

Souhegan Annual Water Use versus Stream Flow – Calendar Year 2004

Water use was reported by 21 sources, no transfers, and six returns in the Souhegan Water Management Planning Area. Two sources, Dram Cup Hill Inc. (bottled water - reported water use of 19,611,000 gallons for 2004), and Temple Mountain Ski Area (no use) were not included in this assessment because they did not meet the definition of an Affected Water User under the rules, which require the user to have a source or withdrawal within 500 feet of a tributary to the Designated River. This unassessed use represents between 0.9 and 2.3 % of the monthly water use included in the assessment.

Unassessed Water User Facility (All Source and Discharge > 500 feet from perennial stream)	Unassessed Annual Water Use (gallons)
Dram Cup Hill Inc	19,611,000
Temple Mountain Ski Area	0

The Water Management Planning Area includes registered water use by three hydroelectric facilities. These facilities are operated as store-and-release during low flow periods and as run-of-river during higher flows. Water use by hydroelectric facilities are not shown in the monthly water-use 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 five municipal and community water supplies in Greenville, Wilton, Milford, and Amherst. There is a food processing plant in Greenville and a bottled water plant in Wilton. There is industrial use at a quarry in Wilton. In the past there was agricultural use for crop irrigation in Amherst, but irrigation has not been used since the summer of 1999. Three golf courses in Amherst reported water use for irrigation. The State’s Fish Hatchery withdraws water from two wells in Milford. Two waste water treatment facilities in Greenville and Milford release water to the Souhegan River.

The beginning of the Designated River is the confluence of its south and west branches in New Ipswich. The Souhegan Designated River flows 34 miles to the Lower Merrimack Designated River. The results of this assessment are a component of that river’s assessment. The Souhegan Water Management Planning Area covers 220 square miles and includes a stream flow gage in Merrimack (USGS 01094000 SOUHEGAN RIVER AT MERRIMACK, NH) measuring 171 square miles of the WMPA. For this report the stream flow was transposed areally from the gage to all impact points on the Designated River. The 2004 assessment resulted in six months not in compliance with the General Standard.

Souhegan Designated River	River Miles not in Compliance with General Standard (0 at the D/S end of the DR)	Length of River Miles not in Compliance with General Standard	Maximum value of Aggregate WU /Stream flow	2003 Months not in Compliance with the General Standard	Unassessed Water Use outside 500’ as a percent of the total Water Use
January	--	--	2.2%	--	0.85%
February	17.6 to 17.2	0.4	4.8%	--	1.20%





March	--	--	1.8%	--	1.41%
April	--	--	0.5%	--	1.47%
May	--	--	1.4%	--	1.46%
June	--	--	3.7%	--	2.32%
July	23.9 to 0.0	23.9	8.4%	x	1.23%
August	23.9 to 12.9; 11.8 to 0.0	22.8 (11.0 and 11.8)	8.9%	x	1.29%
September	17.6 to 17.2	0.4	3.7%	x	1.17%
October	17.6 to 17.2	0.4	4.3%	--	1.18%
November	17.6 to 17.2	0.4	3.8%	--	1.10%
December	--	--	1.1%	--	1.06%

The Souhegan Designated River drains directly into the Lower Merrimack Designated River. The results of this assessment are a component of that river's assessment.








# Souhegan Water User Facilities: Source and Discharge Locations

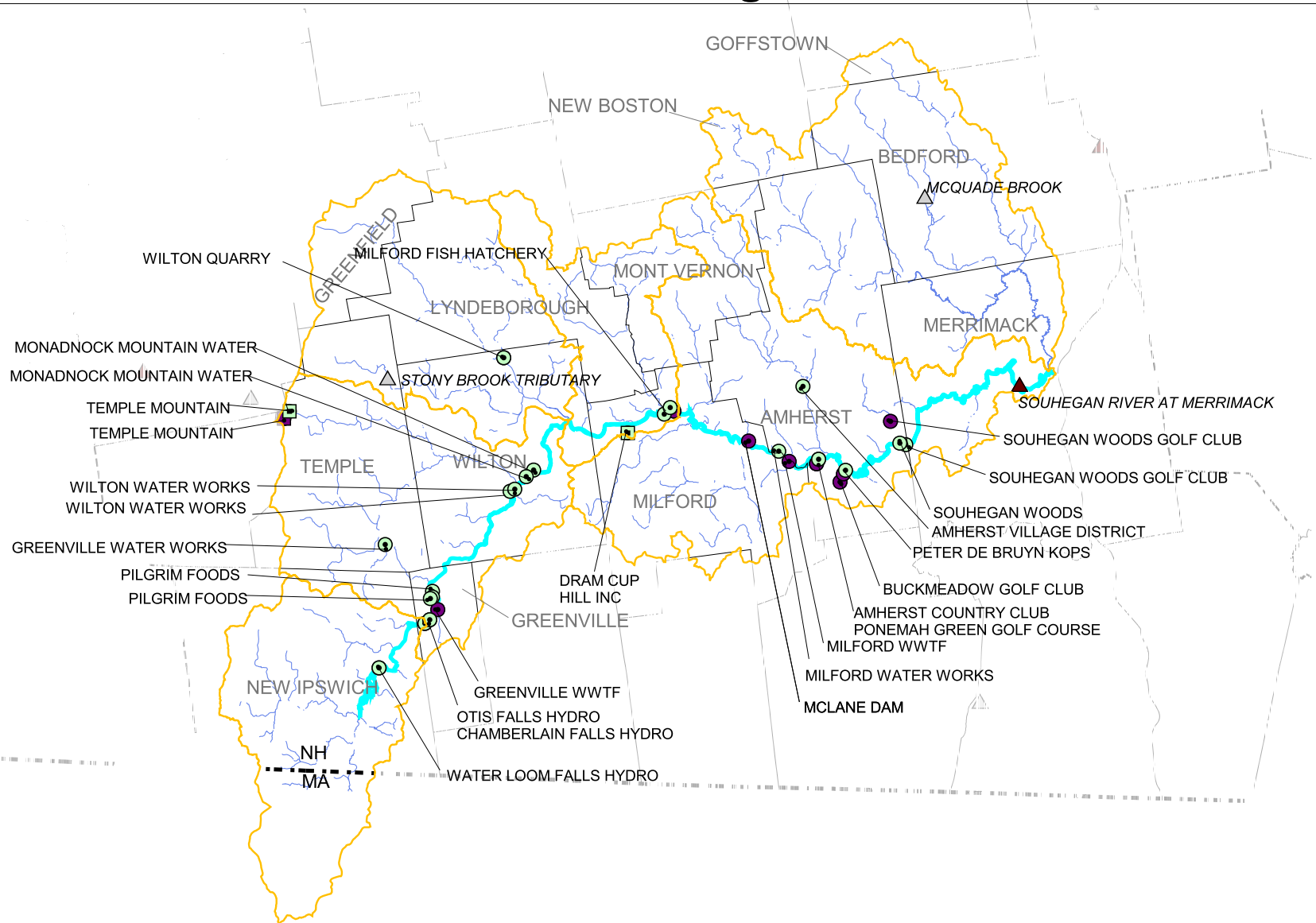
## Legend

### Souhegan Water Users

-  Source
-  Discharge
-  Source - Outside 500 feet
-  Discharge - Outside 500 feet

### Stream Gages

-  Active
-  Inactive
-  Designated Reach
-  Hydrology
-  State boundary
-  Town boundary
-  Souhegan 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 April 2005.

Map produced May 12, 2005



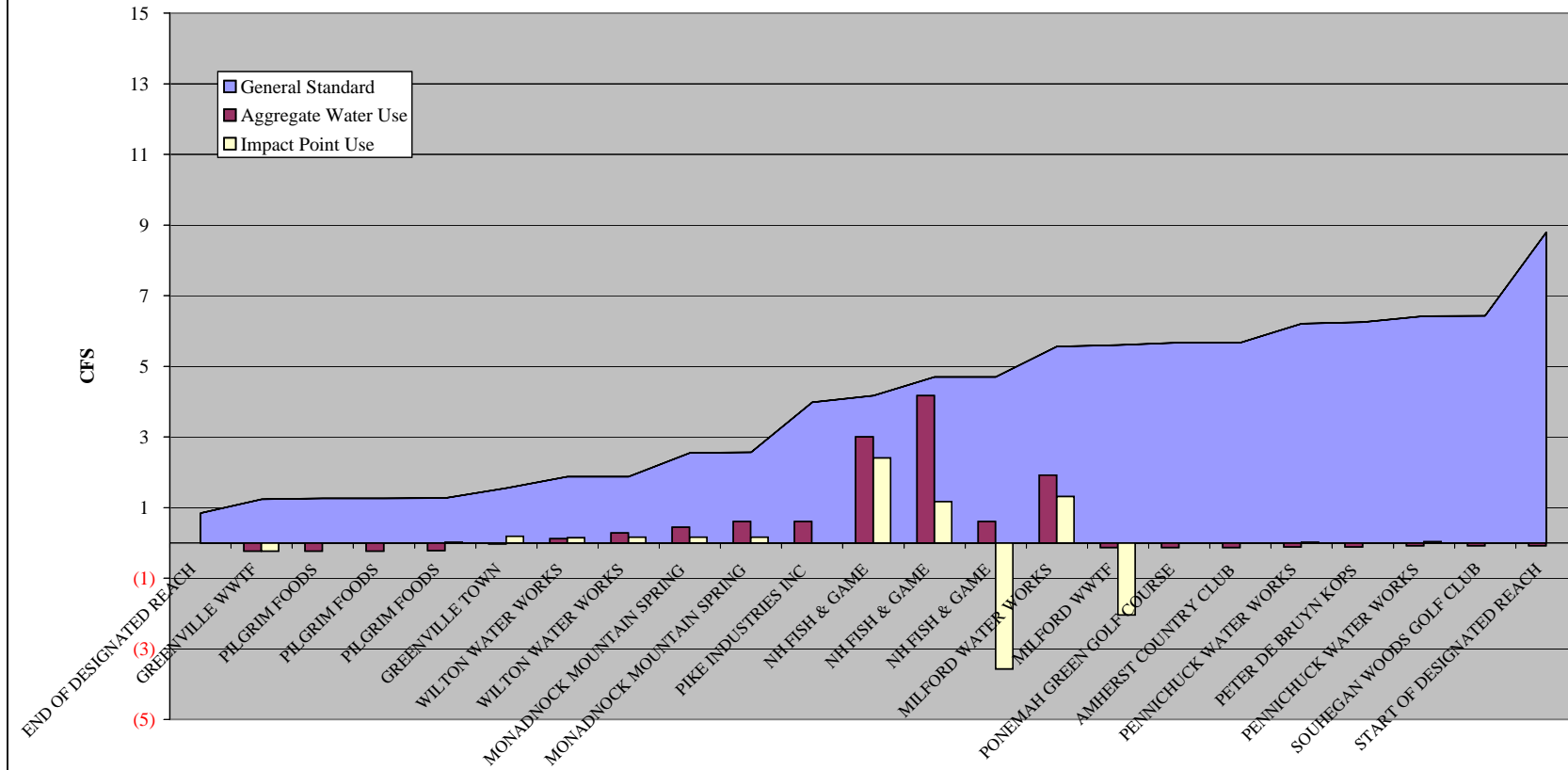
0 1 2 3 4 Miles

2004 Souhegan 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		21.07												
GREENWOOD ALDEN T	WATER LOOM FALLS HYDRO	20228 20228-S01	22.65	19.4	20.7	19.4	20.0	19.4	20.0	19.4	19.4	20.0	19.4	20.0	19.4
GREENWOOD ALDEN T	WATER LOOM FALLS HYDRO	20228 20228-D01	22.65	(19.4)	(20.7)	(19.4)	(20.0)	(19.4)	(20.0)	(19.4)	(19.4)	(20.0)	(19.4)	(20.0)	(19.4)
GREENWOOD ALDEN T	OTIS FALLS	20229 20229-S01	29.46	20.7	22.1	20.7	21.4	20.7	21.4	20.7	20.7	21.4	20.7	21.4	20.7
GREENWOOD ALDEN T	OTIS FALLS	20229 20229-D01	29.46	(20.7)	(22.1)	(20.7)	(21.4)	(20.7)	(21.4)	(20.7)	(20.7)	(21.4)	(20.7)	(21.4)	(20.7)
GREENWOOD ALDEN T	CHAMBERLAIN FALLS HYDRO	20230 20230-S01	29.64	17.2	18.4	17.2	17.8	17.2	17.8	17.2	17.2	17.8	17.2	17.8	17.2
GREENWOOD ALDEN T	CHAMBERLAIN FALLS HYDRO	20230 20230-D01	29.64	(17.2)	(18.4)	(17.2)	(17.8)	(17.2)	(17.8)	(17.2)	(17.2)	(17.8)	(17.2)	(17.8)	(17.2)
GREENVILLE WWTF	WASTE WATER TREAT PLANT	20086 20086-D01	30.97	(0.2)	(0.2)	(0.2)	(0.4)	(0.4)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)
PILGRIM FOODS	PILGRIM FOODS	20681 20681-S04	31.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PILGRIM FOODS	PILGRIM FOODS	20681 20681-S03	31.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PILGRIM FOODS	PILGRIM FOODS	20681 20681-S02	31.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GREENVILLE TOWN	GREENVILLE WATER WORKS	20047 20047-S03	38.84	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
WILTON WATER WORKS	WILTON WATER WORKS	20065 20065-S02	46.76	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.1
WILTON WATER WORKS	WILTON WATER WORKS	20065 20065-S01	46.76	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.3	0.2
MONADNOCK MOUNTAIN SPRING	MONADNOCK MOUNTAIN WATER	20621 20621-S02	63.75	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MONADNOCK MOUNTAIN SPRING	MONADNOCK MOUNTAIN WATER	20621 20621-S01	64.06	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PIKE INDUSTRIES INC	WILTON QUARRY	20281 20281-S01	99.47	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0
PIKE INDUSTRIES INC	WILTON QUARRY	20281 20281-D01	99.47												
NH FISH & GAME	MILFORD FISH HATCHERY	20218 20218-S01	104.18	2.4	2.5	2.5	3.0	3.0	3.0	2.6	2.6	2.6	2.8	2.8	2.8
NH FISH & GAME	MILFORD FISH HATCHERY	20218 20218-S02	117.36	1.2	1.2	1.2	1.0	1.0	1.0	1.2	1.2	1.2	1.1	1.1	1.1
NH FISH & GAME	MILFORD FISH HATCHERY	20218 20218-D01	117.36	(3.6)	(3.6)	(3.6)	(4.0)	(4.0)	(4.0)	(3.8)	(3.8)	(3.8)	(3.9)	(3.9)	(3.9)
MILFORD WATER WORKS	MILFORD WATER WORKS	20100 20100-S01	139.01	1.3	1.3	1.3	1.3	1.5	1.8	1.5	1.3	1.5	1.0	1.2	1.2
MILFORD WWTF	WASTE WATER TREAT PLANT	20092 20092-D01	139.97	(2.0)	(1.7)	(2.1)	(3.6)	(2.4)	(1.9)	(1.6)	(1.6)	(1.7)	(1.6)	(1.7)	(2.2)
PONEMAH GREEN GOLF COURSE		20624 20624-S01	141.69	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.3	0.3	0.0	0.0	0.0
PONEMAH GREEN GOLF COURSE		20624 20624-D01	141.69												
AMHERST COUNTRY CLUB		20190 20190-S01	141.69	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.3	0.3	0.0	0.0	0.0
AMHERST COUNTRY CLUB		20190 20190-D01	141.69												
PENNICHUCK WATER WORKS	AMHERST VILLAGE DISTRICT	20000 20000-S01	155.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PETER DE BRUYN KOPS		20383 20383-S01	156.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PETER DE BRUYN KOPS		20383 20383-D01	156.21												
PENNICHUCK WATER WORKS	SOUHEGAN WOODS	20659 20659-S01	160.55	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SOUHEGAN WOODS GOLF CLUB		20523 20523-S01	160.64	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.2	0.1	0.1	0.0	0.0
SOUHEGAN WOODS GOLF CLUB		20523 20523-D01	160.64												
START OF DESIGNATED REACH	START OF DESIGNATED REACH		219.72												
2004 Souhegan 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		21.07	0	0	0	0	0	0	0	0	0	0	0	0
GREENVILLE WWTF	WASTE WATER TREAT PLANT	20086 20086-D01	30.97	(0.23)	(0.17)	(0.23)	(0.42)	(0.35)	(0.22)	(0.22)	(0.21)	(0.25)	(0.25)	(0.22)	(0.31)
PILGRIM FOODS	PILGRIM FOODS	20681 20681-S04	31.51	(0.23)	(0.17)	(0.23)	(0.42)	(0.35)	(0.22)	(0.22)	(0.21)	(0.25)	(0.25)	(0.22)	(0.31)
PILGRIM FOODS	PILGRIM FOODS	20681 20681-S03	31.55	(0.23)	(0.17)	(0.23)	(0.42)	(0.35)	(0.22)	(0.22)	(0.21)	(0.25)	(0.25)	(0.22)	(0.31)
PILGRIM FOODS	PILGRIM FOODS	20681 20681-S02	31.64	(0.21)	(0.16)	(0.20)	(0.39)	(0.32)	(0.20)	(0.20)	(0.19)	(0.23)	(0.23)	(0.19)	(0.29)
GREENVILLE TOWN	GREENVILLE WATER WORKS	20047 20047-S03	38.84	(0.03)	0.01	(0.01)	(0.22)	(0.23)	(0.10)	0.02	0.04	(0.03)	(0.04)	(0.02)	(0.11)
WILTON WATER WORKS	WILTON WATER WORKS	20065 20065-S02	46.76	0.11	0.15	0.12	(0.08)	(0.07)	0.08	0.22	0.33	0.28	0.24	(0.02)	0.02
WILTON WATER WORKS	WILTON WATER WORKS	20065 20065-S01	46.76	0.28	0.29	0.26	0.06	0.09	0.26	0.35	0.33	0.28	0.26	0.31	0.19
MONADNOCK MOUNTAIN SPRING	MONADNOCK MOUNTAIN WATER	20621 20621-S02	63.75	0.44	0.46	0.42	0.11	0.14	0.31	0.40	0.37	0.33	0.29	0.35	0.22
MONADNOCK MOUNTAIN SPRING	MONADNOCK MOUNTAIN WATER	20621 20621-S01	64.06	0.60	0.64	0.58	0.15	0.18	0.36	0.44	0.42	0.37	0.33	0.38	0.26

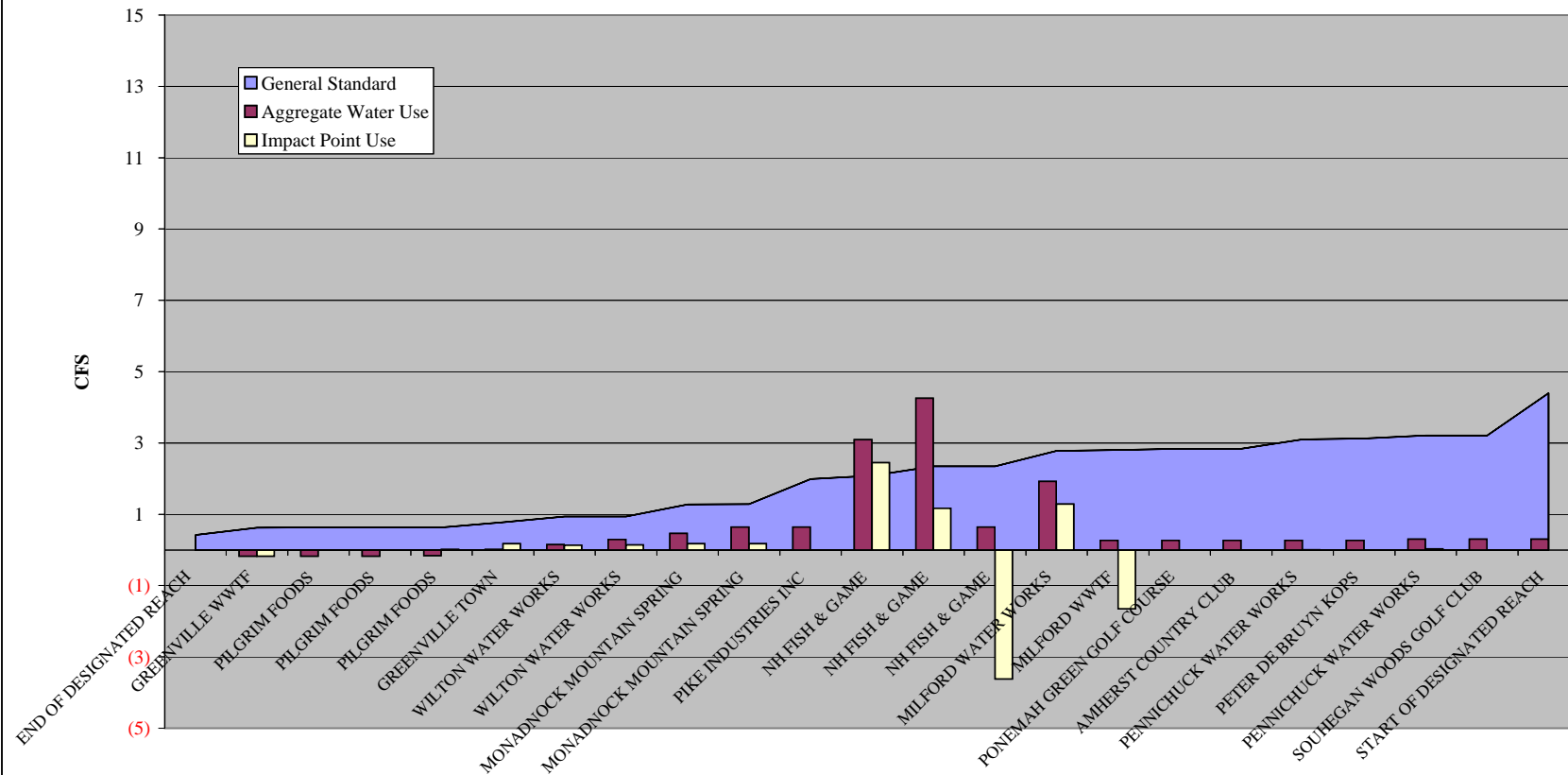




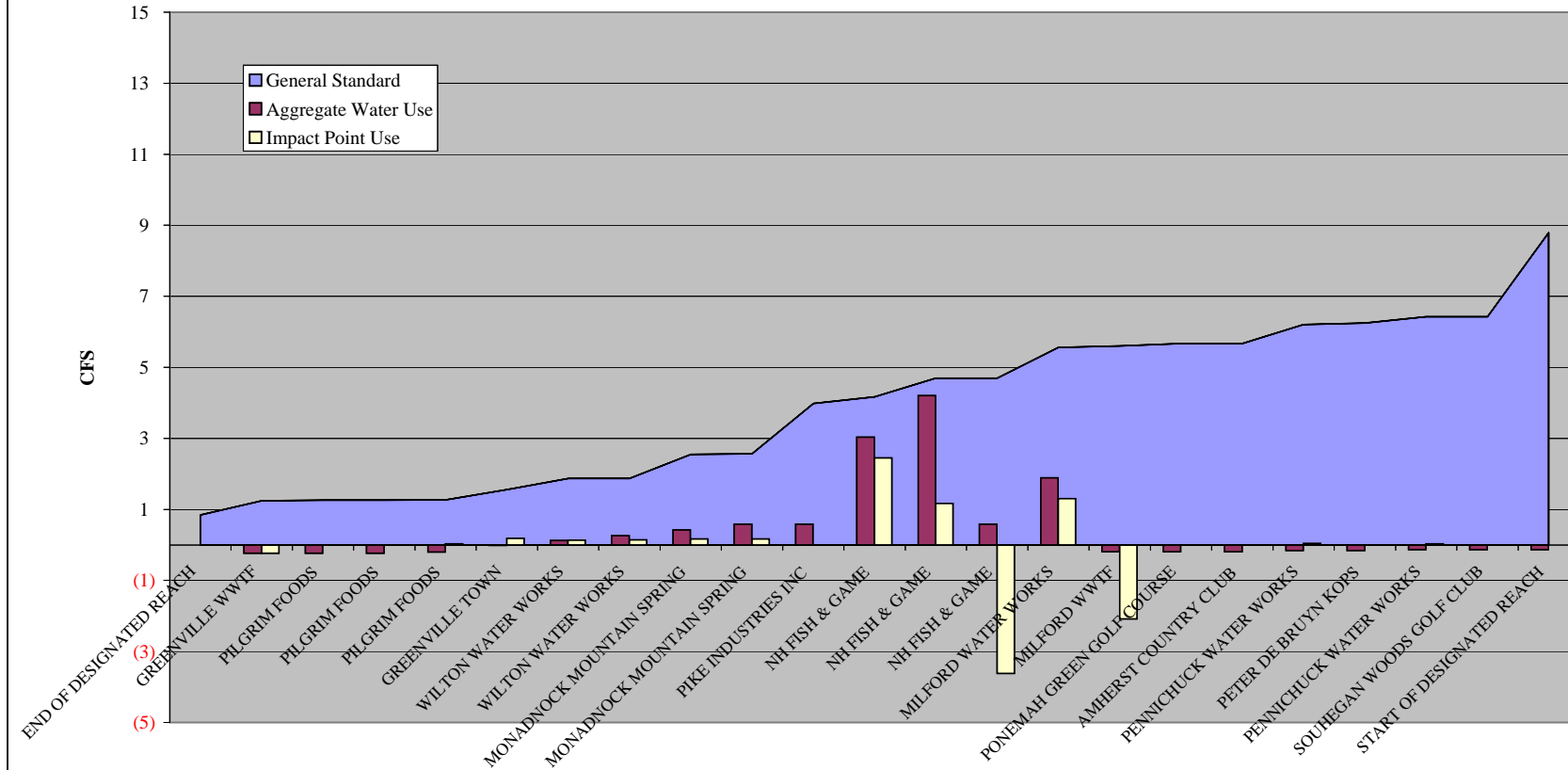
### January 2004 Souhegan



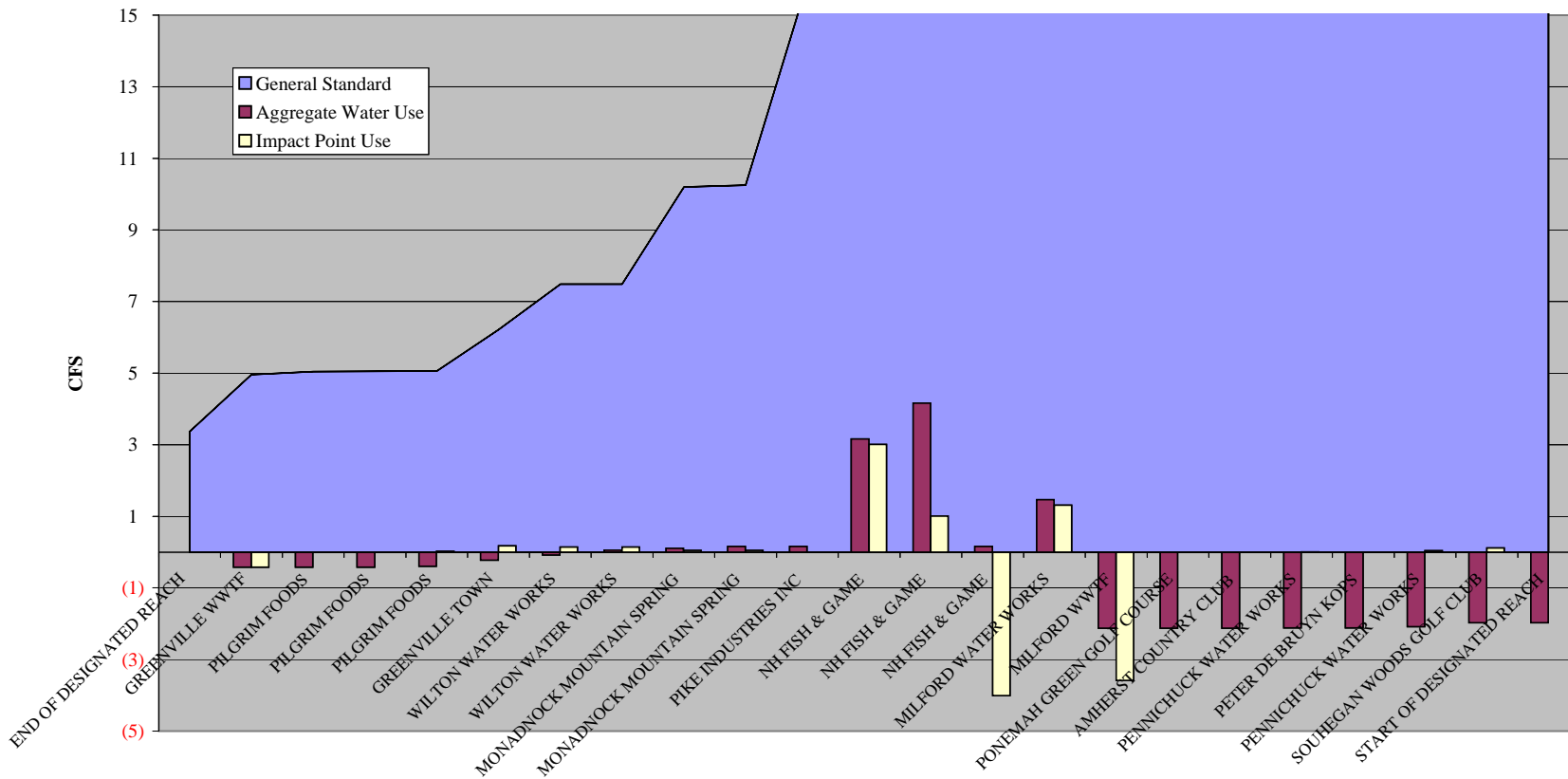
### February 2004 Souhegan



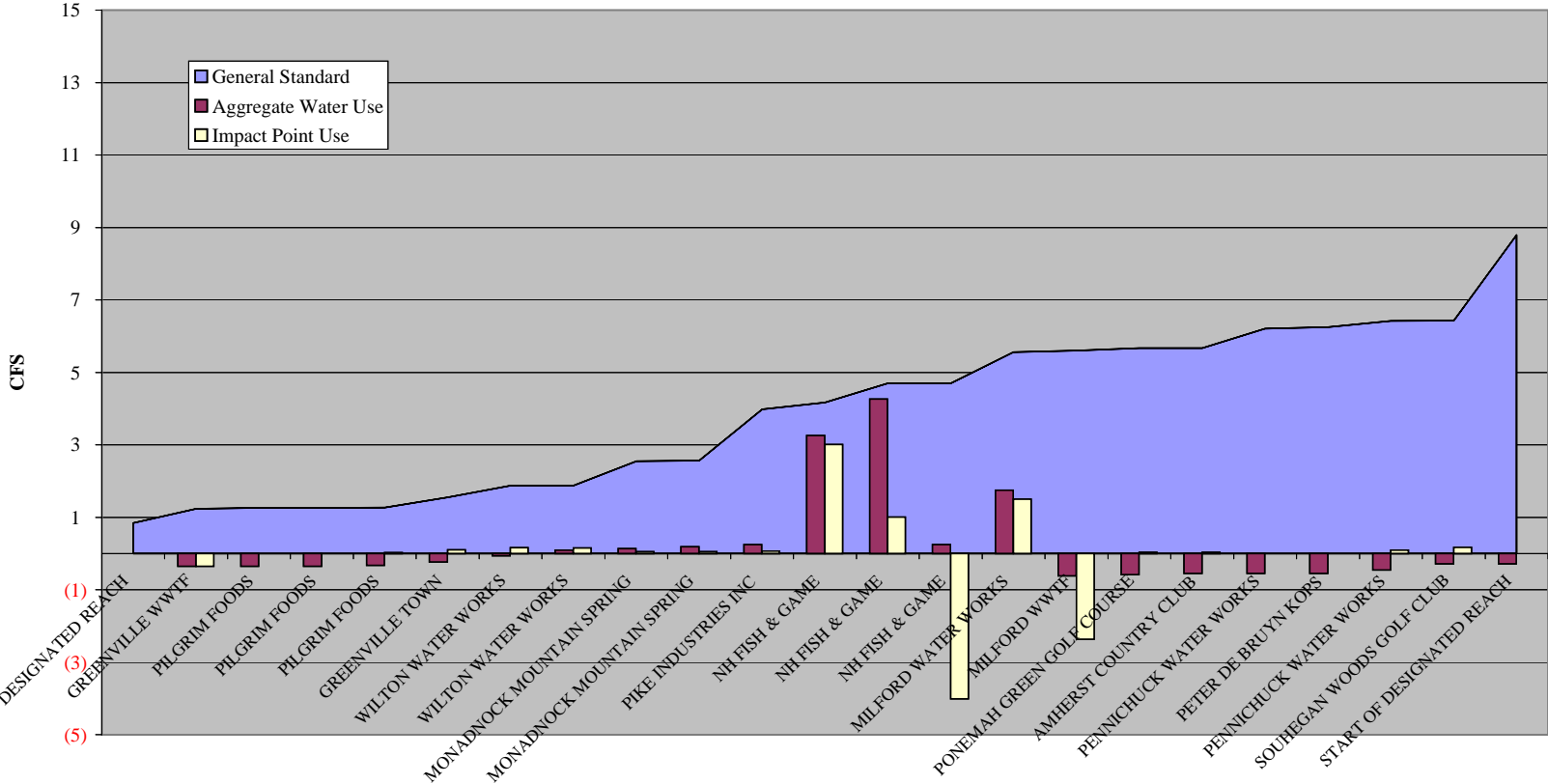
### March 2004 Souhegan



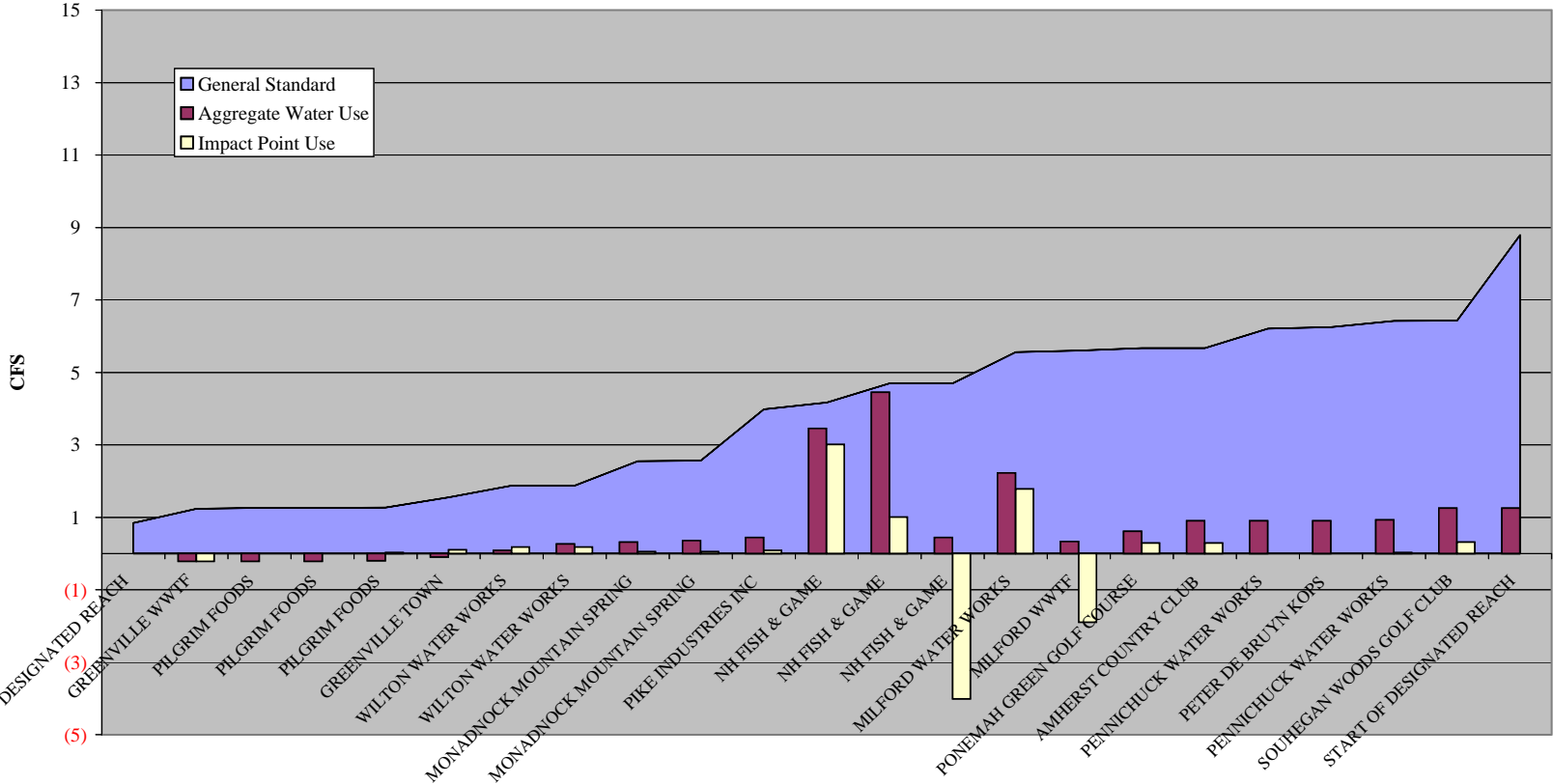
### April 2004 Souhegan



### May 2004 Souhegan

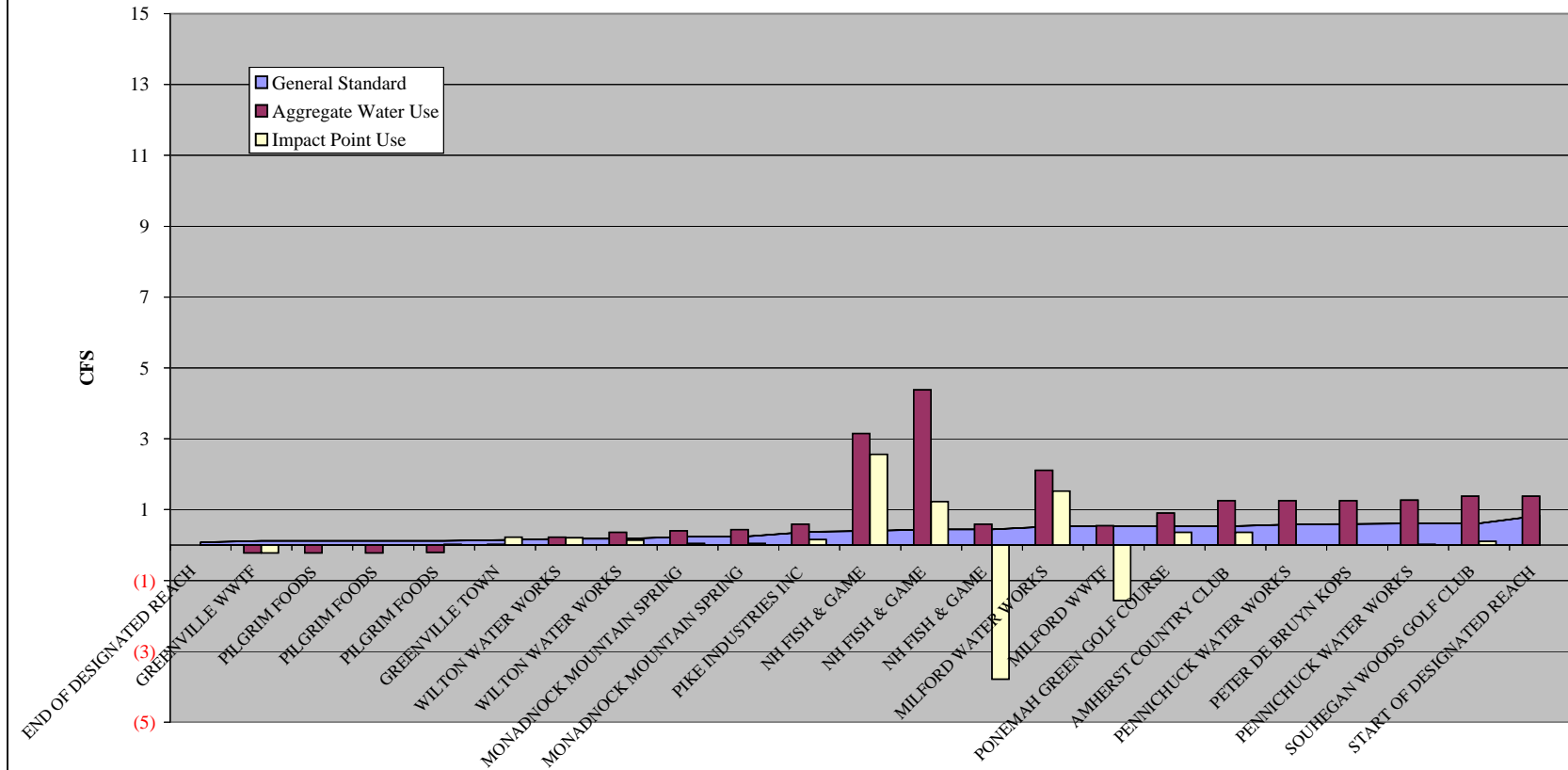


### June 2004 Souhegan

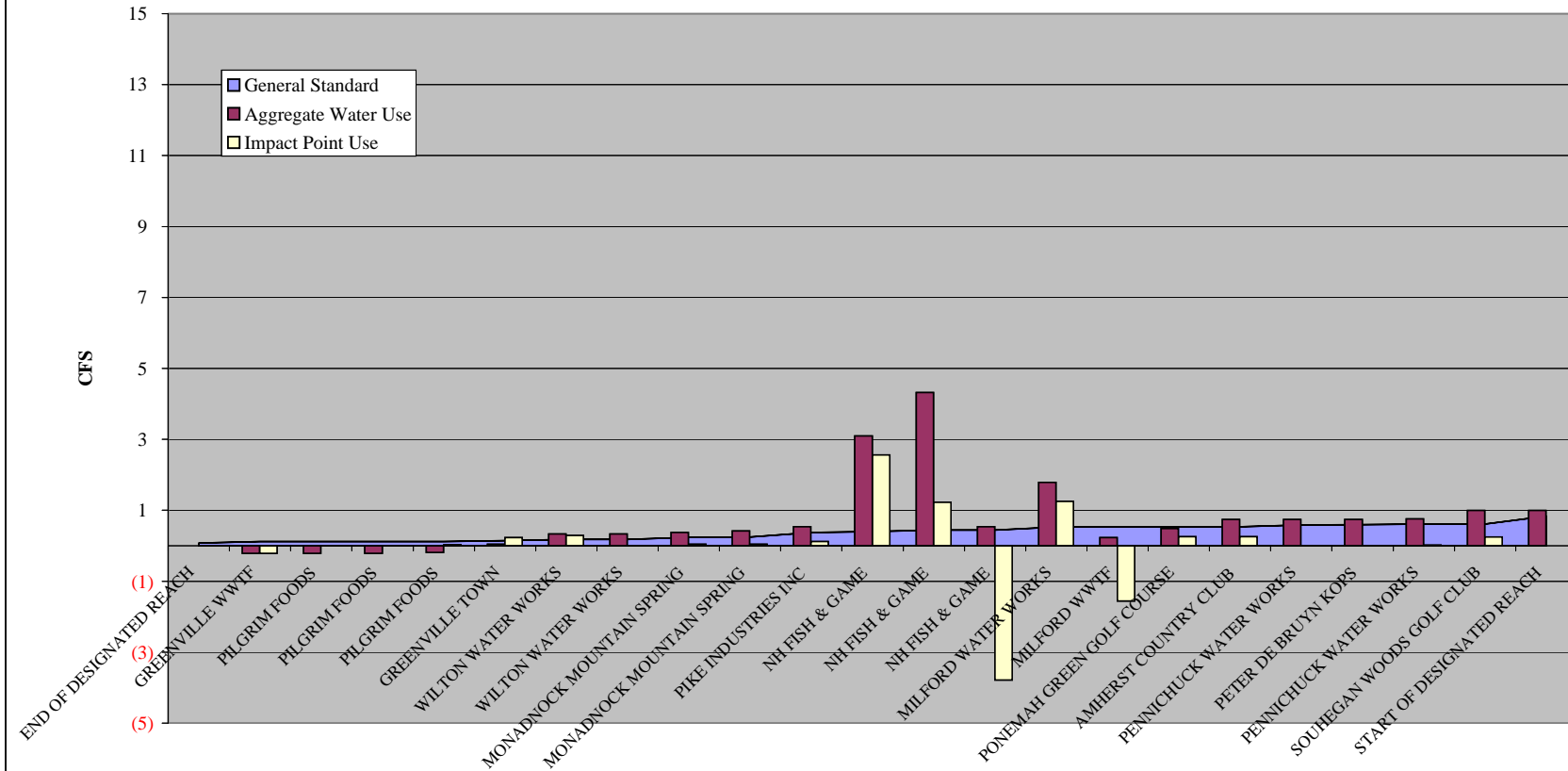


(1)  
(3)  
(5)

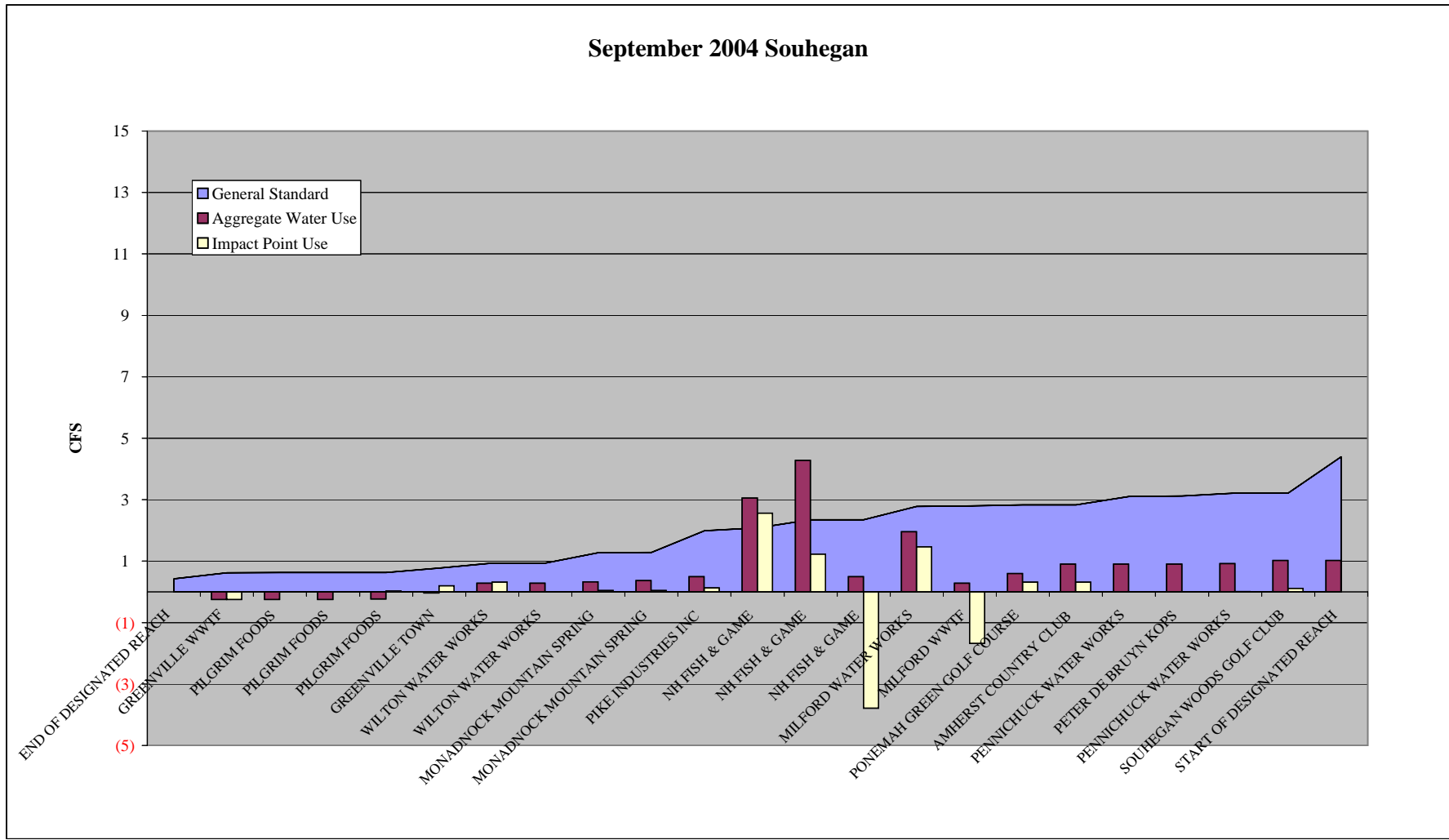
### July 2004 Souhegan



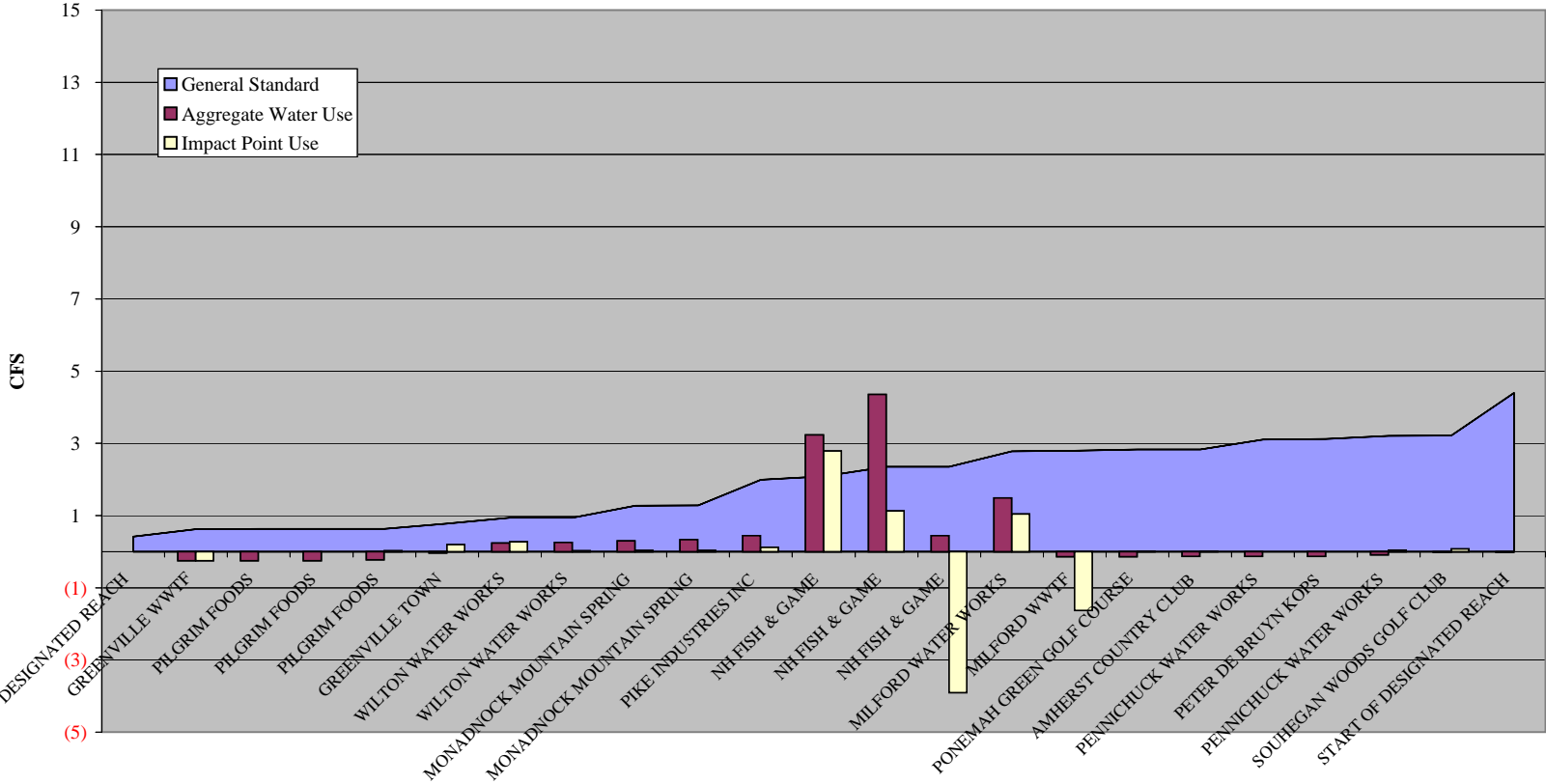
### August 2004 Souhegan



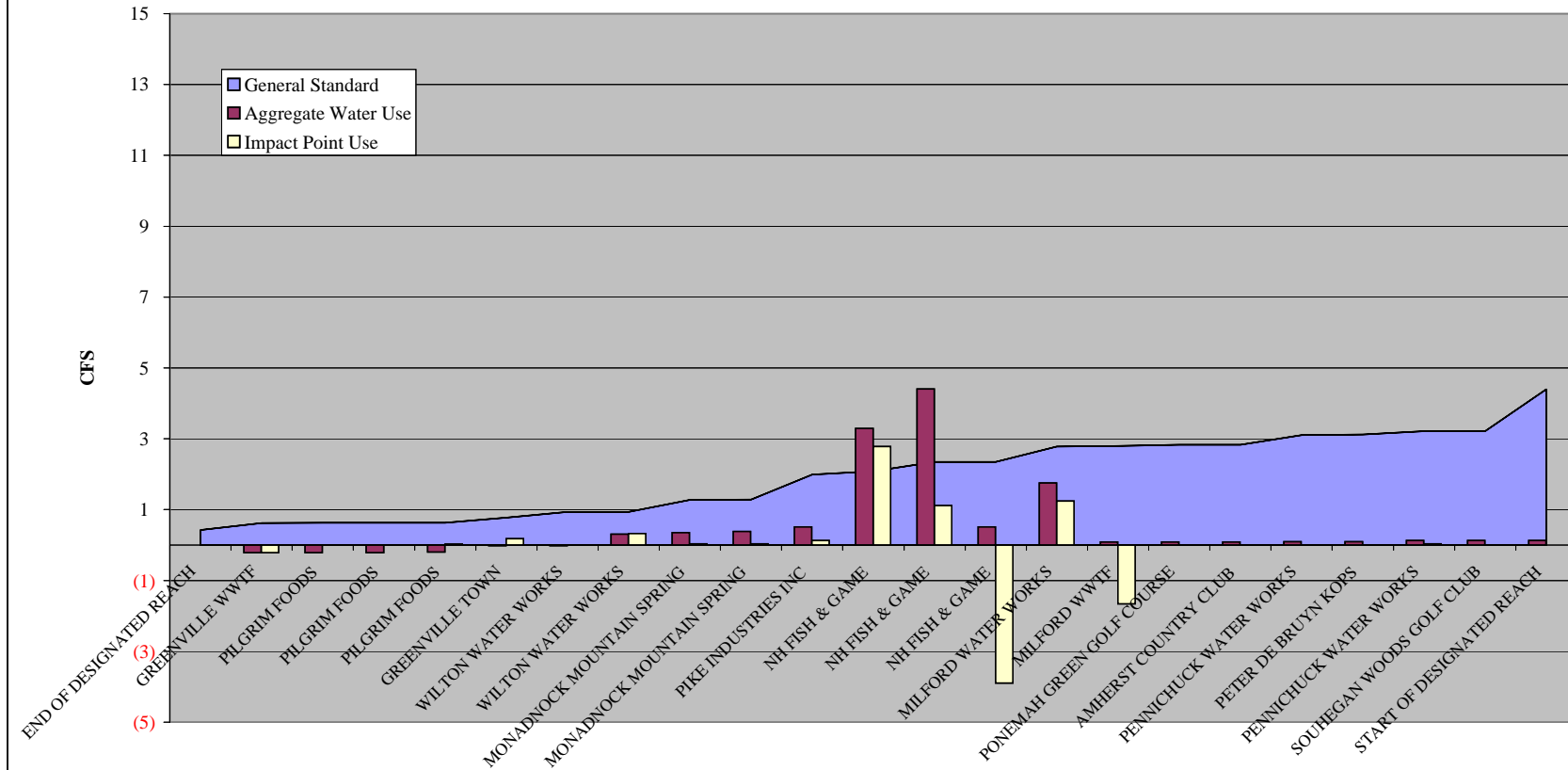
### September 2004 Souhegan



### October 2004 Souhegan



### November 2004 Souhegan



### December 2004 Souhegan

