCityTrig3= 1
            Expression :  ddelivery0327 <= demand0327 * 0.8 }
```

Randleman_ops.ocl

```
/*  Operational policies for Randleman Lake */


Set MinReleaseRandleman :  min_flow0270.0280
{    condition  :  storage0270 / max_stor0270 <= 0.30
     value      :  convert_units {10, cfs, af }

     condition  :  storage0270 / max_stor0270 <= 0.60
     value      :  convert_units {20, cfs, af }

     condition  :  default
     value      :  convert_units {30, cfs, af }
}
```

Fayetteville_ops.ocl

```
/*  Operational policies for Fayetteville */


// Switch to river intake only when Glenville < 212.2 ft
Target Glenville_WD : dflow0760.0733
{   condition : storage0760 < lower_rule0760
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : 0

// Otherwise WD 4.5 mgd (per conversation with Chris Smith at Fayettville).
    condition : default
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : convert_units { 4.5, mgd, af }
}
```

FtBragg_ops.ocl

```
/*  Operational policy for Ft. Bragg */

// Set targets to dictate WDs between
Constraint : {dFlow0663.0721 = 0}  // none from Dunn
Constraint : {dFlow0720.0721 = 0}  // none from old intake

// Set the fraction coming from Harnett w/ a substitute

:Substitute: [FtBraggWS_Harnett] = 0.5

Target Harnett_WD : dflow0551.0721
{   condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 100
    Value     : [FtBraggWS_Harnett] * demand0721 // The rest will be from Fayettville
}
```

SpringLake_ops.ocl

```
/*  Operational policy for Spring Lake */

// Set the fraction coming from Harnett w/ a substitute

:Substitute: [SpringLakeWS_Harnett] = 0.21


// Set targets to dictate WDs between sources
Target Hatnett_WD : dflow0551.0719
{   condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 100
    Value     : [SpringLakeWS_Harnett] * demand0719 // 21% from Harnett, rest will be from Fayettville
}
```

falls_bdam_ops.ocl

```
/* Operational policies for Falls and Beaverdam */

/*  Sets the Falls minimum release - seasonal pattern (100/60 cfs) with user-defined safety factor (only when using service gates)
   The safety factor can be set in the ocl constants table. */
Set FallsRelease : min_flow1300.1310
{   condition : month > 3 and month < 11
   value     : convert_units { 100, cfs, af } * ( 1 + [FLakeMin_SafeFact] / 100 )

   condition : default
   /*  Winter min. release based on amount from Piggyback gates, which is approx. 60 cfs depending on stage. */
   value     : convert_units { lookup { PiggybackGate, elevation1300 }, cfs, af }
}

/*  Sets the Clayton minimum flow target - seasonal pattern (254/184 cfs) with user-defined safety factor
   Also can be overridden if user chooses, when WQ storage drops below 20%; this can be truned on in the ocl constants table. */
Set Clayt_Target: min_flow1630.1640
{   condition : [ClaytonTarget_Override] = 1 and ( _Total_WQ_Pct(-1) < [FLake_WQ_Threshold] or elevation1300 <= 245 )
   value     : 0

   condition : month > 3 and month < 11
   value     : convert_units { 254, cfs, af } * ( 1 + [ClaytonTarget_SafeFact] / 100 )

   condition : default
   value     : convert_units { 184, cfs, af } * ( 1 + [ClaytonTarget_SafeFact] / 100 )
}

/*  Beaverdam elevation = projected Falls elevation if at or above 249 ft.  */
Target Bdam_elevation : dstorage1230
{   condition : elevation1300 >= 249.0
            priority  : 1
   penalty+  : 10000
   penalty-  : 10000
   Value     : elev_to_stor {1230, elevation1300}
}

/*Beaverdam drought release policy*/

Target Beaverdam_release : dflow1230.1300

{   /* If Falls is between 237 and 240, and Beaverdam is above 236.5, draw down Beaverdam maximum of 1-ft (down to a minimum of 236.5); next drawdown can occur after 5 days */
   condition : elevation1230(-5) - elevation1230 < 5 and elevation1300 < 240 and elevation1230 > elevation1300 and elevation1230> 236.5
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min { elev_to_stor { 1230, elevation1230 } - elev_to_stor { 1230, elevation1230 - 1 }, elev_to_stor { 1230, elevation1230 } - elev_to_stor { 1230, 236.5 } }

   /* If Falls is below 249 ft, make sure Beaverdam is not above 249 ft */
   condition : elevation1230 > 249 and elevation1300 < 249
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : elev_to_stor { 1230, elevation1230 } - elev_to_stor { 1230, 249 }

  /*  To ensure accurate accounting of water supply and quality pools, when stressed, release some contents from Beaverdam if either yesterday's water supply or
   water quality account for Falls was less than 5% full; do not draw down more than 1 ft per day  THIS IS NOT PART OF TERRY'S SPREADSHEET (sn) */
   condition :  _FLake_WS_Pct(-1) < 5 or _FLake_WQ_Pct(-1) < 5 and elevation1230 > elevation1300 + 0.9 and elevation1230(-5) - elevation1230 < 5
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
```

```
   Value     : max {0, min {elev_to_stor { 1230, elevation1230 } - elev_to_stor { 1230, elevation1230 - 1 } , (
_Bdam_WS_Stor(-1) + _Bdam_WQ_Stor(-1) + inflow1230 - evap1230 )} }

   condition : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : 0
}


/*  Constrain the delivery for Raleigh from Falls based on amount in the total (Falls+Bdam) water supply storage account.
   Demand will not be fulfilled if the account has gone empty and there is not enough inflow to the water supply account
(for the previous day).
   Similarly, constrain the water quality release from Falls (arc 1300.1310) based on amount in the water quality storage
account.

   Since we refer to yesterday's storage estimates, for the first day of the run, constrain deliveries and releases to the
initialized volumes for
   each account (for simplicity, ignore inflows) so that deliveries and releases are made. */


Constraint   Deliv_Lim_Raleigh :
            {  condition  :  abs_period = 1
               expression :  dflow1300.1306 <= [FLake_WS_Stor] + [Bdam_WS_Stor]
            }

Constraint   Deliv_Lim_Raleigh :
            {  condition  :  abs_period > 1
               expression :  dflow1300.1306 <= _Total_WS_Stor(-1)
            }

Constraint   Release_Limit_Falls :
            {  condition  :  abs_period = 1
               expression :  dflow1300.1310 <= [FLake_WQ_Stor] + [Bdam_WQ_Stor]
            }

Constraint   Release_Limit_Falls :
            {  condition  :  abs_period > 1
               expression :  dflow1300.1310 <= _Total_WQ_Stor(-1)
            }
```

falls_flood_ops.ocl

```
/* Flood release policy for Falls Lake */

/*  Calculate estimated local inflow to Clayton, which is used in determing Falls flood releases */
Set : _ClaytLocal
{       Value : inflow1290 + inflow1445 + inflow1450 + inflow1630 +
        /*  To increase accuracy, estimate Crabtree outflows by using starting elevation and spillway curve */
        min {convert_units { Lookup{ 1416Outflow, elevation1416 }, cfs, af}, storage1416 - elev_to_stor {1416, 230} } +

        min {convert_units { Lookup{ 1418Outflow, elevation1418 }, cfs, af}, storage1418 - elev_to_stor {1418, 335} } +

        min {convert_units { Lookup{ 1422Outflow, elevation1422 }, cfs, af}, storage1422 - elev_to_stor {1422, 252} }
}


/*  Falls flood operations per recommendations in Terry Brown's email 02/26/2009 */
Target Falls_release  :  dflow1300.1310
{   /*  Release only the minimum release if elevation is less than 255 and est. Clayton inflows >= 7000 cfs */
    condition : elevation1300 >= 251.5 and elevation1300 <= 255 and _ClaytLocal >= convert_units { 7000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : min_flow1300.1310

    /*  If elev. < 255 and est. Clayton inflow < 7000 cfs, release the lesser of 4000 cfs or (7000 - the Clayt inflow).
        Also added provision to only drop Falls to the guide curve, but not less than the minimum release */
    condition : elevation1300 >= 251.5 and elevation1300 <= 255 and _ClaytLocal < convert_units { 7000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : max { min_flow1300.1310, min { convert_units { 4000, cfs, af }, convert_units { 7000, cfs, af } - _ClaytLocal,
storage1300 - elev_to_stor { 1300, 251.5 } } }

    /*  Release only the minimum release if elevation is less than 255 - 258 and est. Clayton inflows >= 7000 cfs */
    condition : elevation1300 > 255 and elevation1300 <= 258 and _ClaytLocal >= convert_units { 7000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : min_flow1300.1310

    /*  If elev. is 255 - 258 and est. Clayton inflow < 7000 cfs, release 7000 - the Clayt inflow. */
    condition : elevation1300 > 255 and elevation1300 <= 258 and _ClaytLocal < convert_units { 7000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : convert_units { 7000, cfs, af } - _ClaytLocal

    /*  Release only the minimum release if elevation is 258 - 264.8 and est. Clayton inflows >= 8000 cfs */
    condition : elevation1300 > 258 and elevation1300 <= 264.8 and _ClaytLocal >= convert_units { 8000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : min_flow1300.1310

    /*   If elev. is 258 - 264.8 and est. Clayton inflow < 8000 cfs, release 8000 - the Clayt inflow. */
    condition : elevation1300 > 258 and elevation1300 <= 264.8 and _ClaytLocal < convert_units { 8000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : convert_units { 8000, cfs, af } - _ClaytLocal

    /*  If elev. is 264.8 - 268 and est. Clayton inflow >= 8000 cfs, release only the computed spillway amount */
    condition : elevation1300 > 264.8 and elevation1300 <= 268 and _ClaytLocal >= convert_units { 8000, cfs, af}
    priority  : 1
    penalty+  : 50
    penalty-  : 50
    Value     : convert_units { lookup { FallsSpillway, elevation1300 }, cfs, af }
```

```
   /*  If elev. is 264.8 - 268 and est. Clayton inflow < 8000 cfs, release [(8000 cfs + the computed spillway amount) - the
Clayt inflow]. */
   condition : elevation1300 > 264.8 and elevation1300 <= 268 and _ClaytLocal < convert_units { 8000, cfs, af}
   priority  : 1
   penalty+  : 50
   penalty-  : 50
   Value     : convert_units {  8000 + lookup { FallsSpillway, elevation1300 }, cfs, af } - _ClaytLocal

   /*  If elev. is > 268, release the full amounts possible from the service gates and the spillway. */
   condition : elevation1300 > 268
   priority  : 1
   penalty+  : 50
   penalty-  : 50
   Value     : convert_units { lookup { FallsSvcGate, elevation1300 } + lookup { FallsSpillway, elevation1300 }, cfs, af }
}

/*  Set targets based on flood stages at downstream gages; note that the above release policy takes priorty over these
targets */

/*  Clayton flood control target */
Target Clayton_max  :  dflow1630.1640
{   condition : default
   priority  : 1
   penalty+  : 10
   penalty-  : 0
   Value     : convert_units{ 5332, cfs, af }
}

/*  Goldsboro flood control target  */
Target Goldsboro_max  :  dflow1780.1790
{   condition : default
   priority  : 1
   penalty+  : 10
   penalty-  : 0
   Value     : convert_units{ 6003, cfs, af }
}

/*  Kinston flood control target */
Target Kinston_max  :  dflow1800.1850
{   condition : default
   priority  : 1
   penalty+  : 10
   penalty-  : 0
   Value     : convert_units{ 7168, cfs, af }
}
```

Falls_Bdam_WS_WQ_Accounts.ocl

```
/* The Falls conservation storage zone is divided into water quality and water storage accounts
Fraction of conservation storage and inflow :
WQ = 57.7% allocated (61,322 acft.)
WS = 42.3% allocated (45,000 acft.)

Beaverdam is also included in the WQ/WS accounting, the proportion to each is the same as Falls. */

/*  WQ and WS accounts by lake */
Set :  _Pct_Max_WQ_Storage  {  value  :  ( [Total_Max_WQ_Storage] /  [Total_Max_WQ_WS_Storage] ) * 100 }
Set :  _Pct_Max_WS_Storage  {  value  :  100 - _Pct_Max_WQ_Storage }

Set :  _FLake_Max_WQ_Storage {  value :  _Pct_Max_WQ_Storage / 100 * [FLake_Max_WQ_WS_Storage] }
Set :  _FLake_Max_WS_Storage {  value :  _Pct_Max_WS_Storage / 100 * [FLake_Max_WQ_WS_Storage] }
Set :  _Bdam_Max_WQ_Storage  {  value  : [Total_Max_WQ_Storage] - _FLake_Max_WQ_Storage }
Set :  _Bdam_Max_WS_Storage  {  value  : [Total_Max_WS_Storage] - _FLake_Max_WS_Storage }

/*  Beaverdam Accounting */

Set  :  _Bdam_Inf  {  value :  inflow1230 - evap1230(0) }  /* Base it on net inflow for Beaverdam.

                        Evap (0) since this file is included after the solve statement and we want today's evap, not
tomorrow's */

Set  :  _Bdam_Inf_WS   {  value :  _Pct_Max_WS_Storage / 100 * _Bdam_Inf }

Set  :  _Bdam_WS_Rel /* Calculate the WS outflow to Falls from Beaverdam.  Assume that the WS amount is simply
based on the percent of water supply to total account storage in Beaverdam */
{     condition  :  elevation1230 < 249 /* WS Outflow only if Beaverdam is less than 249ft (spillage is accounted for in Falls)
*/
      value      :  flow1230.1300 * _Pct_Max_WS_Storage / 100

      condition  :  default
      value      :  0
}

Set  :  _Bdam_WS_Stor_Init /* Calculate the initial Beaverdam WS storage (before computing spill to WQ and back*/
{     condition  :  elevation1230 >= 249 or _Bdam_WS_Stor(-1) + _Bdam_Inf_WS - _Bdam_WS_Rel >=
_Bdam_Max_WS_Storage
      value      :  _Bdam_Max_WS_Storage

/*    Prevent the water supply account from going negative */
      condition  :  default
      value      :  max {  0, _Bdam_WS_Stor(-1) + _Bdam_Inf_WS - _Bdam_WS_Rel }
}

Set  :  _Bdam_WStoWQ_Spill /* Calculate the spillover from WS to WQ*/
{     condition  :  _Bdam_WS_Stor(-1) + _Bdam_Inf_WS - _Bdam_WS_Rel > _Bdam_Max_WS_Storage /* Spillover only if
projected WS storage is more than 100% */
      value      :  _Bdam_WS_Stor(-1) + _Bdam_Inf_WS - _Bdam_WS_Rel - _Bdam_Max_WS_Storage

      condition  :  default
      value      :  0
}

Set  :  _Bdam_Inf_WQ   {  value  :  _Pct_Max_WQ_Storage / 100 * _Bdam_Inf }

Set  :  _Bdam_WQ_Rel /* Calculate the WQ outflow to Falls from Beaverdam */
{     condition  :  elevation1230 < 249 /* WQ Outflow only if Beaverdam is less than 249ft (spillage is accounted for in Falls)
*/
      value      :  flow1230.1300 * _Pct_Max_WQ_Storage / 100

      condition  :  default
      value      :  0
}

Set  :  _Bdam_WQ_Stor /* Calculate the Beaverdam WQ storage */
{     condition  :  elevation1230 >= 249 or _Bdam_WQ_Stor(-1) + ( _Bdam_WStoWQ_Spill + _Bdam_Inf_WQ -
_Bdam_WQ_Rel ) >= _Bdam_Max_WQ_Storage
```

```
    value     : _Bdam_Max_WQ_Storage

/*   Prevent the water quality account from going negative */
    condition  : default
    value     : max { 0, _Bdam_WQ_Stor(-1) + ( _Bdam_WStoWQ_Spill + _Bdam_Inf_WQ - _Bdam_WQ_Rel ) }
}

Set  :  _Bdam_WQtoWS_Spill /* Calculate the spillover from WQ to WS */
{    condition  :  _Bdam_WQ_Stor(-1) + ( _Bdam_WStoWQ_Spill + _Bdam_Inf_WQ - _Bdam_WQ_Rel ) >
_Bdam_Max_WQ_Storage   /* Spillover only if projected WS storage more than 100% */
    value     : _Bdam_WQ_Stor(-1) + ( _Bdam_WStoWQ_Spill + _Bdam_Inf_WQ - _Bdam_WQ_Rel ) -
_Bdam_Max_WQ_Storage

    condition  : default
    value     : 0
}

Set  :  _Bdam_WS_Stor /* Calculate the final Beaverdam WS storage (after computing spillage) */
{    condition  :  _Bdam_WS_Stor_Init + _Bdam_WQtoWS_Spill >= _Bdam_Max_WS_Storage  /* Set at 100% if at or
above full */
    value     : _Bdam_Max_WS_Storage

    condition  : default
    value     : _Bdam_WS_Stor_Init + _Bdam_WQtoWS_Spill
}

/*  Falls Accounting  */

/* Falls Lake inflow is Falls gain + upstream flows into Falls*/
Set  :  _FLake_Inf
{   /* When Beaverdam is full, inflow to Falls account from Beaverdam will simply be the Beaverdam surplus above 249 (=
net inflow).  Note for the general accounting
            (i.e, not the WS/WQ accounting), storage will accumulate in Beaverdam (and Falls) until the upper rule of 251.5
is reached.
            The point of this is to mirror what historic elevations have been */
            condition  :  elevation1230 >= 249
            value     : inflow1300 + flow1140.1300 + flow1162.1300 + flow1205.1300 + flow1250.1300 + flow1259.1300 +
flow1270.1300 + flow1705.1300 - delivery1302 - evap1300(0) + _Bdam_Inf

/* Otherwise, inflow to Falls account from Beaverdam is simply the Beaverdam release defined in the main.ocl (associated
with drought operations).  This will be today's release since
  this accounting file is included after the solve statement in the main.ocl file */
            condition  :  default
            value     : inflow1300 + flow1140.1300 + flow1162.1300 + flow1205.1300 + flow1250.1300 + flow1259.1300 +
flow1270.1300 + flow1705.1300 - delivery1302 - evap1300(0) + flow1230.1300
}

Set  :  _FLake_Inf_WS  {  value  : _Pct_Max_WS_Storage / 100 * _FLake_Inf  }  /* Calculate WS portion of Falls inflow */

/*  The water supply release from Falls = the delivery to Raleigh.  The delivery is constrained in the main.ocl file to the
amount in the water
            supply storage pool plus the inflow to that account.  This way, the delivery will not be made if the account has
emptied */
Set  :  _Flake_WS_Rel  {  value  :  flow1300.1306  }

Set  :  _FLake_WS_Stor_Init /* Calculate the initial Falls WS storage (before computing spill to WQ and back) */
{    condition  :  elevation1300 >= 251.5 or _FLake_WS_Stor(-1) + ( _FLake_Inf_WS -  _Flake_WS_Rel ) >=
_FLake_Max_WS_Storage     /* Set at 100% if at or above full */
    value     : _FLake_Max_WS_Storage

              /*  Sets the water supply storage floor as zero minus the storage in Beaverdam */
    condition  :  default
    value     :  max {  0 - _Bdam_WS_Stor, _FLake_WS_Stor(-1) + ( _FLake_Inf_WS -  _Flake_WS_Rel ) }
}

Set  :  _FLake_WStoWQ_Spill /* Calculate the spillover from WS to WQ */
{    condition  :  _FLake_WS_Stor(-1) + ( _FLake_Inf_WS - _Flake_WS_Rel ) > _FLake_Max_WS_Storage  /* Spillover
only if projected WS storage is more than 100%  */
    value     :  _FLake_WS_Stor(-1) + ( _FLake_Inf_WS - _Flake_WS_Rel ) - _FLake_Max_WS_Storage
```

```
    condition  :  default
    value      :  0
}

Set  :  _FLake_Inf_WQ  {  value  :  _Pct_Max_WQ_Storage / 100  * _FLake_Inf  }  /* Calculate WQ portion of Falls inflow */

/*  The water quality release from Falls = outflow from Falls.  The release is constrained in the main.ocl file to the amount in the water
            quality storage pool plus the inflow to that account.  This way, the release will not be made if the account has emptied. Note the outflow may
            include releasing surplus water above the rule curve, which technically would be more than the water quality release.  But since the account
            is reset to full above the rule curve, it makes no difference.  However, to make it more realistic, set the WQ release to the minimum flow from Falls
            (for simplicity) when the elevation is at 251.5 or above.  */
Set  :  _Flake_WQ_Rel
{    condition  :  elevation1300 >= 251.5
              value      :  min_flow1300.1310

              condition  :  default
              value      :  flow1300.1310
}

Set  :  _FLake_WQ_Stor /* Calculate the Falls WQ storage */
{    condition  :  elevation1300 >= 251.5 or _FLake_WQ_Stor(-1) + ( _FLake_WStoWQ_Spill + _FLake_Inf_WQ - _Flake_WQ_Rel ) >= _FLake_Max_WQ_Storage
    value      :  _FLake_Max_WQ_Storage

              /*  Sets the water supply storage floor as zero minus the storage in Beaverdam */
    condition  :  default
    value      :  max { 0 - _Bdam_WQ_Stor, _FLake_WQ_Stor(-1) + ( _FLake_WStoWQ_Spill + _FLake_Inf_WQ - _Flake_WQ_Rel ) } /* Appears to be counted twice in terry's spreadsheet, but we are not here.*/
}

Set  :  _FLake_WQtoWS_Spill /* Calculate the spillover from WQ to WS */
{    condition  :  _FLake_WQ_Stor(-1) + ( _FLake_WStoWQ_Spill + _FLake_Inf_WQ - _Flake_WQ_Rel ) > _FLake_Max_WQ_Storage   /* Spillover only if projected WS storage more than 100% */
    value      :  _FLake_WQ_Stor(-1) + ( _FLake_WStoWQ_Spill + _FLake_Inf_WQ - _Flake_WQ_Rel ) - _FLake_Max_WQ_Storage

    condition  :  default
    value      :  0
}

Set  :  _FLake_WS_Stor /* Calculate the final Falls WS storage (after computing spillage) */
{    condition  :  _FLake_WS_Stor_Init + _FLake_WQtoWS_Spill >= _FLake_Max_WS_Storage /* Set to 100% if more than full */
    value      :  _FLake_Max_WS_Storage

              condition  :  default
    value      :  _FLake_WS_Stor_Init + _FLake_WQtoWS_Spill
}

Set  :  _Total_WS_Stor  {  value  :  _FLake_WS_Stor + _Bdam_WS_Stor  } /* Sum the total WS storage for Falls + Beaverdam */


Set  :  _Total_WQ_Stor  {  value  :  _FLake_WQ_Stor + _Bdam_WQ_Stor  } /* Sum the total WQ storage for Falls + Beaverdam */


/*  Calculate the percent of full for the WS and WQ accounts */

Set  :  _Bdam_WS_Pct  {  value  :  100 * _Bdam_WS_Stor / _Bdam_Max_WS_Storage    }
Set  :  _Bdam_WQ_Pct  {  value  :  100 * _Bdam_WQ_Stor / _Bdam_Max_WQ_Storage    }
Set  :  _FLake_WS_Pct {  value  :  100 * _FLake_WS_Stor / _FLake_Max_WS_Storage  }
Set  :  _FLake_WQ_Pct {  value  :  100 * _FLake_WQ_Stor / _FLake_Max_WQ_Storage  }
Set  :  _Total_WS_Pct {  value  :  100 * _Total_WS_Stor / [Total_Max_WS_Storage] }
Set  :  _Total_WQ_Pct {  value  :  100 * _Total_WQ_Stor / [Total_Max_WQ_Storage] }
```

raleigh_ops.ocl

```
/*  Operational policy for other Raleigh systems - Swift Creek and the proposed Little River Reservoir. */
/*  Set the minimum release for Benson/Wheeler - per 3/3/08 e-mail from Mary Sadler via Reed Palmer - based on useable storage */
Set :  min_flow1440.1700
{   condition : (storage1420 - dead_stor1420 + storage1440 -  dead_stor1440) / (max_stor1420 - dead_stor1420 + max_stor1440 - dead_stor1440) < 0.3
    Value     : convert_units { 1 , cfs , af }

    condition : (storage1420 - dead_stor1420 + storage1440 - dead_stor1440) / (max_stor1420 - dead_stor1420 + max_stor1440 - dead_stor1440) < 0.6
    Value     : convert_units { 2 , cfs , af }

    condition : default
    Value     : convert_units { 3 , cfs , af }
}

/*  Operational policy for withdrawals from Benson/Wheeler */

/* Set the maximum delivery from Raleigh WTP's (change the capacities using the substitutes below) */

:Substitute: [EMJ_WTP_capacity] = 86 //MGD
:Substitute: [DE_Benton_WTP_production] = 8 // MGD

Set :  max_flow1440.1306 //Set max WTP flows based on Final EA for D.E. Benton WTP
{   condition : (storage1420 - dead_stor1420 + storage1440 -  dead_stor1440) / (max_stor1420 - dead_stor1420 + max_stor1440 - dead_stor1440) < 0.3
    Value     : convert_units { 11.2, mgd, af }

    condition : (storage1420 - dead_stor1420 + storage1440 - dead_stor1440) / (max_stor1420 - dead_stor1420 + max_stor1440 - dead_stor1440) < 0.6
    Value     : convert_units { 12.6, mgd, af }

    condition : default
    Value     : convert_units { 14 , mgd , af }
}

Set :  max_flow1300.1306
{   condition  :  default
            Value      :  convert_units { [EMJ_WTP_capacity], mgd , af }
}

// Don't allow Falls/EMJ WD to drop below 36 MGD
Target Falls_WTP_Min_production  :  dflow1300.1306
{   condition : default
    priority  : 1
    penalty+  : 0
    penalty-  : 200
    Value     : convert_units{ 36, mgd, af }
}

/* Set delivery target for DE Benton WTP  */
Target Benton_WTP_Min_production  :  dflow1440.1306
{   condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 100
    Value     : convert_units{ [DE_Benton_WTP_production], mgd, af }
}

//  Raleigh's proposed Little River Reservoir --
//    Set flow from Little River Reservoir (Raleigh) to Raleigh demand to zero;
//    basecase simulates Raleigh's withdrawal from Falls; this
//    can be changed to reflect a future operating policy using that lake.
Constraint : {dFlow1740.1306 = 0 }

/*  Also note that the net evaporation for the propsed reservoir is turned off in the
    basecase run, to prevent drawdown in the reservoir from cutting off flows in the
    river when modeling current scenarios with the reservoir.  The net evaporation
```

can be turned back on for an alternative scenario by switching the Evaporation Type to "Time Series" under the Net Evaporation table. */

upper_eno_ops.ocl

```
/* Operation policy the Upper Eno, based on the Capacity Use Plan */

/*  Compute channel loss factor, which is used in the Lake Orange and WFER min release computations,
    and to calculate channel loss at the Hillsborough Gage.  Based on the values in the WFER dam safety permit.  */
Set  :  _Eno_Channel_Loss
{   condition : flow1110.1115 < convert_units{4,cfs,af}
    Value     : 0.2

    condition : flow1110.1115 <= convert_units{12,cfs,af}
    Value     : 0.1

    condition : default
    Value     : 0
}

/*  Determine the maximum release from Lake Orange for Hillsborough demand; based on stage. */
Set :  _Max_Hills_WD
{      /* For Dead Storage */
       Condition : storage1060 / max_stor1060 <= 0.1365
       Value     : 0

       /* Stages 6 */
       condition : storage1060 / max_stor1060 <= 0.3
       Value     : convert_units { 0.68, mgd, af }

       /* Stages 5 */
       condition : storage1060 / max_stor1060 <= 0.4
       Value     : convert_units { 1.13, mgd, af }

       /* Stages 3 & 4 */
       condition : storage1060 / max_stor1060  <= 0.6
       Value     : convert_units { 1.28, mgd, af }

       /* Stage 2 */
       condition : storage1060 / max_stor1060 <= 0.8
       Value     : convert_units { 1.36, mgd, af }
       /* Stage 1 */
       condition : default
       Value     : convert_units { 1.51, mgd, af }
}

/*  Determine the maximum release from Lake Orange for Orange-Alamance demand; based on stage. */
Set :  _Max_OrAl_WD
{      /* For Dead Storage */
       Condition : storage1060 / max_stor1060 <= 0.1365
       Value     : 0

       /* Stages 6 */
       condition : storage1060 / max_stor1060 <= 0.3
       Value     : convert_units { 0.37, mgd, af }

       /* Stages 5 */
       condition : storage1060 / max_stor1060 <= 0.4
       Value     : convert_units { 0.62, mgd, af }

       /* Stages 3 & 4 */
       condition : storage1060 / max_stor1060  <= 0.6
       Value     : convert_units { 0.70, mgd, af }

       /* Stage 2 */
       condition : storage1060 / max_stor1060 <= 0.8
       Value     : convert_units { 0.74, mgd, af }
       /* Stage 1 */
       condition : default
       Value     : convert_units { 0.82, mgd, af }
}

/*  Determine the maximum release from Lake Orange for Piedmont Minerals demand; based on stage. */
```

```
Set :  _Max_Pied_WD
{      /* Stages 6 */
       condition : storage1060 / max_stor1060 <= 0.3
       Value     : convert_units { 0.00, mgd, af }

       /* Stages 5 */
       condition : storage1060 / max_stor1060 <= 0.4
       Value     : convert_units { 0.19, mgd, af }

       /* Stages 4 */
       condition : storage1060 / max_stor1060  <= 0.5
       Value     : convert_units { 0.32, mgd, af }

       /* Stages 3 */
       condition : storage1060 / max_stor1060  <= 0.6
       Value     : convert_units { 0.36, mgd, af }

       /* Stage 2 */
       condition : storage1060 / max_stor1060 <= 0.8
       Value     : convert_units { 0.38, mgd, af }
       /* Stage 1 */
       condition : default
       Value     : convert_units { 0.43, mgd, af }
}

/*  Determine the Lake Orange required streamflow augmentation; based on stage. */
Set :  _Orange_streamflow
{      /* Stages 6 */
       condition : storage1060 / max_stor1060 <= 0.3
       Value     : 0

       /* Stages 5 */
       condition : storage1060 / max_stor1060 <= 0.4
       Value     : 0

       /* Stages 3 & 4 */
       condition : storage1060 / max_stor1060  <= 0.6
       Value     : convert_units { 0.45, mgd, af }

       /* Stage 2 */
       condition : storage1060 / max_stor1060 <= 0.8
       Value     : convert_units { 0.65, mgd, af }
       /* Stage 1 */
       condition : default
       Value     : convert_units { 1.10, mgd, af }
}

/*  Lake Orange minimum release, based on Eno Capacity Use plan.  Includes a streamflow augmentation release plus
    a release for downstream demands.  The release for Hillsborough, Or-Al and Pied. Minerals' demand is only up to
    the maximum specified in the plan. A multiplier for channel loss, the same as for WFER, is also included.  */
Set :  min_flow1060.1080
{      /* All stage-dependant streamflow augmentation and max. WDs have been determined above  */
       condition : default
       Value     : (1 + _Eno_Channel_Loss) * (_Orange_streamflow + min { demand1046, _Max_OrAl_WD } + min {
demand1106, _Max_Hills_WD } + min { demand1116, _Max_Pied_WD })
}

/*  Determine which Phase WFER is in.  Set to Tier 3 if elevation < 624.  Set to Tier 2 if elevation is between 624 and 628
ft.
              Otherwise set to Tier 1 */

Set : _WFER_Tier
{    Condition : elevation1050 < 624
     Value     : 3

                Condition : elevation1050 < 628
     Value     : 2

     Condition : default
     Value     : 1
```

```
}

/*  WFER Minimm release - depends on storage tier, and remaining Hillsborough demand that cannot be met by Lake
Orange.
   From Eno Capacity Use pland and WFER dam safety permit; either enough to meet downstream requirements, or the
specified
   seasonal pattern, whichever is greater  */
Set :  min_flow1050.1080
{    /* If in Tier1 */
     condition : _WFER_Tier = 1
     Value     : max { (1 + _Eno_Channel_Loss) * (convert_units{1.0,cfs,af} + max { 0, demand1106 - _Max_Hills_WD }) ,
convert_units{pattern(Tier1),cfs,af} }

     /* If in Tier2 */
     condition : _WFER_Tier = 2
     Value     : max { (1 + _Eno_Channel_Loss) * (convert_units{1.0,cfs,af} + max { 0, demand1106 - _Max_Hills_WD }) ,
convert_units{pattern(Tier2),cfs,af} }

     /* If in Tier3 */
     condition : _WFER_Tier = 3
     Value     : max { (1 + _Eno_Channel_Loss) * (convert_units{1.0,cfs,af} + max { 0, demand1106 - _Max_Hills_WD }) ,
convert_units{pattern(Tier3),cfs,af} }
}

/*  Compute channel loss at Hills. Gage (computed) */
Target Channel_Loss  :  dflow1110.1107
{   condition : default
    priority  : 1
    penalty+  : 1000
    penalty-  : 1000
    Value     : max { 0, _Eno_Channel_Loss * (flow1105.1110 + inflow1110) }
}
```

durham_ops.ocl

```
/*  Operational policy for Durham's system */

/*  Set Teer Quarry flows to zero - operating policy can be set in alternative scenarios */
Constraint : {dFlow1115.1120 = 0 }

Constraint : {dFlow1140.1120 = 0 }

Constraint : {dFlow1200.1120 = 0 }

Constraint : {dFlow1120.1151 = 0 }

/*  Turn off interconnects from Durham for base case - transfers can be simulated
    with an operating policy in alternative scenarios */
Constraint : {dFlow1151.0473 = 0}  /* Durham-Chatham Interconnect */
Constraint : {dFlow1151.0431 = 0}  /* Durham-OWASA Interconnect */
Constraint : {dFlow1151.0471 = 0}  /* Durham-Cary Interconnect */
Constraint : {dFlow1151.1106 = 0} /* Durham-Hillsborough Interconnect */
Constraint : {dFlow1151.1306 = 0}  /* Durham-Raleigh Interconnect */

/*  Sets the Little River Reservoir (Durham) minimum release - based on stage and time of year */
Set LittleRiverRelease : min_flow1200.1205
{   condition : (storage1200 / max_stor1200) < 0.7
    value     : convert_units {0.64,cfs,af}

    condition : month > 5 and month < 12
    value     : convert_units {2.0,cfs,af}

    condition : default
    value     : convert_units {6.0,cfs,af}
}

/*  RESERVOIR BALANCING -- Durham
    With a very low penalty in Priority 1, balance the water (usable stor pct) between the
    reservoirs. This will draw Michie and Little River Res. down proportionally.
    This can be replaced with a more comprehensive operating policy from Durham
    in alternative scenarios */

Constraint Balance1200 : { d_StorRatio > ( Dstorage1200 - lower_rule1200 ) / (upper_rule1200 - lower_rule1200 ) }

Constraint Balance1140 : { d_StorRatio > ( Dstorage1140 - lower_rule1140 ) / (upper_rule1140 - lower_rule1140 ) }

Minimax : d_StorRatio
{   priority  : 1
    penalty   : 2
    tolerance : .02
}
```

Crabtree_ops.ocl

```
/* Set the Crabtree Creek inflows and net evap for the individual flood control impoundments
  Instead of having 11 inflow and evap records in the basedata file, base all of them
  the inflow1400/evap1400 from the main basedata.dss */


/* Variables for the incremental DA into each reservoir */
:Substitute: [1400] = 2.1
:Substitute: [1402] = 1.4
:Substitute: [1404] = 2.3
:Substitute: [1406] = 8.9
:Substitute: [1408] = 5.2
:Substitute: [1410] = 8.2
:Substitute: [1412] = 2.5
:Substitute: [1414] = 11.5
:Substitute: [1416] = 3.7
:Substitute: [1418] = 23.1
:Substitute: [1422] = 24.8
:Substitute: [CrabtreeTotal] = 93.7

/* Filter the total inflow (in case there are any negative provisional inflows) */
Set : _TempInfCrabtree { Value : timesers(1400/inflow) }
Set : _TotInfCrabtree  { Value : max{0, _TempInfCrabtree - _InfDeficitCrabtree(-1) } }
Set : _InfDeficitCrabtree { Value : max{0, _InfDeficitCrabtree(-1) - _TempInfCrabtree } }

/* Set the inflows - proportion by drainage area the total inflow to Crabtree Creek */
Set : inflow1400  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1400]  }
Set : inflow1402  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1402]  }
Set : inflow1404  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1404]  }
Set : inflow1406  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1406]  }
Set : inflow1408  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1408]  }
Set : inflow1410  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1410]  }
Set : inflow1412  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1412]  }
Set : inflow1414  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1414]  }
Set : inflow1416  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1416]  }
Set : inflow1418  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1418]  }
Set : inflow1422  { value :  _TotInfCrabtree / [CrabtreeTotal] * [1422]  }

/* Set the evap for all nodes */
:For:
{   [node] = { 1400, 1402, 1404, 1406, 1408, 1410, 1412, 1414, 1416, 1418, 1422 }
}
    Set : evap[node]  { value : stor_to_area { [node], storage[node] } * timesers(1400/evap) / 12 }

:Next:

/* Set the spillway rating curves for the Crabtree Creek impoundments.  Prevent releases from drawing pond below spill
elevation  */
Target 1400_release: dflow1400.1412
{  Condition  : default
    priority  : 1
    penalty+  : 1000
    penalty-  : 1000
    Value     : min {convert_units { Lookup{ 1400Outflow, elevation1400 }, cfs, af}, storage1400 - elev_to_stor {1400, 305} }
}

Target 1402_release: dflow1402.1412
{  Condition  : default
    priority  : 1
    penalty+  : 1000
    penalty-  : 1000
    Value     : min {convert_units { Lookup{ 1402Outflow, elevation1402 }, cfs, af}, storage1402 - elev_to_stor {1402, 326} }
}

Target 1404_release: dflow1404.1412
{  Condition  : default
    priority  : 1
    penalty+  : 1000
    penalty-  : 1000
```

```
   Value     : min {convert_units { Lookup{ 1404Outflow, elevation1404 }, cfs, af}, storage1404 - elev_to_stor {1404, 342.5}
}
}

Target 1406_release: dflow1406.1412
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1406Outflow, elevation1406 }, cfs, af}, storage1406 - elev_to_stor {1406, 306.5}
}
}

Target 1408_release: dflow1408.1412
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1408Outflow, elevation1408 }, cfs, af}, storage1408 - elev_to_stor {1408, 313} }
}

Target 1410_release: dflow1410.1412
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1410Outflow, elevation1410 }, cfs, af}, storage1410 - elev_to_stor {1410, 306.5}
}
}

Target 1412_release: dflow1412.1416
{   Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1412Outflow, elevation1412 }, cfs, af}, storage1412 - elev_to_stor {1412, 276} }
}

Target 1414_release: dflow1414.1416
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1414Outflow, elevation1414 }, cfs, af}, storage1414 - elev_to_stor {1414, 301 } }
}

Target 1416_release: dflow1416.1424
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1416Outflow, elevation1416 }, cfs, af}, storage1416 - elev_to_stor {1416, 230} }
}

Target 1418_release: dflow1418.1424
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1418Outflow, elevation1418 }, cfs, af}, storage1418 - elev_to_stor {1418, 335} }
}

Target 1422_release: dflow1422.1424
{  Condition  : default
   priority  : 1
   penalty+  : 1000
   penalty-  : 1000
   Value     : min {convert_units { Lookup{ 1422Outflow, elevation1422 }, cfs, af}, storage1422 - elev_to_stor {1422, 252} }
}
```

Johnston_ops.ocl

```
/*  Operational policy for Johnston County's New Intake and 2 quarries */


/* this block is for balancing intakes for demand*/

Target JCIntake1:  dflow1650.1654
{   condition : default
    priority  : 1
    penalty+  : 50
    penalty-  : 0
    Value     : 0.5*demand1646

}

/*this block is for main operation constraints*/


Set: max_flow1700.1652
{           condition : abs_period <= 1
                value : Convert_Units {0, mgd, AF}

            condition : flow1700.1760 -demand1646 >= convert_units { 198, cfs, af }
                        value : Convert_Units {lookup {JohnstonCFlow, convert_units{flow1700.1760, af, cfs}}, mgd, AF}

            condition : flow1700.1760  - demand1646 <= convert_units { 198, cfs, af }
                        value : max { 0, flow1700.1760 - demand1646 -  convert_units { 198, cfs, af } }
}

/* set constraint for flow to quarry when full*/

Set: max_flow1652.1653
{ condition : elevation1647 >= 450 and elevation1648 >= 275
  value     : 0

 condition : default
 value     : max { 0, max_flow1700.1652 - demand1646 }
}
```

Fuquay_ops.ocl

```
/*  Operational policy for Fuaquay-Varina's system */

// Set deliveries from Raliegh to zero
Constraint : {dFlow1306.1706 = 0}

// Set targets to dictate deliveries from Harnett and Johnston Cos.
Target Harnett_Del : dflow0551.1706
{   condition : default
    priority  : 1
    penalty+  : 100
    penalty-  : 100
    Value     : 0.82 * demand1706 // 82% from Harnett Co., the rest will be from Johnston Co. (arc 1646.1706)
}
```

buckhorn_Wilson_ops.ocl

```
/*  Minimum release policy for Wilson's Buckhorn Lake - based on storage remaining. */
Set :  min_flow1500.1520
{   condition : storage1500 / max_stor1500 < 0.5
    Value     : convert_units { 1.4 , cfs , af }

    condition : storage1500 / max_stor1500 < 0.7
    Value     : convert_units { 5.3 , cfs , af }

    condition : default
    Value     : convert_units { 7.6 , cfs , af }
}
```

drought_plans_cf.ocl

```
:If: {[Drought_Plans_On] = 1} // First check if drought plan variable is on

:Include: ocl\OWASA_wsrp.ocl // OWASA's forecast-based plan is in a separate OCL file

/* Burlington */
Set : _Burl_Max_Usable_Stor { Value: (upper_rule0070 - lower_rule0070) + (upper_rule0340 - lower_rule0340) }
Set : _Burl_Usable_Stor { Value : min { _Burl_Max_Usable_Stor, storage0070 - lower_rule0070 + storage0340 -
lower_rule0340 } }
Set : _Burl_Usable_Stor_Pct { Value : 100 * _Burl_Usable_Stor / _Burl_Max_Usable_Stor }

Set : _Burl_Trigger_6_On { Value : 0 }

Set : _Burl_Trigger_5_On
{   Condition : _Burl_Trigger_5_On(-1) = 1
    {   Condition : _Burl_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Burl_Trigger_5_On(-1)
    }

    Condition : _Burl_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Burl_Usable_Stor_Pct <= 15
              Value     : 1
        }
        Condition : default
        Value     : _Burl_Trigger_5_On(-1)
    }
    Condition : default
    Value     : _Burl_Trigger_5_On(-1)
}

Set : _Burl_Trigger_4_On
{   Condition : _Burl_Trigger_4_On(-1) = 1
    {   Condition : _Burl_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Burl_Trigger_4_On(-1)
    }

    Condition : _Burl_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Burl_Usable_Stor_Pct < 30
              Value     : 1
        }
        Condition : default
        Value     : _Burl_Trigger_4_On(-1)
    }
    Condition : default
    Value     : _Burl_Trigger_4_On(-1)
}

Set : _Burl_Trigger_3_On
{   Condition : _Burl_Trigger_3_On(-1) = 1
    {   Condition : _Burl_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Burl_Trigger_3_On(-1)
    }

    Condition : _Burl_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Burl_Usable_Stor_Pct < 45
              Value     : 1
        }
```

```
      Condition : default
      Value     : _Burl_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _Burl_Trigger_3_On(-1)
}


Set : _Burl_Trigger_2_On
{  Condition : _Burl_Trigger_2_On(-1) = 1
   {  Condition : _Burl_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Burl_Trigger_2_On(-1)
   }

   Condition : _Burl_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : _Burl_Usable_Stor_Pct < 60
         Value     : 1
      }
      Condition : default
      Value     : _Burl_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _Burl_Trigger_2_On(-1)
}


Set : _Burl_Trigger_1_On
{  Condition : _Burl_Trigger_1_On(-1) = 1
   {  Condition : _Burl_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Burl_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : _Burl_Usable_Stor_Pct < 75
      Value     : 1

      Condition : default
      Value     : _Burl_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Burl_Trigger_1_On(-1)
}

/* Grensboro */
Set : _Gree_Max_Usable_Stor { Value: (upper_rule0120 - lower_rule0120) + (upper_rule0140 - lower_rule0140) }
Set : _Gree_Usable_Stor { Value : min { _Gree_Max_Usable_Stor, (storage0120 - lower_rule0120) + (storage0140 -
lower_rule0140) } }
Set : _Gree_Usable_Stor_Pct { Value : 100 * _Gree_Usable_Stor / _Gree_Max_Usable_Stor }
Set : _Gree_DSR { Value :_Gree_Usable_Stor / (demand0121 + demand0141) }

Set : _Gree_Trigger_6_On { Value : 0 }

Set : _Gree_Trigger_5_On
{  Condition : _Gree_Trigger_5_On(-1) = 1
   {  Condition : _Gree_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Gree_Trigger_5_On(-1)
   }

   Condition : _Gree_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
   {  Condition : weekday{year, month, day} <= 1
```

```
      {    Condition : _Gree_DSR <= 75
           Value     : 1
      }
      Condition : default
      Value     : _Gree_Trigger_5_On(-1)
   }
   Condition : default
   Value     : _Gree_Trigger_5_On(-1)
}

Set : _Gree_Trigger_4_On
{  Condition : _Gree_Trigger_4_On(-1) = 1
   {  Condition : _Gree_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Gree_Trigger_4_On(-1)
   }

   Condition : _Gree_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : _Gree_DSR <= 100
           Value     : 1
      }
      Condition : default
      Value     : _Gree_Trigger_4_On(-1)
   }
   Condition : default
   Value     : _Gree_Trigger_4_On(-1)
}

Set : _Gree_Trigger_3_On
{  Condition : _Gree_Trigger_3_On(-1) = 1
   {  Condition : _Gree_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Gree_Trigger_3_On(-1)
   }

   Condition : _Gree_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : _Gree_DSR <= 125
           Value     : 1
      }
      Condition : default
      Value     : _Gree_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _Gree_Trigger_3_On(-1)
}


Set : _Gree_Trigger_2_On
{  Condition : _Gree_Trigger_2_On(-1) = 1
   {  Condition : _Gree_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Gree_Trigger_2_On(-1)
   }

   Condition : _Gree_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : _Gree_DSR <= 150
         Value     : 1
      }
      Condition : default
      Value     : _Gree_Trigger_2_On(-1)
   }
```

```
   Condition : default
   Value     : _Gree_Trigger_2_On(-1)
}


Set : _Gree_Trigger_1_On
{  Condition : _Gree_Trigger_1_On(-1) = 1
   {  Condition : _Gree_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Gree_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : _Gree_DSR <= 200 // Note - Drought plan only references 'water levels ... do not conform to seasonal
expectation' - subbed in 200 DSR so trigger would activate
      Value     : 1

      Condition : default
      Value     : _Gree_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Gree_Trigger_1_On(-1)
}

/* High Point */
Set : _High_Max_Usable_Stor { Value: (upper_rule0220- lower_rule0220) }
Set : _High_Usable_Stor { Value : min { _High_Max_Usable_Stor, storage0220 - lower_rule0220  } }
Set : _High_Usable_Stor_Pct { Value : 100 * _High_Usable_Stor / _High_Max_Usable_Stor }

Set : _High_Trigger_6_On  { Value : 0 }

Set : _High_Trigger_5_On  { Value : 0 }

Set : _High_Trigger_4_On
{  Condition : _High_Trigger_4_On(-1) = 1
   {  Condition : _High_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _High_Trigger_4_On(-1)
   }

   Condition : _High_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _High_Usable_Stor_Pct < 40
            Value     : 1
      }
      Condition : default
      Value     : _High_Trigger_4_On(-1)
   }
   Condition : default
   Value     : _High_Trigger_4_On(-1)
}

Set : _High_Trigger_3_On
{  Condition : _High_Trigger_3_On(-1) = 1
   {  Condition : _High_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _High_Trigger_3_On(-1)
   }

   Condition : _High_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _High_Usable_Stor_Pct < 50
            Value     : 1
      }
```

```
      Condition : default
      Value     : _High_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _High_Trigger_3_On(-1)
}


Set : _High_Trigger_2_On
{  Condition : _High_Trigger_2_On(-1) = 1
   {  Condition : _High_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _High_Trigger_2_On(-1)
   }

   Condition : _High_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _High_Usable_Stor_Pct < 60
         Value     : 1
      }
      Condition : default
      Value     : _High_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _High_Trigger_2_On(-1)
}


Set : _High_Trigger_1_On
{  Condition : _High_Trigger_1_On(-1) = 1
   {  Condition : _High_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _High_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : _High_Usable_Stor_Pct < 80
      Value     : 1

      Condition : default
      Value     : _High_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _High_Trigger_1_On(-1)
}

/* Reidsville */
Set : _Reid_Max_Usable_Stor { Value : upper_rule0030 - lower_rule0030 }
Set : _Reid_Usable_Stor { Value : min { _Reid_Max_Usable_Stor, storage0030 - lower_rule0030 } }
Set : _Reid_Usable_Stor_Pct { Value : 100 * _Reid_Usable_Stor / _Reid_Max_Usable_Stor }
Set : _Reid_DSR { Value :_Reid_Usable_Stor / (demand0031) }

Set : _Reid_Trigger_6_On { Value : 0 }

Set : _Reid_Trigger_5_On
{  Condition : _Reid_Trigger_5_On(-1) = 1
   {  Condition : _Reid_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Reid_Trigger_5_On(-1)
   }

   Condition : _Reid_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _Reid_DSR <= 50
```

```
            Value     : 1
        }
        Condition : default
        Value     : _Reid_Trigger_5_On(-1)
    }
    Condition : default
    Value     : _Reid_Trigger_5_On(-1)
}

Set : _Reid_Trigger_4_On
{   Condition : _Reid_Trigger_4_On(-1) = 1
    {   Condition : _Reid_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Reid_Trigger_4_On(-1)
    }

    Condition : _Reid_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Reid_DSR <= 75
              Value     : 1
        }
        Condition : default
        Value     : _Reid_Trigger_4_On(-1)
    }
    Condition : default
    Value     : _Reid_Trigger_4_On(-1)
}

Set : _Reid_Trigger_3_On
{   Condition : _Reid_Trigger_3_On(-1) = 1
    {   Condition : _Reid_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Reid_Trigger_3_On(-1)
    }

    Condition : _Reid_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Reid_DSR <= 100
              Value     : 1
        }
        Condition : default
        Value     : _Reid_Trigger_3_On(-1)
    }
    Condition : default
    Value     : _Reid_Trigger_3_On(-1)
}


Set : _Reid_Trigger_2_On
{   Condition : _Reid_Trigger_2_On(-1) = 1
    {   Condition : _Reid_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Reid_Trigger_2_On(-1)
    }

    Condition : _Reid_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Reid_DSR <= 125
            Value     : 1
        }
        Condition : default
        Value     : _Reid_Trigger_2_On(-1)
    }
    Condition : default
```

```
   Value     : _Reid_Trigger_2_On(-1)
}


Set : _Reid_Trigger_1_On
{   Condition : _Reid_Trigger_1_On(-1) = 1
    {   Condition : _Reid_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Reid_Trigger_1_On(-1)
    }

    Condition : weekday{year, month, day} <= 1
    {   Condition : _Reid_DSR <= 150
        Value     : 1

        Condition : default
        Value     : _Reid_Trigger_1_On(-1)
    }
    Condition : default
    Value     : _Reid_Trigger_1_On(-1)
}

/* Ramseur */
Set : _Rams_Max_Usable_Stor { Value : upper_rule0300- lower_rule0300 }
Set : _Rams_Usable_Stor { Value : min { _Rams_Max_Usable_Stor, storage0300- lower_rule0300 } }
Set : _Rams_Usable_Stor_Pct { Value : 100 * _Rams_Usable_Stor / _Rams_Max_Usable_Stor }

Set : _Rams_Trigger_6_On {Value : 0 }

Set : _Rams_Trigger_5_On
{   Condition : _Rams_Trigger_5_On(-1) = 1
    {   Condition : _Rams_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Rams_Trigger_5_On(-1)
    }

    Condition : _Rams_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Rams_Usable_Stor_Pct <= 0
              Value     : 1
        }
        Condition : default
        Value     : _Rams_Trigger_5_On(-1)
    }
    Condition : default
    Value     : _Rams_Trigger_5_On(-1)
}

Set : _Rams_Trigger_4_On
{   Condition : _Rams_Trigger_4_On(-1) = 1
    {   Condition : _Rams_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _Rams_Trigger_4_On(-1)
    }

    Condition : _Rams_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Rams_Usable_Stor_Pct < 67
              Value     : 1
        }
        Condition : default
        Value     : _Rams_Trigger_4_On(-1)
    }
    Condition : default
```

```
   Value     : _Rams_Trigger_4_On(-1)
}

Set : _Rams_Trigger_3_On
{  Condition : _Rams_Trigger_3_On(-1) = 1
   {  Condition : _Rams_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Rams_Trigger_3_On(-1)
   }

   Condition : _Rams_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _Rams_Usable_Stor_Pct < 75
            Value     : 1
      }
      Condition : default
      Value     : _Rams_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _Rams_Trigger_3_On(-1)
}


Set : _Rams_Trigger_2_On
{  Condition : _Rams_Trigger_2_On(-1) = 1
   {  Condition : _Rams_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Rams_Trigger_2_On(-1)
   }

   Condition : _Rams_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _Rams_Usable_Stor_Pct < 83
         Value     : 1
      }
      Condition : default
      Value     : _Rams_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _Rams_Trigger_2_On(-1)
}


Set : _Rams_Trigger_1_On
{  Condition : _Rams_Trigger_1_On(-1) = 1
   {  Condition : _Rams_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _Rams_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : _Rams_Usable_Stor_Pct < 91
      Value     : 1

      Condition : default
      Value     : _Rams_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Rams_Trigger_1_On(-1)
}

/* Graham-Mebane */
Set : _GramMeb_Max_Usable_Stor { Value : upper_rule0320 - lower_rule0320 }
Set : _GramMeb_Usable_Stor { Value : min { _GramMeb_Max_Usable_Stor, storage0320 - lower_rule0320 } }
```

```
Set : _GramMeb_Usable_Stor_Pct { Value : 100 * _GramMeb_Usable_Stor / _GramMeb_Max_Usable_Stor }
Set : _GramMeb_DSR { Value :_GramMeb_Usable_Stor / (demand0321) }

Set : _GramMeb_Trigger_6_On { Value : 0 }

Set : _GramMeb_Trigger_5_On
{   Condition : _GramMeb_Trigger_5_On(-1) = 1
    {   Condition : _GramMeb_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _GramMeb_Trigger_5_On(-1)
    }

    Condition : _GramMeb_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _GramMeb_DSR <= 30
              Value     : 1
        }
        Condition : default
        Value     : _GramMeb_Trigger_5_On(-1)
    }
    Condition : default
    Value     : _GramMeb_Trigger_5_On(-1)
}

Set : _GramMeb_Trigger_4_On
{   Condition : _GramMeb_Trigger_4_On(-1) = 1
    {   Condition : _GramMeb_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _GramMeb_Trigger_4_On(-1)
    }

    Condition : _GramMeb_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _GramMeb_DSR <= 60
              Value     : 1
        }
        Condition : default
        Value     : _GramMeb_Trigger_4_On(-1)
    }
    Condition : default
    Value     : _GramMeb_Trigger_4_On(-1)
}

Set : _GramMeb_Trigger_3_On
{   Condition : _GramMeb_Trigger_3_On(-1) = 1
    {   Condition : _GramMeb_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _GramMeb_Trigger_3_On(-1)
    }

    Condition : _GramMeb_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _GramMeb_DSR <= 90
              Value     : 1
        }
        Condition : default
        Value     : _GramMeb_Trigger_3_On(-1)
    }
    Condition : default
    Value     : _GramMeb_Trigger_3_On(-1)
}


Set : _GramMeb_Trigger_2_On
```

```
{   Condition : _GramMeb_Trigger_2_On(-1) = 1
    {   Condition : _GramMeb_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _GramMeb_Trigger_2_On(-1)
    }

    Condition : _GramMeb_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _GramMeb_DSR <= 120
            Value     : 1
        }
        Condition : default
        Value     : _GramMeb_Trigger_2_On(-1)
    }
    Condition : default
    Value     : _GramMeb_Trigger_2_On(-1)
}


Set : _GramMeb_Trigger_1_On
{   Condition : _GramMeb_Trigger_1_On(-1) = 1
    {   Condition : _GramMeb_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _GramMeb_Trigger_1_On(-1)
    }

    Condition : weekday{year, month, day} <= 1
    {   Condition : _GramMeb_DSR <= 150
        Value     : 1

        Condition : default
        Value     : _GramMeb_Trigger_1_On(-1)
    }
    Condition : default
    Value     : _GramMeb_Trigger_1_On(-1)
}

/* Siler City */

Set : _Siler_Trigger_6_On  { Value : 0 }
Set : _Siler_Trigger_5_On  { Value : 0 }

Set : _Siler_Trigger_4_On
{   Condition : _Siler_Trigger_4_On(-1) = 1
    {   Condition : _SilerCity_UsableStorPct >= 100
        Value     : 0

        Condition : default
        Value     : _Siler_Trigger_4_On(-1)
    }

    Condition : _Siler_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _SilerCity_UsableStorPct < 10
            Value     : 1
        }
        Condition : default
        Value     : _Siler_Trigger_4_On(-1)
    }
    Condition : default
    Value     : _Siler_Trigger_4_On(-1)
}

Set : _Siler_Trigger_3_On
{   Condition : _Siler_Trigger_3_On(-1) = 1
    {   Condition : _SilerCity_UsableStorPct >= 100
```

```
      Value     : 0

      Condition : default
      Value     : _Siler_Trigger_3_On(-1)
   }

   Condition : _Siler_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _SilerCity_UsableStorPct < 20
            Value     : 1
      }
      Condition : default
      Value     : _Siler_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _Siler_Trigger_3_On(-1)
}


Set : _Siler_Trigger_2_On
{  Condition : _Siler_Trigger_2_On(-1) = 1
   {  Condition : _SilerCity_UsableStorPct >= 100
      Value     : 0

      Condition : default
      Value     : _Siler_Trigger_2_On(-1)
   }

   Condition : _Siler_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _SilerCity_UsableStorPct < 40
         Value     : 1
      }
      Condition : default
      Value     : _Siler_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _Siler_Trigger_2_On(-1)
}


Set : _Siler_Trigger_1_On
{  Condition : _Siler_Trigger_1_On(-1) = 1
   {  Condition : _SilerCity_UsableStorPct >= 100
      Value     : 0

      Condition : default
      Value     : _Siler_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : _SilerCity_UsableStorPct < 70
      Value     : 1

      Condition : default
      Value     : _Siler_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Siler_Trigger_1_On(-1)
}

/* Pittsboro - based on intake pool elevation, cannot model without more information */

/* Cary-Apex */
Set : _Cary_DSR
{  Condition : abs_period >= 1
   Value     : 16030 / demand0471

   Condition : default
   Value     : _Storage_CaryAp(-1) / demand0471
```

```
}

Set : _Cary_Trigger_6_On  { Value : 0 }
Set : _Cary_Trigger_5_On  { Value : 0 }

Set : _Cary_Trigger_4_On
{   Condition : _Cary_Trigger_4_On(-1) = 1
    {   Condition : _Cary_DSR >= 60 // Need to put in for 14 days
        Value     : 0

        Condition : default
        Value     : _Cary_Trigger_4_On(-1)
    }

    Condition : _Cary_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Cary_DSR <= 30
              Value     : 1
        }
        Condition : default
        Value     : _Cary_Trigger_4_On(-1)
    }
    Condition : default
    Value     : _Cary_Trigger_4_On(-1)
}

Set : _Cary_Trigger_3_On
{   Condition : _Cary_Trigger_3_On(-1) = 1
    {   Condition : _Cary_DSR >= 90 // Need to put in for 14 days
        Value     : 0

        Condition : default
        Value     : _Cary_Trigger_3_On(-1)
    }

    Condition : _Cary_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Cary_DSR <= 60
              Value     : 1
        }
        Condition : default
        Value     : _Cary_Trigger_3_On(-1)
    }
    Condition : default
    Value     : _Cary_Trigger_3_On(-1)
}


Set : _Cary_Trigger_2_On
{   Condition : _Cary_Trigger_2_On(-1) = 1
    {   Condition : _Cary_DSR >= 120 // Need to put in for 14 days
        Value     : 0

        Condition : default
        Value     : _Cary_Trigger_2_On(-1)
    }

    Condition : _Cary_Stage_1_Counter(-1) >= 28   // Require a 28 day waiting period before going into phase 2
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _Cary_DSR <= 90
            Value     : 1
        }
        Condition : default
        Value     : _Cary_Trigger_2_On(-1)
    }
    Condition : default
    Value     : _Cary_Trigger_2_On(-1)
}
```

```
Set : _Cary_Trigger_1_On
{   Condition : _Cary_Trigger_1_On(-1) = 1
    {   Condition : _Stor_Final_Pct_CaryAp(-1) >= 100 // need to put in for 14 days
        Value     : 0

        Condition : default
        Value     : _Cary_Trigger_1_On(-1)
    }

    Condition : weekday{year, month, day} <= 1
    {   Condition : _Cary_DSR <= 120
        Value     : 1

        Condition : default
        Value     : _Cary_Trigger_1_On(-1)
    }
    Condition : default
    Value     : _Cary_Trigger_1_On(-1)
}

/* Chatham North */
Set : _ChatNo_Usable_Stor_Pct
{   Condition : abs_period <= 1
    Value     : 100

    Condition : default
    Value     : _Stor_Final_Pct_Chatham(-1)
}

Set : _ChatNo_Trigger_6_On  {Value : 0 }

Set : _ChatNo_Trigger_5_On
{   Condition : _ChatNo_Trigger_5_On(-1) = 1
    {   Condition : _ChatNo_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _ChatNo_Trigger_5_On(-1)
    }

    Condition : _ChatNo_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _ChatNo_Usable_Stor_Pct < 0
              Value     : 1
        }
        Condition : default
        Value     : _ChatNo_Trigger_5_On(-1)
    }
    Condition : default
    Value     : _ChatNo_Trigger_5_On(-1)
}

Set : _ChatNo_Trigger_4_On
{   Condition : _ChatNo_Trigger_4_On(-1) = 1
    {   Condition : _ChatNo_Usable_Stor_Pct >= 100
        Value     : 0

        Condition : default
        Value     : _ChatNo_Trigger_4_On(-1)
    }

    Condition : _ChatNo_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _ChatNo_Usable_Stor_Pct < 30
              Value     : 1
        }
        Condition : default
        Value     : _ChatNo_Trigger_4_On(-1)
    }
    Condition : default
```

```
   Value     : _ChatNo_Trigger_4_On(-1)
}

Set : _ChatNo_Trigger_3_On
{  Condition : _ChatNo_Trigger_3_On(-1) = 1
   {  Condition : _ChatNo_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _ChatNo_Trigger_3_On(-1)
   }

   Condition : _ChatNo_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _ChatNo_Usable_Stor_Pct < 50
            Value     : 1
      }
      Condition : default
      Value     : _ChatNo_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _ChatNo_Trigger_3_On(-1)
}


Set : _ChatNo_Trigger_2_On
{  Condition : _ChatNo_Trigger_2_On(-1) = 1
   {  Condition : _ChatNo_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _ChatNo_Trigger_2_On(-1)
   }

   Condition : _ChatNo_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : _ChatNo_Usable_Stor_Pct < 65
         Value     : 1
      }
      Condition : default
      Value     : _ChatNo_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _ChatNo_Trigger_2_On(-1)
}


Set : _ChatNo_Trigger_1_On
{  Condition : _ChatNo_Trigger_1_On(-1) = 1
   {  Condition : _ChatNo_Usable_Stor_Pct >= 100
      Value     : 0

      Condition : default
      Value     : _ChatNo_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : _ChatNo_Usable_Stor_Pct < 75
      Value     : 1

      Condition : default
      Value     : _ChatNo_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _ChatNo_Trigger_1_On(-1)
}

/* Sanford - demand/production based */

/* Harnett Co. - mostly demand based */
```

```
/* Dunn */

Set : _Dunn_Trigger_6_On
{   Condition : _Dunn_Trigger_5_On(-1) = 1
    {   Condition : flow0555.0650 > convert_units { 100, cfs, af }
        Value     : 0

        Condition : default
        Value     : _Dunn_Trigger_6_On(-1)
    }

    Condition : _Dunn_Stage_5_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : flow0555.0650 < convert_units { 100, cfs, af } and flow0555.0650(-1) < convert_units { 100, cfs, af }
and
                    flow0555.0650(-2) < convert_units { 100, cfs, af } and flow0555.0650(-3) < convert_units { 100, cfs, af }
and
                    flow0555.0650(-4) < convert_units { 100, cfs, af }
            Value     : 1
        }
        Condition : default
        Value     : _Dunn_Trigger_6_On(-1)
    }
    Condition : default
    Value     : _Dunn_Trigger_6_On(-1)
}

Set : _Dunn_Trigger_5_On
{   Condition : _Dunn_Trigger_5_On(-1) = 1
    {   Condition : flow0555.0650 > convert_units { 125, cfs, af }
        Value     : 0

        Condition : default
        Value     : _Dunn_Trigger_5_On(-1)
    }

    Condition : _Dunn_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : flow0555.0650 < convert_units { 125, cfs, af } and flow0555.0650(-1) < convert_units { 125, cfs, af }
and
                    flow0555.0650(-2) < convert_units { 125, cfs, af } and flow0555.0650(-3) < convert_units { 125, cfs, af }
and
                    flow0555.0650(-4) < convert_units { 125, cfs, af }
            Value     : 1
        }
        Condition : default
        Value     : _Dunn_Trigger_5_On(-1)
    }
    Condition : default
    Value     : _Dunn_Trigger_5_On(-1)
}

Set : _Dunn_Trigger_4_On
{   Condition : _Dunn_Trigger_4_On(-1) = 1
    {   Condition : flow0555.0650 > convert_units { 150, cfs, af }
        Value     : 0

        Condition : default
        Value     : _Dunn_Trigger_4_On(-1)
    }

    Condition : _Dunn_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : flow0555.0650 < convert_units { 150, cfs, af } and flow0555.0650(-1) < convert_units { 150, cfs, af }
and
                    flow0555.0650(-2) < convert_units { 150, cfs, af } and flow0555.0650(-3) < convert_units { 150, cfs, af }
and
                    flow0555.0650(-4) < convert_units { 150, cfs, af }
```

```
            Value     : 1
        }
        Condition : default
        Value     : _Dunn_Trigger_4_On(-1)
    }
    Condition : default
    Value     : _Dunn_Trigger_4_On(-1)
}

Set : _Dunn_Trigger_3_On
{   Condition : _Dunn_Trigger_3_On(-1) = 1
    {   Condition : flow0555.0650 > convert_units { 175, cfs, af }
        Value     : 0

        Condition : default
        Value     : _Dunn_Trigger_3_On(-1)
    }

    Condition : _Dunn_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : flow0555.0650 < convert_units { 175, cfs, af } and flow0555.0650(-1) < convert_units { 175, cfs, af }
and
                    flow0555.0650(-2) < convert_units { 175, cfs, af } and flow0555.0650(-3) < convert_units { 175, cfs, af }
and
                    flow0555.0650(-4) < convert_units { 175, cfs, af }
            Value     : 1
        }
        Condition : default
        Value     : _Dunn_Trigger_3_On(-1)
    }
    Condition : default
    Value     : _Dunn_Trigger_3_On(-1)
}


Set : _Dunn_Trigger_2_On
{   Condition : _Dunn_Trigger_2_On(-1) = 1
    {   Condition : flow0555.0650 > convert_units { 200, cfs, af }
        Value     : 0

        Condition : default
        Value     : _Dunn_Trigger_2_On(-1)
    }

    Condition : _Dunn_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : flow0555.0650 < convert_units { 200, cfs, af } and flow0555.0650(-1) < convert_units { 200, cfs, af }
and
                    flow0555.0650(-2) < convert_units { 200, cfs, af } and flow0555.0650(-3) < convert_units { 200, cfs, af }
and
                    flow0555.0650(-4) < convert_units { 200, cfs, af }
           Value     : 1
        }
        Condition : default
        Value     : _Dunn_Trigger_2_On(-1)
    }
    Condition : default
    Value     : _Dunn_Trigger_2_On(-1)
}


Set : _Dunn_Trigger_1_On
{   Condition : _Dunn_Trigger_1_On(-1) = 1
    {   Condition : flow0555.0650 > convert_units { 225, cfs, af }
        Value     : 0

        Condition : default
        Value     : _Dunn_Trigger_1_On(-1)
    }
```

```
   // Assume no waiting period since Dunn_Trigger 1 only drought alert
   Condition : weekday{year, month, day} <= 1
   {   Condition : flow0555.0650 < convert_units { 225, cfs, af } and flow0555.0650(-1) < convert_units { 225, cfs, af } and
                   flow0555.0650(-2) < convert_units { 225, cfs, af } and flow0555.0650(-3) < convert_units { 225, cfs, af } and
                   flow0555.0650(-4) < convert_units { 225, cfs, af }
       Value     : 1

       Condition : default
       Value     : _Dunn_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Dunn_Trigger_1_On(-1)
}

/* Carthage - Trigger based on Nicks Creek - using arc 700.710 Little River_Linden gage in model since that is where their
WD is from */
Set : _Carth_Trigger_6_On  {Value : 0}
Set : _Carth_Trigger_5_On  {Value : 0}

Set : _Carth_Trigger_4_On
{   Condition : _Carth_Trigger_4_On(-1) = 1
   {   Condition : flow0700.0710 > convert_units { 0.50, cfs, af }
       Value     : 0

       Condition : default
       Value     : _Carth_Trigger_4_On(-1)
   }

   Condition : _Carth_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
   {   Condition : weekday{year, month, day} <= 1
       {     Condition : flow0700.0710 < convert_units { 0.50, cfs, af }
             Value     : 1
       }
       Condition : default
       Value     : _Carth_Trigger_4_On(-1)
   }
   Condition : default
   Value     : _Carth_Trigger_4_On(-1)
}

Set : _Carth_Trigger_3_On
{   Condition : _Carth_Trigger_3_On(-1) = 1
   {   Condition : flow0700.0710 > convert_units { 1.50, cfs, af }
       Value     : 0

       Condition : default
       Value     : _Carth_Trigger_3_On(-1)
   }

   Condition : _Carth_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {   Condition : weekday{year, month, day} <= 1
       {     Condition : flow0700.0710 < convert_units { 1.50, cfs, af } and flow0700.0710(-1) < convert_units { 1.50, cfs, af }
and
                     flow0700.0710(-2) < convert_units { 1.50, cfs, af }
             Value     : 1
       }
       Condition : default
       Value     : _Carth_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _Carth_Trigger_3_On(-1)
}


Set : _Carth_Trigger_2_On
{   Condition : _Carth_Trigger_2_On(-1) = 1
   {   Condition : flow0700.0710 > convert_units { 2.40, cfs, af }
       Value     : 0

       Condition : default
```

```
      Value     : _Carth_Trigger_2_On(-1)
   }

   Condition : _Carth_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : flow0700.0710 < convert_units { 2.40, cfs, af } and flow0700.0710(-1) < convert_units { 2.40, cfs, af }
and
                  flow0700.0710(-2) < convert_units { 2.40, cfs, af }
         Value     : 1
      }
      Condition : default
      Value     : _Carth_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _Carth_Trigger_2_On(-1)
}


Set : _Carth_Trigger_1_On
{  Condition : _Carth_Trigger_1_On(-1) = 1
   {  Condition : flow0700.0710 > convert_units { 3, cfs, af }
      Value     : 0

      Condition : default
      Value     : _Carth_Trigger_1_On(-1)
   }

   // Assume no waiting period since Carth_Trigger 1 only drought alert
   Condition : weekday{year, month, day} <= 1
   {  Condition : flow0700.0710 < convert_units { 3, cfs, af } and flow0700.0710(-1) < convert_units { 3, cfs, af } and
                  flow0700.0710(-2) < convert_units { 3, cfs, af } and flow0700.0710(-3) < convert_units { 3, cfs, af } and
                  flow0700.0710(-4) < convert_units { 3, cfs, af } and flow0700.0710(-5) < convert_units { 3, cfs, af } and
                  flow0700.0710(-6) < convert_units { 3, cfs, af }
      Value     : 1

      Condition : default
      Value     : _Carth_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Carth_Trigger_1_On(-1)
}

/* Fayettville - mostly demand based (w/ one lilington trigger), so leaving out for now */



/*  This section sets/resets the counters used to maintain the proper spacing of conservation stages */

:For:
{ [Util] = { Burl, Gree, High, Reid, Rams, GramMeb, Siler, Cary, ChatNo, Dunn, Carth }
}

:For:
{  [trig] = {1, 2, 3, 4, 5, 6}
}

Set : _[Util]_Stage_[trig]_Counter
{  Condition : _[Util]_Stage_[trig]_Counter(-1) > 0 and _[Util]_Trigger_[trig]_On = 0
   Value     : 0

   Condition : _[Util]_Trigger_[trig]_On = 1
   Value     : _[Util]_Stage_[trig]_Counter(-1) + 1

   Condition : default
   Value     : _[Util]_Stage_[trig]_Counter(-1)
}

/*  Count all trigger events lasting at least 7 days */

Set : _[Util]_Ph_[trig]_event_counter
```

```
{   Condition : _[Util]_Stage_[trig]_Counter = 7 and _[Util]_Stage_[trig]_Counter(-1) = 6
    Value     : _[Util]_Ph_[trig]_event_counter(-1) + 1

    Condition : default
    Value     : _[Util]_Ph_[trig]_event_counter(-1)
}

:Next:

:Next:


// Set conservation demand and delivery constraints for each trigger level in effect.

// Set demand reduction factors
:SUBSTITUTE: [Dem_1_Red_Factor] = 5
:SUBSTITUTE: [Dem_2_Red_Factor] = 10
:SUBSTITUTE: [Dem_3_Red_Factor] = 20
:SUBSTITUTE: [Dem_4_Red_Factor] = 25
:SUBSTITUTE: [Dem_5_Red_Factor] = 35
:SUBSTITUTE: [Dem_6_Red_Factor] = 50

:For:
{   [trig] = {1, 2, 3, 4, 5, 6}
}



// Burlington - Ed Thomas
Set : _Burl1_Consvn_[trig]_Demand
{   Condition : _Burl_Trigger_[trig]_On = 1
    Value     : Demand0071 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

    Condition : default
    Value     : Demand0071
}

Constraint   Burl1_Demand_Limit_Consvn_[trig] :
          {   Condition  :  _Burl_Trigger_[trig]_On = 1
              Expression :  dflow0070.0071 <= _Burl1_Consvn_[trig]_Demand }

// Burlington - Mackintosh
Set : _Burl2_Consvn_[trig]_Demand
{   Condition : _Burl_Trigger_[trig]_On = 1
    Value     : Demand0341 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

    Condition : default
    Value     : Demand0341
}

Constraint   Burl2_Demand_Limit_Consvn_[trig] :
          {   Condition  :  _Burl_Trigger_[trig]_On = 1
              Expression :  dflow0340.0341 <= _Burl2_Consvn_[trig]_Demand }

// Greensboro - Mitchell
Set : _Gree1_Consvn_[trig]_Demand
{   Condition : _Gree_Trigger_[trig]_On = 1
    Value     : Demand0121 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

    Condition : default
    Value     : Demand0121
}

Constraint   Gree1_Demand_Limit_Consvn_[trig] :
          {   Condition  :  _Gree_Trigger_[trig]_On = 1
              Expression :  dflow0120.0121 <= _Gree1_Consvn_[trig]_Demand }

// Greensboro - Townsend
Set : _Gree2_Consvn_[trig]_Demand
{   Condition : _Gree_Trigger_[trig]_On = 1
```

```
   Value     : Demand0141 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0141
}

Constraint   Gree3_Demand_Limit_Consvn_[trig] :
         {  Condition  :  _Gree_Trigger_[trig]_On = 1
            Expression :  dflow0140.0141 <= _Gree2_Consvn_[trig]_Demand }

// High Point
Set : _High_Consvn_[trig]_Demand
{  Condition : _High_Trigger_[trig]_On = 1
   Value     : Demand0221 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0221
}

Constraint   High_Demand_Limit_Consvn_[trig] :
         {  Condition  :  _High_Trigger_[trig]_On = 1
            Expression :  dflow0220.0221 <= _High_Consvn_[trig]_Demand }

// Reidsville
Set : _Reid_Consvn_[trig]_Demand
{  Condition : _Reid_Trigger_[trig]_On = 1
   Value     : Demand0031 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0031
}

Constraint   Reid_Demand_Limit_Consvn_[trig] :
         {  Condition  :  _Reid_Trigger_[trig]_On = 1
            Expression :  dflow0030.0031 <= _Reid_Consvn_[trig]_Demand }

// Ramseur
Set : _Rams_Consvn_[trig]_Demand
{  Condition : _Rams_Trigger_[trig]_On = 1
   Value     : Demand0301 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0301
}

Constraint   Rams_Demand_Limit_Consvn_[trig] :
         {  Condition  :  _Rams_Trigger_[trig]_On = 1
            Expression :  dflow0300.0301 <= _Rams_Consvn_[trig]_Demand }

// Graham-Mebane
Set : _GramMeb_Consvn_[trig]_Demand
{  Condition : _GramMeb_Trigger_[trig]_On = 1
   Value     : Demand0321 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0321
}

Constraint   GramMeb_Demand_Limit_Consvn_[trig] :
         {  Condition  :  _GramMeb_Trigger_[trig]_On = 1
            Expression :  dflow0320.0321 <= _GramMeb_Consvn_[trig]_Demand }

// Siler City
Set : _Siler_Consvn_[trig]_Demand
{  Condition : _Siler_Trigger_[trig]_On = 1
   Value     : Demand0327 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0327
}
```

```
Constraint   Siler_Demand_Limit_Consvn_[trig] :
        {  Condition  :  _Siler_Trigger_[trig]_On = 1
           Expression :  dflow0325.0327 <= _Siler_Consvn_[trig]_Demand }

// Chatham-North
Set : _ChatNo_Consvn_[trig]_Demand
{  Condition : _ChatNo_Trigger_[trig]_On = 1
   Value     : Demand0473 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0473
}

Constraint   ChatNo_Demand_Limit_Consvn_[trig] :
        {  Condition  :  _ChatNo_Trigger_[trig]_On = 1
           Expression :  dflow0470.0473 <= _ChatNo_Consvn_[trig]_Demand }

// Dunn
Set : _Dunn_Consvn_[trig]_Demand
{  Condition : _Dunn_Trigger_[trig]_On = 1
   Value     : Demand0663 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0663
}

Constraint   Dunn_Demand_Limit_Consvn_[trig] :
        {  Condition  :  _Dunn_Trigger_[trig]_On = 1
           Expression :  dflow0660.0663 <= _Dunn_Consvn_[trig]_Demand }

// Carthage
Set : _Carth_Consvn_[trig]_Demand
{  Condition : _Carth_Trigger_[trig]_On = 1
   Value     : Demand0701 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

   Condition : default
   Value     : Demand0701
}

Constraint   Carth_Demand_Limit_Consvn_[trig] :
        {  Condition  :  _Carth_Trigger_[trig]_On = 1
           Expression :  dflow0700.0701 <= _Carth_Consvn_[trig]_Demand }


:Next:

// Set Cary's Consv Demand - differs seasonally

Set : _Cary_Consvn_1_Demand
{
   Condition : month > 4 and month < 11 and _Cary_Trigger_1_On = 1
   Value     : Demand0471 * ( 1 - 13 / 100 )

   Condition : _Cary_Trigger_1_On = 1
   Value     : Demand0471 * ( 1 - 6 / 100 )

   Condition : default
   Value     : Demand0471
}

Set : _Cary_Consvn_2_Demand
{
   Condition : month > 4 and month < 11 and _Cary_Trigger_2_On = 1
   Value     : Demand0471 * ( 1 - 32 / 100 )

   Condition : _Cary_Trigger_2_On = 1
   Value     : Demand0471 * ( 1 - 10 / 100 )

   Condition : default
```

```
   Value     : Demand0471
}

Set : _Cary_Consvn_3_Demand
{
   Condition : month > 4 and month < 11 and _Cary_Trigger_3_On = 1
   Value     : Demand0471 * ( 1 - 38 / 100 )

   Condition : _Cary_Trigger_3_On = 1
   Value     : Demand0471 * ( 1 - 17 / 100 )

   Condition : default
   Value     : Demand0471
}

Set : _Cary_Consvn_4_Demand
{
   Condition : month > 4 and month < 11 and _Cary_Trigger_4_On = 1
   Value     : Demand0471 * ( 1 - 46 / 100 )

   Condition : _Cary_Trigger_4_On = 1
   Value     : Demand0471 * ( 1 - 29 / 100 )

   Condition : default
   Value     : Demand0471
}

:For:
{  [trig] = {1, 2, 3, 4}
}

Constraint   Cary_Demand_Limit_Consvn_[trig] :
         {  Condition  :  _Cary_Trigger_[trig]_On = 1
            Expression :  dflow0479.0471 <= _Cary_Consvn_[trig]_Demand }

:Next:

:else:
// Do nothing if not using drought plans
:endif:
```

OWASA_wsrp.ocl

```
Set : _OWASA_Max_Usable_Stor { Value: (upper_rule0390 - lower_rule0390) + (upper_rule0395 - lower_rule0395) +
(upper_rule0430 - lower_rule0430) }
Set : _OWASA_Usable_Stor { Value : min { _OWASA_Max_Usable_Stor,
                                (storage0390 - lower_rule0390) + (storage0395 - lower_rule0395) + (storage0430 -
lower_rule0430) } }
Set : _OWASA_Usable_Stor_Pct { Value : 100 * _OWASA_Usable_Stor / _OWASA_Max_Usable_Stor }

// Trigger 1 horizon.
Set : _OWASA_ProjInflow1
{   condition : weekday{year, month, day} <= 1
    value     : 7 * ( timesers(0380/R02W52) + (1.2 / 28.7) * timesers(0430/R02W52) + timesers(0430/R02W52) )

    condition :  default
    value     :  _OWASA_ProjInflow1(-1)
}


Set : _OWASA_ProjDemand1
{   condition : weekday{year, month, day} <= 1
    value     : accumulate { demand0431 , 0 , +365 }

    condition :  default
    value     :  _OWASA_ProjDemand1(-1)
}


Set : _OWASA_ProjMinFlow1
{   condition : weekday{year, month, day} <= 1
    value     : accumulate { min_flow0390.0370 , 0 , +365}

    condition :  default
    value     :  _OWASA_ProjMinFlow1(-1)
}


Set : _OWASA_ProjEvap1
{   condition : weekday{year, month, day} <= 1
    value     : (stor_to_area { 0390 , storage0390 } * 7 * timesers(0390/EVAP_R02W52) / 12) +
                (stor_to_area { 0395 , storage0395 } * 7 * timesers(0395/EVAP_R02W52) / 12) +
                (stor_to_area { 0430 , storage0390 } * 7 * timesers(0430/EVAP_R02W52) / 12)
    condition :  default
    value     :  _OWASA_ProjEvap1(-1)
}


// Trigger 2 horizon.
Set : _OWASA_ProjInflow2
{   condition : weekday{year, month, day} <= 1
    value     : 7 * ( timesers(0380/R10W52) + (1.2 / 28.7) * timesers(0430/R10W52) + timesers(0430/R10W52) )

    condition :  default
    value     :  _OWASA_ProjInflow1(-1)
}


Set : _OWASA_ProjDemand2
{   condition : weekday{year, month, day} <= 1
    value     : accumulate { demand0431 , 0 , +365 }

    condition :  default
    value     :  _OWASA_ProjDemand1(-1)
}


Set : _OWASA_ProjMinFlow2
{   condition : weekday{year, month, day} <= 1
    value     : accumulate { min_flow0390.0370 , 0 , +365}
```

```
    condition :  default
    value     :  _OWASA_ProjMinFlow1(-1)
}


Set : _OWASA_ProjEvap2
{   condition : weekday{year, month, day} <= 1
    value     : (stor_to_area { 0390 , storage0390 } * 7 * timesers(0390/EVAP_R10W52) / 12) +
                (stor_to_area { 0395 , storage0395 } * 7 * timesers(0395/EVAP_R10W52) / 12) +
                (stor_to_area { 0430 , storage0390 } * 7 * timesers(0430/EVAP_R10W52) / 12)
    condition :  default
    value     :  _OWASA_ProjEvap1(-1)
}

// Trigger 3 horizon.
Set : _OWASA_ProjInflow3
{   condition : weekday{year, month, day} <= 1
    value     : 7 * ( timesers(0380/R20W52) + (1.2 / 28.7) * timesers(0430/R20W52) + timesers(0430/R20W52) )

    condition :  default
    value     :  _OWASA_ProjInflow1(-1)
}


Set : _OWASA_ProjDemand3
{   condition : weekday{year, month, day} <= 1
    value     : accumulate { demand0431 , 0 , +365 }

    condition :  default
    value     :  _OWASA_ProjDemand1(-1)
}


Set : _OWASA_ProjMinFlow3
{   condition : weekday{year, month, day} <= 1
    value     : accumulate { min_flow0390.0370 , 0 , +365}

    condition :  default
    value     :  _OWASA_ProjMinFlow1(-1)
}


Set : _OWASA_ProjEvap3
{   condition : weekday{year, month, day} <= 1
    value     : (stor_to_area { 0390 , storage0390 } * 7 * timesers(0390/EVAP_R20W52) / 12) +
                (stor_to_area { 0395 , storage0395 } * 7 * timesers(0395/EVAP_R20W52) / 12) +
                (stor_to_area { 0430 , storage0390 } * 7 * timesers(0430/EVAP_R20W52) / 12)
    condition :  default
    value     :  _OWASA_ProjEvap1(-1)
}


// Compute projected storage for the entire system for each trigger.  Projected storage will not exceed the max usable
storage

:For:
{   [trig] = {1, 2, 3}
}

Set : _OWASA_ProjStorage[trig]
{   Condition : weekday{year, month, day} <= 1
    Value     : min{_OWASA_Usable_Stor + _OWASA_ProjInflow[trig] - _OWASA_ProjDemand[trig] -
_OWASA_ProjEvap[trig] - _OWASA_ProjMinFlow[trig] ,
                _OWASA_Max_Usable_Stor}

    Condition : default
    Value     : _OWASA_ProjStorage[trig](-1)
}

Set : _OWASA_ProjStorage_Pct[trig]
```

```
{   Condition : weekday{year, month, day} <= 1
    Value     : 100 * _OWASA_ProjStorage[trig] / _OWASA_Max_Usable_Stor

    Condition : default
    Value     : _OWASA_ProjStorage_Pct[trig](-1)
}

:Next:


/*  This section evaluates whether any of the three triggers were on during the
    last time step.  If so, it checks to see whether the reservoir has re-filled
    to the release elevation (defined in constants table), in which case the triggers are released.
    If the trigger was not on in the last timestep, it compares the projected stage with
    the threshold to determine whether it should be turned on.

    Note the projected stage is calculated only at beginning of week, so determination of triggers
    is kept to the beginning of the week.  That provides some delay in enactment of triggers and duplicates
    to some extent the waiting period requirement below.
*/

// Enact only if trigger elevation is met and put in some waiting period as shown below.
// Triggers 2 and 3 can only turn on in sequence after trigger 1 has turned on.
// These triggers turn off if the pond has refilled to the user-defined release elevation of 124 feet.

Set : _OWASA_Trigger_3_On
{   Condition : _OWASA_Trigger_3_On(-1) = 1
    {   Condition : _OWASA_Usable_Stor >= _OWASA_Max_Usable_Stor
        Value     : 0

        Condition : default
        Value     : _OWASA_Trigger_3_On(-1)
    }

    Condition : _OWASA_Stage_2_Counter(-1) >= 7   // Require a 7 day waiting period before going into phase 3
    {   Condition : weekday{year, month, day} <= 1
        {     Condition : _OWASA_ProjStorage_Pct3 <= 20
              Value     : 1
        }
        Condition : default
        Value     : _OWASA_Trigger_3_On(-1)
    }
    Condition : default
    Value     : _OWASA_Trigger_3_On(-1)
}


Set : _OWASA_Trigger_2_On
{   Condition : _OWASA_Trigger_2_On(-1) = 1
    {   Condition : _OWASA_Usable_Stor >= _OWASA_Max_Usable_Stor
        Value     : 0

        Condition : default
        Value     : _OWASA_Trigger_2_On(-1)
    }

    Condition : _OWASA_Stage_1_Counter(-1) >= 7   // Require a 7 day waiting period before going into phase 2
    {   Condition : weekday{year, month, day} <= 1
        {   Condition : _OWASA_ProjStorage_Pct2 <= 20
            Value     : 1
        }
        Condition : default
        Value     : _OWASA_Trigger_2_On(-1)
    }
    Condition : default
    Value     : _OWASA_Trigger_2_On(-1)
}


Set : _OWASA_Trigger_1_On
```

```
{   Condition : _OWASA_Trigger_1_On(-1) = 1
    {   Condition : _OWASA_Usable_Stor >= _OWASA_Max_Usable_Stor
        Value     : 0

        Condition : default
        Value     : _OWASA_Trigger_1_On(-1)
    }

    Condition : weekday{year, month, day} <= 1
    {   Condition : _OWASA_ProjStorage_Pct1 <= 20
        Value     : 1

        Condition : default
        Value     : _OWASA_Trigger_1_On(-1)
    }
    Condition : default
    Value     : _OWASA_Trigger_1_On(-1)
}

:For:
{   [trig] = {1, 2, 3}
}

Set : _OWASA_Stage_[trig]_Counter
{   Condition : _OWASA_Stage_[trig]_Counter(-1) > 0 and _OWASA_Trigger_[trig]_On = 0
    Value     : 0

    Condition : _OWASA_Trigger_[trig]_On = 1
    Value     : _OWASA_Stage_[trig]_Counter(-1) + 1

    Condition : default
    Value     : _OWASA_Stage_[trig]_Counter(-1)
}

/*  Count all trigger events lasting at least 7 days */

Set : _OWASA_Ph_[trig]_event_counter
{   Condition : _OWASA_Stage_[trig]_Counter = 7 and _OWASA_Stage_[trig]_Counter(-1) = 6
    Value     : _OWASA_Ph_[trig]_event_counter(-1) + 1

    Condition : default
    Value      : _OWASA_Ph_[trig]_event_counter(-1)
}

:Next:

/*  This section determines the demand depending upon which level of conservation
    is in place. */

Set : _OWASA_Consvn_1_Demand
{
    Condition : _OWASA_Trigger_1_On = 1
    Value     : Demand0431 * ( 1 - ( 10/ 100 ))

    Condition : default
    Value     : Demand0431
}

Set : _OWASA_Consvn_2_Demand
{
            Condition : _OWASA_Trigger_2_On = 1
    Value     : Demand0431 * ( 1 - ( 15 / 100 ))

    Condition : default
    Value     : Demand0431
}

Set : _OWASA_Consvn_3_Demand
{
            Condition : _OWASA_Trigger_3_On = 1
```

```
   Value     : Demand0431 * ( 1 - ( 20 / 100 ))

   Condition : default
   Value     : Demand0431
}

:For:
{   [trig] = {1, 2, 3}
}

Constraint   OWASA_Demand_Limit_Consvn_[trig] :
         {   Condition  :  _OWASA_Trigger_[trig]_On = 1
             Expression :  ddelivery0431<= _OWASA_Consvn_[trig]_Demand }

:Next:
```

drought_plans_neuse.ocl

```
:If: {[Drought_Plans_On] = 1} // First check if drought plan variable is on

//Note - Hillsborough and Orange-Alamance drought restrictions are handled in upper_eno_ops.ocl


// Durham
/* Variable to indicate if additional sources are available (1 = yes 0 = no) */

Set : _Durham_add_sources { Value : 0 }


/* Compute Durham's usable storage */

Set : _Durham_usable_stor { Value : (storage1140 - lower_rule1140) + (storage1200 - lower_rule1200) }

Set : _Max_Durham_usable_stor { Value : (upper_rule1140 - lower_rule1140) + (upper_rule1200 - lower_rule1200) }

Set : _Durham_usable_pct { Value : 100 * (_Durham_usable_stor / _Max_Durham_usable_stor) }


/* Turn triggers on for non-forecast runs */

/* Stage 1 */
Set : _Durham_Trigger_1_On
{
   Condition : abs_period = 1
   Value     : 0

   Condition : _Durham_Trigger_1_On(-1) = 1
   {
      /* Lift Stage 1 restrictions if greater than recission triggers for at least 7 days */
      Condition : _Durham_usable_pct(-7) >= 95 and _Durham_usable_pct(-6) >= 95 and _Durham_usable_pct(-5) >= 95
                  and _Durham_usable_pct(-4) >= 95 and _Durham_usable_pct(-3) >= 95
                  and _Durham_usable_pct(-2) >= 95 and _Durham_usable_pct(-1) >= 95
      Value     : 0

      Condition : default
      Value     : _Durham_Trigger_1_On(-1)
   }

   Condition : month > 4 and month < 11
   {
      Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1) <= 80
      Value     : 1

      Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1) <= 75
      Value     : 1
   }

    Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1)  <= 45
    Value     : 1

    Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1)  <= 40
    Value     : 1


   Condition : default
   Value     : _Durham_Trigger_1_On(-1)
}

/* Stage 2 */
Set : _Durham_Trigger_2_On
{
   Condition : _Durham_Trigger_2_On(-1) = 1
   {
      /* Lift Stage 2 restrictions if greater than recission triggers for at least 7 days */
      Condition : month > 4 and month < 11  and _Durham_usable_pct(-7) >= 80 and _Durham_usable_pct(-6) >= 80
                  and _Durham_usable_pct(-5) >= 80 and _Durham_usable_pct(-4) >= 80 and _Durham_usable_pct(-3) >= 80
```

```
                and _Durham_usable_pct(-2) >= 80 and _Durham_usable_pct(-1) >= 80
        Value     : 0

        Condition : month < 5 or month > 11 and _Durham_usable_pct(-7) >= 45 and _Durham_usable_pct(-6) >= 45 and
_Durham_usable_pct(-5) >= 45
                and _Durham_usable_pct(-4) >= 45 and _Durham_usable_pct(-3) >= 45
                and _Durham_usable_pct(-2) >= 45 and _Durham_usable_pct(-1) >= 45
        Value     : 0

        Condition : default
        Value     : _Durham_Trigger_2_On(-1)
    }

            /* 28 day waiting period between stages - subject to change */
    Condition : _Durham_Stage_1_Counter(-1) >= 28
            {   Condition : month > 4 and month < 11
        {   Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1) <= 60
            Value     : 1

            Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1) <= 55
            Value     : 1
        }

        Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1)  <= 40
        Value     : 1

        Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1)  <= 35
        Value     : 1
    }

    Condition : default
    Value     : _Durham_Trigger_2_On(-1)
}

/* Stage 3 */
Set : _Durham_Trigger_3_On
{
    Condition : _Durham_Trigger_3_On(-1) = 1
    {
        /* Lift Stage 3 restrictions if greater than recission triggers for at least 7 days */
        Condition : month > 4 and month < 11  and _Durham_usable_pct(-7) >= 60 and _Durham_usable_pct(-6) >= 60
                and _Durham_usable_pct(-5) >= 60 and _Durham_usable_pct(-4) >= 60 and _Durham_usable_pct(-3) >= 60
                and _Durham_usable_pct(-2) >= 60 and _Durham_usable_pct(-1) >= 60
        Value     : 0

        Condition : month < 5 or month > 11 and _Durham_usable_pct(-7) >= 40 and _Durham_usable_pct(-6) >= 40 and
_Durham_usable_pct(-5) >= 40
                and _Durham_usable_pct(-4) >= 40 and _Durham_usable_pct(-3) >= 40
                and _Durham_usable_pct(-2) >= 40 and _Durham_usable_pct(-1) >= 40
        Value     : 0

        Condition : default
        Value     : _Durham_Trigger_3_On(-1)
    }

            /* 28 day waiting period between stages - subject to change */
    Condition : _Durham_Stage_2_Counter(-1) >= 28
            {   Condition : month > 4 and month < 11
        {   Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1) <= 45
            Value     : 1

            Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1) <= 40
            Value     : 1
        }

        Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1)  <= 35
        Value     : 1

        Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1)  <= 30
        Value     : 1
```

```
   }

   Condition : default
   Value     : _Durham_Trigger_3_On(-1)
}

/* Stage 4 */
Set : _Durham_Trigger_4_On
{
   Condition : _Durham_Trigger_4_On(-1) = 1
   {
      /* Lift Stage 3 restrictions if greater than recission triggers for at least 7 days */
      Condition : month > 4 and month < 10  and _Durham_usable_pct(-7) >= 45 and _Durham_usable_pct(-6) >= 45
                  and _Durham_usable_pct(-5) >= 45 and _Durham_usable_pct(-4) >= 45 and _Durham_usable_pct(-3) >= 45
                  and _Durham_usable_pct(-2) >= 45 and _Durham_usable_pct(-1) >= 45
      Value     : 0

      Condition : month < 5 or month > 11 and _Durham_usable_pct(-7) >= 35 and _Durham_usable_pct(-6) >= 35 and
_Durham_usable_pct(-5) >= 35
                  and _Durham_usable_pct(-4) >= 35 and _Durham_usable_pct(-3) >= 35
                  and _Durham_usable_pct(-2) >= 35 and _Durham_usable_pct(-1) >= 35
      Value     : 0

      Condition : default
      Value     : _Durham_Trigger_4_On(-1)
   }

            /* 28 day waiting period between stages - subject to change */
   Condition : _Durham_Stage_3_Counter(-1) >= 28
            {   Condition : month > 4 and month < 11
      {    Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1) <= 35
           Value     : 1

           Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1) <= 30
           Value     : 1
      }

      Condition : _Durham_add_sources = 0 and _Durham_usable_pct(-1)  <= 25
      Value     : 1

      Condition : _Durham_add_sources = 1 and _Durham_usable_pct(-1)  <= 20
      Value     : 1
   }

   Condition : default
   Value     : _Durham_Trigger_4_On(-1)
}


/*  This section sets/resets the counters used to maintain the proper spacing
   of conservation stages */

Set : _Durham_Stage_1_Counter
{
   /*Condition : _Durham_Stage_1_Counter(-1) > 0
   {
      Condition : month > 4 and month < 10  _Durham_usable_pct(-7) >= 80 and _Durham_usable_pct(-6) >= 80
                  and _Durham_usable_pct(-5) >= 80 and _Durham_usable_pct(-4) >= 80 and _Durham_usable_pct(-3) >= 80
                  and _Durham_usable_pct(-2) >= 80 and _Durham_usable_pct(-1) >= 80
      Value     : 0

      Condition : _Durham_usable_pct(-7) >= 45 and _Durham_usable_pct(-6) >= 45 and _Durham_usable_pct(-5) >= 45
                  and _Durham_usable_pct(-4) >= 45 and _Durham_usable_pct(-3) >= 45
                  and _Durham_usable_pct(-2) >= 45 and _Durham_usable_pct(-1) >= 45
      Value     : 0
   }*/

   Condition : _Durham_Trigger_1_On = 1
   Value     : _Durham_Stage_1_Counter(-1) + 1
```

```
   Condition : default
   Value     : 0
}


Set : _Durham_Stage_2_Counter
{
   Condition : _Durham_Trigger_2_On = 1
   Value     : _Durham_Stage_2_Counter(-1) + 1


   Condition : default
   Value     : 0
}

Set : _Durham_Stage_3_Counter
{
   Condition : _Durham_Trigger_3_On = 1
   Value     : _Durham_Stage_3_Counter(-1) + 1


   Condition : default
   Value     : 0
}

Set : _Durham_Stage_4_Counter
{
   Condition : _Durham_Trigger_4_On = 1
   Value     : _Durham_Stage_4_Counter(-1) + 1


   Condition : default
   Value     : 0
}


/*  This section determines the demand depending upon which level of conservation
   is in place. */

Set : _Durham_Consvn_1_Demand
{
   Condition : month > 4 and month < 11 and _Durham_Trigger_1_On = 1
   Value     : Demand1162 * ( 1 - 15 / 100 )

   Condition : _Durham_Trigger_1_On = 1
   Value     : Demand1162 * ( 1 - 7 / 100 )

   Condition : default
   Value     : Demand1162
}

Set : _Durham_Consvn_2_Demand
{
   Condition : month > 4 and month < 11 and _Durham_Trigger_2_On = 1
   Value     : Demand1162 * ( 1 - 30 / 100 )

   Condition : _Durham_Trigger_2_On = 1
   Value     : Demand1162 * ( 1 - 12 / 100 )

   Condition : default
   Value     : Demand1162
}

Set : _Durham_Consvn_3_Demand
{
   Condition : month > 4 and month < 11 and _Durham_Trigger_3_On = 1
   Value     : Demand1162 * ( 1 - 40 / 100 )

   Condition : _Durham_Trigger_3_On = 1
```

```
   Value     : Demand1162 * ( 1 - 17 / 100 )

   Condition : default
   Value     : Demand1162
}

Set : _Durham_Consvn_4_Demand
{
   Condition : month > 4 and month < 11 and _Durham_Trigger_4_On = 1
   Value     : Demand1162 * ( 1 - 55 / 100 )

   Condition : _Durham_Trigger_4_On = 1
   Value     : Demand1162 * ( 1 - 30 / 100 )

   Condition : default
   Value     : Demand1162
}


/* Constrain the water supply release to implement the desired conservation */

Constraint   Durham_Demand_Limit_Consvn_1 :
        {  Condition  :  _Durham_Trigger_1_On = 1
           Expression :  ddelivery1162 <= _Durham_Consvn_1_Demand }

Constraint   Durham_Demand_Limit_Consvn_2 :
        {  Condition  :  _Durham_Trigger_2_On = 1
           Expression :  ddelivery1162 <= _Durham_Consvn_2_Demand }

Constraint   Durham_Demand_Limit_Consvn_3 :
        {  Condition  :  _Durham_Trigger_3_On = 1
           Expression :  ddelivery1162 <= _Durham_Consvn_3_Demand }

Constraint   Durham_Demand_Limit_Consvn_4 :
        {  Condition  :  _Durham_Trigger_4_On = 1
           Expression :  ddelivery1162 <= _Durham_Consvn_4_Demand }


/*  Turn on event counter whenever duration exceeds 4 days */

Set : _Durham_Ph_1_event_counter
{  Condition : _Durham_Stage_1_Counter = 5 and _Durham_Stage_1_Counter(-1) = 4
   Value     : _Durham_Ph_1_event_counter(-1) + 1

   Condition : default
   Value     : _Durham_Ph_1_event_counter(-1)
}

Set : _Durham_Ph_2_event_counter
{  Condition : _Durham_Stage_2_Counter = 5  and _Durham_Stage_2_Counter(-1) = 4
   Value     : _Durham_Ph_2_event_counter(-1) + 1

   Condition : default
   Value     : _Durham_Ph_2_event_counter(-1)
}

Set : _Durham_Ph_3_event_counter
{  Condition : _Durham_Stage_3_Counter = 5 and _Durham_Stage_3_Counter(-1) = 4
   Value     : _Durham_Ph_3_event_counter(-1) + 1

   Condition : default
   Value     : _Durham_Ph_3_event_counter(-1)
}

Set : _Durham_Ph_3_event_counter
{  Condition : _Durham_Stage_3_Counter = 5  and _Durham_Stage_3_Counter(-1) = 4
   Value     : _Durham_Ph_3_event_counter(-1) + 1

   Condition : default
   Value     : _Durham_Ph_3_event_counter(-1)
```

```
}


// Raleigh
Set : _Ral_Trigger_1_On
{
   Condition : _Ral_Trigger_1_On(-1) = 1
   {
      Condition : _Total_WS_Stor(-1) >= 0.9 *  [Total_Max_WS_Storage]
      Value     : 0

      Condition : default
      Value     : _Ral_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {
      Condition : _Total_WS_Stor(-1)  <= 50 / 100 *  [Total_Max_WS_Storage]
      Value     : 1
   }

   Condition : default
   Value     : _Ral_Trigger_1_On(-1)
}


Set : _Ral_Trigger_2_On
{
   Condition : _Ral_Trigger_2_On(-1) = 1
   {
      Condition : _Total_WS_Stor(-1) >= 0.7 * [Total_Max_WS_Storage]
      Value     : 0

      Condition : default
      Value     : _Ral_Trigger_2_On(-1)
   }

         Condition : _Ral_Stage_1_Counter(-1) >= 30
                  {    Condition : weekday{year, month, day} <= 1
                           {
                           Condition : _Total_WS_Stor(-1) <= 30 / 100 *  [Total_Max_WS_Storage]
                           Value     : 1
                                    }

                           Condition : default
                  Value     : _Ral_Trigger_2_On(-1)
         }

   Condition : default
   Value     : _Ral_Trigger_2_On(-1)
}

Set : _Ral_Trigger_3_On
{
   Condition : _Ral_Trigger_3_On(-1) = 1
   {
      Condition : _Total_WS_Stor(-1) >= 0.5 * [Total_Max_WS_Storage]
      Value     : 0

      Condition : default
      Value     : _Ral_Trigger_3_On(-1)
   }

         Condition : _Ral_Stage_2_Counter(-1) >= 30
                  {    Condition : weekday{year, month, day} <= 1
                           {
                           Condition : _Total_WS_Stor(-1) <= 10 / 100 *  [Total_Max_WS_Storage]
                           Value     : 1
                                    }
```

```
                                    Condition : default
                                Value     : _Ral_Trigger_3_On(-1)
                }

    Condition : default
    Value     : _Ral_Trigger_3_On(-1)
}


/*  This section sets/resets the counters used to maintain the proper spacing
    of conservation stages */

Set : _Ral_Stage_1_Counter
{
    Condition : _Ral_Stage_1_Counter(-1) > 0
    {
        Condition : _Total_WS_Stor(-1) >= 0.9 * [Total_Max_WS_Storage]
        Value     : 0
    }

    Condition : _Ral_Trigger_1_On = 1
    Value     : _Ral_Stage_1_Counter(-1) + 1


    Condition : default
    Value     : _Ral_Stage_1_Counter(-1)
}


Set : _Ral_Stage_2_Counter
{
    Condition : _Ral_Stage_2_Counter(-1) > 0
    {
        Condition : _Total_WS_Stor(-1) >= 0.7 * [Total_Max_WS_Storage]
        Value     : 0
    }

    Condition : _Ral_Trigger_2_On = 1
    Value     : _Ral_Stage_2_Counter(-1) + 1


    Condition : default
    Value     : _Ral_Stage_2_Counter(-1)
}

Set : _Ral_Stage_3_Counter
{
    Condition : _Ral_Stage_3_Counter(-1) > 0
    {
        Condition : _Total_WS_Stor(-1) >= 0.5 * [Total_Max_WS_Storage]
        Value     : 0
    }

    Condition : _Ral_Trigger_3_On = 1
    Value     : _Ral_Stage_3_Counter(-1) + 1


    Condition : default
    Value     : _Ral_Stage_3_Counter(-1)
}



/*  This section determines the demand depending upon which level of conservation
    is in place. */

Set : _Ral_Consvn_1_Demand
{
    Condition : _Ral_Trigger_1_On = 1
    Value     : Demand1306 * ( 1 - ( 8 / 100 ))
```

```
   Condition : default
   Value     : Demand1306
}

Set : _Ral_Consvn_2_Demand
{
            Condition : _Ral_Trigger_2_On = 1
   Value     : Demand1306 * ( 1 - ( 15 / 100 ))

   Condition : default
   Value     : Demand1306
}

Set : _Ral_Consvn_3_Demand
{
            Condition : _Ral_Trigger_3_On = 1
   Value     : Demand1306 * ( 1 - ( 20 / 100 ))

   Condition : default
   Value     : Demand1306
}


/* Constrain the water supply withdrawal to implement the desired conservation */

Constraint   Demand_Limit_Consvn_1 :
         {  Condition  :  _Ral_Trigger_1_On = 1
            Expression :  ddelivery1306 <= _Ral_Consvn_1_Demand }

Constraint   Demand_Limit_Consvn_2 :
         {  Condition  :  _Ral_Trigger_2_On = 1
            Expression :  ddelivery1306 <= _Ral_Consvn_2_Demand }

Constraint   Demand_Limit_Consvn_3 :
         {  Condition  :  _Ral_Trigger_3_On = 1
            Expression :  ddelivery1306 <= _Ral_Consvn_3_Demand }


/*  Turn on event counter whenever duration exceeds 4 days */

Set : _Ral_Ph_1_event_counter
{  Condition : _Ral_Stage_1_Counter = 5 and _Ral_Stage_1_Counter(-1) = 4
   Value     : _Ral_Ph_1_event_counter(-1) + 1

   Condition : default
   Value      : _Ral_Ph_1_event_counter(-1)
}

Set : _Ral_Ph_2_event_counter
{  Condition : _Ral_Stage_2_Counter = 5  and _Ral_Stage_2_Counter(-1) = 4
   Value     : _Ral_Ph_2_event_counter(-1) + 1

   Condition : default
   Value      : _Ral_Ph_2_event_counter(-1)
}

Set : _Ral_Ph_3_event_counter
{  Condition : _Ral_Stage_3_Counter = 5  and _Ral_Stage_3_Counter(-1) = 4
   Value     : _Ral_Ph_3_event_counter(-1) + 1

   Condition : default
   Value      : _Ral_Ph_3_event_counter(-1)
}

// SGWASA

Set : _SGWASA_Trigger_5_On
{  Condition : _SGWASA_Trigger_5_On(-1) = 1
   {  Condition : elevation1250 >= 356
```

```
      Value     : 0

      Condition : default
      Value     : _SGWASA_Trigger_5_On(-1)
   }

   Condition : _SGWASA_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : elevation1250<= 320
           Value     : 1
      }
      Condition : default
      Value     : _SGWASA_Trigger_5_On(-1)
   }
   Condition : default
   Value     : _SGWASA_Trigger_5_On(-1)
}

Set : _SGWASA_Trigger_4_On
{  Condition : _SGWASA_Trigger_4_On(-1) = 1
   {  Condition : elevation1250 >= 356
      Value     : 0

      Condition : default
      Value     : _SGWASA_Trigger_4_On(-1)
   }

   Condition : _SGWASA_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : elevation1250< 340.5
           Value     : 1
      }
      Condition : default
      Value     : _SGWASA_Trigger_4_On(-1)
   }
   Condition : default
   Value     : _SGWASA_Trigger_4_On(-1)
}

Set : _SGWASA_Trigger_3_On
{  Condition : _SGWASA_Trigger_3_On(-1) = 1
   {  Condition : elevation1250 >= 356
      Value     : 0

      Condition : default
      Value     : _SGWASA_Trigger_3_On(-1)
   }

   Condition : _SGWASA_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {    Condition : elevation1250< 343.08
           Value     : 1
      }
      Condition : default
      Value     : _SGWASA_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _SGWASA_Trigger_3_On(-1)
}


Set : _SGWASA_Trigger_2_On
{  Condition : _SGWASA_Trigger_2_On(-1) = 1
   {  Condition : elevation1250 >= 356
      Value     : 0

      Condition : default
      Value     : _SGWASA_Trigger_2_On(-1)
   }
```

```
   Condition : _SGWASA_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {   Condition : weekday{year, month, day} <= 1
      {     Condition : elevation1250< 345.25
                                                  Value     : 1
      }
      Condition : default
      Value     : _SGWASA_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _SGWASA_Trigger_2_On(-1)
}


Set : _SGWASA_Trigger_1_On
{   Condition : _SGWASA_Trigger_1_On(-1) = 1
   {   Condition : elevation1250 >= 356
      Value     : 0

      Condition : default
      Value     : _SGWASA_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {   Condition : elevation1250< 349.67
      Value     : 1

      Condition : default
      Value     : _SGWASA_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _SGWASA_Trigger_1_On(-1)
}

// Wilson

Set : _Wilson_Trigger_5_On
{   Condition : _Wilson_Trigger_5_On(-1) = 1
   {   Condition : elevation1500 >= 148
      Value     : 0

      Condition : default
      Value     : _Wilson_Trigger_5_On(-1)
   }

   Condition : _Wilson_Stage_4_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 5
   {   Condition : weekday{year, month, day} <= 1
      {     Condition : elevation1500<= 135
         Value     : 1
      }
      Condition : default
      Value     : _Wilson_Trigger_5_On(-1)
   }
   Condition : default
   Value     : _Wilson_Trigger_5_On(-1)
}

Set : _Wilson_Trigger_4_On
{   Condition : _Wilson_Trigger_4_On(-1) = 1
   {   Condition : elevation1500 >= 148
      Value     : 0

      Condition : default
      Value     : _Wilson_Trigger_4_On(-1)
   }

   Condition : _Wilson_Stage_3_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 4
   {   Condition : weekday{year, month, day} <= 1
      {     Condition : elevation1500< 138
         Value     : 1
      }
```

```
      Condition : default
      Value     : _Wilson_Trigger_4_On(-1)
   }
   Condition : default
   Value     : _Wilson_Trigger_4_On(-1)
}

Set : _Wilson_Trigger_3_On
{  Condition : _Wilson_Trigger_3_On(-1) = 1
   {  Condition : elevation1500 >= 148
      Value     : 0

      Condition : default
      Value     : _Wilson_Trigger_3_On(-1)
   }

   Condition : _Wilson_Stage_2_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 3
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : elevation1500< 140
                                                   Value     : 1
      }
      Condition : default
      Value     : _Wilson_Trigger_3_On(-1)
   }
   Condition : default
   Value     : _Wilson_Trigger_3_On(-1)
}


Set : _Wilson_Trigger_2_On
{  Condition : _Wilson_Trigger_2_On(-1) = 1
   {  Condition : elevation1500 >= 148
      Value     : 0

      Condition : default
      Value     : _Wilson_Trigger_2_On(-1)
   }

   Condition : _Wilson_Stage_1_Counter(-1) >= 14   // Require a 14 day waiting period before going into phase 2
   {  Condition : weekday{year, month, day} <= 1
      {     Condition : elevation1500< 142
                                                   Value     : 1
      }
      Condition : default
      Value     : _Wilson_Trigger_2_On(-1)
   }
   Condition : default
   Value     : _Wilson_Trigger_2_On(-1)
}


Set : _Wilson_Trigger_1_On
{  Condition : _Wilson_Trigger_1_On(-1) = 1
   {  Condition : elevation1500 >= 148
      Value     : 0

      Condition : default
      Value     : _Wilson_Trigger_1_On(-1)
   }

   Condition : weekday{year, month, day} <= 1
   {  Condition : elevation1500< 144
      Value     : 1

      Condition : default
      Value     : _Wilson_Trigger_1_On(-1)
   }
   Condition : default
   Value     : _Wilson_Trigger_1_On(-1)
}
```

```
/*  This section sets/resets the counters used to maintain the proper spacing of conservation stages */

:For:
{ [Util] = { SGWASA, Wilson }
}

:For:
{   [trig] = {1, 2, 3, 4, 5}
}

Set : _[Util]_Stage_[trig]_Counter
{   Condition : _[Util]_Stage_[trig]_Counter(-1) > 0 and _[Util]_Trigger_[trig]_On = 0
    Value     : 0

    Condition : _[Util]_Trigger_[trig]_On = 1
    Value     : _[Util]_Stage_[trig]_Counter(-1) + 1

    Condition : default
    Value     : _[Util]_Stage_[trig]_Counter(-1)
}

/*  Count all trigger events lasting at least 7 days */

Set : _[Util]_Ph_[trig]_event_counter
{   Condition : _[Util]_Stage_[trig]_Counter = 7 and _[Util]_Stage_[trig]_Counter(-1) = 6
    Value     : _[Util]_Ph_[trig]_event_counter(-1) + 1

    Condition : default
    Value      : _[Util]_Ph_[trig]_event_counter(-1)
}

:Next:

:Next:


// Set conservation demand and delivery constraints for each trigger level in effect.

// Set demand reduction factors
:SUBSTITUTE: [Dem_1_Red_Factor] = 5
:SUBSTITUTE: [Dem_2_Red_Factor] = 10
:SUBSTITUTE: [Dem_3_Red_Factor] = 20
:SUBSTITUTE: [Dem_4_Red_Factor] = 25
:SUBSTITUTE: [Dem_5_Red_Factor] = 35
:SUBSTITUTE: [Dem_6_Red_Factor] = 50

:For:
{   [trig] = {1, 2, 3, 4, 5}
}



// SGWASA
Set : _SGWASA_Consvn_[trig]_Demand
{   Condition : _SGWASA_Trigger_[trig]_On = 1
    Value     : Demand1256 *  ( 1 - [Dem_[trig]_Red_Factor] / 100 )

    Condition : default
    Value     : Demand1256
}

Constraint   SGWASA_Demand_Limit_Consvn_[trig] :
          {   Condition  :  _SGWASA_Trigger_[trig]_On = 1
              Expression :  dflow1254.1256 <= _SGWASA_Consvn_[trig]_Demand }

//Wilson
Set : _Wilson_Consvn_[trig]_Demand
{   Condition : _Wilson_Trigger_[trig]_On = 1
    Value     : Demand1506*  ( 1 - [Dem_[trig]_Red_Factor] / 100 )
```

```
   Condition : default
   Value     : Demand1506
}

Constraint   Wilson_Demand_Limit_Consvn_[trig] :
         {   Condition  :  _Wilson_Trigger_[trig]_On = 1
             Expression :  dflow1520.1506 <= _Wilson_Consvn_[trig]_Demand }

:Next:

:else:
// Do nothing if not using drought plans
:endif:
```