

## Ashuelot Annual Water Use versus Stream Flow – Calendar Year 2003

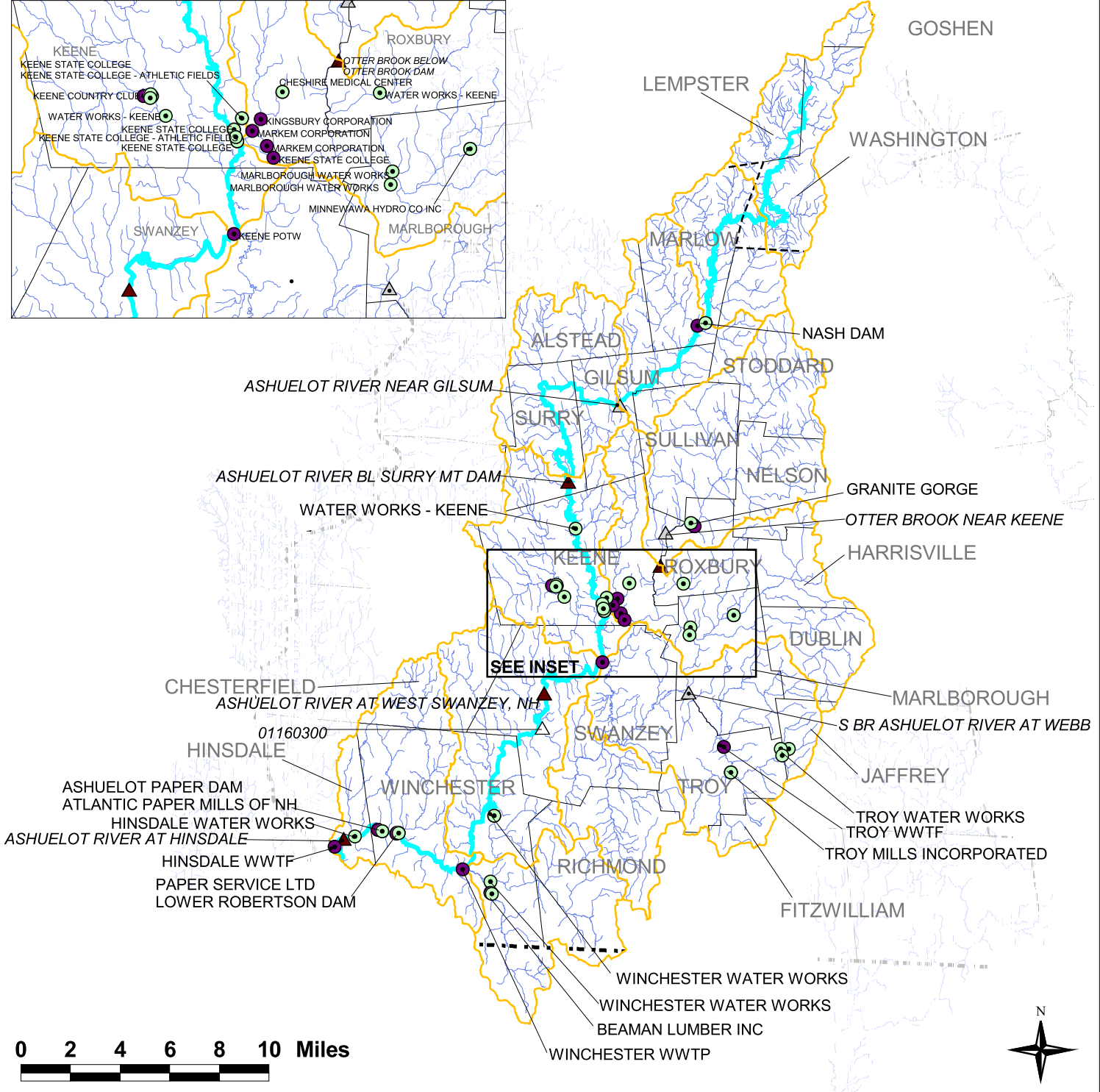
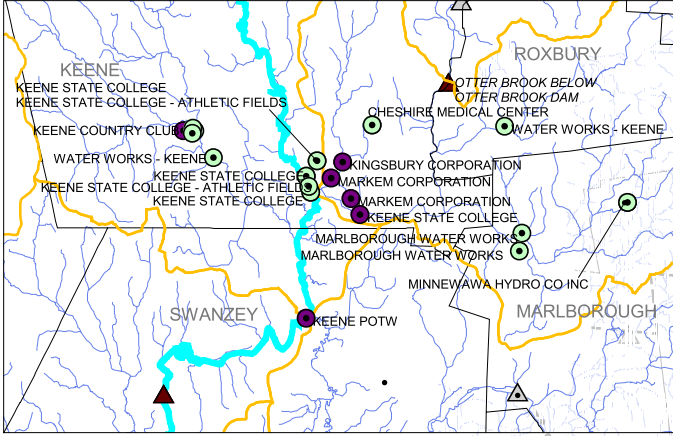
The Ashuelot Water Management Planning Area covers 422 square miles and includes three streamflow gage used this report. The gages are in Surry (**USGS 01158000 ASHUELOT RIVER BELOW SURRY MT DAM, NEAR KEENE, NH**) measuring 101 square miles of the WMPA; in Swanzey (**USGS 01160350 ASHUELOT RIVER AT WEST SWANZEY, NH**) measuring 316.1 square miles; and in Hinsdale (**USGS 01161000 ASHUELOT RIVER AT HINSDALE, NH**) measuring 420 square miles. For this report the streamflow was transposed areal from these gages to all impact points on the Designated River. There are 27 registered sources and 14 registered, measured discharges in the Water Management Planning Area.

July was the only month in 2003 the Designated Rive was not in compliance with the General Standard. In July, the Designated Rive was not in compliance with the General Standard from most upstream source for the Keene Water Works, which is below the Surry Mountain gage, to the beginning of the Designated Reach in Hinsdale













The Water Management Planning Area includes registered water use by four hydroelectric facilities. These facilities are run of the river type water uses. Water use by hydroelectric facilities are not shown in the monthly graphs because flow in is expected to equal flow out and because the General Standard does not apply to hydroelectric facilities between their point of withdrawal and point of return per Env-Ws 1903.02(d). Other water users include Keene State College for athletic fields and institutional uses; municipal water supplies in Keene, Marlborough, Troy, Winchester and Hinsdale; golf course irrigation at Keene Country Club; snowmaking at Granite Gorge; and several industrial uses including among other types paper making and lumber mill operations. Measured, registered returns other than from hydroelectric facilities include industrial returns and returns from four waste water treatment facilities.

# Ashuelot Affected Water User Facilities: Source and Discharge Locations

INSET



## Legend

-  Affected Water Users
-  Source
-  Discharge
-  Stream Gages
-  Active
-  Inactive
-  Unknown
-  Designated Reach
-  Hydrology
-  State boundary
-  Town boundary
-  WMPA

The coverages presented are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. NHDES is not responsible for the use or interpretation of this information. Not intended for legal purposes. Water users database last updated January 2004.

Map produced January 28, 2004

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2003 Ashuelot Water Use in CFS															
USERNAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
End of Designated Reach			7.0												
MARLOW POWER	NASH DAM	20246 20246-S01	46.3	28.4	7.1	16.4	27.1	25.6	30.1	2.6	19.8	12.4	6.4	18.8	20.3
MARLOW POWER	NASH DAM	20246 20246-D01	46.3	(28.4)	(7.1)	(16.4)	(27.1)	(25.6)	(30.1)	(2.6)	(19.8)	(12.4)	(6.4)	(18.8)	(20.3)
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S03	108.5	0.4	0.3	0.4	0.4	0.3	1.5	1.7	1.5	1.6	1.3	1.3	1.3
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S03	115.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S02	115.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S01	115.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20338-S04	115.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRANITE GORGE LLC	GRANITE GORGE	20767 20767-S01	215.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KEENE STATE COLLEGE	KEENE STATE COLLEGE	20494 20338-S01	215.8	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.2
SOUTHERN NH HYDRO	MINNEWAWA HYDRO CO INC	20462 20462-S01	215.8	15.5	5.3	19.7	33.6	15.2	21.4	2.0	7.2	4.7	16.2	24.8	24.0
SOUTHERN NH HYDRO	MINNEWAWA HYDRO CO INC	20462 20462-D01	215.8	(15.5)	(5.3)	(19.7)	(33.6)	(15.2)	(21.4)	(2.0)	(7.2)	(4.7)	(16.2)	(24.8)	(24.0)
MARKEM CORPORATION	MARKEM CORPORATION	20406 20406-D03	215.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARKEM CORPORATION	MARKEM CORPORATION	20406 20406-D02	215.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARKEM CORPORATION	MARKEM CORPORATION	20406 20074-D01	--	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
MARKEM CORPORATION	MARKEM CORPORATION	20406 20338-S01	--	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S01	215.8	3.0	3.1	2.9	3.1	3.1	1.7	1.7	1.6	1.8	1.7	1.3	1.4
KINGSBURY CORPORATION	KINGSBURY CORPORATION	20201 20201-D01	215.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARLBOROUGH WATER WORKS	MARLBOROUGH WATER WORKS	20053 20053-S02	215.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARLBOROUGH WATER WORKS	MARLBOROUGH WATER WORKS	20053 20053-S01	215.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHESHIRE MEDICAL CENTER	CHESHIRE MEDICAL CENTER	20017 20338-S01	215.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
KEENE COUNTRY CLUB	KEENE COUNTRY CLUB	20705 20705-S03	234.6	0.0	0.0	0.0	0.2	0.3	0.4	0.4	0.2	0.2	0.1	0.0	0.0
KEENE COUNTRY CLUB	KEENE COUNTRY CLUB	20705 20705-S02	234.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KEENE COUNTRY CLUB	KEENE COUNTRY CLUB	20705 20705-S01	234.6	0.0	0.0	0.0	0.2	0.3	0.2	0.3	0.2	0.1	0.0	0.0	0.0
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S02	234.6	0.3	0.5	0.5	0.4	0.3	1.2	1.2	1.1	1.0	1.2	1.1	1.0
TROY WATER WORKS	TROY WATER WORKS	20451 20451-S03	288.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TROY WATER WORKS	TROY WATER WORKS	20451 20451-S02	288.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TROY WATER WORKS	TROY WATER WORKS	20451 20451-S01	288.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TROY WWTF	WASTE WATER TREAT PLANT	20449 20449-D01	288.6	(0.2)	(0.1)	(0.1)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)
TROY MILLS INCORPORATED	TROY MILLS INCORPORATED	20111 20111-S01	288.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TROY MILLS INCORPORATED	TROY MILLS INCORPORATED	20111 20111-D01	288.6	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
KEENE WWTF	KEENE POTW	20074 20074-D01	288.6	(4.4)	(4.3)	(6.5)	(7.7)	(5.5)	(4.7)	(3.6)	(4.7)	(4.4)	(5.2)	(6.0)	(7.3)
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S02	380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S01	380.0	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.2
BEAMAN LUMBER INC	BEAMAN LUMBER INC	20537 20537-S01	385.3	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S03	385.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
WINCHESTER WWTF	WINCHESTER WASTE WATER TREAT PLANT	20314 20314-D01	385.3	(0.3)	(0.3)	(0.4)	(0.5)	(0.4)	(0.4)	(0.3)	(0.3)	(0.3)	(0.3)	(0.4)	(0.4)
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-S01	408.4	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-D01	408.4	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.2)
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-S01	408.4	374.4	270.5	459.5	867.9	748.8	525.9	394.9	304.4	319.1	641.7	707.2	667.5
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-D01	408.5	(374.4)	(270.5)	(459.5)	(867.9)	(748.8)	(525.9)	(394.9)	(304.4)	(319.1)	(641.7)	(707.2)	(667.5)
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-S01	412.3	0.0	0.0	0.1	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-S01	412.3	397.0	322.8	487.9	877.8	792.5	537.3	394.5	287.7	278.2	652.4	692.4	554.9
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-D01	412.6	(0.0)	(0.0)	(0.1)	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-D01	412.6	(397.0)	(322.8)	(487.9)	(877.8)	(792.5)	(537.3)	(394.5)	(287.7)	(278.2)	(652.4)	(692.4)	(554.9)
HINSDALE WATER WORKS	HINSDALE WATER WORKS	20050 20050-S02	415.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
HINSDALE WWTF	WASTE WATER TREAT PLANT	20089 20089-D01	421.2	(0.3)	(0.3)	(0.4)	(0.6)	(0.5)	(0.4)	(0.0)	(0.4)	(0.3)	(0.4)	(0.5)	(0.6)
Start of Designated Reach			421.9												

2003 Ashuelot Aggregate Water Use in CFS															
USERNAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
End of Designated Reach	End of Designated Reach		7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARLOW POWER	NASH DAM	20246 20246-S01	46.3	28.4	7.1	16.4	27.1	25.6	30.1	2.6	19.8	12.4	6.4	18.8	20.3
MARLOW POWER	NASH DAM	20246 20246-D01	46.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S03	108.5	0.4	0.3	0.4	0.4	0.3	1.5	1.7	1.5	1.6	1.3	1.3	1.3
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S03	115.6	0.4	0.3	0.4	0.4	0.4	1.5	1.7	1.5	1.6	1.3	1.3	1.3
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S02	115.6	0.4	0.3	0.4	0.4	0.4	1.5	1.7	1.5	1.6	1.3	1.3	1.3
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S01	115.6	0.4	0.3	0.4	0.4	0.4	1.5	1.8	1.5	1.6	1.3	1.3	1.3
The Branch (Minnewawa) confluence			215.8	3.5	3.6	3.5	3.6	3.6	3.3	3.6	3.3	3.5	3.2	2.7	2.9
Ash Swamp Brook confluence			234.6	3.8	4.1	4.0	4.3	4.5	5.0	5.5	4.7	4.8	4.4	3.8	3.9
South Branch confluence			288.6	(0.6)	(0.1)	(2.4)	(3.3)	(0.8)	0.4	2.0	0.1	0.4	(0.7)	(2.1)	(3.5)
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S02	380.0	(0.6)	(0.1)	(2.4)	(3.3)	(0.8)	0.4	2.0	0.1	0.4	(0.7)	(2.1)	(3.5)
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S01	380.0	(0.2)	0.3	(2.1)	(3.0)	(0.5)	0.7	2.3	0.3	0.6	(0.6)	(2.0)	(3.3)
Mirey Brook confluence			385.3	(0.1)	0.4	(2.1)	(3.1)	(0.4)	0.9	2.5	0.5	0.8	(0.5)	(1.9)	(3.3)
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-S01	408.4	(0.0)	0.5	(2.0)	(3.0)	(0.3)	0.9	2.5	0.5	0.8	(0.4)	(1.8)	(3.1)
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-D01	408.4	(0.1)	0.4	(2.1)	(3.1)	(0.4)	0.9	2.5	0.5	0.8	(0.5)	(1.9)	(3.3)
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-S01	408.4	374.3	270.9	457.4	864.8	748.5	526.7	397.3	304.9	319.9	641.2	705.2	664.1
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-D01	408.5	(0.1)	0.4	(2.1)	(3.1)	(0.4)	0.9	2.5	0.5	0.8	(0.5)	(1.9)	(3.3)
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-S01	412.3	(0.1)	0.4	(2.0)	(2.9)	(0.4)	0.9	2.5	0.9	0.8	(0.5)	(1.9)	(3.3)
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-S01	412.3	396.9	323.2	485.9	875.0	792.1	538.2	396.9	288.6	279.0	651.9	690.5	551.6
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-D01	412.6	396.9	323.2	485.8	874.7	792.1	538.2	396.9	288.6	278.9	651.9	690.5	551.6
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-D01	412.6	(0.1)	0.4	(2.1)	(3.1)	(0.4)	0.9	2.5	0.9	0.8	(0.5)	(1.9)	(3.3)
HINSDALE WATER WORKS	HINSDALE WATER WORKS	20050 20050-S02	415.1	0.0	0.6	(2.0)	(3.0)	(0.3)	1.0	2.6	1.0	0.9	(0.4)	(1.8)	(3.2)
HINSDALE WWTF	WASTE WATER TREAT PLANT	20089 20089-D01	421.2	(0.2)	0.3	(2.4)	(3.6)	(0.7)	0.6	2.6	0.6	0.6	(0.8)	(2.3)	(3.8)
Start of Designated Reach	Start of Designated Reach		421.9	(0.2)	0.3	(2.4)	(3.6)	(0.7)	0.6	2.6	0.6	0.6	(0.8)	(2.3)	(3.8)

4. Table of Estimated Monthly Stream Flows and General Standard

**USGS 01161000 ASHUELOT RIVER AT HINSDALE, NH**

DA(mi^2) 420  
 7Q10 (cfs) 45

	Mean of daily streamflows (2003) in cfs	Mean of monthly streamflows (POR = 93 years) in cfs	Median of monthly means (cfs)	Calculated 2003 monthly mean streamflow	General Standard in cfsm
Jan-03	604	604	565	1.44	0.04
Feb-03	603	604	481	1.43	0.04
Mar-03	1881	1238	1137	4.48	0.16
Apr-03	1990	1878	1890	4.74	0.16
May-03	934	990	841	2.22	0.04
Jun-03	570	523	394	1.36	0.04
Jul-03	118	276	191	0.28	0.0054
Aug-03	712	224	143	1.70	0.04
Sep-03	443	241	148	1.06	0.04
Oct-03	878	345	208	2.09	0.04
Nov-03	1290	585	480	3.07	0.04
Dec-03	1923	657	557	4.58	0.16

2003 daily data availability

77.3% = number of days with data in 2003 / 365 days

Using POR average streamflow for this month

Using interpolated values or POR average daily streamflows for part of this month

## USGS 01160350 ASHUELOT RIVER AT WEST SWANZEY, NH

DA(mi<sup>2</sup>) 316.1

7Q10 (cfs) 21 \*

	Mean of daily streamflows (2003) in cfs	Mean of monthly streamflows (POR = 9 years) in cfs	Median of monthly means (cfs)	Calculated 2003 monthly mean streamflow	General Standard in cfsm
Jan-03	560	560	562.5	1.77	0.04
Feb-03	484	492	447	1.53	0.04
Mar-03	1463	893	844.5	4.63	0.16
Apr-03	1646	1360	1095	5.21	0.16
May-03	729	730	694	2.31	0.04
Jun-03	405	402	300	1.28	0.04
Jul-03	88	187	137	0.28	0.0033
Aug-03	555	128	71.3	1.76	0.04
Sep-03	300	141	79.3	0.95	0.02
Oct-03	604	331	255.5	1.91	0.04
Nov-03	1024	489	372	3.24	0.04
Dec-03	1585	551	367.5	5.02	0.16

2003 daily data availability

77.0% = number of days with data in 2003 / 365 days

	Using POR average streamflow for this month
	Using interpolated values or POR average daily streamflows for part of this month

\* Determined by averaging the Hinsdale and Surry Mtn. gages.

## USGS 01158000 ASHUELOT RIVER BELOW SURRY MT DAM, NEAR

DA(mi<sup>2</sup>) 101

7Q10 (cfs) 2.8

	Mean of daily streamflows (2003)(cfs)	Mean of monthly streamflows (POR= 51 years) (cfs)	Median of monthly means (cfs)	Calculated 2003 monthly mean streamflow	General Standard in cfsm
Jan-03	95	148	130	0.94	0.02
Feb-03	57	154	122	0.56	0.02
Mar-03	319	281	272	3.16	0.04
Apr-03	633	548	554	6.26	0.16
May-03	236	284	285	2.33	0.04
Jun-03	103	136	127	1.02	0.04
Jul-03	14	54	33	0.14	0.0014
Aug-03	313	40	21	3.10	0.04
Sep-03	129	51	32	1.27	0.04
Oct-03	241	100	53	2.39	0.04
Nov-03	356	159	139	3.52	0.04
Dec-03	493	176	145	4.88	0.16

2003 daily data availability

96.2% = number of days with data in 2003 / 365 days

Using POR average streamflow for this month

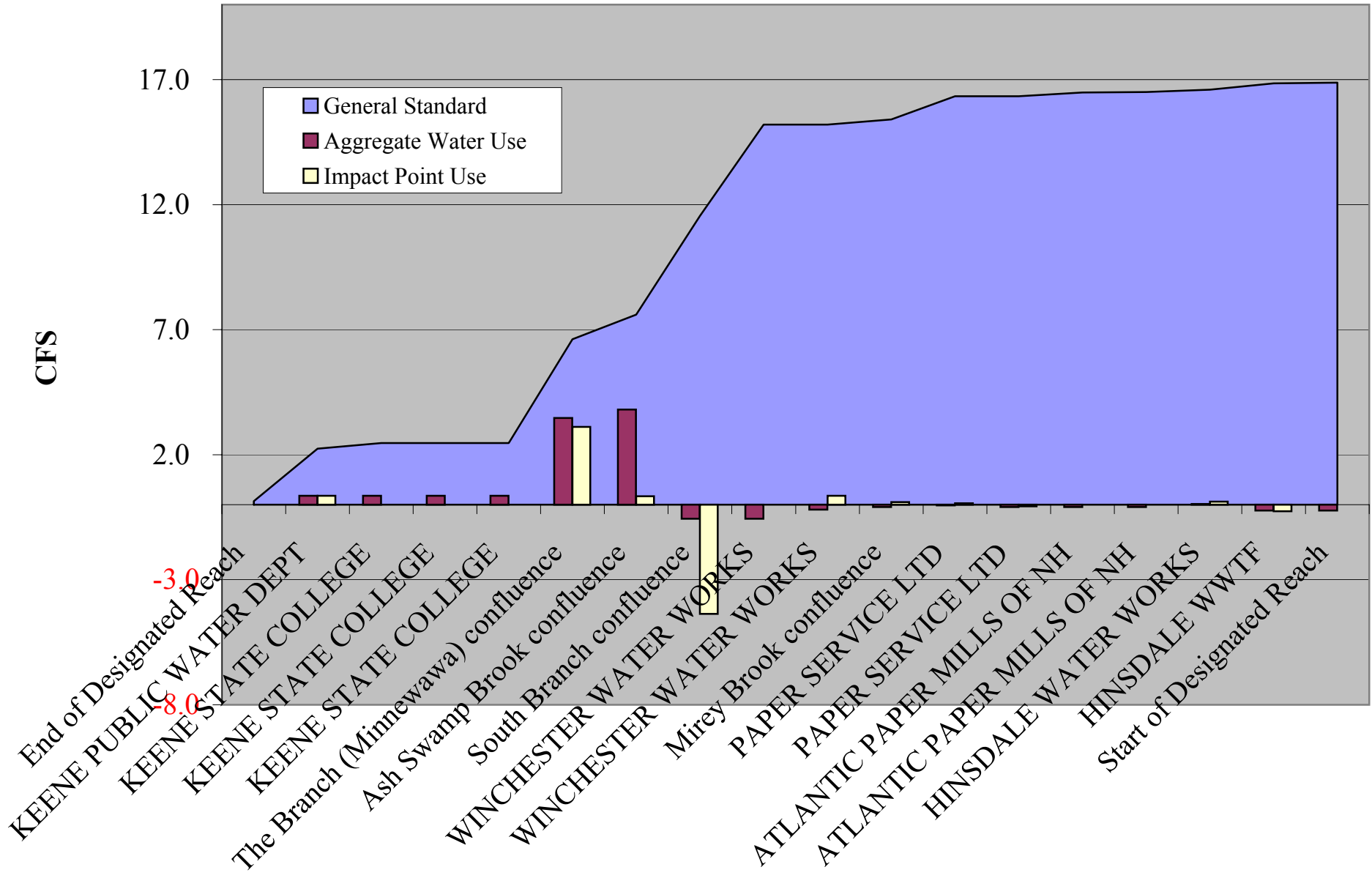
Using interpolated values or POR average daily streamflows for part of this month

<b>2003 Ashuelot Estimated Monthly Stream Flow at Each Impact Point in CFS</b>		Calculated 2003 monthly mean streamflow in CFSM	101	0.94	0.56	3.16	6.26	2.33	1.02	0.14	3.10	1.27	2.39	3.52	4.88
		Calculated 2003 monthly mean streamflow in CFSM	316.1	1.77	1.53	4.63	5.21	2.31	1.28	0.28	1.76	0.95	1.91	3.24	5.02
		Calculated 2003 monthly mean streamflow in CFSM	420	1.44	1.43	4.48	4.74	2.22	1.36	0.28	1.70	1.06	2.09	3.07	4.58
USERNAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
End of Designated Reach	End of Designated Reach		7.0	6.6	4.0	22.1	43.9	16.4	7.2	1.0	21.8	8.9	16.7	24.7	34.2
MARLOW POWER	NASH DAM	20246 20246-S01	46.3	43.4	26.1	146.4	290.2	108.1	47.4	6.5	143.8	59.0	110.7	163.3	226.2
MARLOW POWER	NASH DAM	20246 20246-D01	46.3	43.4	26.1	146.4	290.2	108.1	47.4	6.5	143.8	59.0	110.7	163.3	226.2
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S03	108.5	104.7	64.8	348.2	675.4	252.9	112.0	15.7	331.5	136.9	257.3	381.2	530.1
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S03	115.6	114.8	72.8	376.7	715.6	269.4	120.4	17.2	348.1	144.7	272.4	405.1	565.4
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S02	115.6	114.8	72.8	376.7	715.8	269.4	120.4	17.2	348.2	144.7	272.4	405.2	565.5
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S01	115.6	114.8	72.8	376.7	715.8	269.4	120.4	17.2	348.2	144.7	272.4	405.2	565.5
The Branch (Minnewawa) confluence			215.8	298.5	233.3	851.1	1230.1	500.4	250.5	46.2	514.5	237.5	460.4	727.8	1069.2
Ash Swamp Brook confluence			234.6	341.5	273.4	955.1	1315.4	543.4	277.6	53.0	531.7	251.5	490.6	785.2	1164.9
South Branch confluence			288.6	537.3	449.7	1346.8	1538.5	672.0	363.5	80.2	511.2	265.7	537.5	947.3	1480.9
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S02	380.0	595.3	559.5	1723.8	1869.2	857.1	504.5	106.7	653.3	385.5	767.8	1191.7	1803.8
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S01	380.0	595.3	559.5	1723.8	1869.2	857.1	504.5	106.7	653.3	385.5	767.8	1191.7	1803.8
Mirey Brook confluence	Mirey Brook confluence		385.3	597.0	565.4	1745.0	1886.2	867.4	513.1	108.3	661.2	393.0	782.1	1205.1	1820.4
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-S01	408.4	602.3	590.4	1836.0	1956.7	911.8	550.8	115.0	695.4	426.2	845.2	1262.2	1889.8
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-D01	408.4	602.3	590.5	1836.2	1956.8	911.9	550.9	115.0	695.5	426.3	845.3	1262.3	1889.9
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-S01	408.4	602.3	590.4	1836.0	1956.7	911.8	550.8	115.0	695.4	426.2	845.2	1262.2	1889.8
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-D01	408.5	602.3	590.5	1836.5	1957.0	912.1	551.0	115.1	695.6	426.4	845.5	1262.5	1890.1
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-S01	412.3	602.9	594.5	1851.2	1968.1	919.2	557.3	116.2	701.2	431.9	856.0	1271.7	1901.0
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-S01	412.3	602.9	594.5	1851.2	1968.1	919.2	557.3	116.2	701.2	431.9	856.0	1271.7	1901.0
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-D01	412.6	602.9	594.9	1852.5	1969.0	919.9	557.8	116.3	701.6	432.4	856.9	1272.5	1902.0
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-D01	412.6	602.9	594.9	1852.5	1969.0	919.9	557.8	116.3	701.6	432.4	856.9	1272.5	1902.0
HINSDALE WATER WORKS	HINSDALE WATER WORKS	20050 20050-S02	415.1	603.2	597.5	1862.1	1976.2	924.5	561.9	117.0	705.3	436.0	863.8	1278.4	1909.0
HINSDALE WWTF	WASTE WATER TREAT PLANT	20089 20089-D01	421.2	605.4	604.4	1886.8	1996.2	936.6	571.8	118.8	714.6	444.7	880.3	1294.1	1928.7
Start of Designated Reach	Start of Designated Reach		421.9	606.4	605.4	1889.9	1999.5	938.2	572.7	119.0	715.7	445.4	881.7	1296.3	1931.9

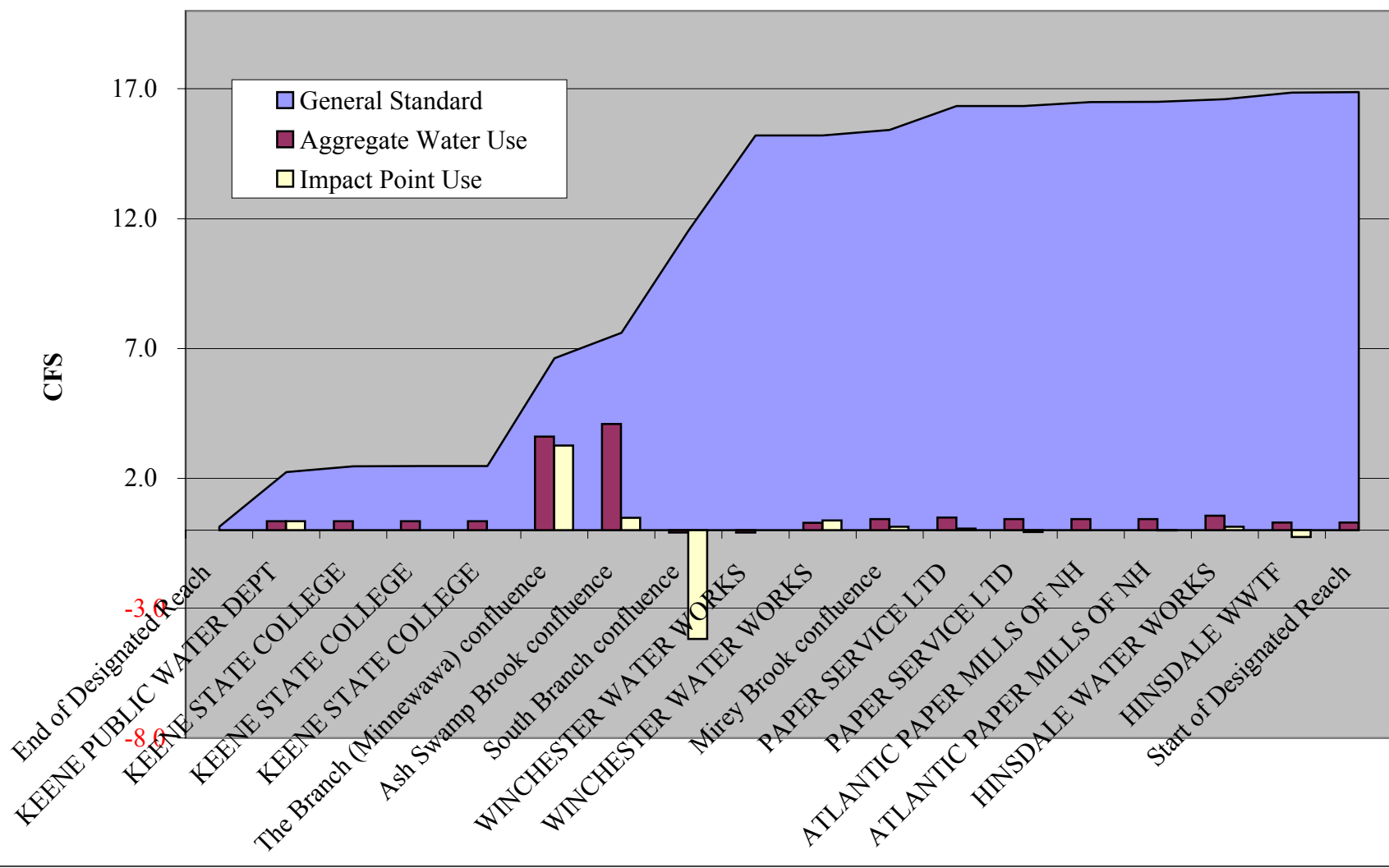
<b>2003 Ashuelot Estimated Monthly General Standard at Each Impact Point in CFS</b>															
USERNAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
End of Designated Reach	End of Designated Reach		7.0	0.14	0.14	0.28	1.12	0.28	0.28	0.01	0.28	0.28	0.28	0.28	1.12
MARLOW POWER	NASH DAM	20246 20246-S01	46.3	0.93	0.93	1.9	7.4	1.9	1.9	0.06	1.9	1.9	1.9	1.9	7.4
MARLOW POWER	NASH DAM	20246 20246-D01	46.3	0.93	0.93	1.9	7.4	1.9	1.9	0.06	1.9	1.9	1.9	1.9	7.4
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S03	108.5	2.2	2.2	4.3	17.4	4.3	4.3	0.16	4.3	4.3	4.3	4.3	17.4
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S03	115.6	2.3	2.3	4.6	18.5	4.6	4.6	0.18	4.6	4.6	4.6	4.6	18.5
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S02	115.6	2.3	2.3	4.6	18.5	4.6	4.6	0.18	4.6	4.6	4.6	4.6	18.5
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S01	115.6	2.3	2.3	4.6	18.5	4.6	4.6	0.18	4.6	4.6	4.6	4.6	18.5
The Branch (Minnewawa) confluence			215.8	8.6	8.6	8.6	34.5	8.6	8.6	0.52	8.6	8.6	8.6	8.6	34.5
Ash Swamp Brook confluence			234.6	9.4	9.4	37.5	37.5	9.4	9.4	0.61	9.4	9.4	9.4	9.4	37.5
South Branch confluence			288.6	11.5	11.5	46.2	46.2	11.5	11.5	0.80	11.5	5.8	11.5	11.5	46.2
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S02	380.0	15.2	15.2	60.8	60.8	15.2	15.2	1.7	15.2	15.2	15.2	15.2	60.8
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S01	380.0	15.2	15.2	60.8	60.8	15.2	15.2	1.7	15.2	15.2	15.2	15.2	60.8
Mirey Brook confluence	Mirey Brook confluence		385.3	15.4	15.4	61.6	61.6	15.4	15.4	1.8	15.4	15.4	15.4	15.4	61.6
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-S01	408.4	16.3	16.3	65.3	65.3	16.3	16.3	2.1	16.3	16.3	16.3	16.3	65.3
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-D01	408.4	16.3	16.3	65.3	65.3	16.3	16.3	2.1	16.3	16.3	16.3	16.3	65.3
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-S01	408.4	16.3	16.3	65.3	65.3	16.3	16.3	2.1	16.3	16.3	16.3	16.3	65.3
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-D01	408.5	16.3	16.3	65.4	65.4	16.3	16.3	2.1	16.3	16.3	16.3	16.3	65.4
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-S01	412.3	16.5	16.5	66.0	66.0	16.5	16.5	2.1	16.5	16.5	16.5	16.5	66.0
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-S01	412.3	16.5	16.5	66.0	66.0	16.5	16.5	2.1	16.5	16.5	16.5	16.5	66.0
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-D01	412.6	16.5	16.5	66.0	66.0	16.5	16.5	2.2	16.5	16.5	16.5	16.5	66.0
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-D01	412.6	16.5	16.5	66.0	66.0	16.5	16.5	2.2	16.5	16.5	16.5	16.5	66.0
HINSDALE WATER WORKS	HINSDALE WATER WORKS	20050 20050-S02	415.1	16.6	16.6	66.4	66.4	16.6	16.6	2.2	16.6	16.6	16.6	16.6	66.4
HINSDALE WWTF	WASTE WATER TREAT PLANT	20089 20089-D01	421.2	16.8	16.8	67.4	67.4	16.8	16.8	2.3	16.8	16.8	16.8	16.8	67.4
Start of Designated Reach	Start of Designated Reach		421.9	16.9	16.9	67.5	67.5	16.9	16.9	2.3	16.9	16.9	16.9	16.9	67.5

<b>2003 Ashuelot Estimated Monthly Margin of the Aggregate Water Use Below the General Standard in CFS</b>															
USERNAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
End of Designated Reach	End of Designated Reach		7.0	0.14	0.14	0.28	1.1	0.28	0.28	0.010	0.28	0.28	0.28	0.28	1.1
MARLOW POWER	NASH DAM	20246 20246-S01	46.3	(27.5)	(6.2)	(14.6)	(19.7)	(23.7)	(28.2)	(2.6)	(18.0)	(10.5)	(4.5)	(17.0)	(12.9)
MARLOW POWER	NASH DAM	20246 20246-D01	46.3	0.9	0.9	1.9	7.4	1.9	1.9	0.06	1.9	1.9	1.9	1.9	7.4
KEENE PUBLIC WATER DEPT	WATER WORKS - KEENE	20338 20338-S03	108.5	1.8	1.8	3.9	17.0	4.0	2.9	(1.6)	2.9	2.8	3.0	3.0	16.0
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S03	115.6	2.0	2.0	4.2	18.1	4.3	3.2	(1.6)	3.1	3.1	3.3	3.3	17.2
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S02	115.6	2.0	2.0	4.2	18.1	4.3	3.1	(1.6)	3.1	3.1	3.3	3.3	17.2
KEENE STATE COLLEGE	KEENE STATE COLLEGE - ATHLETIC FIELDS	20757 20757-S01	115.6	2.0	2.0	4.2	18.1	4.3	3.1	(1.6)	3.1	3.0	3.3	3.3	17.2
The Branch (Minnewawa) confluence			215.8	5.2	5.0	5.1	30.9	5.0	5.3	(3.1)	5.4	5.1	5.5	5.9	31.7
Ash Swamp Brook confluence			234.6	5.6	5.3	33.5	33.2	4.9	4.4	(4.9)	4.7	4.6	5.0	5.6	33.6
South Branch confluence			288.6	12.1	11.6	48.6	49.5	12.4	11.1	(1.2)	11.5	5.3	12.3	13.6	49.6
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S02	380.0	15.8	15.3	63.2	64.1	16.0	14.8	(0.3)	15.1	14.8	15.9	17.3	64.3
WINCHESTER WATER WORKS	WINCHESTER WATER WORKS	20434 20434-S01	380.0	15.4	14.9	62.9	63.8	15.7	14.5	(0.6)	14.9	14.6	15.8	17.2	64.1
Mirey Brook confluence	Mirey Brook confluence		385.3	15.5	15.0	63.7	64.7	15.8	14.5	(0.7)	14.9	14.6	15.9	17.3	65.0
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-S01	408.4	16.4	15.8	67.3	68.3	16.7	15.4	(0.4)	15.8	15.5	16.8	18.1	68.5
PAPER SERVICE LTD	PAPER SERVICE LTD	20137 20137-D01	408.4	16.4	15.9	67.4	68.4	16.7	15.5	(0.4)	15.8	15.6	16.8	18.3	68.7
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-S01	408.4	(358.0)	(254.6)	(392.1)	(799.5)	(732.1)	(510.4)	(395.2)	(288.6)	(303.5)	(624.8)	(688.9)	(598.8)
ALGONQUIN POWER SYST INC	LOWER ROBERTSON DAM	20590 20590-D01	408.5	16.4	15.9	67.4	68.5	16.7	15.5	(0.4)	15.8	15.6	16.8	18.3	68.7
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-S01	412.3	16.6	16.1	67.9	68.8	16.9	15.6	(0.3)	15.6	15.7	17.0	18.4	69.2
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-S01	412.3	(380.5)	(306.7)	(419.9)	(809.0)	(775.6)	(521.7)	(394.8)	(272.1)	(262.5)	(635.4)	(674.0)	(485.6)
ATLANTIC PAPER MILLS OF NH	ATLANTIC PAPER MILLS OF NH	20627 20627-D01	412.6	(380.4)	(306.7)	(419.8)	(808.7)	(775.6)	(521.7)	(394.8)	(272.1)	(262.4)	(635.4)	(674.0)	(485.6)
ALGONQUIN POWER SYST INC	ASHUELOT PAPER DAM	20589 20589-D01	412.6	16.6	16.1	68.1	69.1	16.9	15.6	(0.3)	15.6	15.7	17.0	18.4	69.3
HINSDALE WATER WORKS	HINSDALE WATER WORKS	20050 20050-S02	415.1	16.6	16.0	68.4	69.4	16.9	15.6	(0.4)	15.6	15.7	17.0	18.4	69.6
HINSDALE WWTF	WASTE WATER TREAT PLANT	20089 20089-D01	421.2	17.1	16.5	69.8	71.0	17.6	16.2	(0.3)	16.2	16.3	17.6	19.2	71.2
Start of Designated Reach	Start of Designated Reach		421.9	17.1	16.6	69.9	71.1	17.6	16.3	(0.3)	16.2	16.3	17.6	19.2	71.3

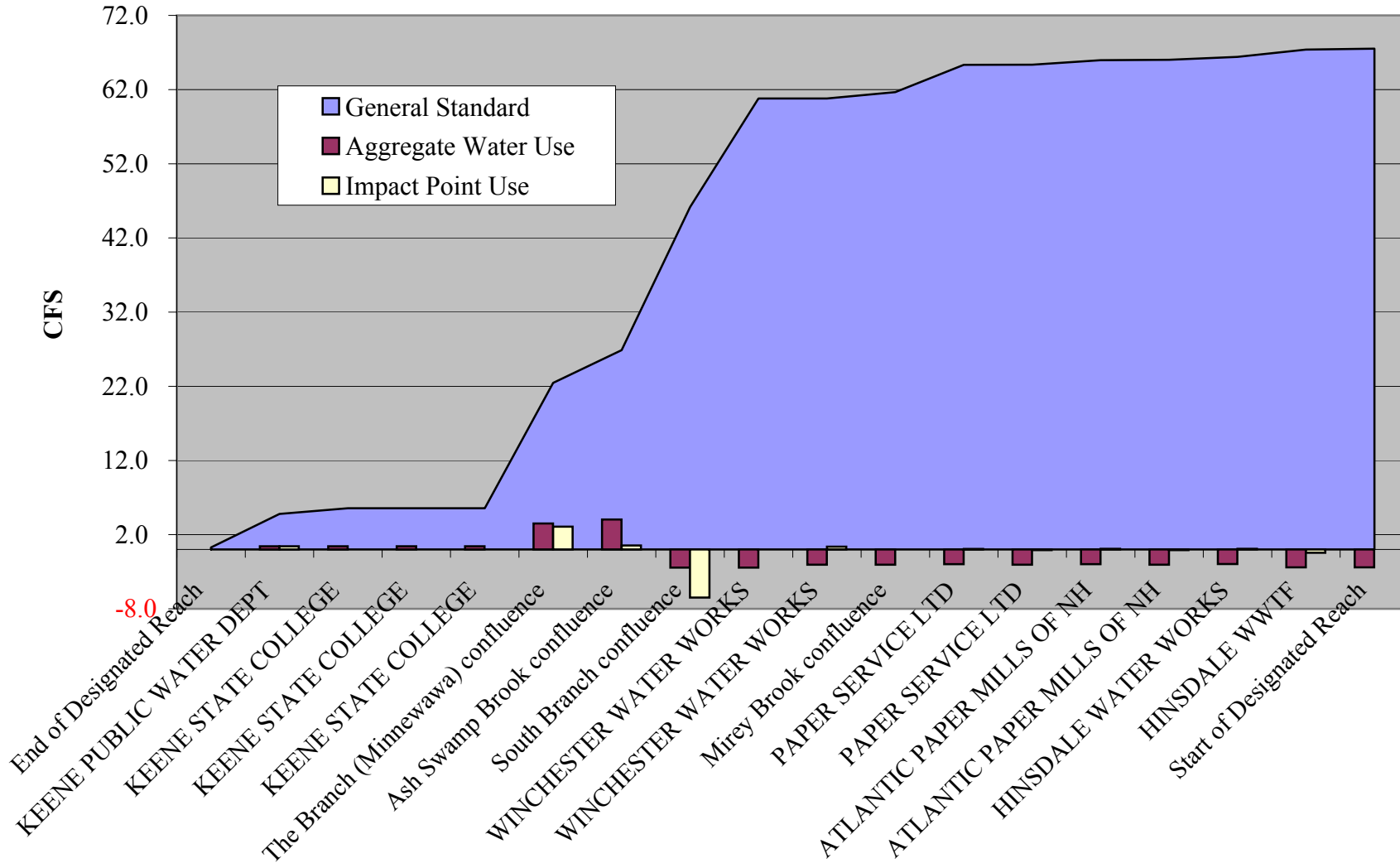
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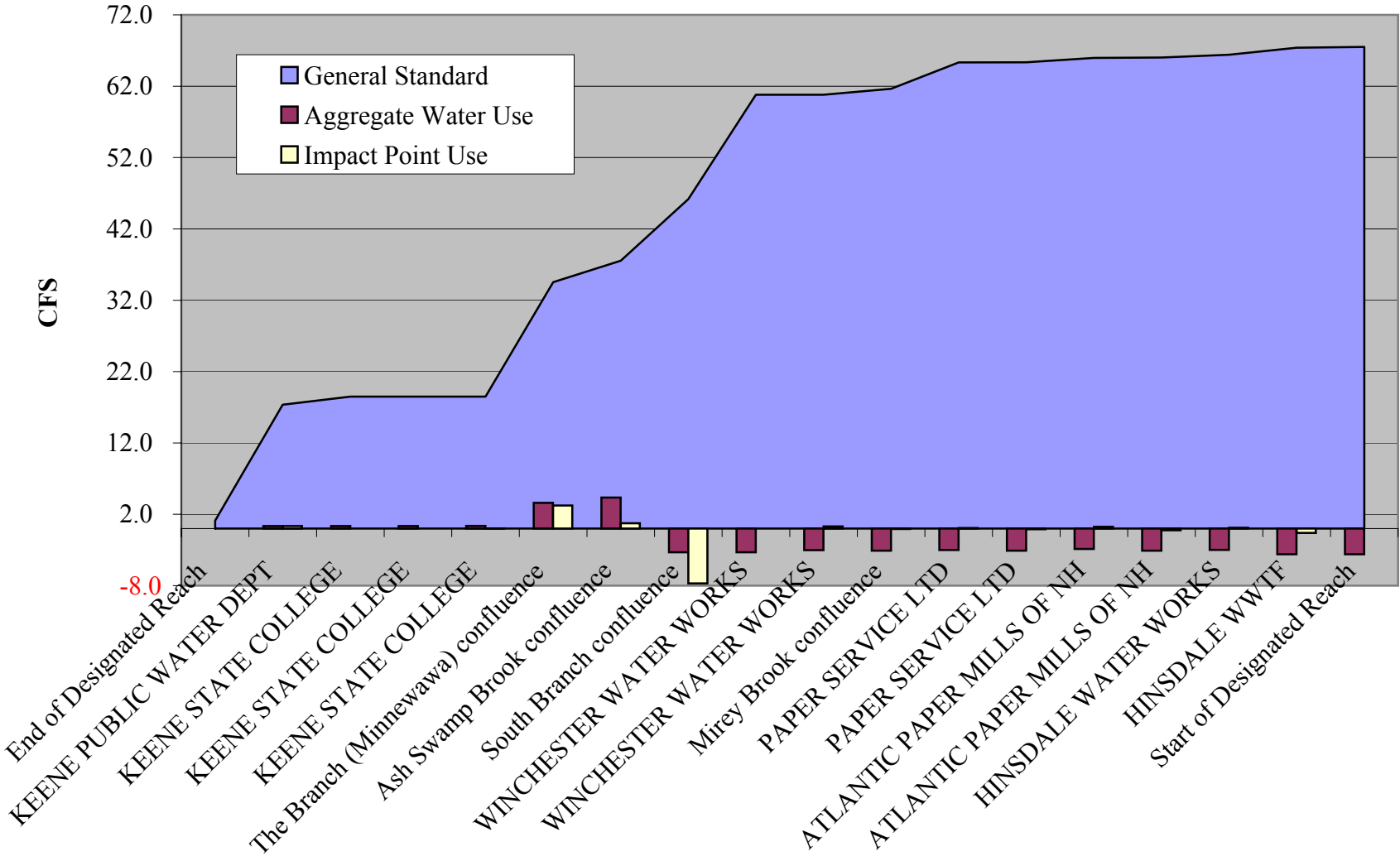
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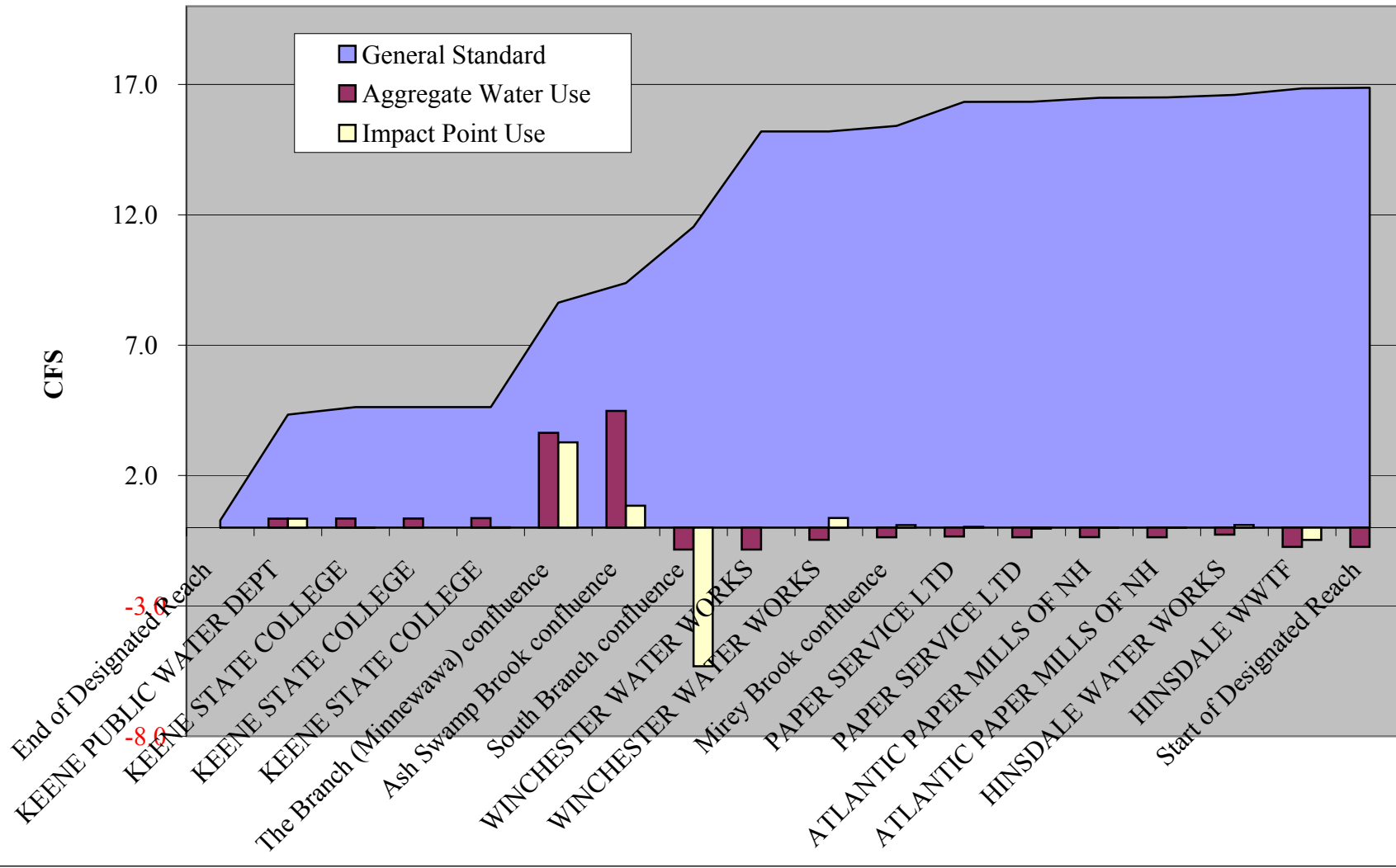
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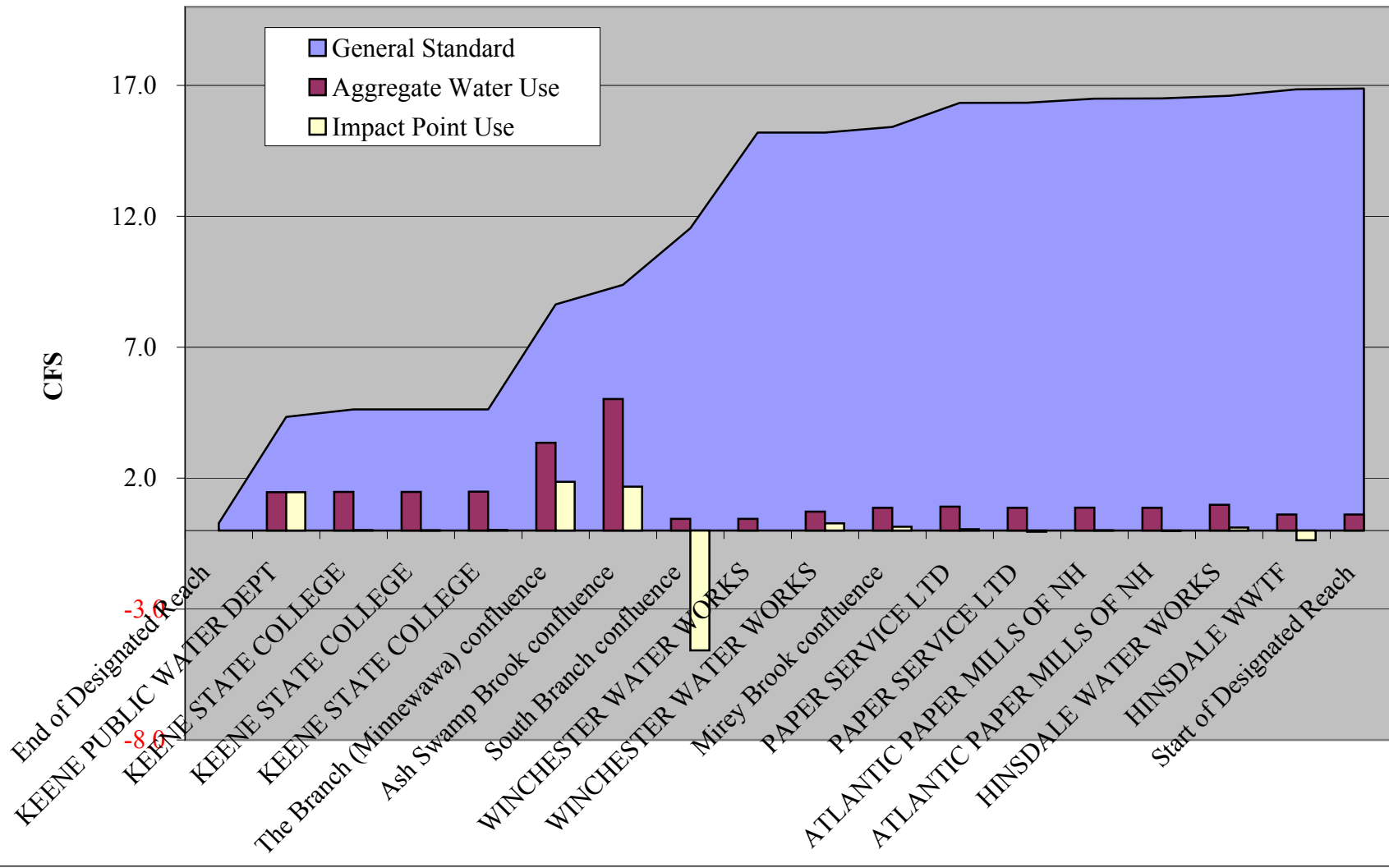
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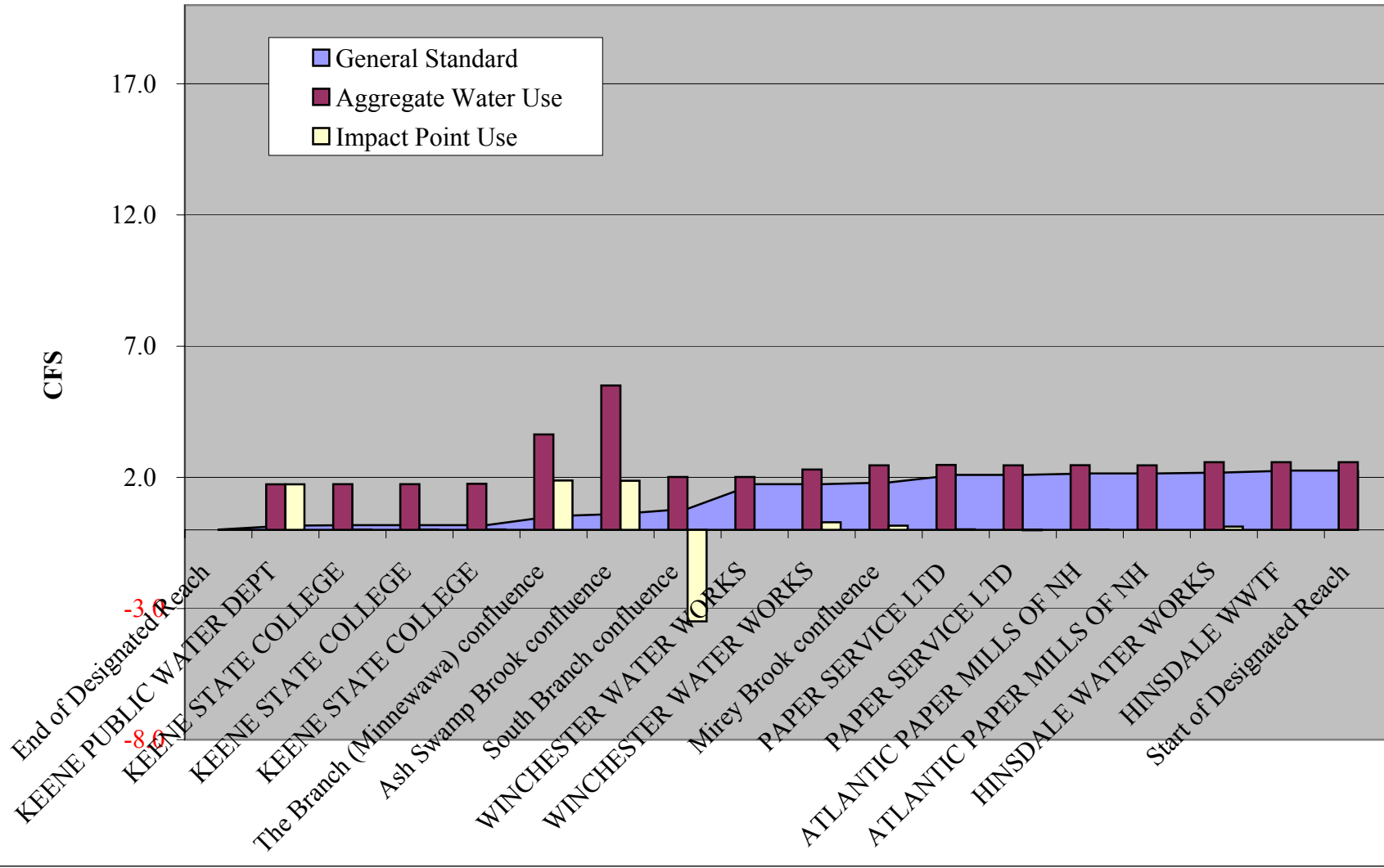
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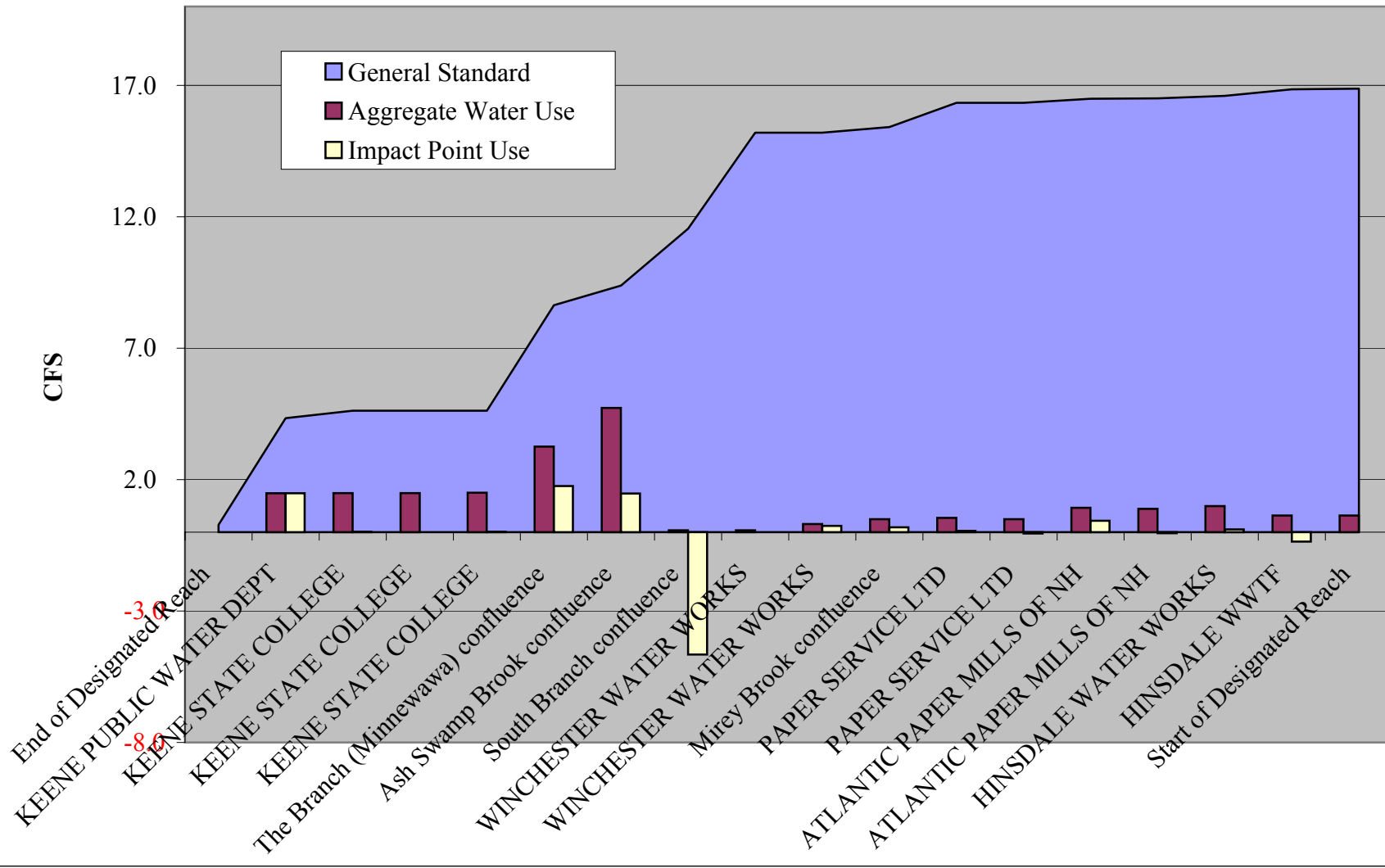
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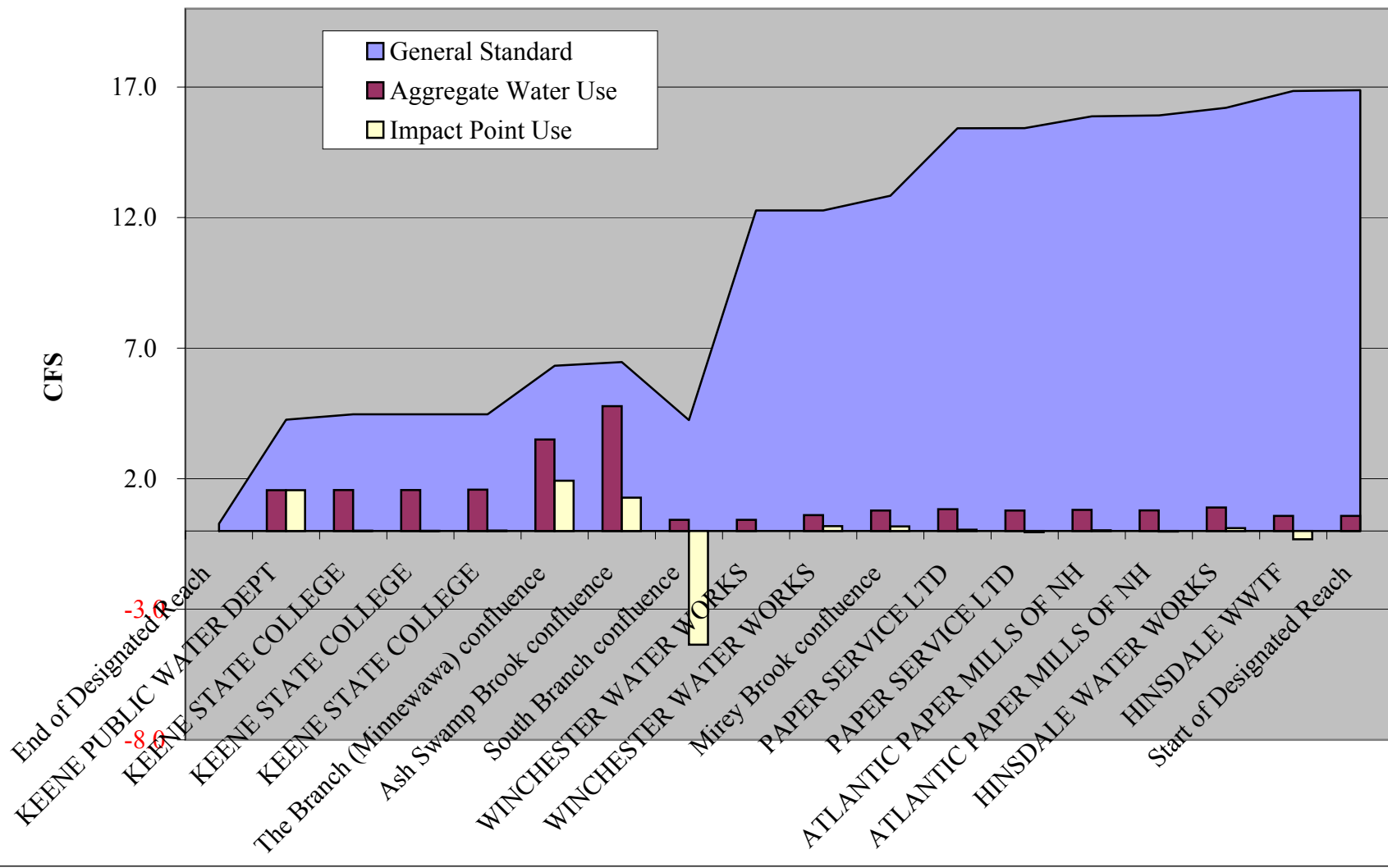
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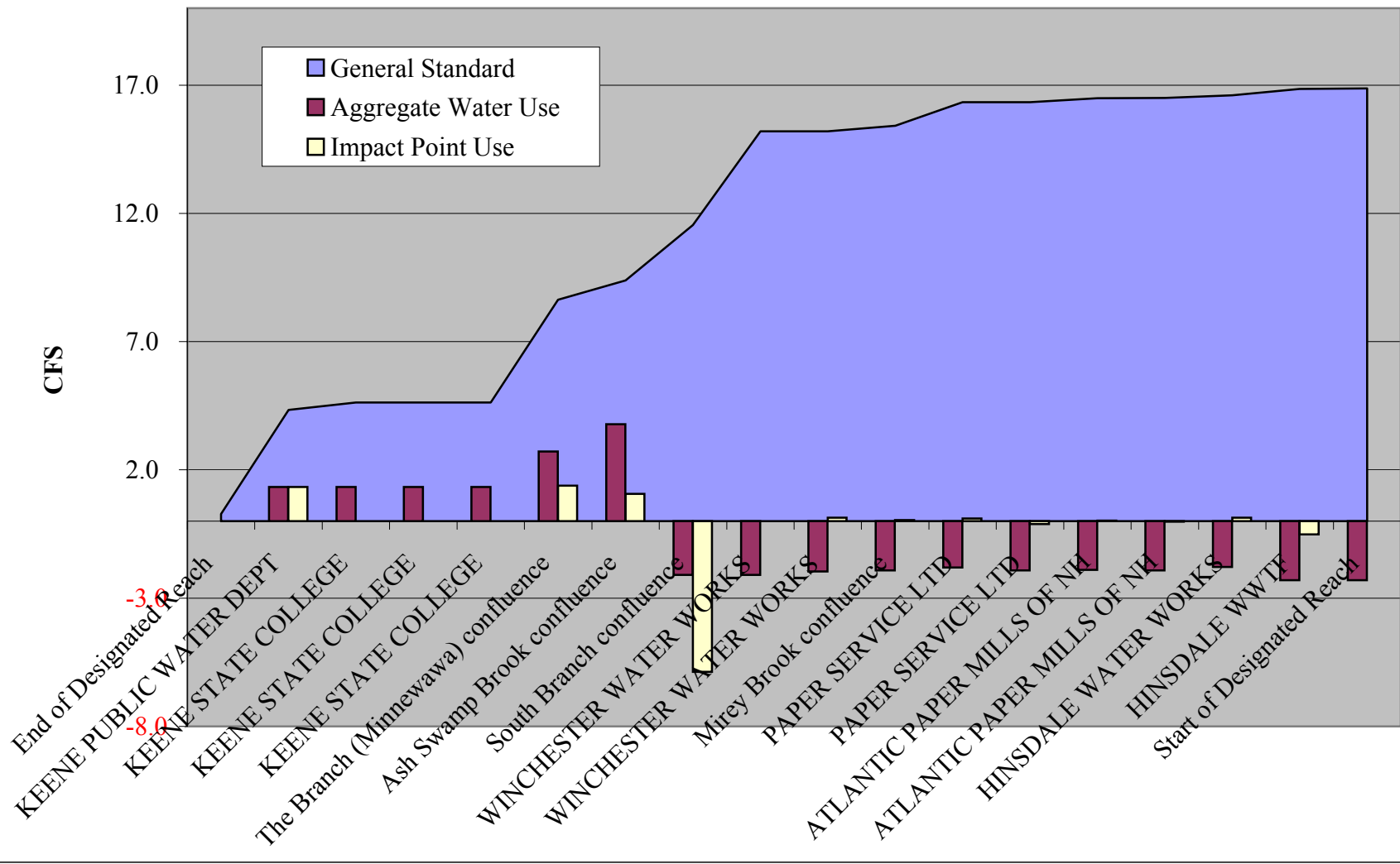


## September 2003 Ashuelot





# November 2003 Ashuelot



## December 2003 Ashuelot

