

Exeter Annual Water Use versus Stream Flow – Calendar Year 2006

Water use was reported by twelve sources and no discharges in the Exeter Water Management Planning Area. The Water Management Planning Area has no operating hydropower facilities; however there is an inactive hydropower facility in Brentwood (DES #029.01). The Water Management Planning Area includes two industrial (aggregate) facilities each with two sources, two sources at a golf course, and two water supply system sources.

Four sources were not included in this assessment because they did not meet the definition of an Affected Water User. These sources include a bottled water supply, a community water supply and two agricultural sources that were not used in 2006. The annual water use during 2006 reported for the unassessed sources was 7,610,846 gallons. These unassessed uses represent 5.7 to 16.2 % of the monthly water use included in the assessment.

Unassessed Water Users (Source > 500 feet from perennial stream)	Unassessed Annual Water Use (gallons)
Liberty Tree Community WS	7,490,846
Pine Brook Spring Water	120,000
J & F Farms	0
Total	7,610,846



The beginning of the Designated River is at its headwaters at the Route 102 bridge in Chester and the end is at its confluence with Great Brook in Exeter—a distance of 33.5 miles. The Exeter Water Management Planning Area covers 76 square miles and includes a streamflow gage in Brentwood (USGS 01073587 EXETER RIVER AT HAIGH ROAD, NEAR BRENTWOOD, NH) measuring 63.5 square miles of the WMPA. For this report the streamflow was transposed areally from the gage to all impact points on the Designated River. A value for 7Q10 at the Exeter gage was estimated by averaging 7Q10 values from the adjacent Lamprey River and nearby Oyster River watershed gages. The Designated River was in compliance with the General Standard in 2006.

2006 Exeter Designated River	River Miles not in Compliance with General Standard (0 at the mouth)	Length of River Miles not in Compliance with General Standard	Maximum value of Aggregate WU /Stream flow	Previously not in Compliance with the General Standard (since 2003)
January	--	--	0.05%	--
February	--	--	0.05%	--
March	--	--	0.21%	--
April	--	--	0.25%	--
May	--	--	0.05%	--
June	--	--	0.08%	--
July	--	--	0.22%	2003, 2004
August	--	--	0.47%	2003, 2005
September	--	--	0.80%	2003, 2005
October	--	--	0.19%	--
November	--	--	0.07%	--
December	--	--	0.10%	--



Exeter Affected Water User Facilities: Source and Discharge Locations

Legend

Affected Water Users


-  Source
-  Discharge


Stream Gages

-  Active
-  Inactive

 Designated Reach

 Hydrology

 State boundary

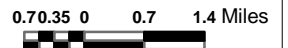
 Town boundary

 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.

Map Document: (H:\Water Quality\Instream Flow\GIS Projects\WMPAs\exeter_waterquality06.mxd)
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2006 Exeter Water Use in CFS															
WU_NAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Beginning Designated Reach			0.6												
HAMPSTEAD AREA WATER CO	COLBY POND	20768 20768-S01	18.3	0.0365	0.0292	0.0547	0.0281	0.0479	0.0720	0.0623	0.0926	0.0395	0.0439	0.0190	0.0451
AGGREGATE INDUSTRIES	RAYMOND PLANT	20642 20642-S02	45.2	0.00	0.00	0.00446	0.00917	0.00911	0.00977	0.00662	0.00604	0.00584	0.00	0.00	0.00
AGGREGATE INDUSTRIES	RAYMOND PLANT	20642 20642-S01	45.2	0.00	0.00	0.00446	0.00917	0.00911	0.00977	0.00662	0.00604	0.00584	0.00	0.00	0.00
AGGREGATE INDUSTRIES	COASTAL CONCRETE OF NH	20641 20641-S02	45.2	0.00	0.00	0.00	0.146	0.141	0.118	0.0943	0.115	0.132	0.121	0.125	0.0269
AGGREGATE INDUSTRIES	COASTAL CONCRETE OF NH	20641 20641-S01	45.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ford Way Brook			45.2												
SHERWOOD FOREST MBL HOME		20468 20468-S01	75.4	0.0408	0.0419	0.0531	0.0580	0.0574	0.0513	0.0268	0.0301	0.0338	0.0152	0.0176	0.0168
APPLE HILL GOLF CLUB	APPLE HILL GOLF CLUB	20712 20712-S02	87.8	0.00	0.00	0.00	0.00	0.00474	0.00165	0.0143	0.0158	0.00810	0.000649	0.00	0.00
APPLE HILL GOLF CLUB	APPLE HILL GOLF CLUB	20712 20712-S01	87.8	0.00	0.00	0.00	0.00	0.00148	0.00054	0.00467	0.00542	0.00256	0.00023	0.00	0.00
APPLE HILL GOLF CLUB	APPLE HILL GOLF CLUB	20712 20712-D01	87.8												
Great Brook	Water use on Great Brook		87.8												
End Designated Reach	Confluence Exeter and Squamscot		87.8												
Tributaries and DR endpoints															

2006 Exeter Aggregate Water Use in CFS															
WU_NAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Beginning Designated Reach			0.65	0	0	0	0	0	0	0	0	0	0	0	0
HAMPSTEAD AREA WATER CO	COLBY POND	20768 20768-S01	18.31	0.037	0.029	0.055	0.028	0.048	0.072	0.062	0.093	0.039	0.044	0.019	0.045
Ford Way Brook			45.20	0.037	0.029	0.064	0.193	0.208	0.210	0.170	0.219	0.183	0.165	0.144	0.072
SHERWOOD FOREST MBL HOME		20468 20468-S01	75.40	0.077	0.071	0.117	0.251	0.265	0.261	0.197	0.249	0.217	0.180	0.162	0.089
Great Brook	Water use on Great Brook		87.83	0.077	0.071	0.117	0.251	0.271	0.263	0.216	0.270	0.228	0.181	0.162	0.089
End Designated Reach	Confluence Exeter and Squamscot		87.83	0.077	0.071	0.117	0.251	0.271	0.263	0.216	0.270	0.228	0.181	0.162	0.089

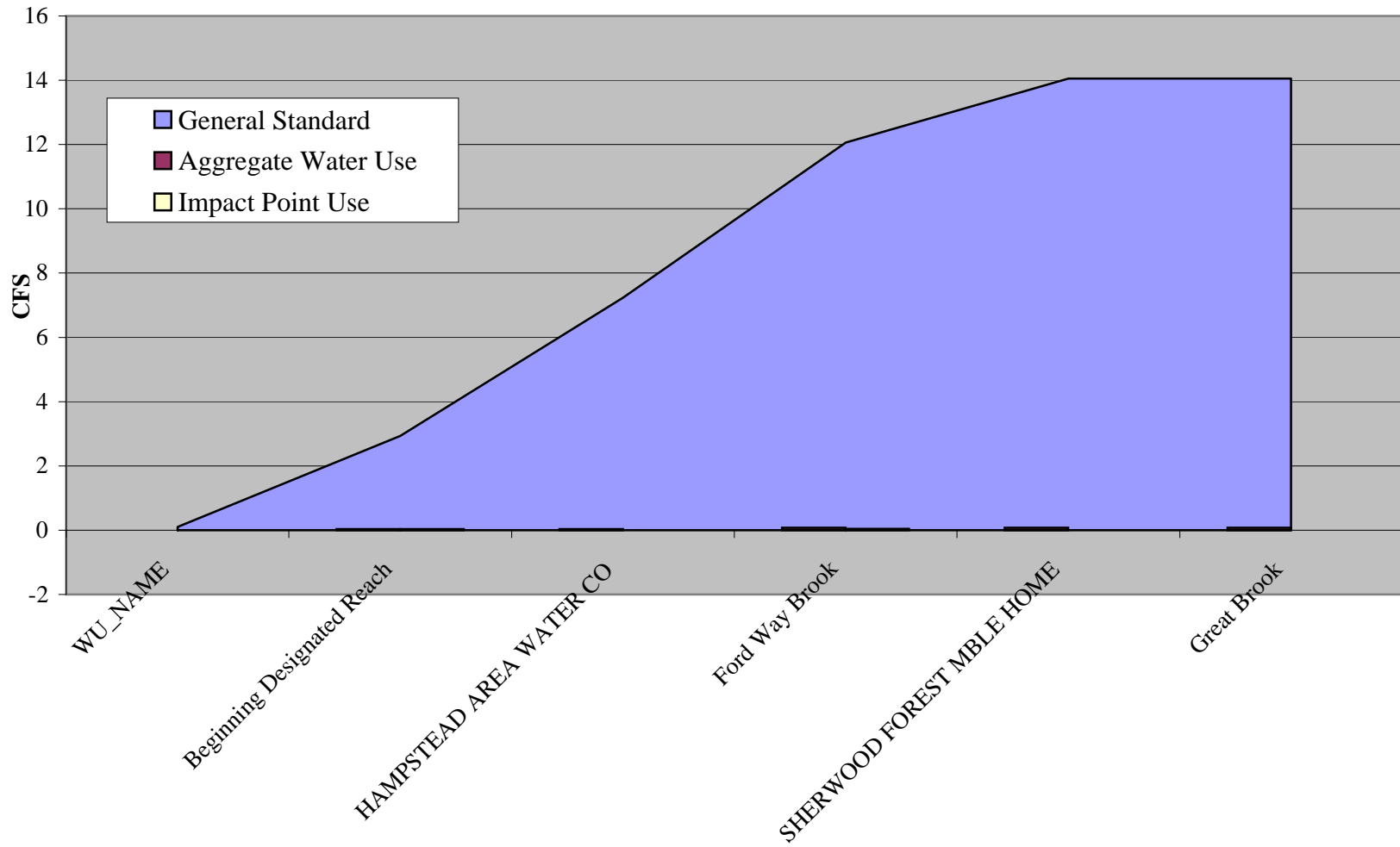
2006 Exeter Estimated Monthly Stream Flow at Each Impact Point in CFS															
WU_NAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Beginning Designated Reach			0.65	2.6	2.2	0.9	1.1	6.1	3.8	1.10	0.69	0.326	1.2	3.0	1.5
HAMPSTEAD AREA WATER CO	COLBY POND	20768 20768-S01	18.31	75	62	26	32	173	109	31	19.7	9.3	34	86	44
Ford Way Brook			45.20	185	153	63	78	426	270	77	49	22.8	85	213	108
SHERWOOD FOREST MBL HOME		20468 20468-S01	75.40	308	255	105	131	710	450	128	81	38.1	142	355	180
Great Brook	Water use on Great Brook		87.83	359	297	123	152	828	524	150	94	44.4	165	414	209
End Designated Reach	Confluence Exeter and Squamscot		87.83	359	297	123	152	828	524	150	94	44.4	165	414	209

2006 Exeter Estimated Monthly General Standard at Each Impact Point in CFS															
WU_NAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Beginning Designated Reach			0.65	0.103	0.026	0.026	0.03	0.10	0.103	0.026	0.02580	0.01290	0.03	0.103	0.03
HAMPSTEAD AREA WATER CO	COLBY POND	20768 20768-S01	18.31	2.93	0.73	0.73	0.7	2.9	2.93	0.73	0.733	0.366	0.7	2.93	0.7
Ford Way Brook			45.20	7.2	1.8	1.8	1.8	7.2	7.2	1.8	1.8	0.9	1.8	7.2	1.8
SHERWOOD FOREST MBL HOME		20468 20468-S01	75.40	12.1	3.0	3.0	3	12	12.1	3.0	3.02	1.51	3.0	12.1	3.0
Great Brook	Water use on Great Brook		87.83	14.1	3.5	3.5	4	14	14.1	3.5	3.51	1.76	3.5	14.1	3.5
End Designated Reach	Confluence Exeter and Squamscot		87.83	14.1	3.5	3.5	4	14	14.1	3.5	3.51	1.76	3.5	14.1	3.5

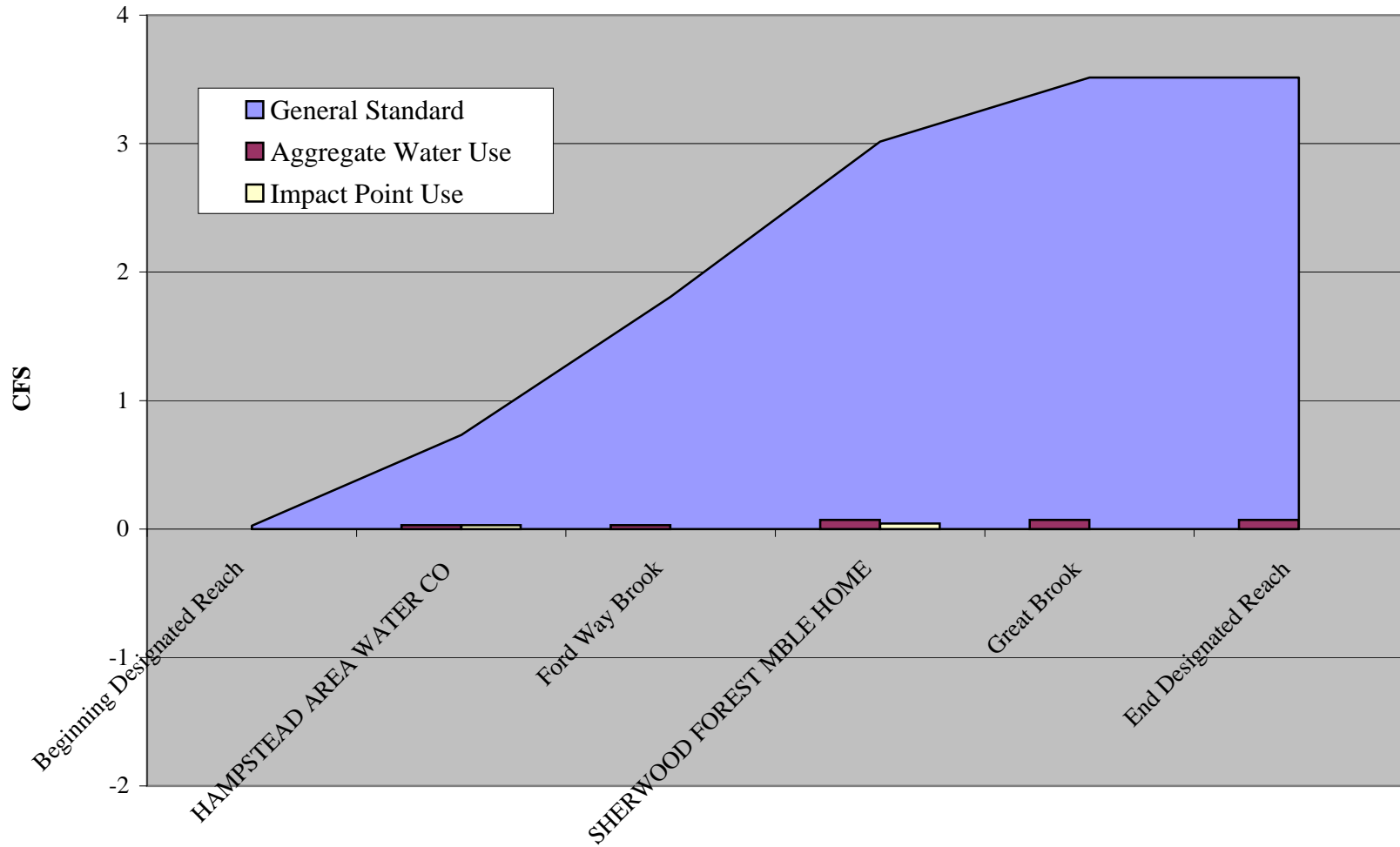
2006 Exeter Estimated Monthly Margin of the Aggregate Water Use Below the General Standard															
WU_NAME	FACILITY	WUSD_ID	DA on DR (SQ MILE)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Beginning Designated Reach			0.65	0.103	0.026	0.026	0.026	0.103	0.103	0.026	0.026	0.013	0.026	0.103	0.026
HAMPSTEAD AREA WATER CO	COLBY POND	20768 20768-S01	18.31	2.89	0.70	0.68	0.70	2.88	2.86	0.670	0.64	0.33	0.69	2.91	0.69
Ford Way Brook	Water use at confluence		45.20	7.2	1.78	1.7	1.6	7.0	7.0	1.64	1.59	0.72	1.64	7.09	1.7
SHERWOOD FOREST MBL HOME		20468 20468-S01	75.40	12	2.9	2.9	2.8	12	12	2.8	2.8	1.29	2.8	12	2.9
Great Brook	Water use on Great Brook		87.83	14	3.4	3.4	3.3	14	14	3.3	3.2	1.53	3.3	14	3.4
End Designated Reach	Confluence Exeter and Squamscot		87.83	14	3.4	3.4	3.3	14	14	3.3	3.2	1.53	3.3	14	3.4

Key
Tributaries

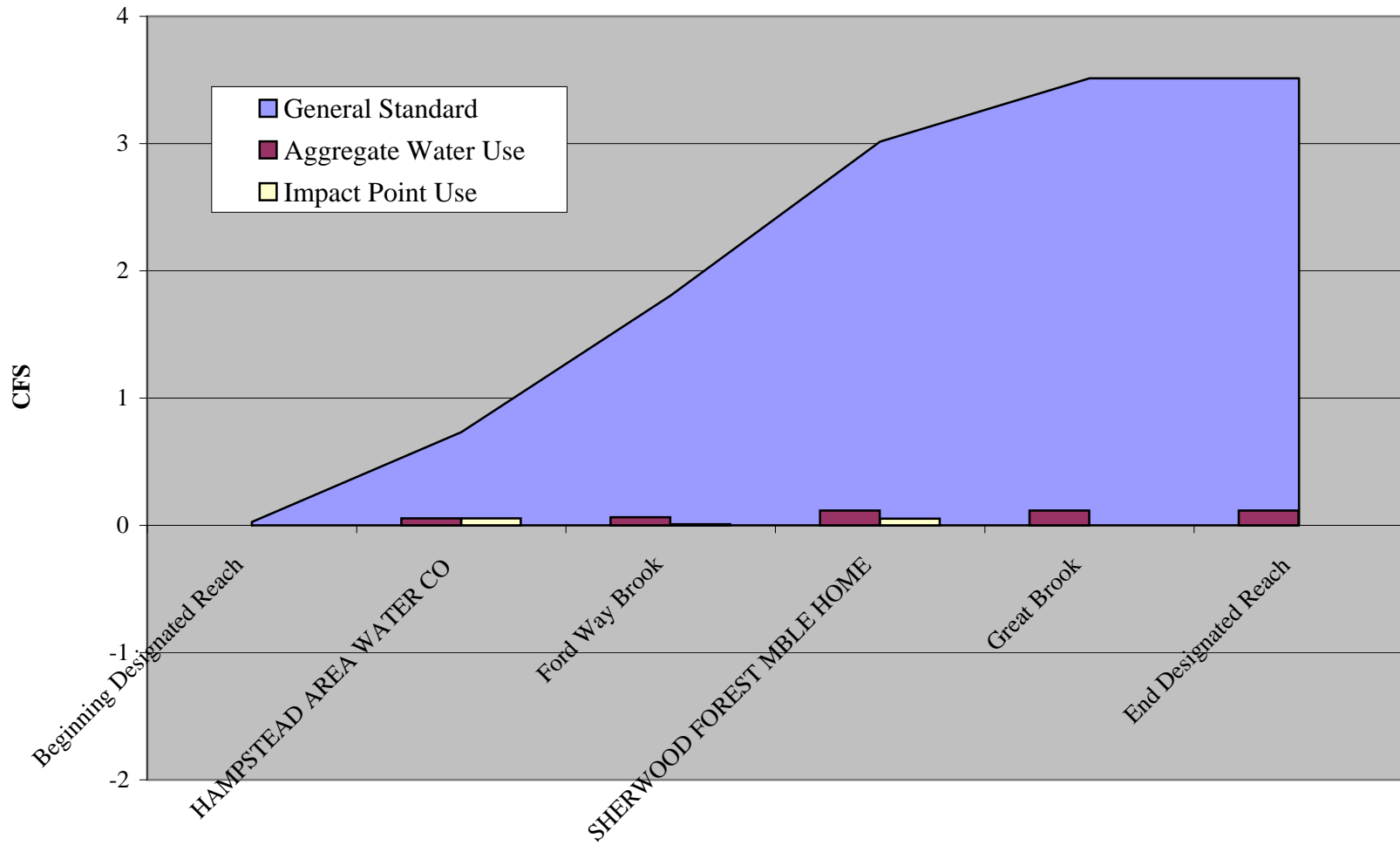
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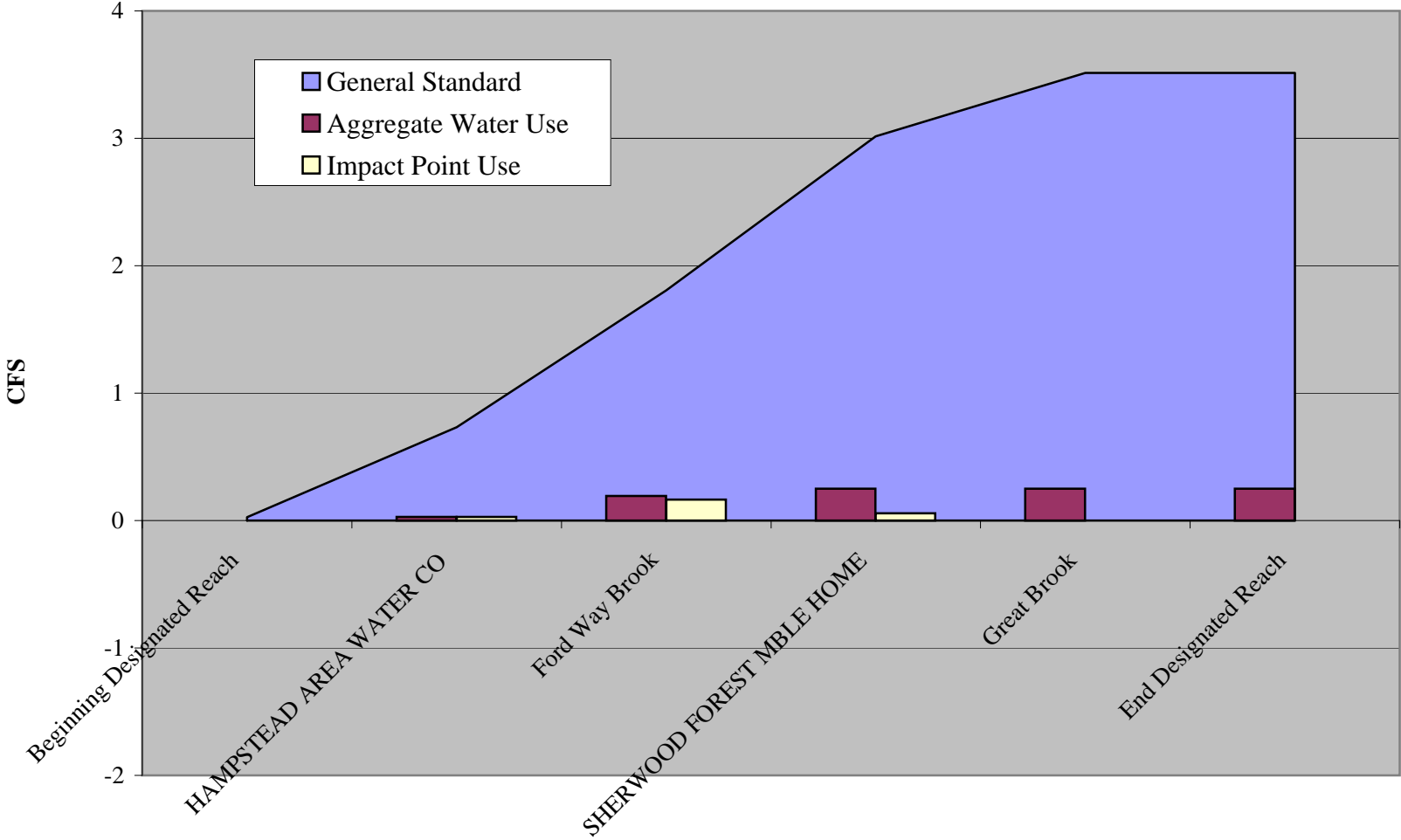
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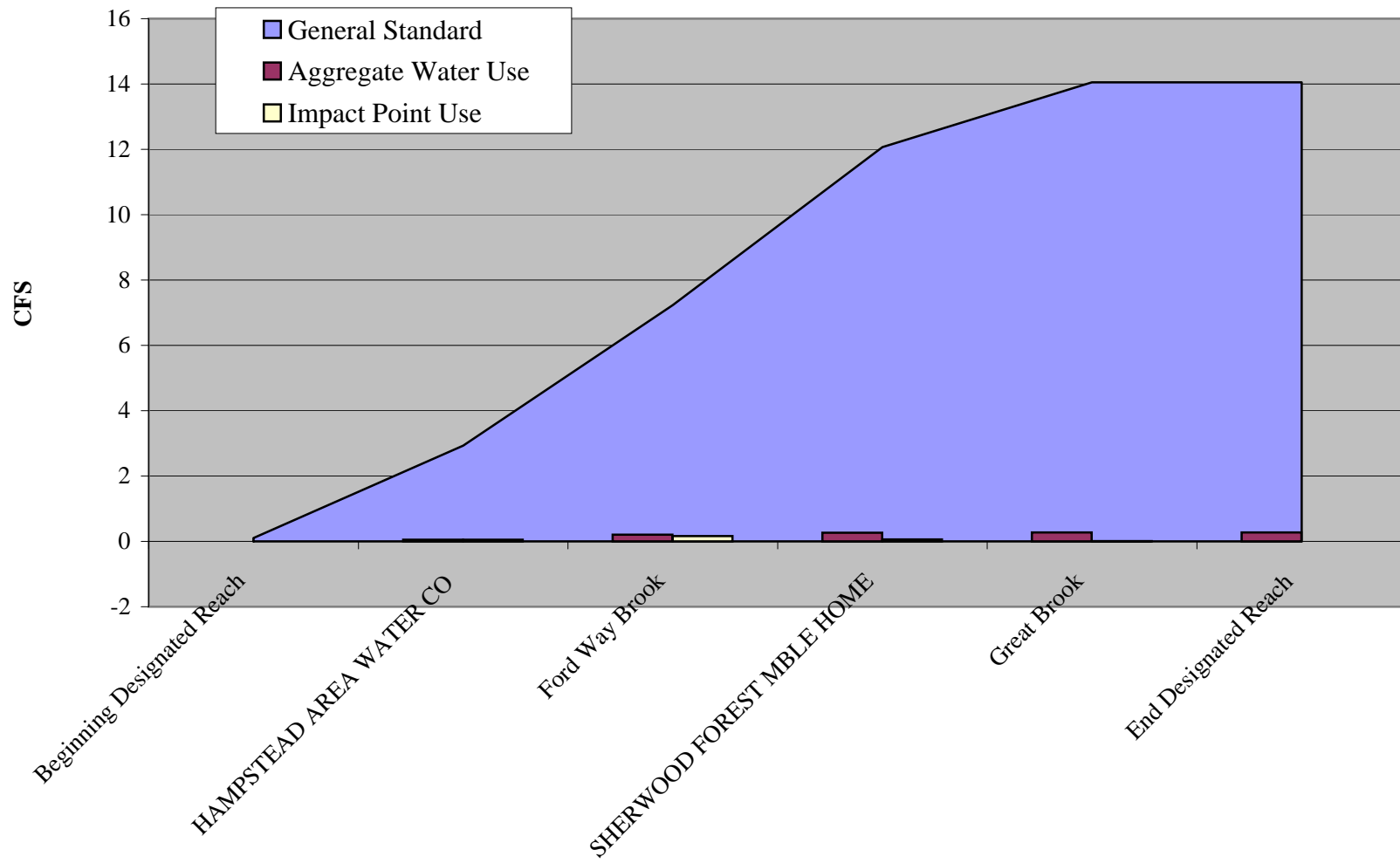
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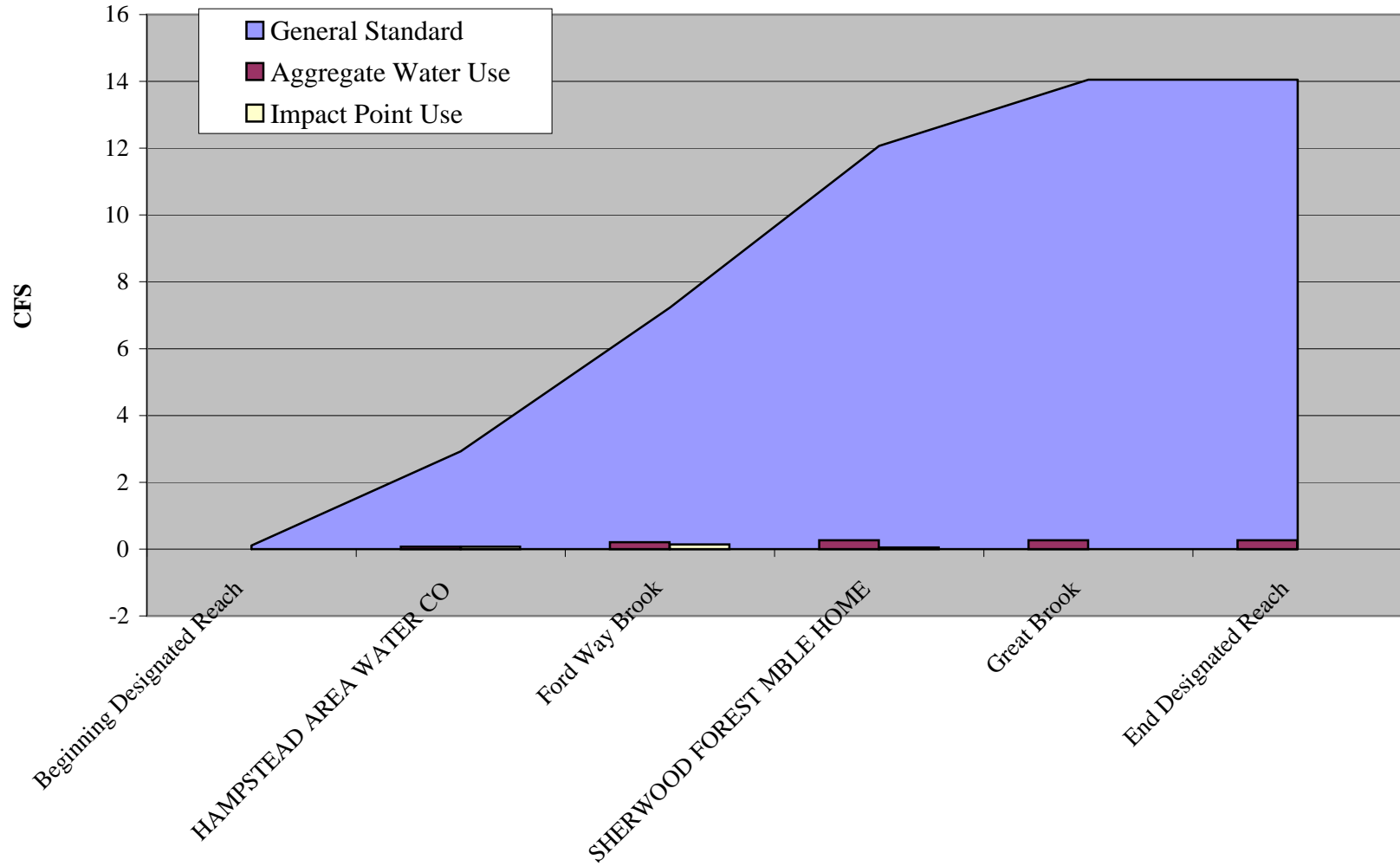
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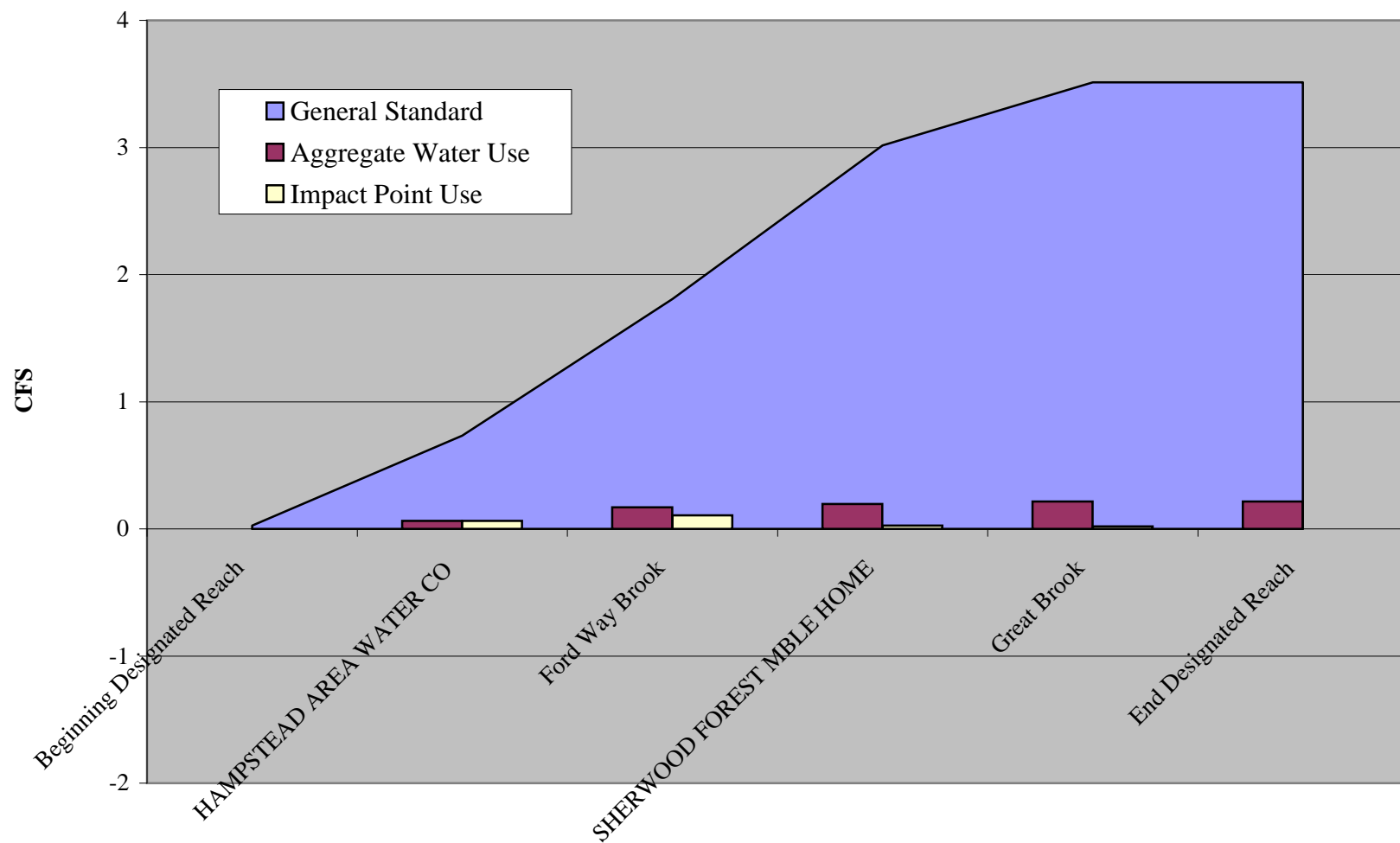
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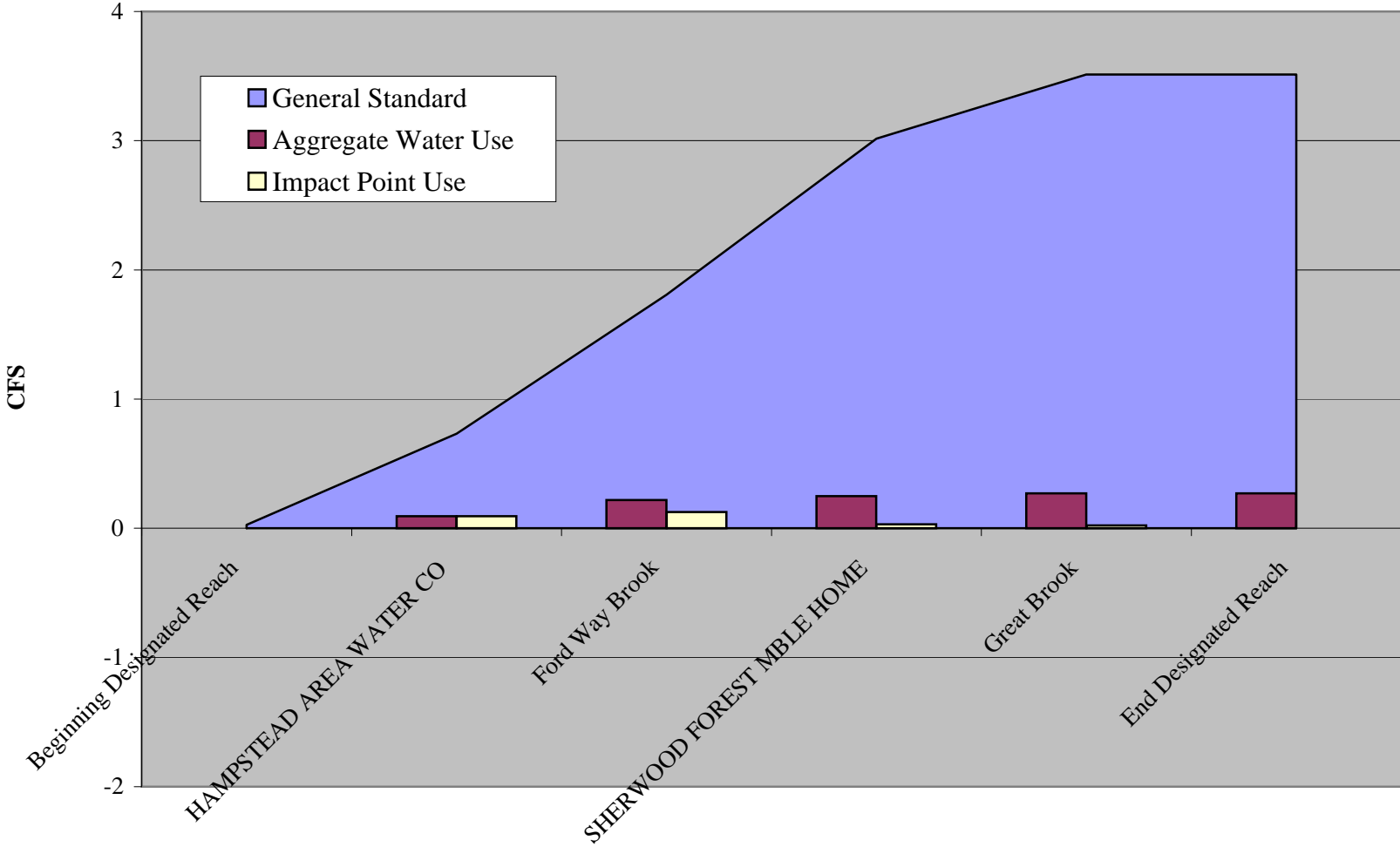
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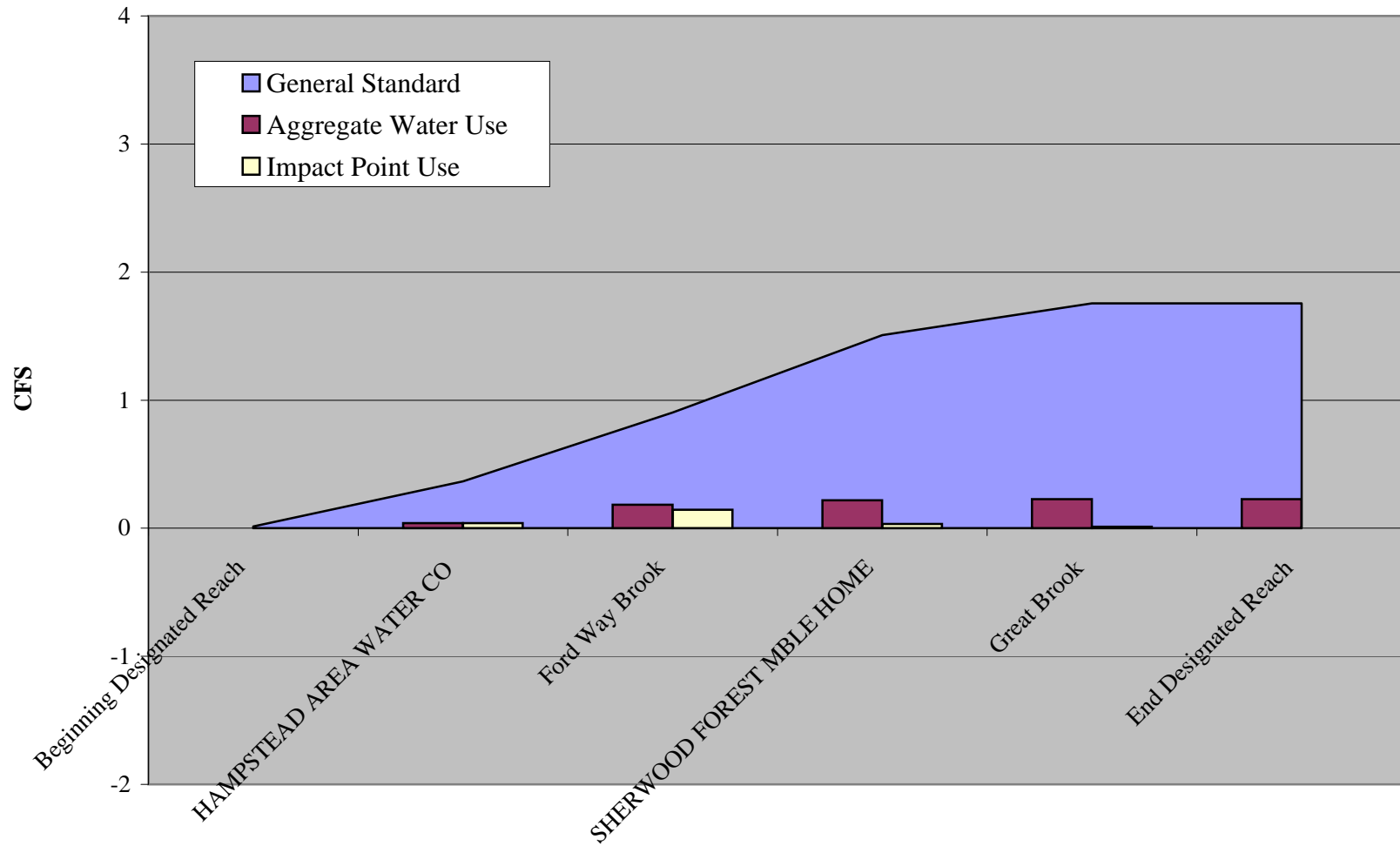
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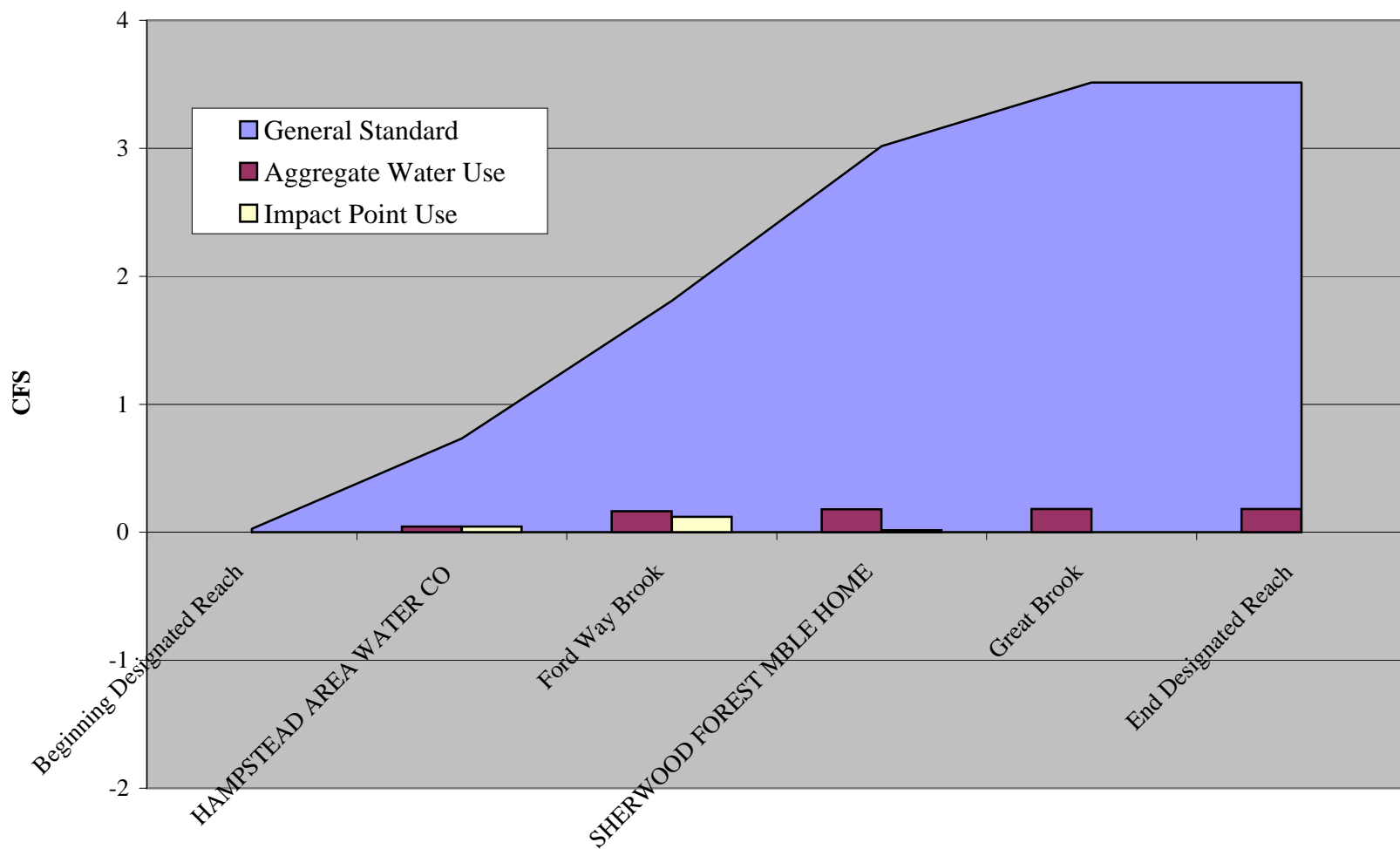
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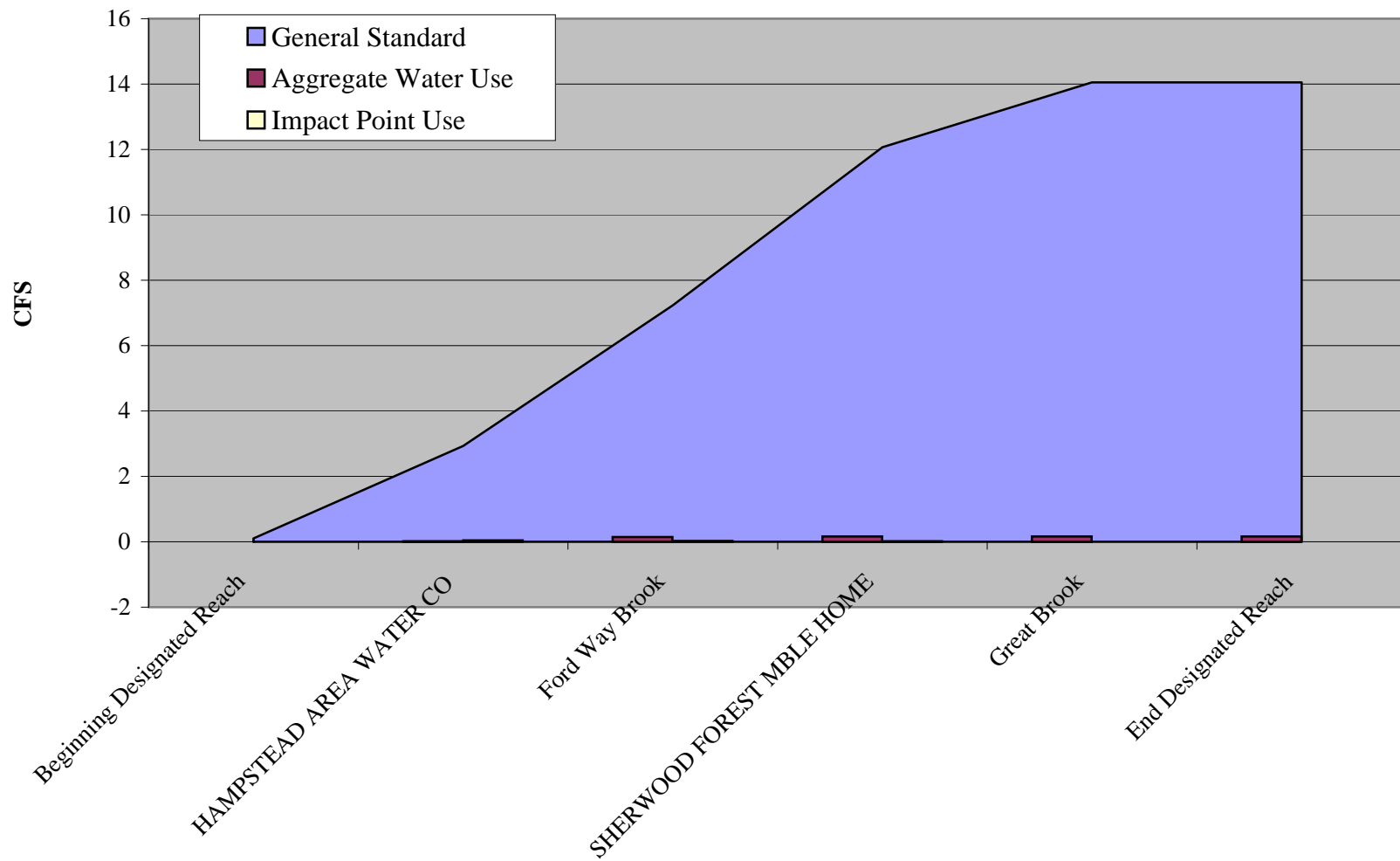
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October 2006 Exeter



November 2006 Exeter



December 2006 Exeter

