



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

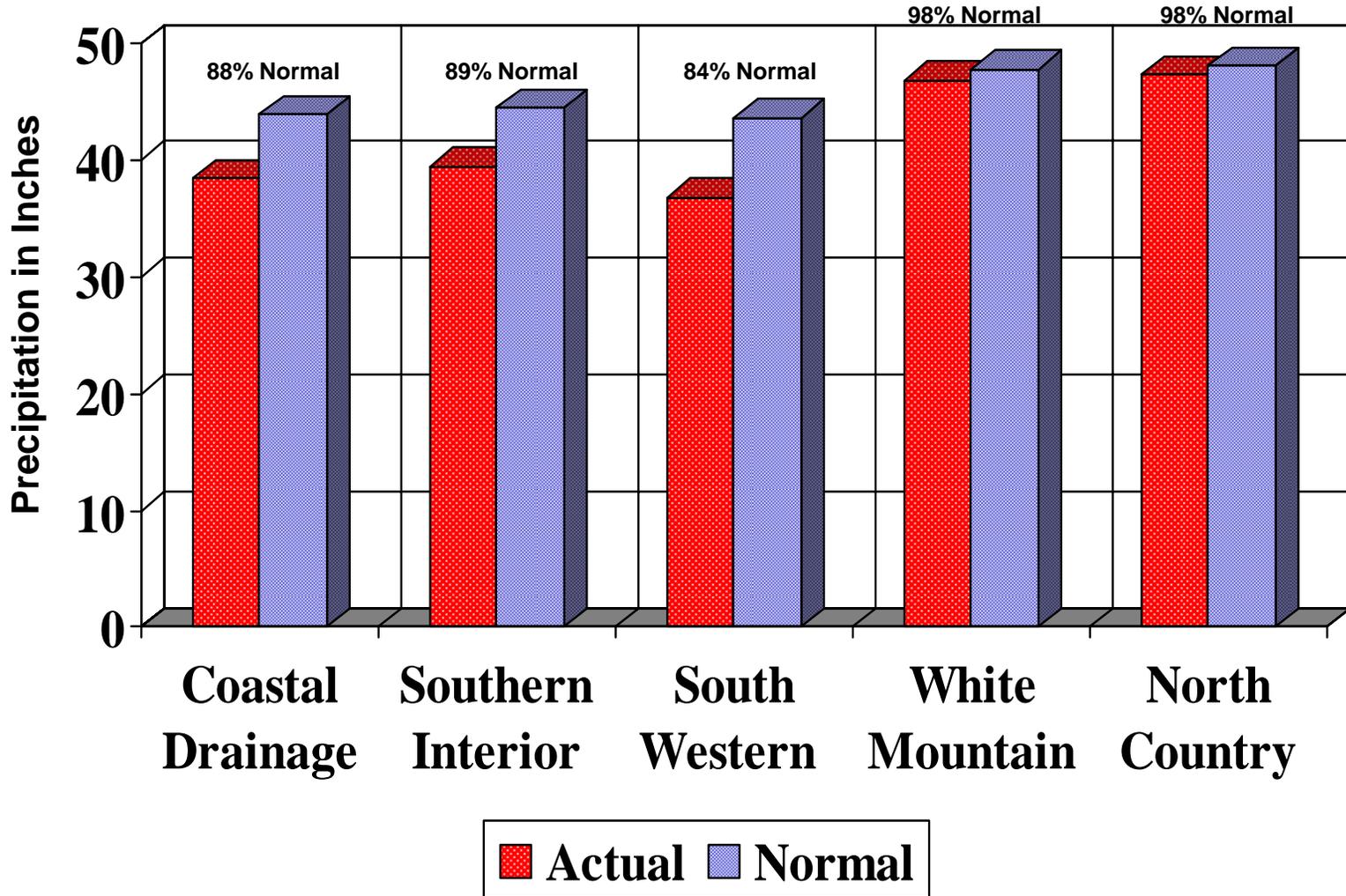
**AGGREGATED PRECIPITATION DATA for N.H.
 DROUGHT MANAGEMENT AREAS**

	Actual Rainfall (inches)	Normal Rainfall (inches)	Deviation from Normal (inches)	Percent of Normal
<u>Coastal Drainage:</u> Rockingham, Strafford counties				
four month	13.42	16.09	-2.68	83%
six month	19.82	23.38	-3.57	85%
nine month	32.67	35.15	-2.48	93%
twelve month	38.40	43.89	-6.83	88%
<u>Southern Interior:</u> Belknap, Hillsborough, Merrimack counties				
four month	14.43	15.30	-0.87	94%
six month	21.39	22.97	-1.58	93%
nine month	33.74	34.26	-0.52	98%
twelve month	39.49	44.44	-4.95	89%
<u>South Western:</u> Cheshire, Sullivan counties				
four month	13.95	14.58	-0.63	96%
six month	20.03	22.59	-2.56	89%
nine month	31.95	33.89	-1.94	94%
twelve month	36.78	43.65	-6.87	84%
<u>White Mountain:</u> Carroll, Grafton counties				
four month	15.83	16.33	-0.50	97%
six month	25.12	24.94	0.18	101%
nine month	41.04	37.12	3.92	111%
twelve month	46.86	47.77	-0.91	98%
<u>North Country:</u> Coos county				
four month	16.84	16.38	0.46	103%
six month	25.75	25.62	0.13	101%
nine month	41.48	37.99	3.49	109%
twelve month	47.27	48.06	-0.79	98%

four month period : Sept 2012 - December 2012
 six month period : July 2012 - December 2012
 nine month period : April 2012 - December 2012
 twelve month period: January 2012 - December 2012

Source: Northeast River Forecast Center, NH Des Dam Bureau

TWELVE MONTH AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS from January 2012 through December 2012





MONTHLY PRECIPITATION DATA FOR N.H COUNTIES

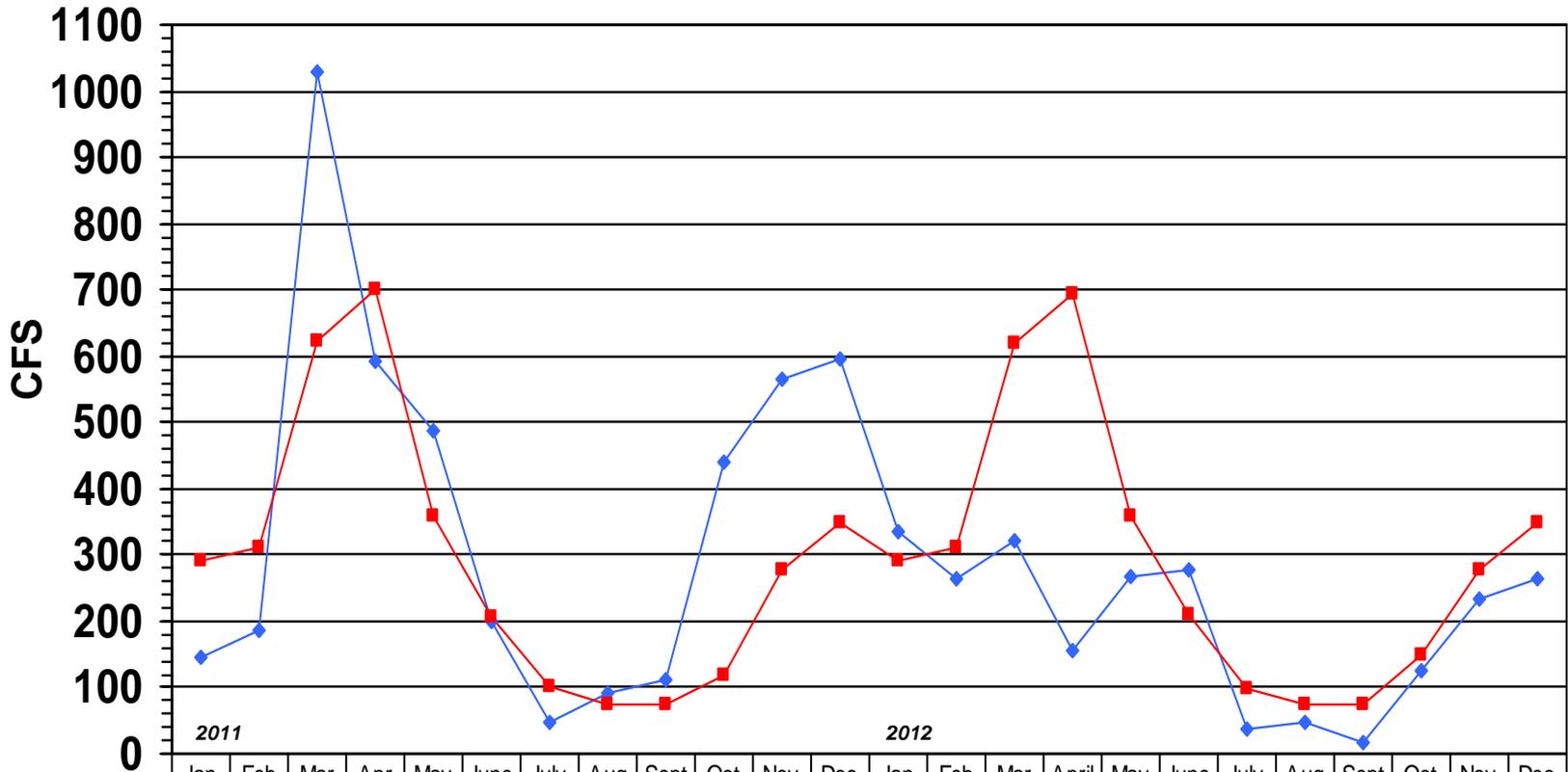
		2012											
		JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Coastal drainage													
STRAFFORD	actual	2.99	1.48	1.59	3.34	4.14	6.40	2.05	4.61	3.67	3.81	0.71	5.34
	normal	-0.69	3.32	4.02	4.39	3.88	3.77	3.75	3.69	3.76	4.39	4.71	3.99
	deviation	1.00	-1.84	-2.43	-1.05	0.26	2.63	-1.70	0.92	-0.09	-0.58	-4.00	1.35
ROCKINGHAM	actual	2.62	1.38	1.41	2.95	3.56	5.31	1.67	4.47	3.48	3.71	0.89	5.22
	normal	3.77	3.20	3.86	4.12	3.69	3.68	3.60	3.54	3.76	3.22	4.42	3.93
	deviation	-1.15	-1.82	-2.45	-1.17	-0.13	1.63	-1.93	0.93	-0.28	0.49	-3.53	1.29
Average	actual	2.81	1.43	1.50	3.15	3.85	5.86	1.86	4.54	3.58	3.76	0.80	5.28
	normal	1.54	3.26	3.94	4.26	3.79	3.73	3.68	3.62	3.76	3.81	4.57	3.96
	deviation	-0.08	-1.83	-2.44	-1.11	0.07	2.13	-1.82	0.93	-0.19	-0.05	-3.77	1.32
Southern Interior													
HILLSBOROUGH	actual	2.90	1.44	1.23	2.93	4.70	4.65	1.51	4.80	4.38	4.57	0.45	4.65
	normal	3.80	3.18	3.88	3.89	3.81	3.74	3.75	3.78	3.68	4.16	4.19	3.84
	deviation	-0.90	-1.74	-2.65	-0.96	0.89	0.91	-2.24	1.02	0.70	0.41	-3.74	0.81
MERRIMACK	actual	2.94	1.26	1.35	2.83	4.82	4.42	3.05	4.31	5.23	4.00	0.39	4.57
	normal	3.49	2.88	3.51	3.66	3.84	3.66	3.81	3.78	3.52	3.97	3.97	3.57
	deviation	-0.55	-1.62	-2.16	-0.83	0.98	0.76	-0.76	0.53	1.71	0.03	-3.58	1.00
BELKNAP	actual	3.39	1.13	1.60	2.91	4.73	5.06	3.04	4.18	5.49	4.48	0.35	4.73
	normal	3.52	2.85	3.42	3.66	3.82	3.78	4.08	3.83	3.55	4.00	3.94	3.50
	deviation	-0.13	-1.72	-1.82	-0.75	0.91	1.28	-1.04	0.35	1.94	0.48	-3.59	1.23
Average	actual	3.08	1.28	1.39	2.89	4.75	4.71	2.53	4.43	5.03	4.35	0.40	4.65
	normal	3.60	2.97	3.60	3.74	3.82	3.73	3.88	3.80	3.58	4.04	4.03	3.64
	deviation	-0.53	-1.69	-2.21	-0.85	0.93	0.98	-1.35	0.63	1.45	0.31	-3.64	1.01
South Western													
CHESHIRE	actual	2.73	1.30	0.96	2.41	6.52	3.82	2.04	4.36	5.95	3.90	0.36	3.81
	normal	3.64	2.92	3.60	3.64	3.97	3.81	4.03	4.05	3.58	3.82	3.79	3.51
	deviation	-0.91	-1.62	-2.64	-1.23	2.55	0.01	-1.99	0.31	2.37	0.08	-3.43	0.30
SULLIVAN	actual	2.66	0.98	1.03	2.68	5.07	3.34	3.28	2.48	4.60	4.59	0.45	4.24
	normal	3.27	2.77	3.33	3.52	3.90	3.76	4.00	3.93	3.64	3.88	3.68	3.26
	deviation	-0.61	-1.79	-2.30	-0.84	1.17	-0.42	-0.72	-1.45	0.96	0.71	-3.23	0.98
Average	actual	2.70	1.14	1.00	2.55	5.80	3.58	2.66	3.42	5.28	4.25	0.41	4.03
	normal	3.46	2.85	3.47	3.58	3.94	3.79	4.02	3.99	3.61	3.85	3.74	3.39
	deviation	-0.76	-1.71	-2.47	-1.04	1.86	-0.21	-1.36	-0.57	1.67	0.40	-3.33	0.64
White Mountain													
GRAFTON	actual	3.06	0.92	1.52	4.20	6.22	5.19	4.38	5.50	5.16	3.81	0.69	5.14
	normal	3.64	2.89	3.60	3.72	4.01	4.26	4.35	4.42	4.05	4.19	4.20	3.66
	deviation	-0.58	-1.97	-2.08	0.48	2.21	0.93	0.03	1.08	1.11	-0.38	-3.51	1.48
CARROLL	actual	3.59	1.05	1.50	3.59	5.79	6.85	2.56	6.13	5.91	4.37	0.44	6.14
	normal	4.01	3.15	4.00	4.05	4.19	4.14	4.24	4.21	3.88	4.37	4.33	3.97
	deviation	-0.42	-2.10	-2.50	-0.46	1.60	2.71	-1.68	1.92	2.03	0.00	-3.89	2.17
Average	actual	3.33	0.99	1.51	3.90	6.01	6.02	3.47	5.82	5.54	4.09	0.57	5.64
	normal	3.83	3.02	3.80	3.89	4.10	4.20	4.30	4.32	3.97	4.28	4.27	3.82
	deviation	-0.50	-2.04	-2.29	0.01	1.91	1.82	-0.83	1.50	1.57	-0.19	-3.70	1.83
North Country													
COOS	actual	2.89	0.96	1.94	4.19	5.53	6.01	3.34	5.57	5.57	4.29	1.01	5.97
	normal	3.61	2.89	3.57	3.61	4.14	4.62	4.53	4.71	4.26	4.13	4.24	3.75
	deviation	-0.72	-1.93	-1.63	0.58	1.39	1.39	-1.19	0.86	1.31	0.16	-3.23	2.22

LAMPREY RIVER near NEWMARKET NH

Gage# 01073500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



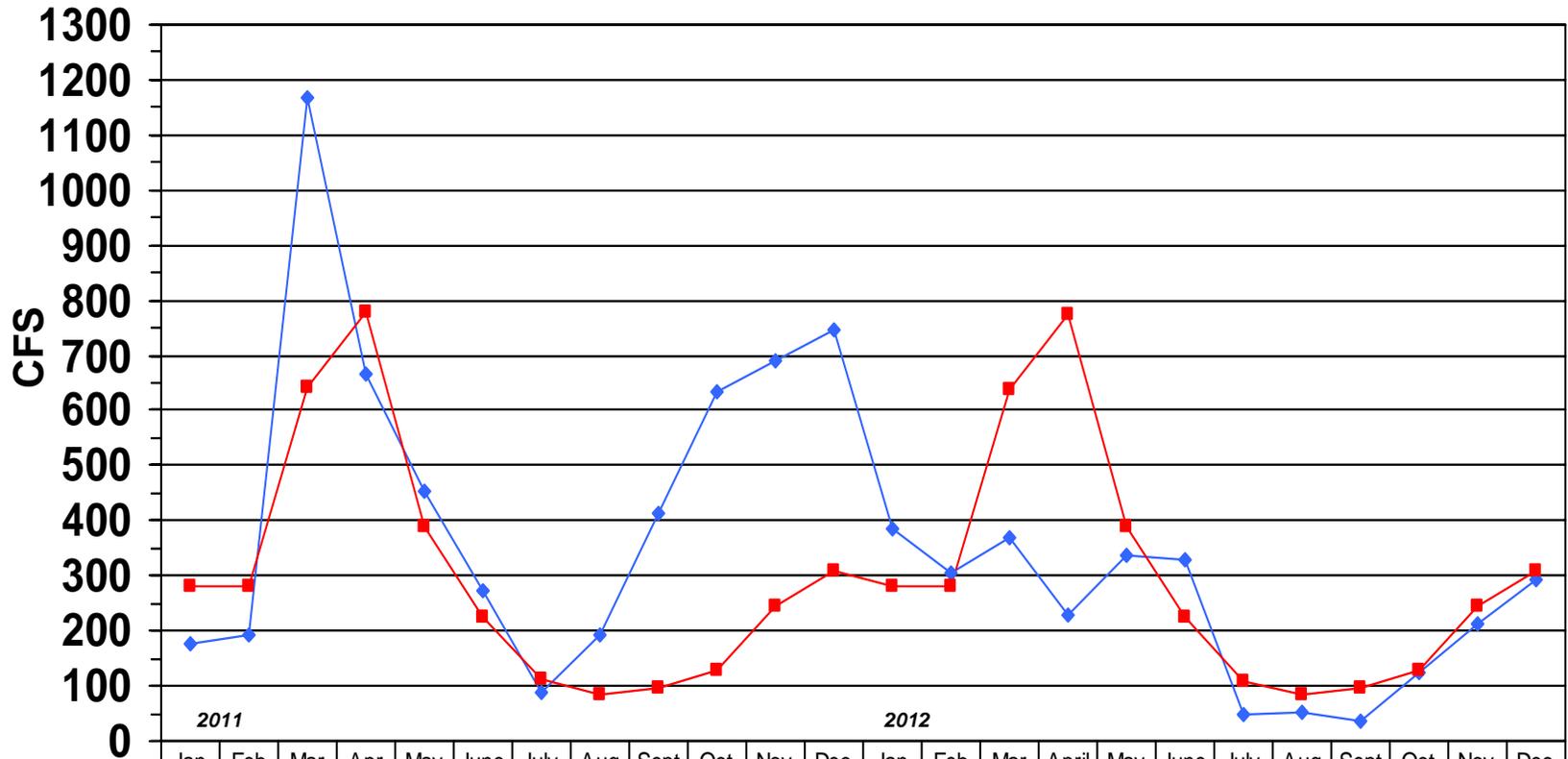
	2011												2012											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
◆ Monthly Mean Flow	145	185	1029	591	487	200	46	91	112	439	564	597	335	265	323	156	266	276	38	48	18	126	235	264
■ Mean of Monthly Flows	291	311	623	701	360	208	100	76	73	118	279	350	291	310	619	694	359	209	99	76	73	148	278	349
% of Normal	50%	59%	165%	84%	135%	96%	46%	120%	153%	372%	202%	170%	115%	85%	52%	22%	74%	132%	38%	63%	25%	85%	84%	76%

SOUHEGAN RIVER at MERRIMACK NH

Gage# 01094000



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

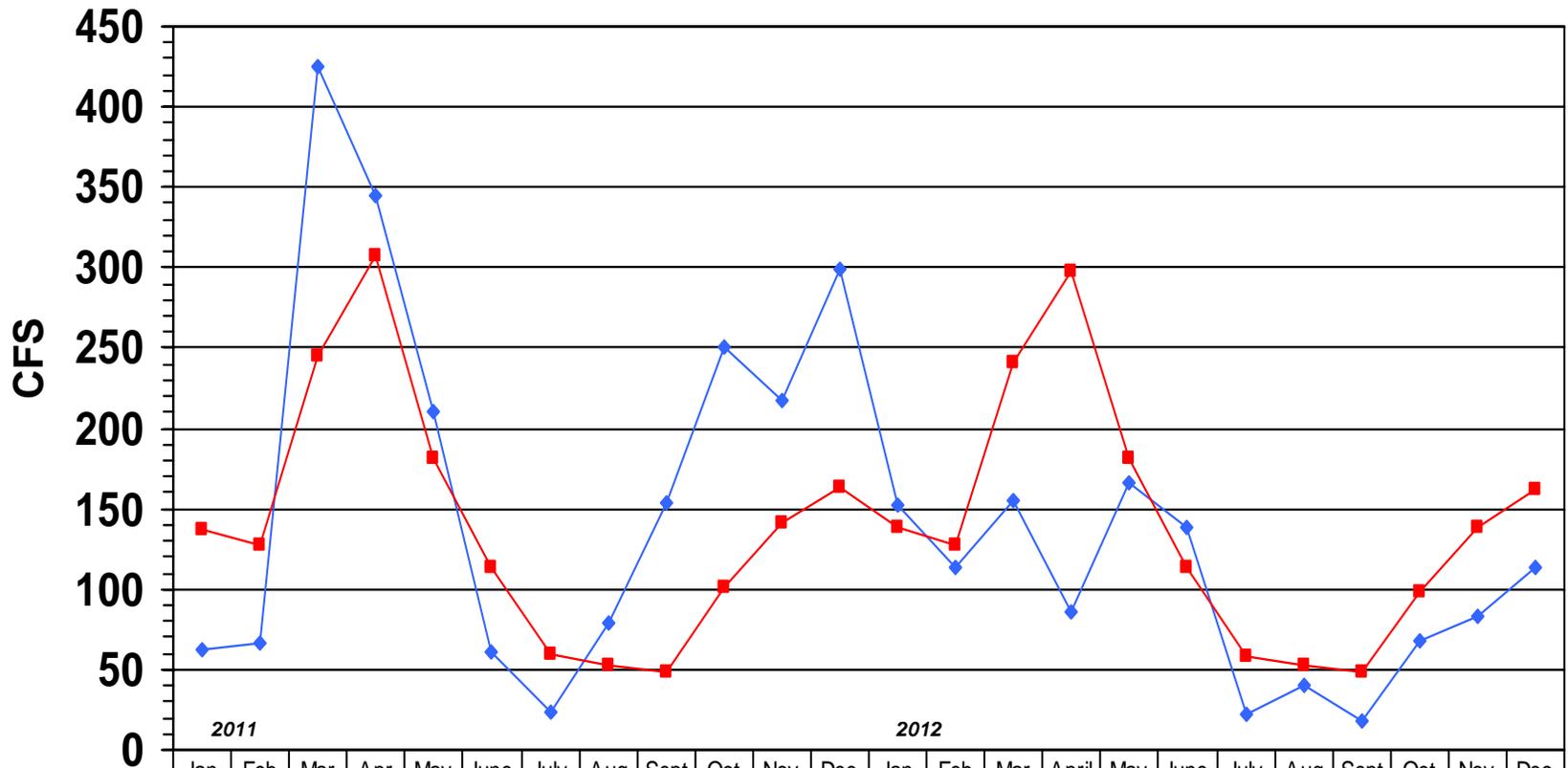


	2011												2012											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
◆ Monthly Mean Flow	176	191	1167	665	455	271	87	194	415	634	692	745	384	303	371	230	336	330	47	53	36	125	214	291
■ Mean of Monthly Flow s	281	280	641	780	391	224	111	84	96	128	243	310	282	281	637	773	391	226	110	83	95	128	243	310
% of Normal	63%	68%	182%	85%	116%	121%	78%	231%	432%	495%	285%	240%	136%	108%	58%	30%	86%	146%	43%	63%	37%	98%	88%	94%

SOUCOOK RIVER at PEMBROKE ROAD near CONCORD NH, Gage# 01089100



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



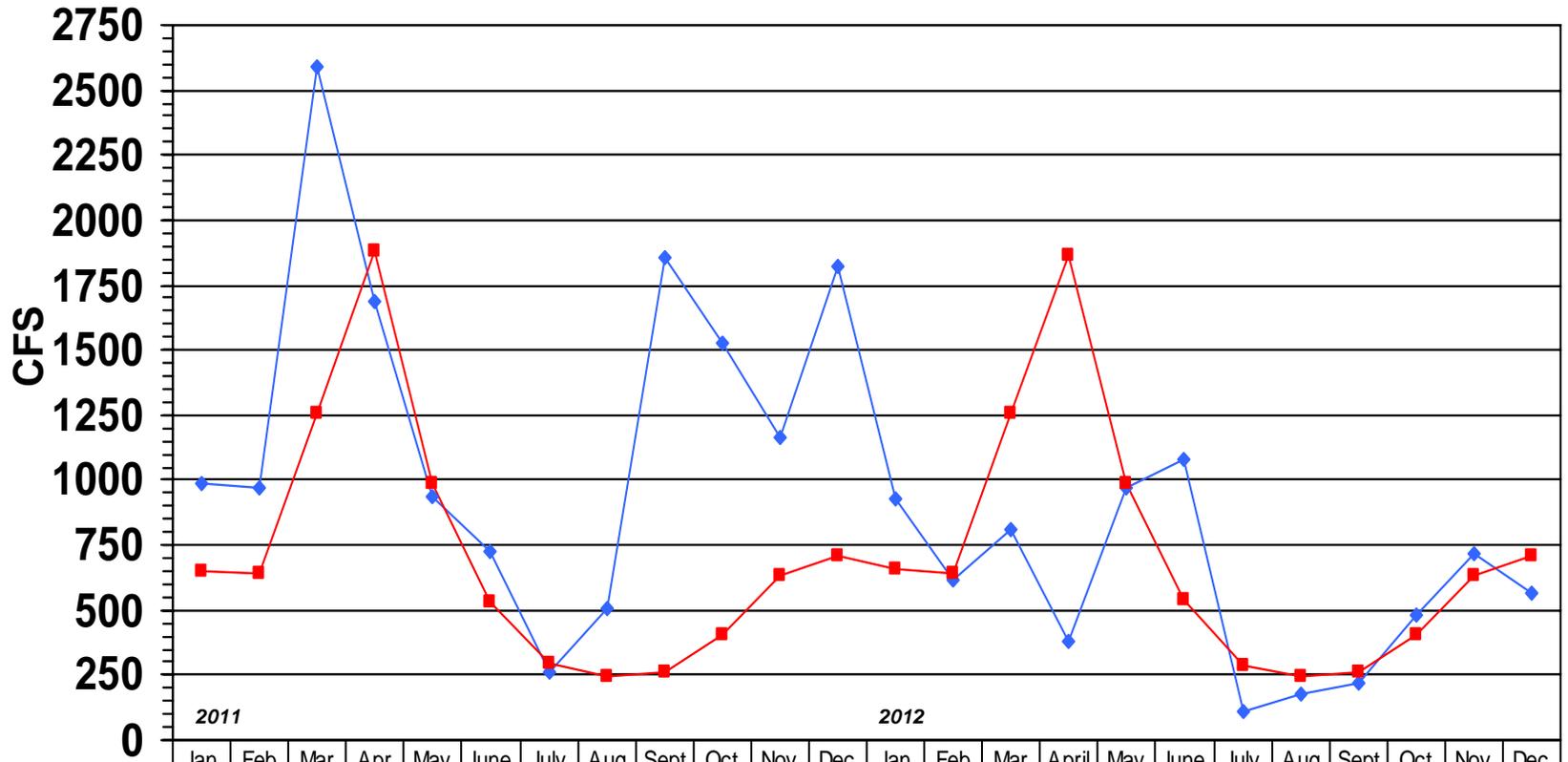
◆ Monthly Mean Flow	63	66	425	345	211	61	23	79	154	250	218	299	153	113	155	86	166	138	22	40	18	68	83	113
■ Mean of Monthly Flow s	137	127	245	307	182	113	59	53	49	101	141	164	138	127	241	298	182	114	58	53	48	99	139	162
% of Normal	46%	52%	173%	112%	116%	54%	39%	149%	314%	247%	155%	182%	111%	89%	64%	29%	91%	121%	38%	76%	38%	69%	60%	70%

ASHUELOT RIVER at HINSDALE NH

Gage# 01161000



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



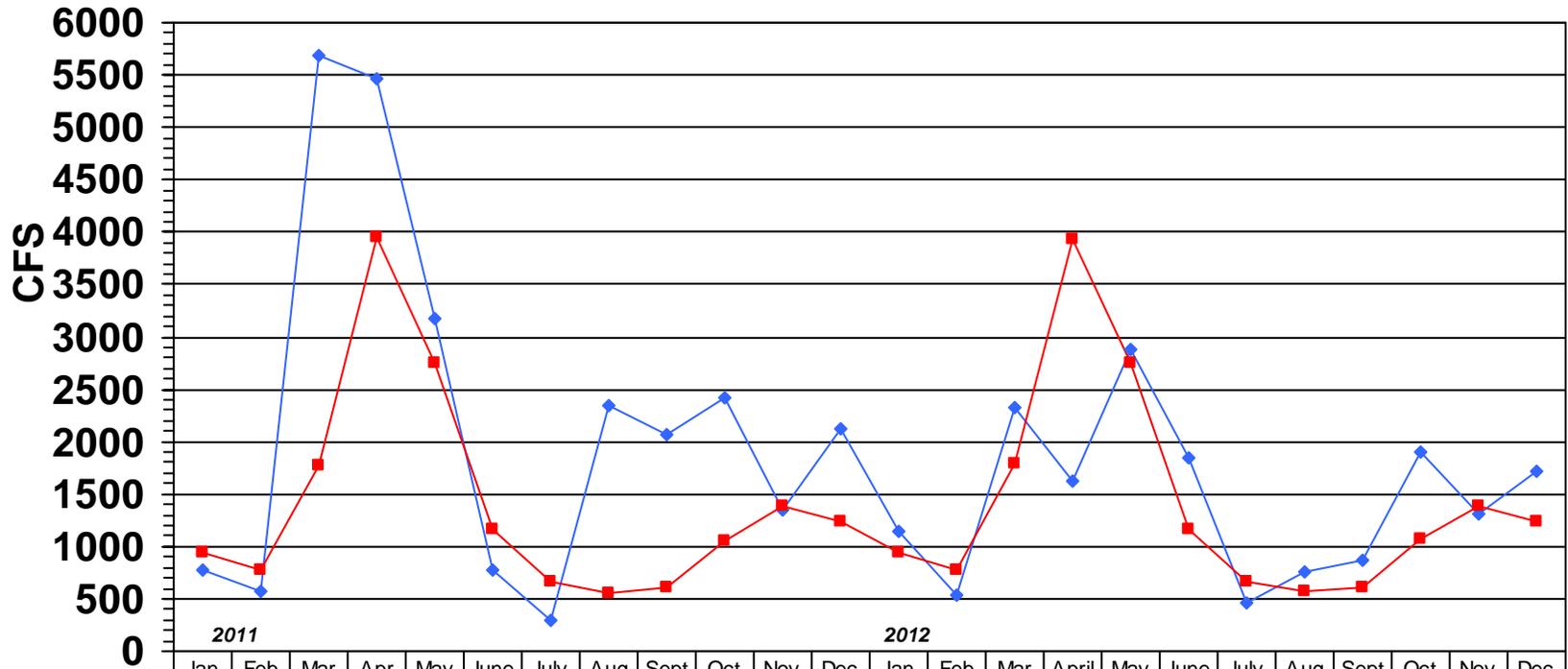
	2011												2012											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
◆ Monthly Mean Flow	987	966	2587	1689	940	728	260	508	1855	1529	1162	1822	925	612	809	379	966	1077	110	181	223	483	715	561
■ Mean of Monthly Flow s	653	642	1259	1879	985	531	293	242	263	401	633	710	656	641	1254	1865	985	536	291	241	262	402	634	708
% of Normal	151%	150%	205%	90%	95%	137%	89%	210%	705%	381%	184%	257%	141%	95%	65%	20%	98%	201%	38%	75%	85%	120%	113%	79%

PEMIGEWASSET RIVER at PLYMOUTH NH

Gage# 01076500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



	2011												2012											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
◆ Monthly Mean Flow	775	580	5695	5469	3183	768	299	2339	2072	2426	1344	2118	1153	534	2317	1627	2872	1852	465	759	870	1909	1306	1723
■ Mean of Monthly Flows	938	769	1779	3954	2742	1158	661	562	612	1058	1390	1232	940	767	1784	3933	2743	1164	659	564	615	1066	1390	1237
% of Normal	83%	75%	320%	138%	116%	66%	45%	416%	339%	229%	97%	172%	123%	70%	130%	41%	105%	159%	71%	287%	141%	179%	94%	139%

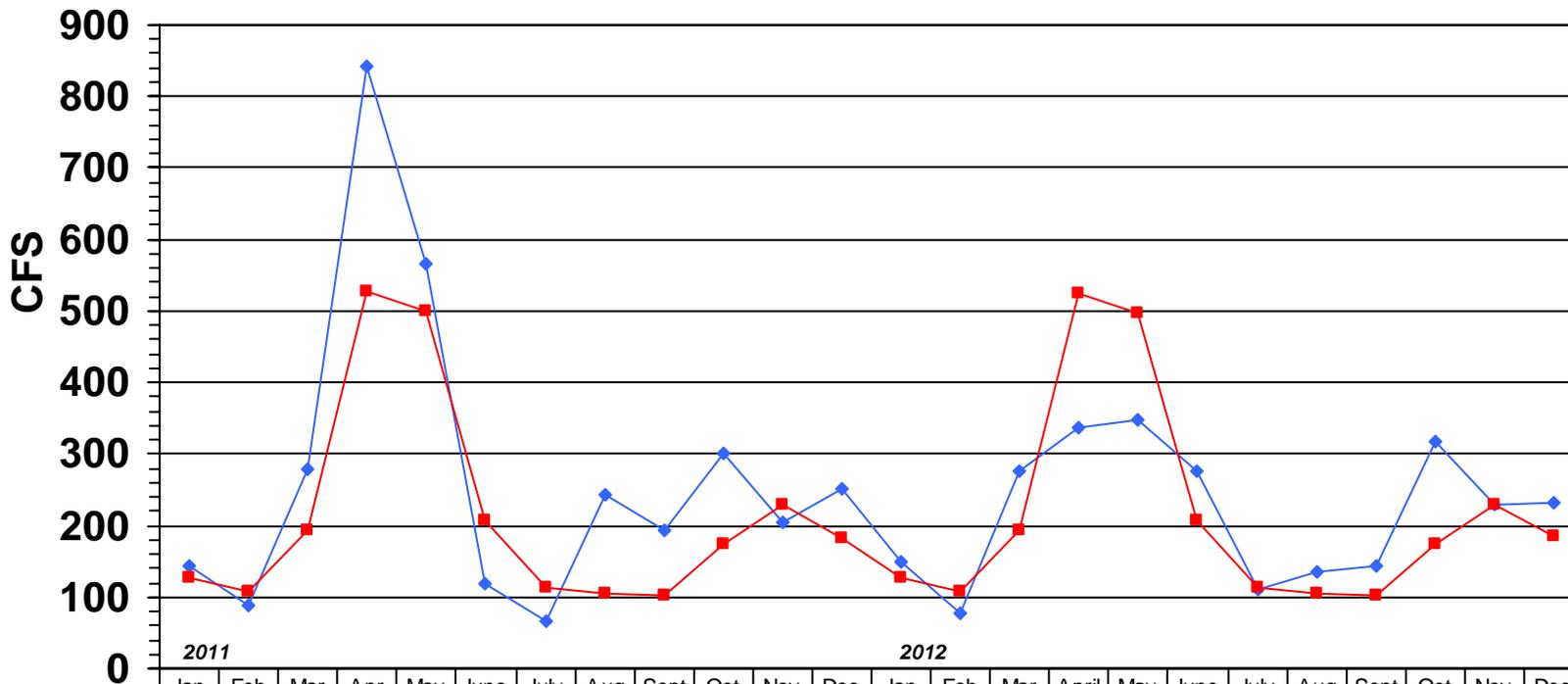
AMMONOOSUC RIVER at BETHLEHEM JUNCTION NH

Gage# 01137500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

This station replaces gage# 01137000 which was discontinued by DES at the end of Sept 2004



	2011												2012											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
◆ Monthly Mean Flow	143	88	278	841	566	120	67	244	192	301	204	250	150	77	275	336	348	277	110	134	143	318	230	231
■ Mean of Monthly Flow s	127	107	193	527	500	206	112	104	101	173	229	183	128	107	194	525	498	207	112	104	101	175	229	184
% of Normal	112%	82%	144%	159%	113%	58%	60%	235%	190%	174%	89%	137%	117%	72%	142%	64%	70%	134%	98%	129%	142%	182%	100%	125%

STREAMFLOW DATA FOR SELECTED NH STATIONS AS OF JANUARY 2, 2013



Station number	Station name	Est. Mean Flow (cfs)	Long Term Median Flow	99% Flow (cfs)	7Q10 Flow (cfs)	Lowest Period of Record Daily Flow (cfs)	% of Median	Below 0.99 Flow?	Below 7Q10 Flow?	Below Record Flow?
Androscoggin River Basin										
01052500	Diamond River near Wentworth Location, NH	ice	133	22	16	6.8		#VALUE!	#VALUE!	#VALUE!
01053500	Androscoggin River at Errol, NH	1960	1700	500	451	0	115%	FALSE	FALSE	FALSE
01054000	Androscoggin River near Gorham, NH	2510	2020	1300	1310	795	124%	FALSE	FALSE	FALSE
Saco River Basin										
01064500	Saco River near Conway, NH	ice	414	105	97	66		#VALUE!	#VALUE!	#VALUE!
01064801	BEARCAMP RIVER AT SOUTH TAMWORTH, NH	338	102	6	4.8	4.5	331%	FALSE	FALSE	FALSE
Piscataqua River Basin										
01072800	COCHECO RIVER NEAR ROCHESTER, NH	ice	134	--	--	2.2		#VALUE!	#VALUE!	#VALUE!
01073500	LAMPREY RIVER NEAR NEWMARKET, NH	266	210	7	5	--	127%	FALSE	FALSE	#VALUE!
Merrimack River Basin										
01074520	EAST BRANCH PEMIGEWASSET RIVER AT LINCOLN, NH	194	161		49	46	120%	FALSE	FALSE	FALSE
01075000	PEMIGEWASSET RIVER AT WOODSTOCK, NH	248	220		56	--	113%	FALSE	FALSE	
01076000	BAKER RIVER NEAR RUMNEY, NH	135	117		15	--	115%	FALSE	FALSE	
01076500	PEMIGEWASSET RIVER AT PLYMOUTH, NH	ice	660		118	45		#VALUE!	#VALUE!	#VALUE!
01078000	SMITH RIVER NEAR BRISTOL, NH	83	74		6.2	2.7	112%	FALSE	FALSE	FALSE
01081000	WINNIPESAUKEE RIVER AT TILTON, NH	900	734		136	48	123%	FALSE	FALSE	FALSE
01081500	MERRIMACK RIVER AT FRANKLIN JUNCTION, NH	2630	1810		551	--	145%		FALSE	
01082000	CONTOOCOOK RIVER AT PETERBOROUGH, NH	ice	83		6.3	--		#VALUE!	#VALUE!	
01085000	CONTOOCOOK RIVER NEAR HENNIKER, NH	526	---		37	--		FALSE	FALSE	
01085500	CONTOOCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH	1060	566		39	--	187%	FALSE	FALSE	
01086000	WARNER RIVER AT DAVISVILLE, NH	ice	153		5.3	--		#VALUE!	#VALUE!	
01087000	BLACKWATER RIVER NEAR WEBSTER, NH	140	---		13.7	--		FALSE	FALSE	
01090800	PISCATAQUOG RIVER BL EVERETT DAM, NR E WEARE, NH	88	---		1.2	--		FALSE	FALSE	
01091500	PISCATAQUOG RIVER NEAR GOFFSTOWN, NH	223	---		8.8	--		FALSE	FALSE	
01092000	MERRIMACK R NR GOFFS FALLS, BELOW MANCHESTER, NH	3550	3850		644	98*	92%		FALSE	
01094000	SOUHEGAN RIVER AT MERRIMACK, NH	158	176		12.9	--	90%	FALSE	FALSE	
Connecticut River Basin										
01129200	CONNECTICUT R BELOW INDIAN STREAM NR PITTSBURG, NH	622	729		42	30	85%	FALSE	FALSE	FALSE
01129500	CONNECTICUT RIVER AT NORTH STRATFORD, NH	ice	1230		176	108		#VALUE!	#VALUE!	#VALUE!
01131500	CONNECTICUT RIVER NEAR DALTON, NH	ice	1800		389	115		#VALUE!	#VALUE!	#VALUE!
01137500	AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH	110	94		28	21	117%	FALSE	FALSE	FALSE
01138500	CONNECTICUT RIVER AT WELLS RIVER, VT	2570	3250		690	152*	79%		FALSE	
01144500	CONNECTICUT RIVER AT WEST LEBANON, NH	8360	4300	380*	902	82*	194%		FALSE	
01152500	SUGAR RIVER AT WEST CLAREMONT, NH	ice	240	40	38	14		#VALUE!	#VALUE!	#VALUE!
01154500	CONNECTICUT RIVER AT NORTH WALPOLE, NH	8550	5600	260*	1058	115*	153%		FALSE	
01158000	ASHUELOT RIVER BELOW SURRY MT DAM, NEAR KEENE, NH	120	101	4.5	2.7	0.4		FALSE	FALSE	FALSE
01158600	OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH	56	55	1.6	1.1	0.3	102%	FALSE	FALSE	FALSE
01160350	ASHUELOT RIVER AT WEST SWANZEY, NH	333	525	32	--	--	63%	FALSE		

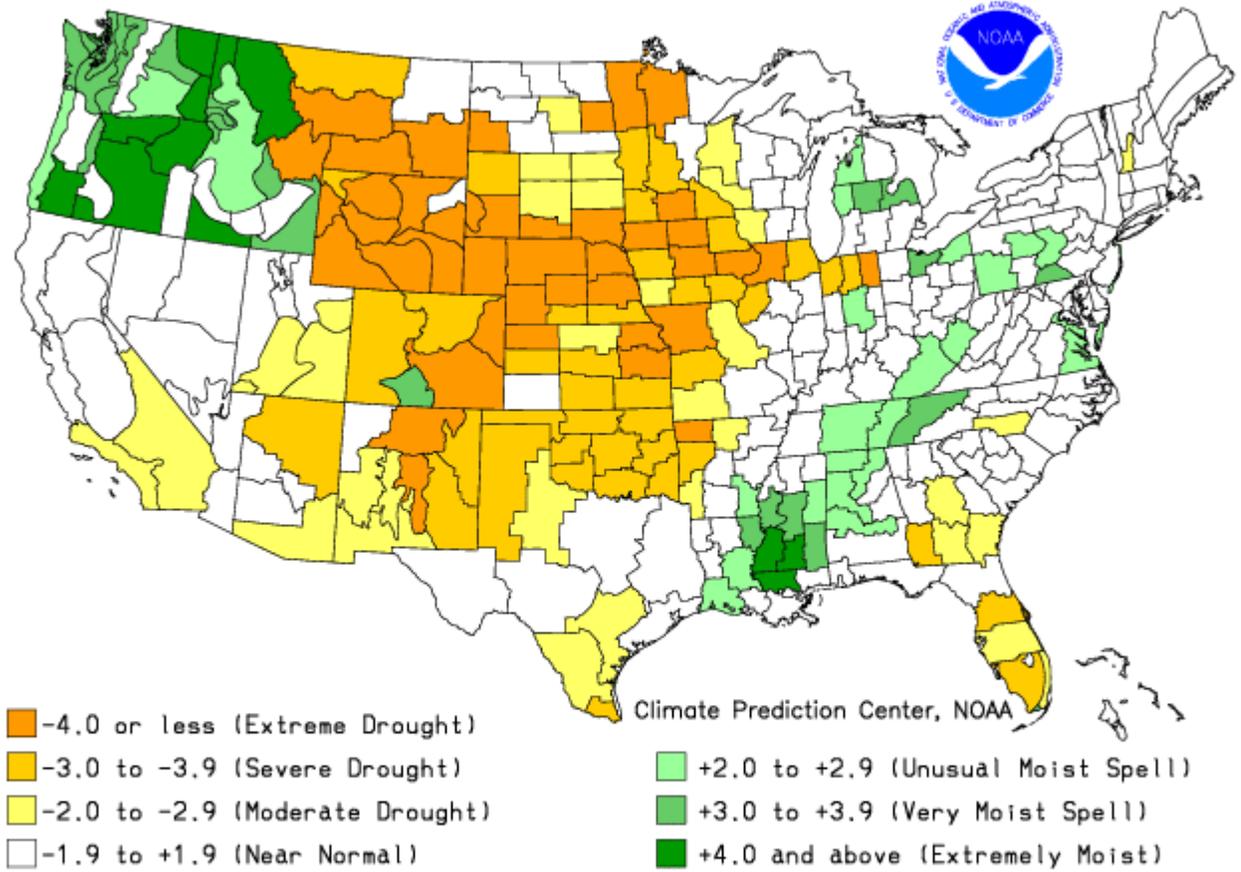
*Flow duration and record low mean daily flow significantly affected by reservoir operations

**Estimated

Source: USGS, NH DES

SUMMARY	Below 0.99 Flow?	Below 7Q10 Flow?	Below Record Flow?
FALSE =	20	24	10
TRUE =	0	0	0

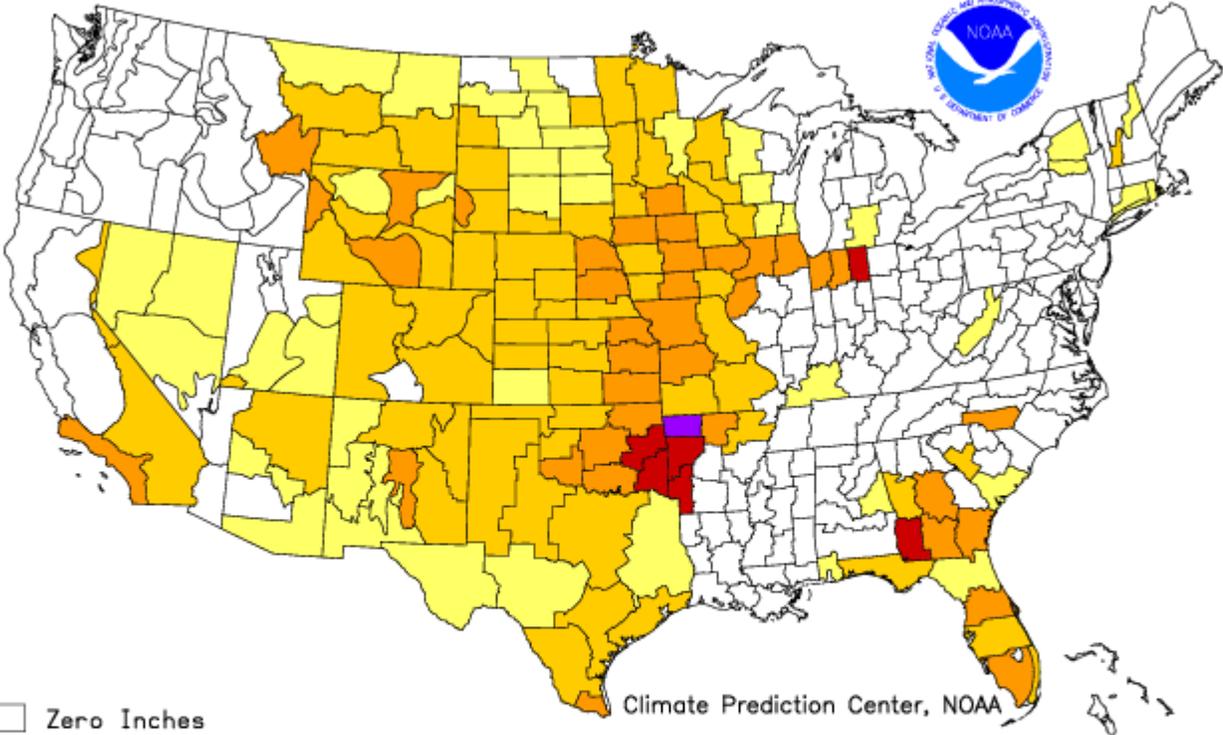
Drought Severity Index by Division
Weekly Value for Period Ending JAN 26, 2013
Long Term Palmer



THE PALMER DROUGHT SEVERITY INDEX

The Palmer Index uses temperature and rainfall information in a formula to determine dryness. The advantage of the Palmer Index is that it is standardized to local climate.

Additional Precip. Needed (In.) to Bring PDI to -0.5
Weekly Value for Period Ending JAN 26, 2013
Long Term Palmer Drought Severity Index (PDI)



This is the amount of rainfall required in a week's time to bring the index back to zero inches required.