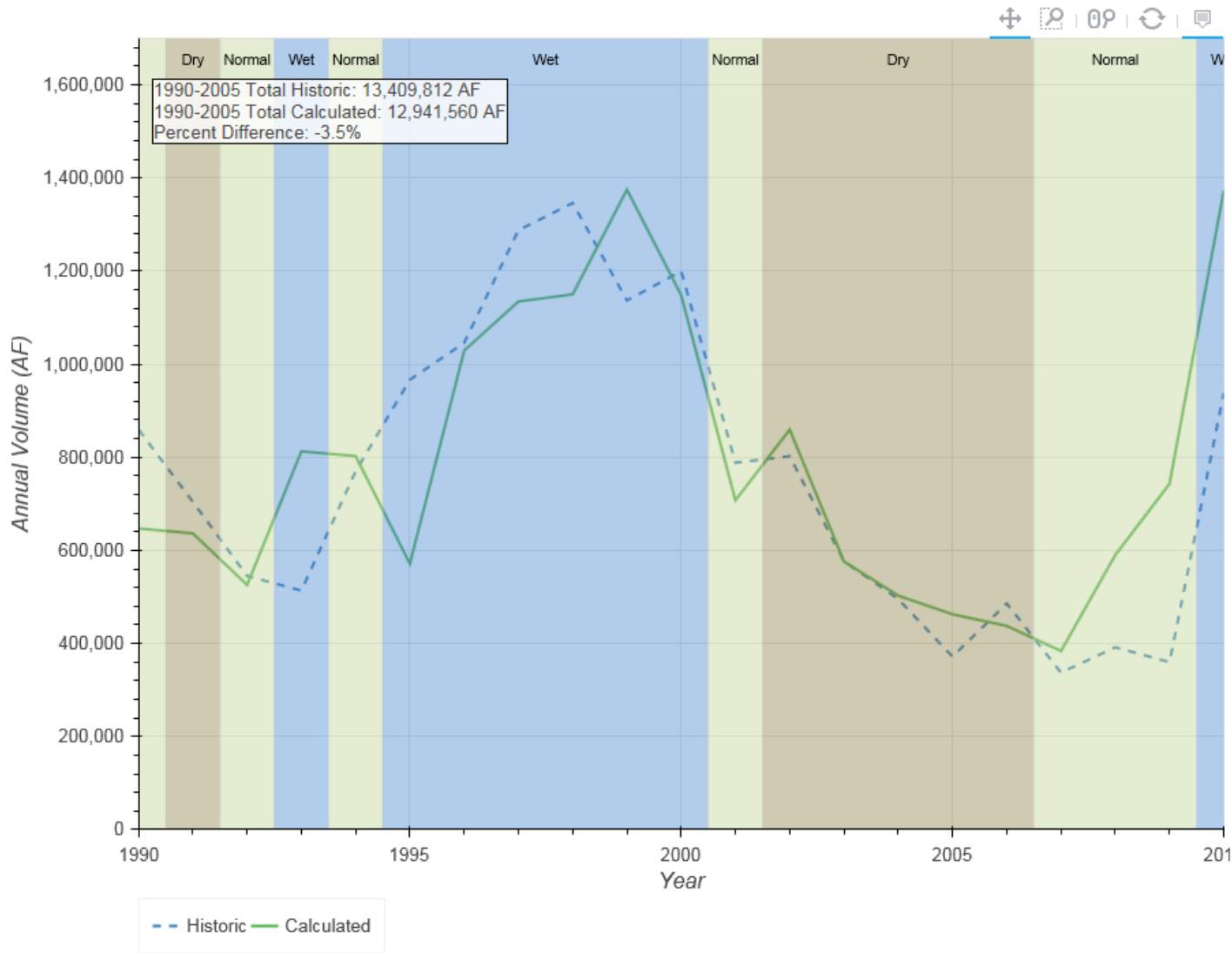


## Surface Water Model Calibration Results – Main Stem Gages

Appendix 6-I contains calibration results for the Platte River main stem gages. Figures include annual and daily simulated and historic flows plotted for each gage for the period 1990-2005. Daily plots include the cumulative differences between historic and modeled daily flow for each gage as well (simulated – historic; positive cumulative difference represents an over prediction by the model). The shaded background in the figures represents the annual wet/dry/normal hydrologic classification of the Platte River basin as determined by US F&WS and is included to assess model performance over varying hydrologic conditions. For select gage locations, daily plots in four-year intervals are provided for more detailed inspection of daily model performance. A location map is provided on the plots to identify the gage spatially in the model domain. Finally, a summary table displays the total historic releases, total calculated (modeled) releases, and percent difference for the period 1990-2005. Gage locations include the following:

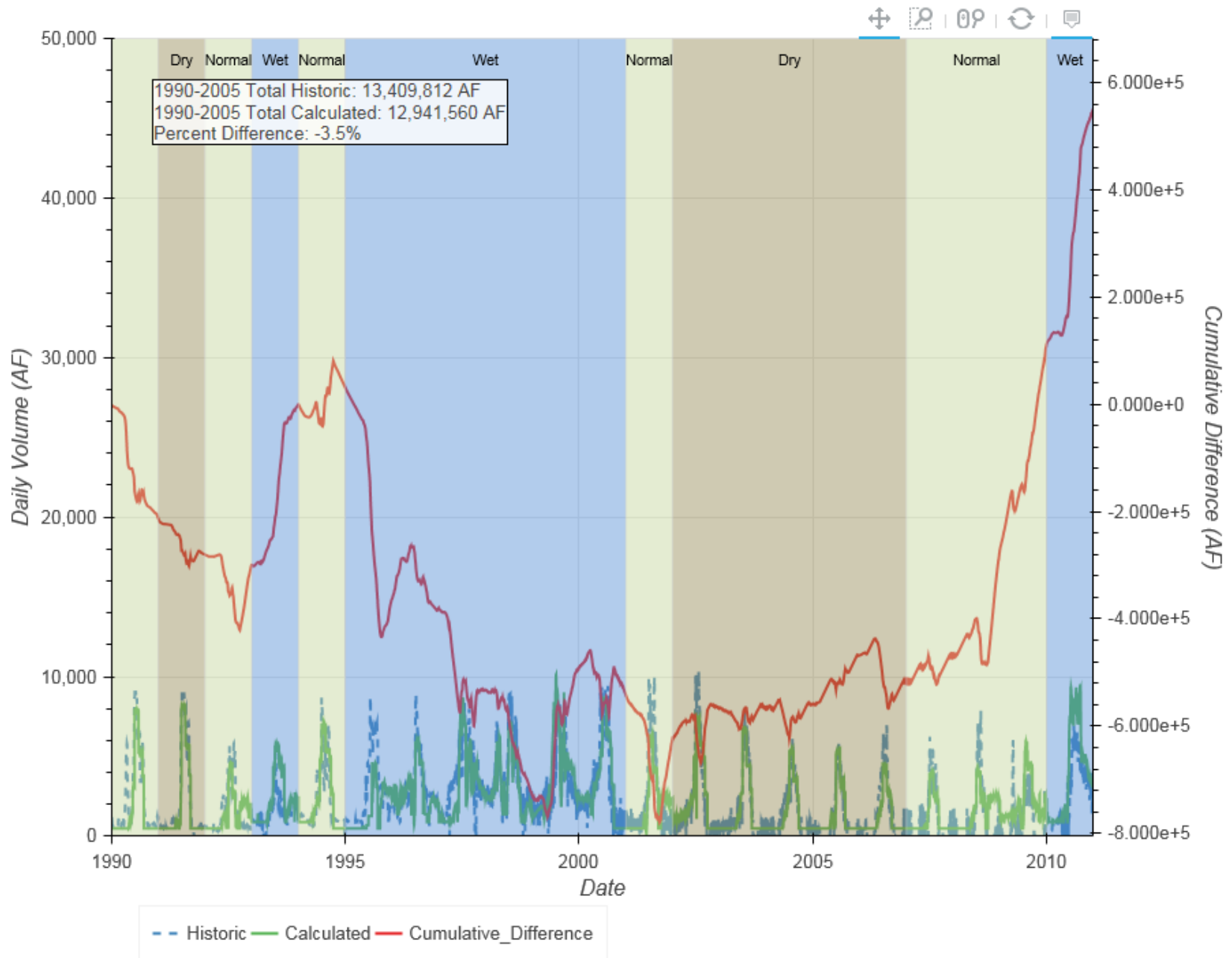
- Lake McConaughy Releases
- North Platte River at Keystone
- North Platte River at North Platte
- South Platte River at Roscoe
- South Platte River at North Platte
- Platte River at North Platte
- Platte River at Brady
- Platte River at Cozad
- Platte River near Overton
- Platte River nr Odessa
- Platte River nr Grand Island
- Platte River at Duncan

# Lake McConaughy Releases

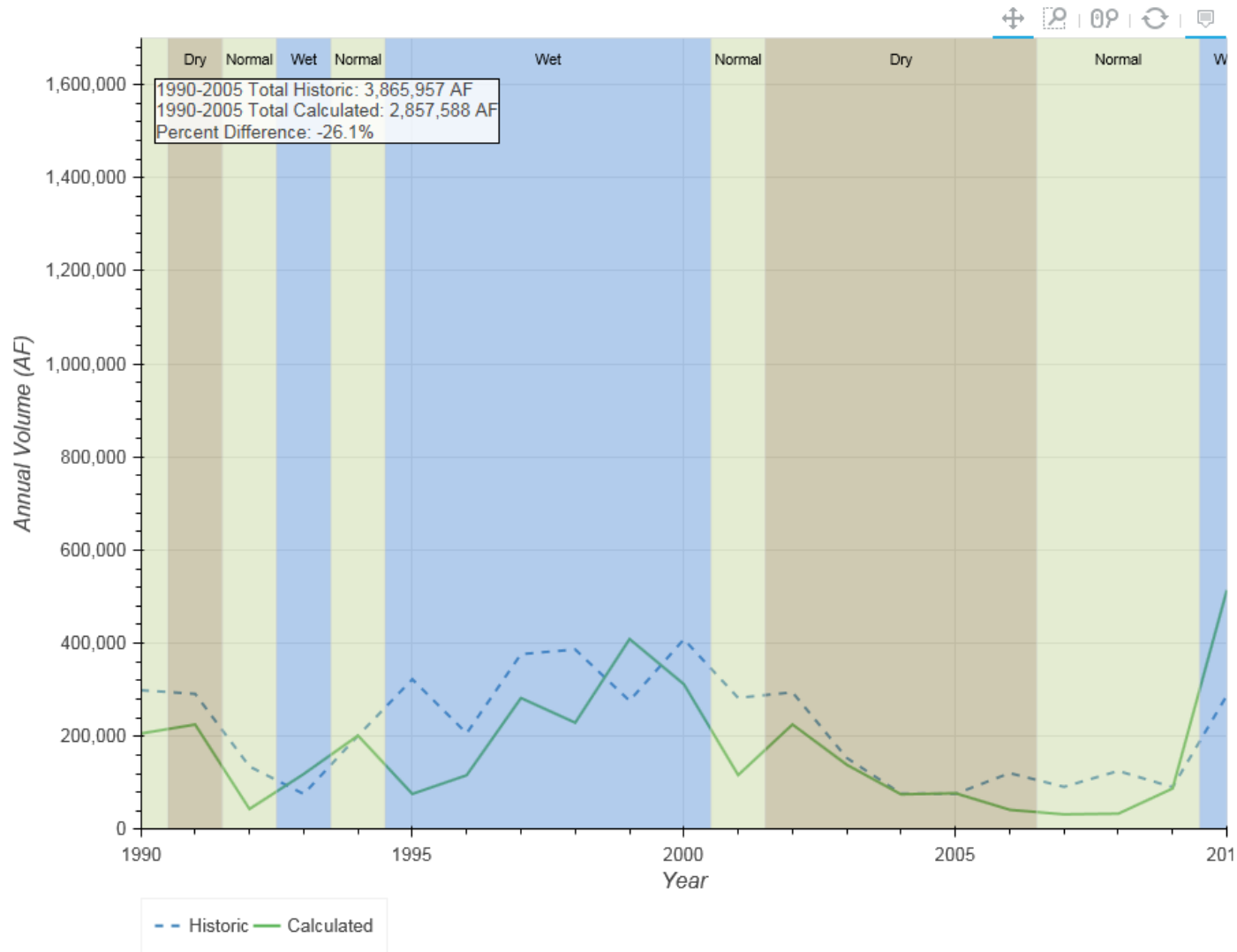


Year	Historic	Calculated
1990	859,331	646,980
1991	704,356	636,496
1992	545,093	525,721
1993	513,606	812,738
1994	769,886	802,595
1995	966,647	571,307
1996	1,045,833	1,029,240
1997	1,287,648	1,134,675
1998	1,346,229	1,150,059
1999	1,136,956	1,375,079
2000	1,199,776	1,148,074
2001	788,215	707,585
2002	802,329	859,574
2003	576,730	575,970
2004	495,455	502,748
2005	371,723	462,719
2006	485,923	437,668
2007	337,241	383,876
2008	391,775	590,088
2009	359,974	742,940
2010	938,236	1,373,395
Total	15,922,961	16,469,526

# Lake McConaughy Releases

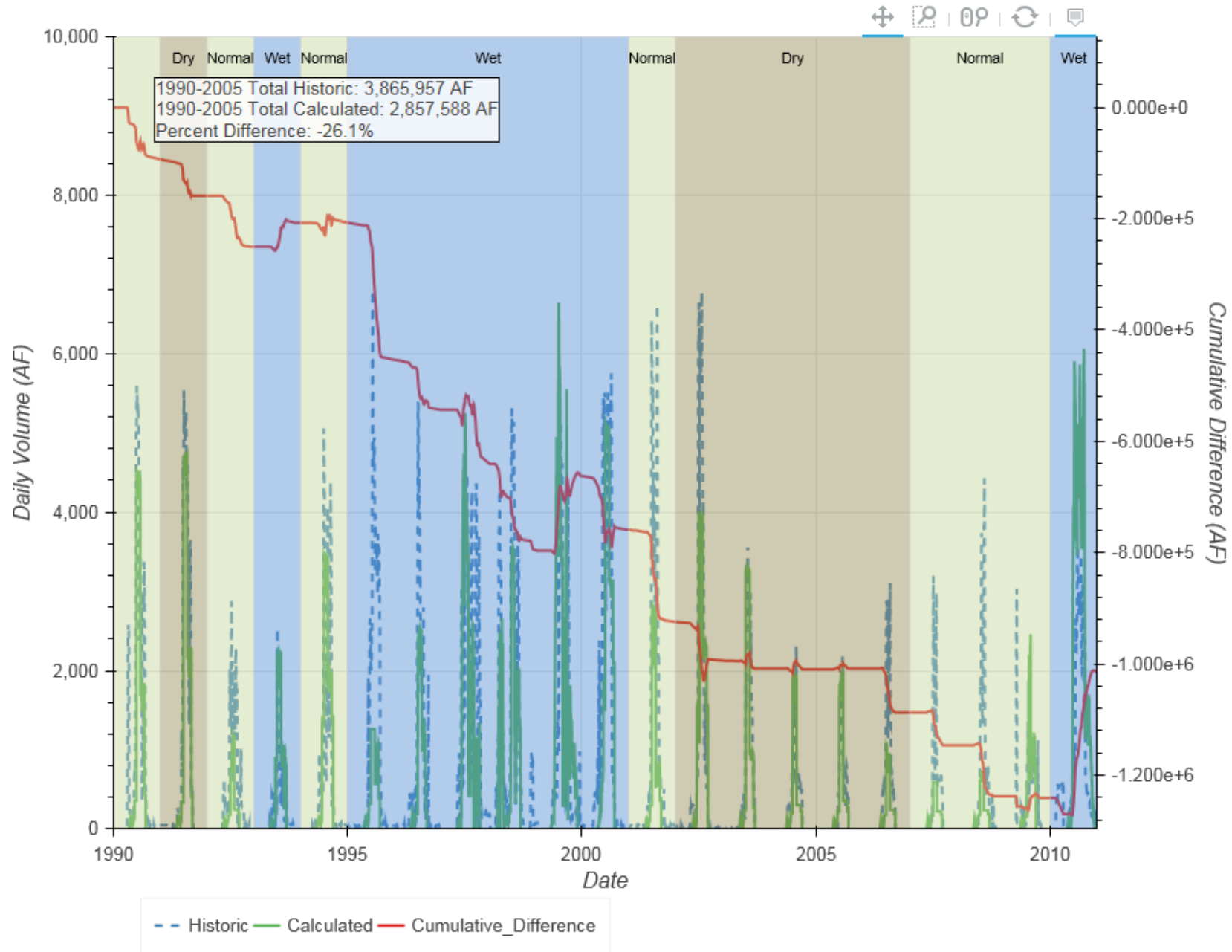


# North Platte River at Keystone

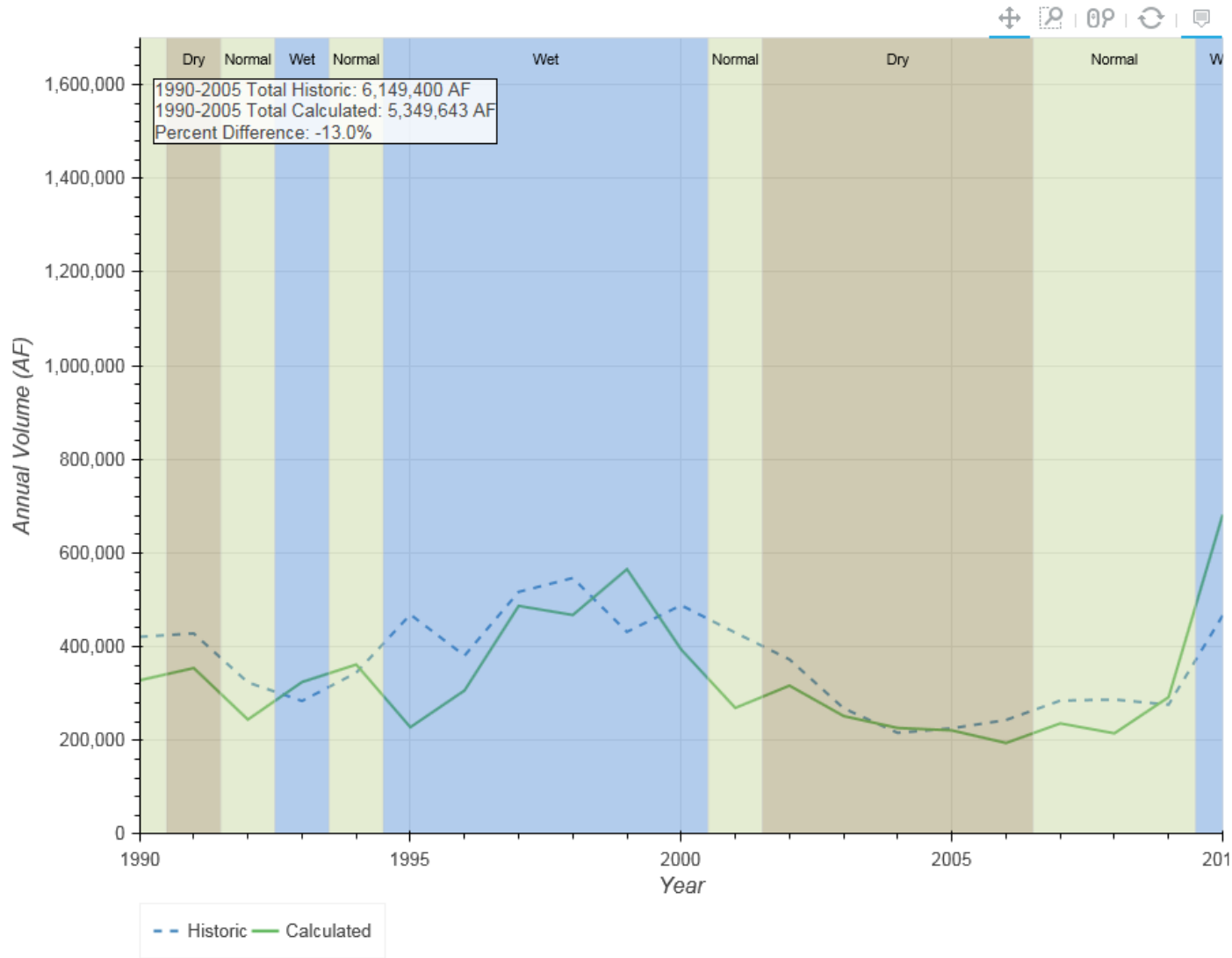


Year	Historic	Calculated
1990	299,107	206,125
1991	291,368	225,502
1992	135,533	44,005
1993	76,217	119,245
1994	201,606	201,716
1995	322,603	76,348
1996	206,640	116,565
1997	376,745	282,407
1998	386,615	229,354
1999	276,422	409,193
2000	408,632	312,143
2001	282,680	116,973
2002	294,771	225,544
2003	153,688	139,116
2004	77,013	75,428
2005	76,319	77,926
2006	121,131	42,343
2007	91,646	32,567
2008	125,793	33,983
2009	90,913	88,096
2010	288,058	514,130
Total	4,583,498	3,568,708

# North Platte River at Keystone

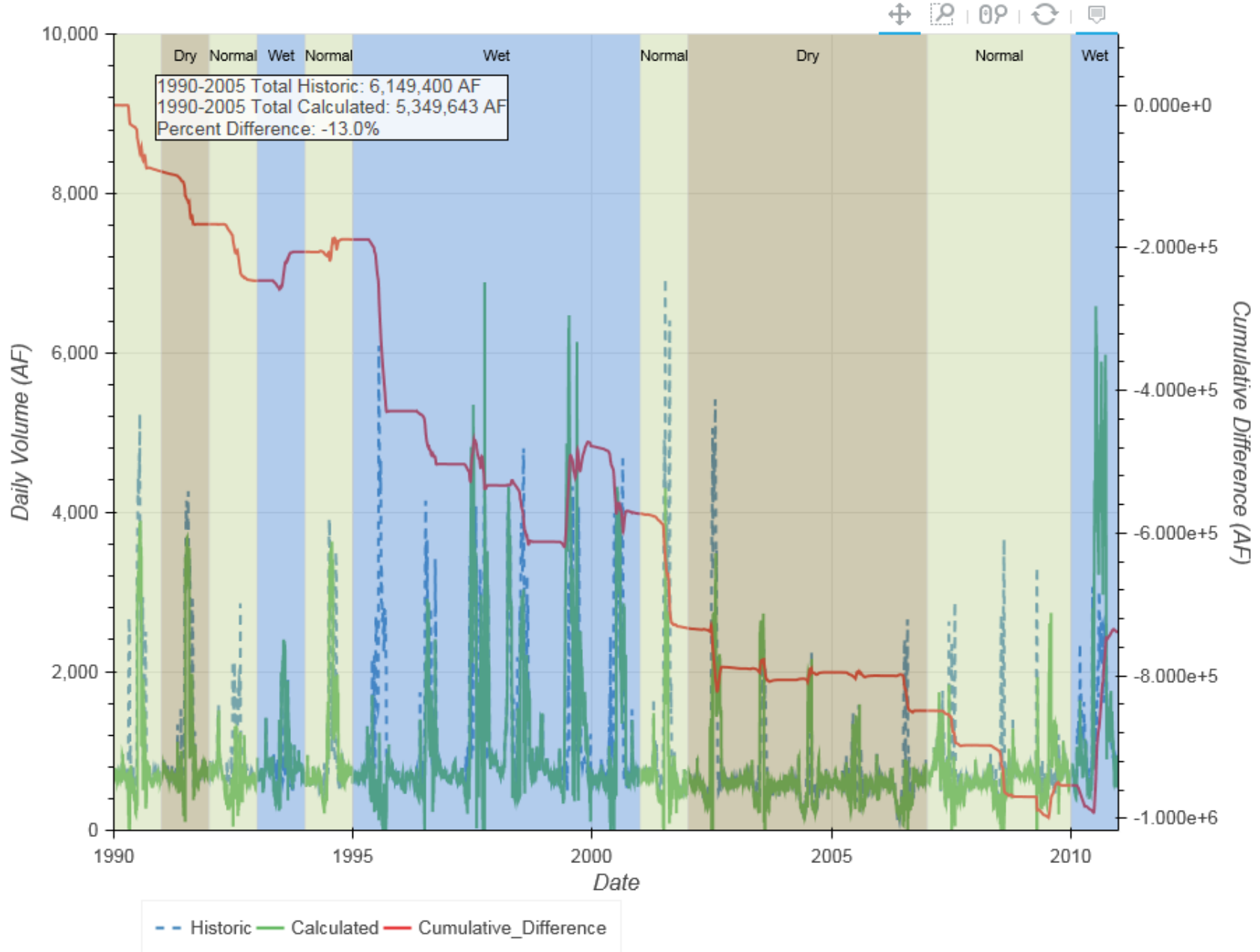


# North Platte River at North Platte

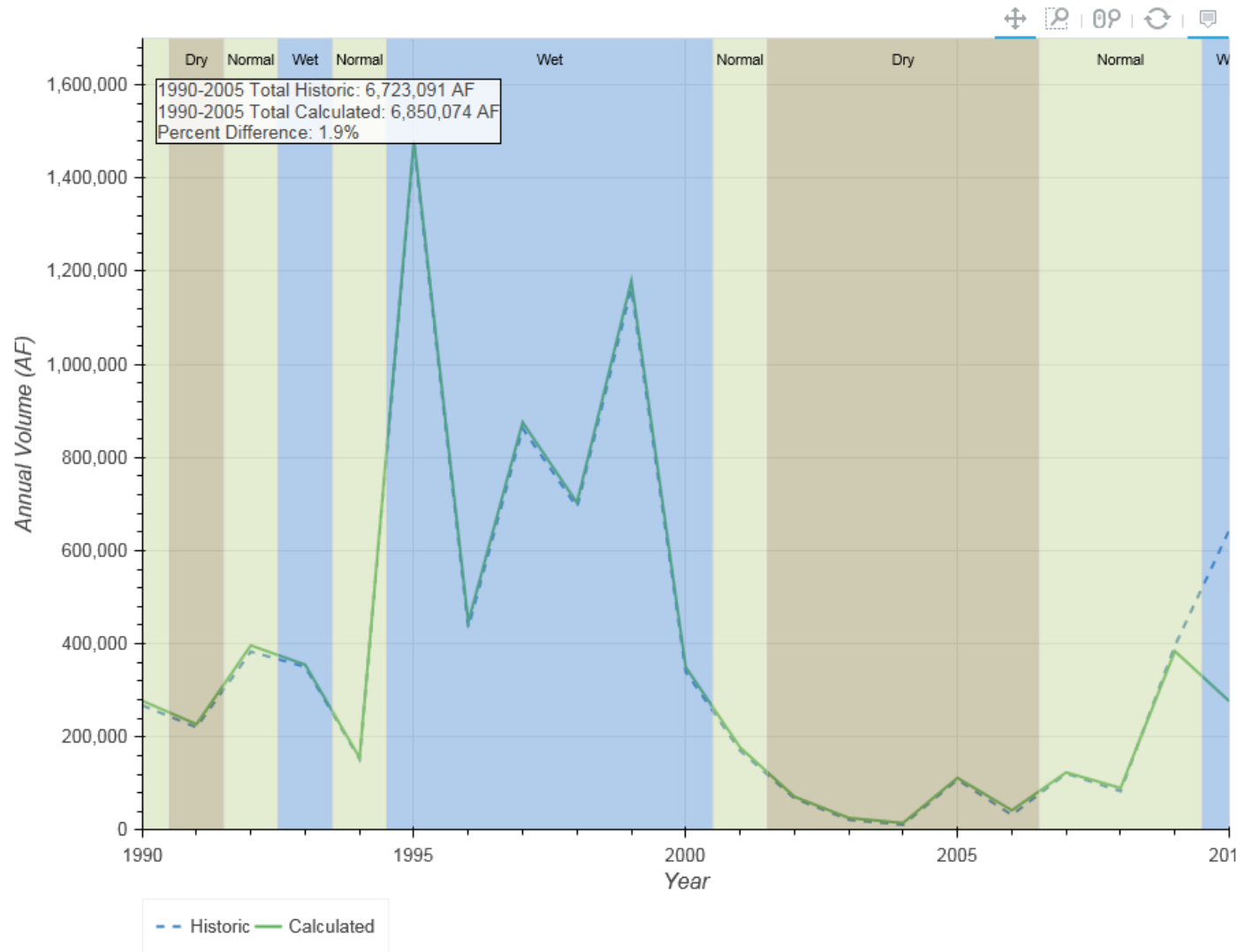


Year	Historic	Calculated
1990	421,202	328,345
1991	428,321	354,424
1992	323,796	244,524
1993	284,215	324,556
1994	344,438	361,956
1995	468,795	228,174
1996	380,997	306,633
1997	517,051	487,201
1998	546,770	467,807
1999	431,744	565,621
2000	488,634	394,071
2001	430,007	269,389
2002	372,895	316,992
2003	268,532	252,014
2004	216,046	226,574
2005	225,959	221,363
2006	243,521	194,475
2007	284,936	236,344
2008	287,189	215,090
2009	276,399	292,316
2010	466,828	682,016
Total	7,708,272	6,969,885

# North Platte River at North Platte



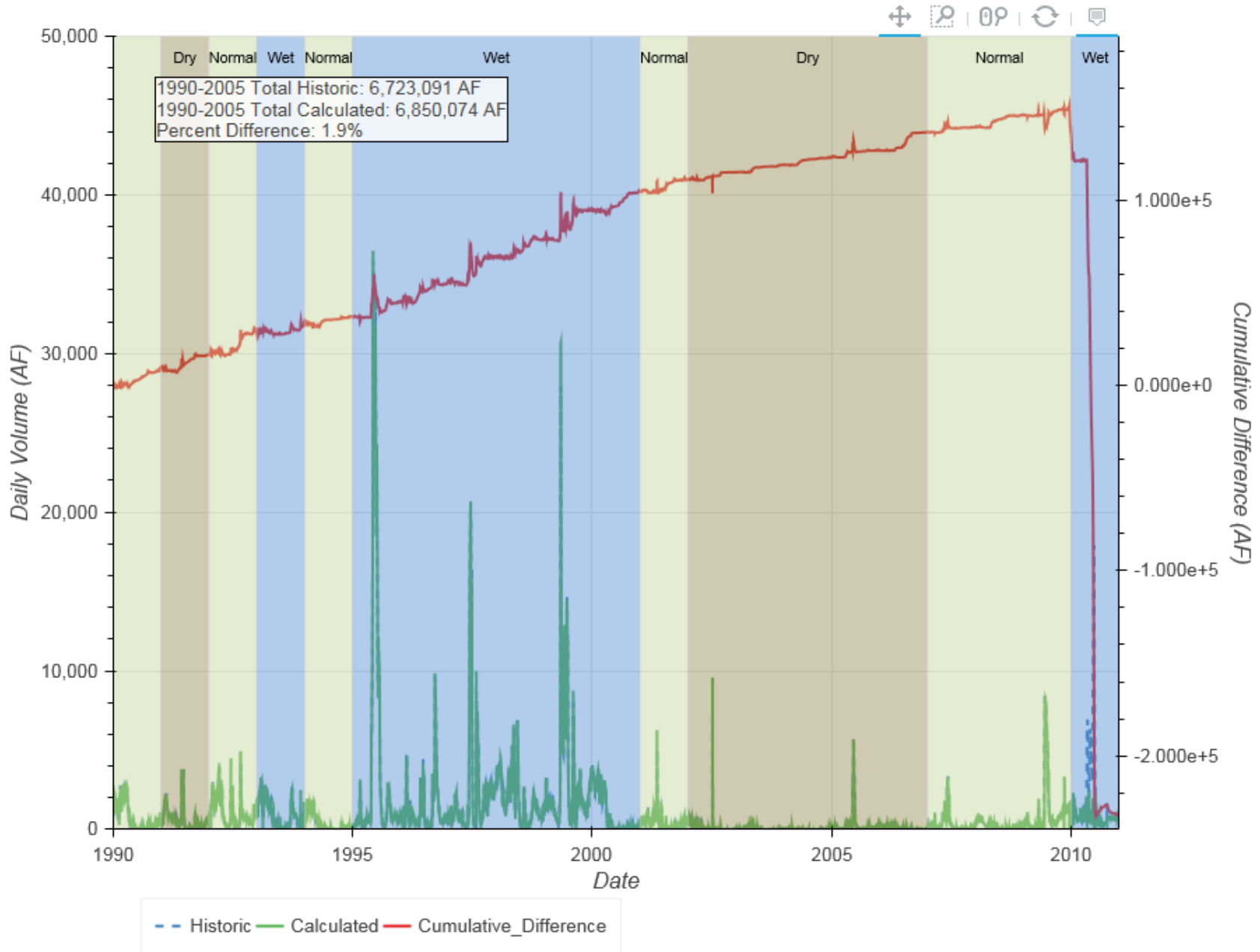
# South Platte River at Roscoe



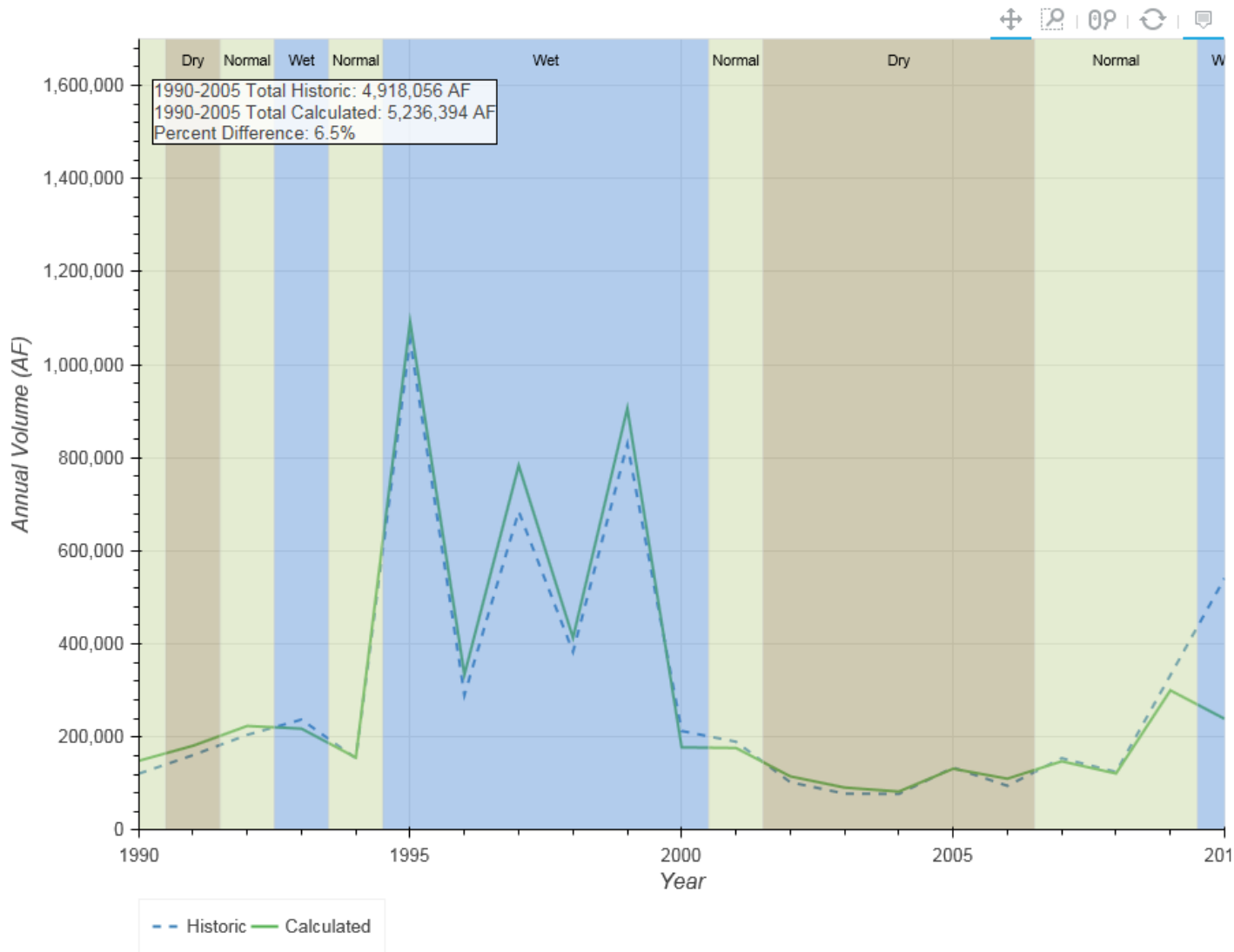
Year	Historic	Calculated
1990	267,935	277,791
1991	220,670	227,387
1992	383,216	396,486
1993	350,654	355,029
1994	152,442	155,352
1995	1,472,547	1,480,645
1996	435,465	446,792
1997	862,223	875,439
1998	693,612	702,748
1999	1,163,302	1,179,230
2000	340,042	349,911
2001	170,991	177,632
2002	68,088	71,766
2003	22,204	26,195
2004	11,430	15,511
2005	108,273	112,161
2006	32,529	42,513
2007	121,740	124,007
2008	83,472	90,403
2009	396,254	384,272
2010	644,049	276,840
Total	8,001,135	7,768,110



# South Platte River at Roscoe

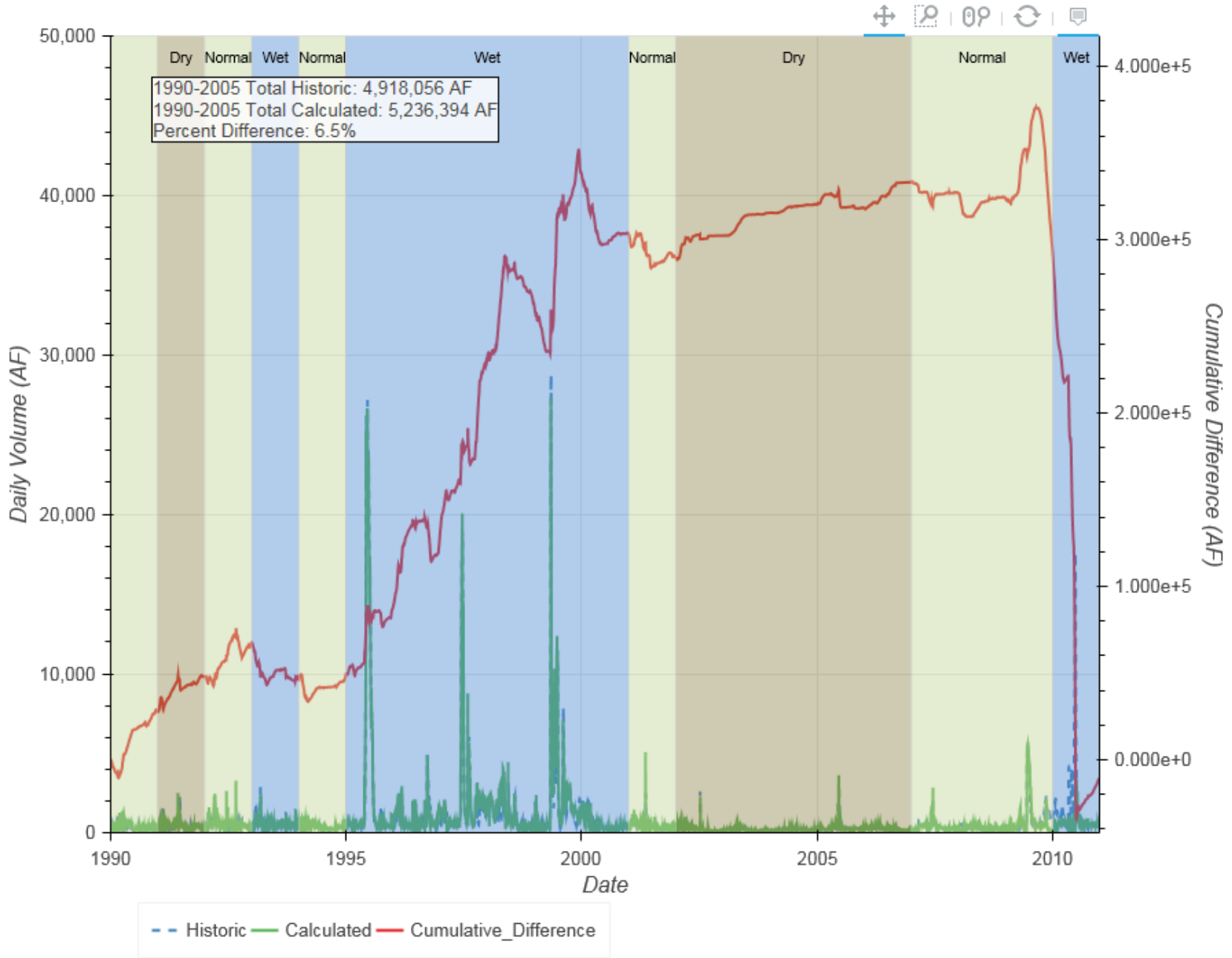


# South Platte River at North Platte

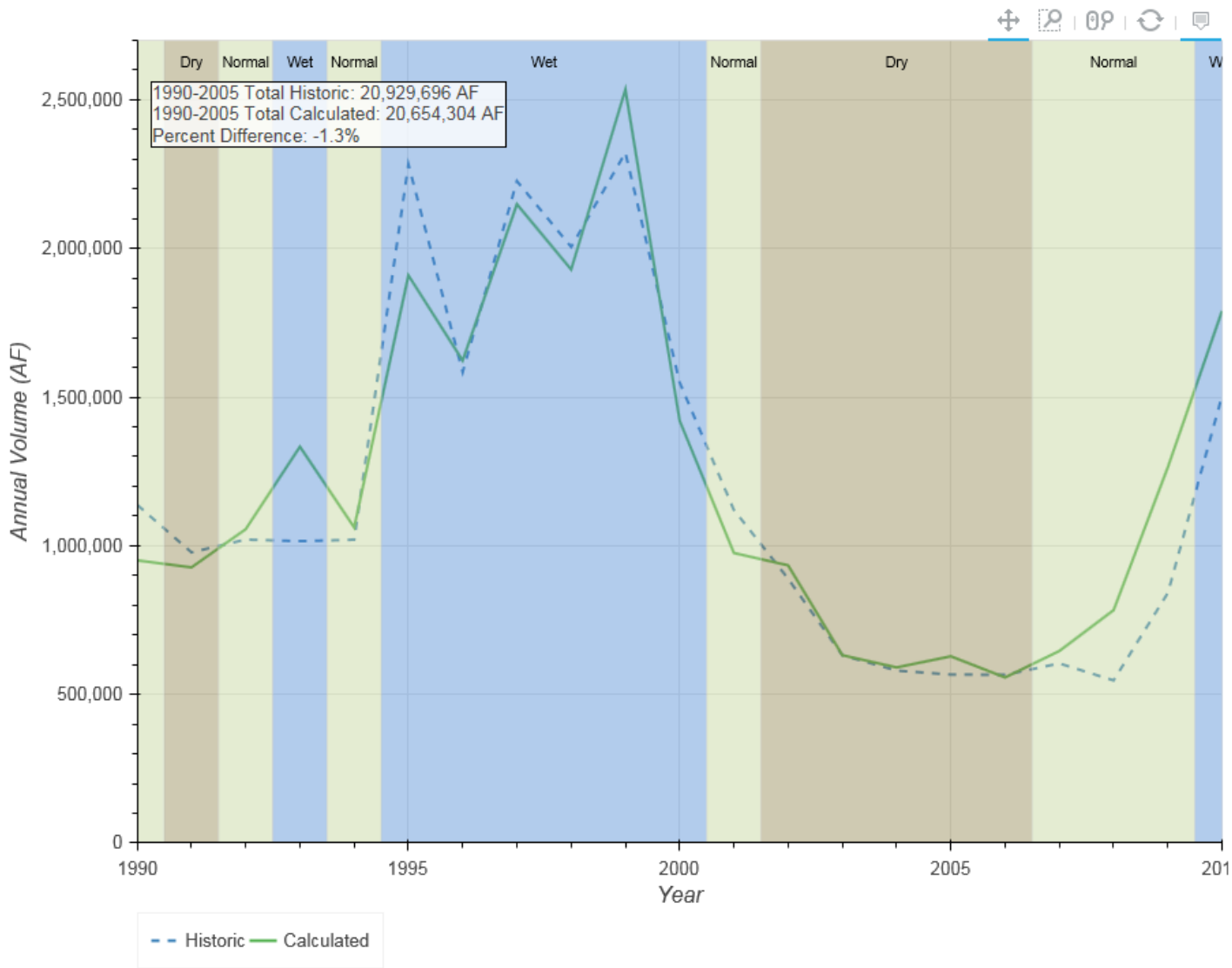


Year	Historic	Calculated
1990	121,311	149,000
1991	161,181	181,321
1992	204,797	224,067
1993	237,582	218,146
1994	154,608	156,103
1995	1,053,602	1,092,473
1996	290,344	334,433
1997	684,754	783,640
1998	383,151	413,421
1999	829,626	906,605
2000	213,140	178,056
2001	190,090	176,758
2002	103,160	115,737
2003	78,494	91,627
2004	77,925	82,964
2005	134,291	132,043
2006	95,344	110,624
2007	154,738	148,018
2008	125,076	121,741
2009	332,904	300,463
2010	541,446	239,246
Total	6,167,564	6,156,487

# South Platte River at North Platte

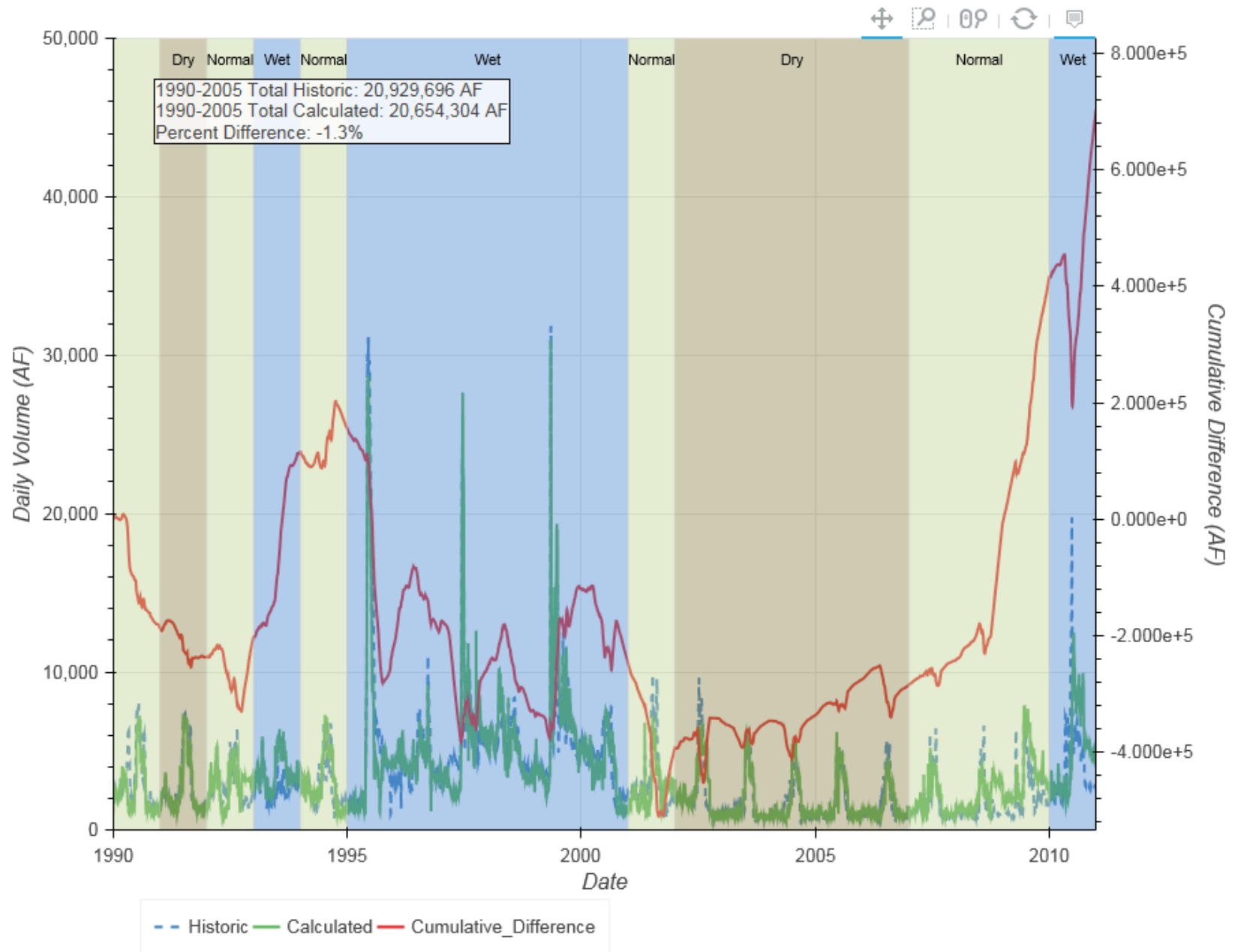


# Platte River at North Platte

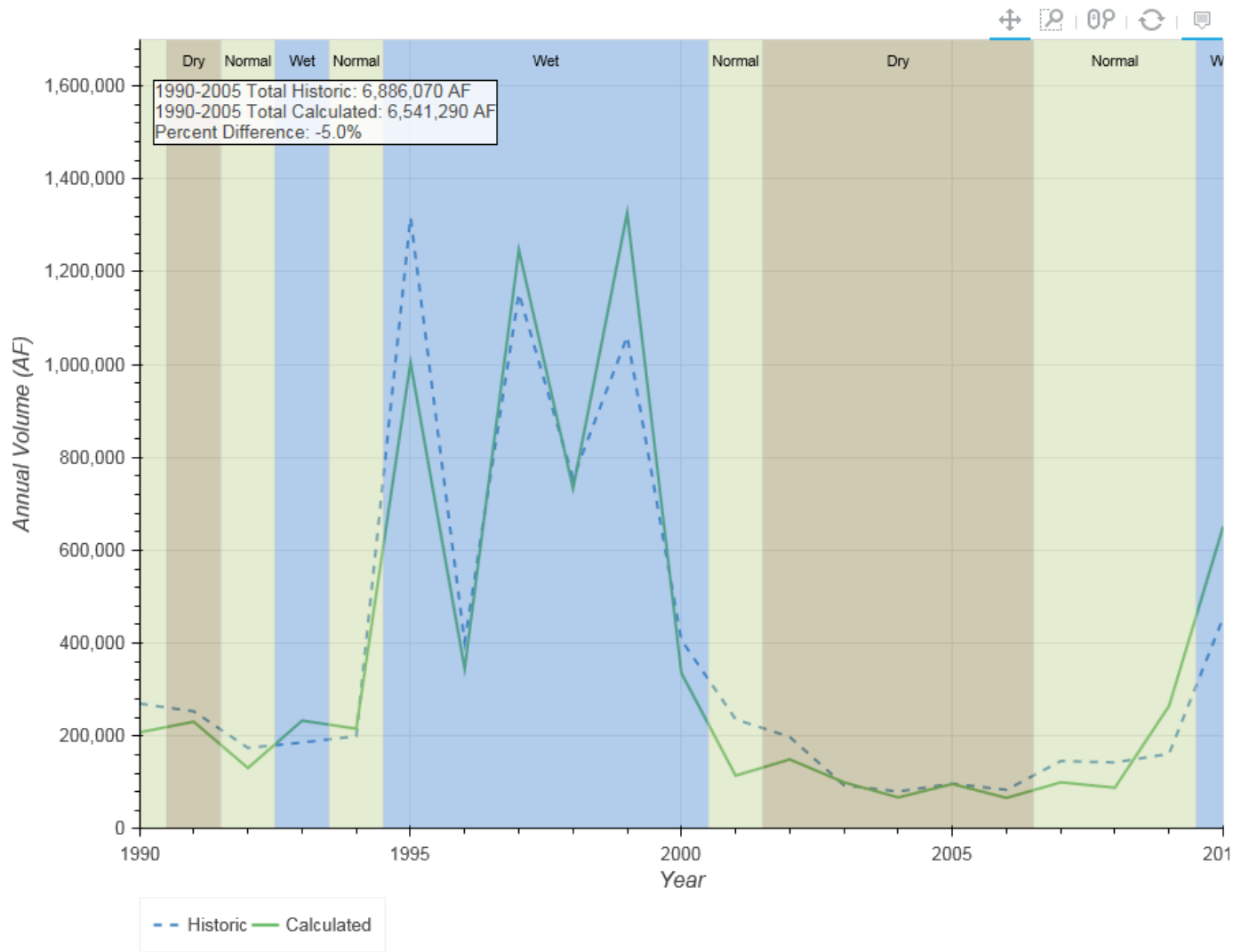


Year	Historic	Calculated
1990	1,137,505	950,830
1991	977,776	927,204
1992	1,020,744	1,055,575
1993	1,015,275	1,333,013
1994	1,020,232	1,061,610
1995	2,283,086	1,909,589
1996	1,584,065	1,622,886
1997	2,226,666	2,148,977
1998	2,005,220	1,929,092
1999	2,322,272	2,534,653
2000	1,549,184	1,420,819
2001	1,120,463	975,740
2002	889,033	933,969
2003	631,500	631,718
2004	580,080	590,561
2005	566,597	628,069
2006	565,694	556,758
2007	604,054	645,841
2008	546,899	783,172
2009	840,968	1,263,817
2010	1,504,725	1,789,853
Total	24,992,036	25,693,747

# Platte River at North Platte

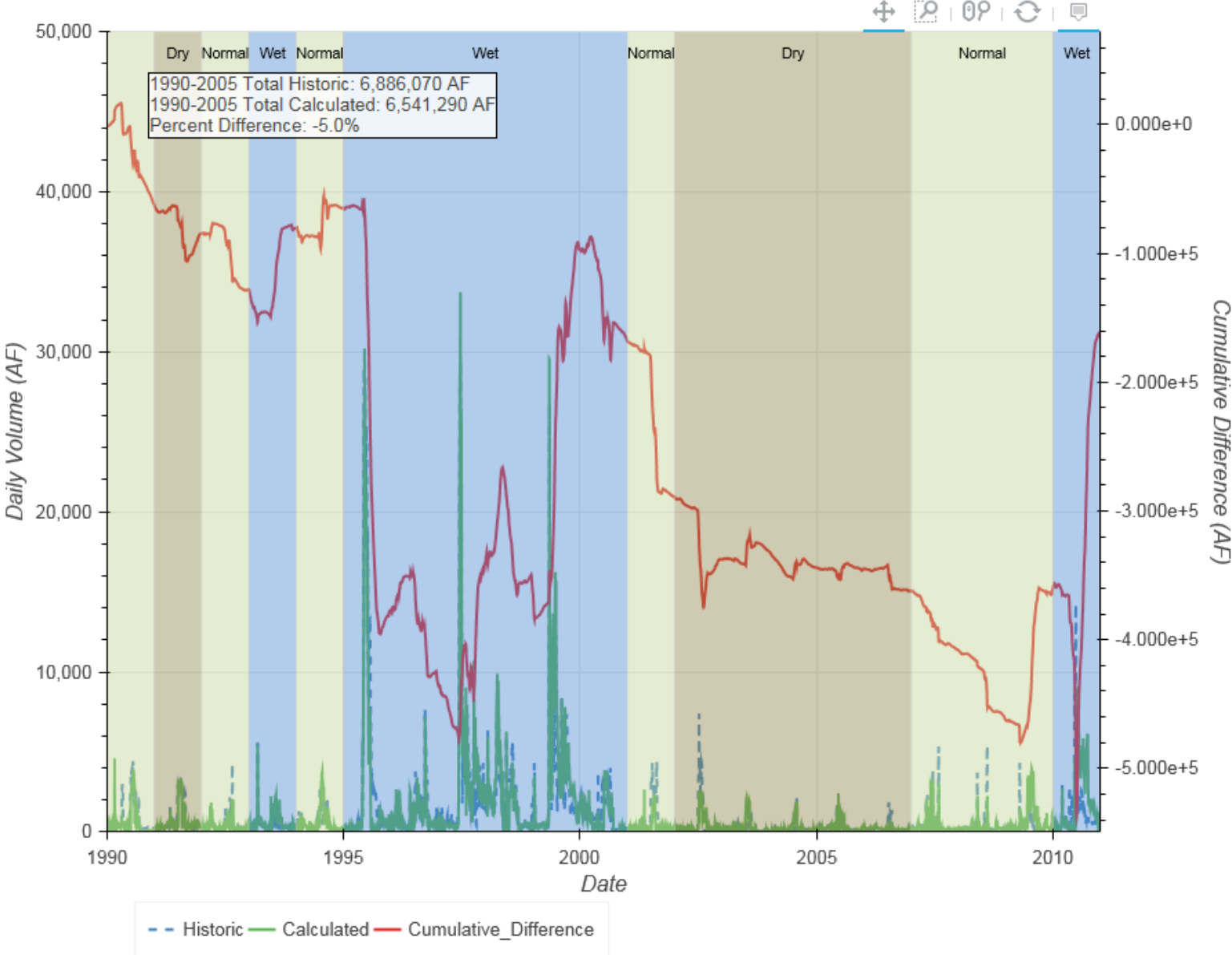


# Platte River at Brady

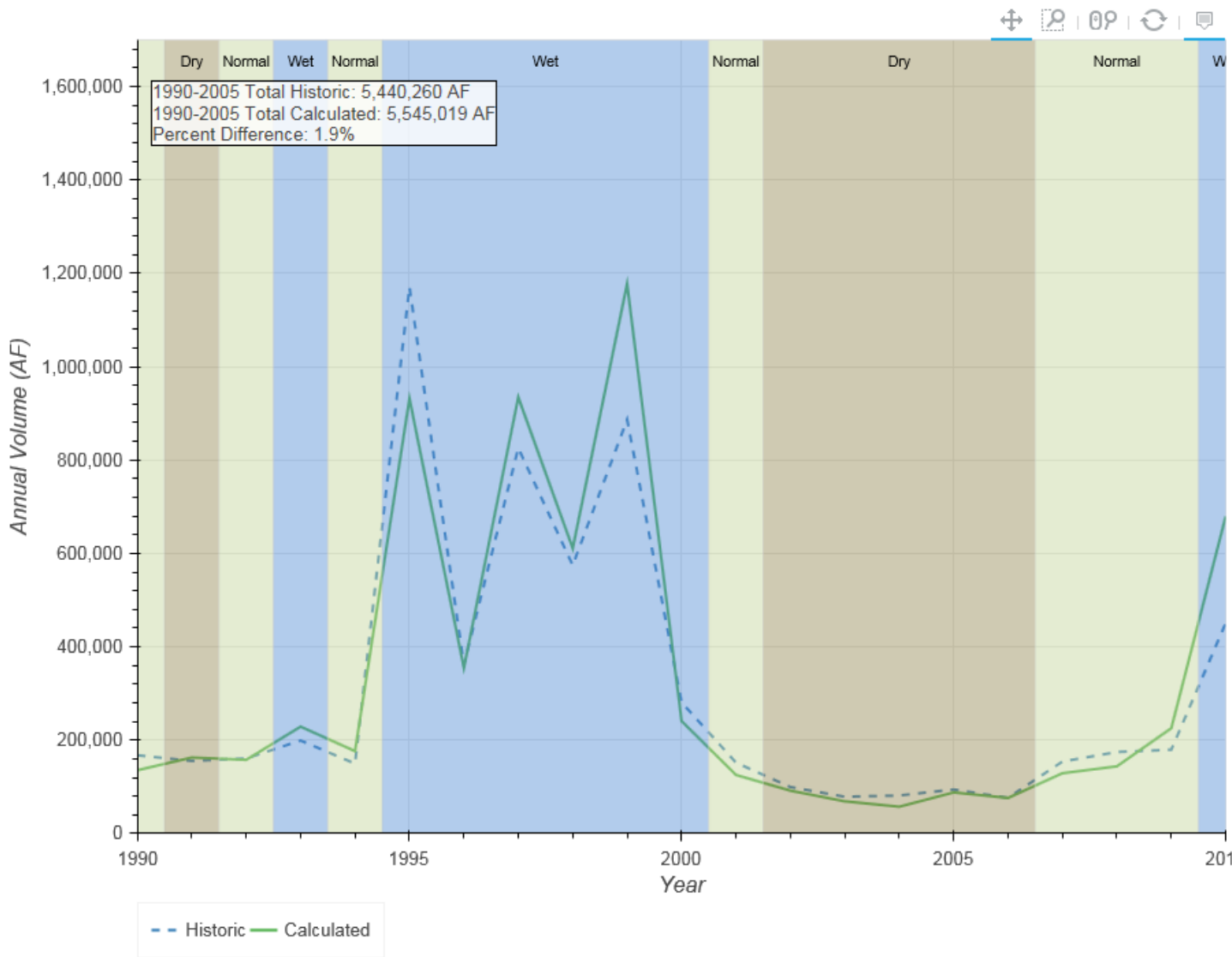


Year	Historic	Calculated
1990	270,083	207,909
1991	253,250	230,933
1992	174,605	131,167
1993	186,048	233,383
1994	199,835	215,782
1995	1,317,285	1,004,494
1996	402,434	345,346
1997	1,153,341	1,247,022
1998	755,096	733,217
1999	1,060,697	1,326,755
2000	406,850	335,549
2001	236,164	114,835
2002	198,125	149,726
2003	94,203	100,405
2004	80,557	67,937
2005	97,499	96,829
2006	84,149	66,734
2007	146,307	100,325
2008	143,193	88,797
2009	161,770	265,291
2010	455,322	651,583
Total	7,876,810	7,714,021

# Platte River at Brady



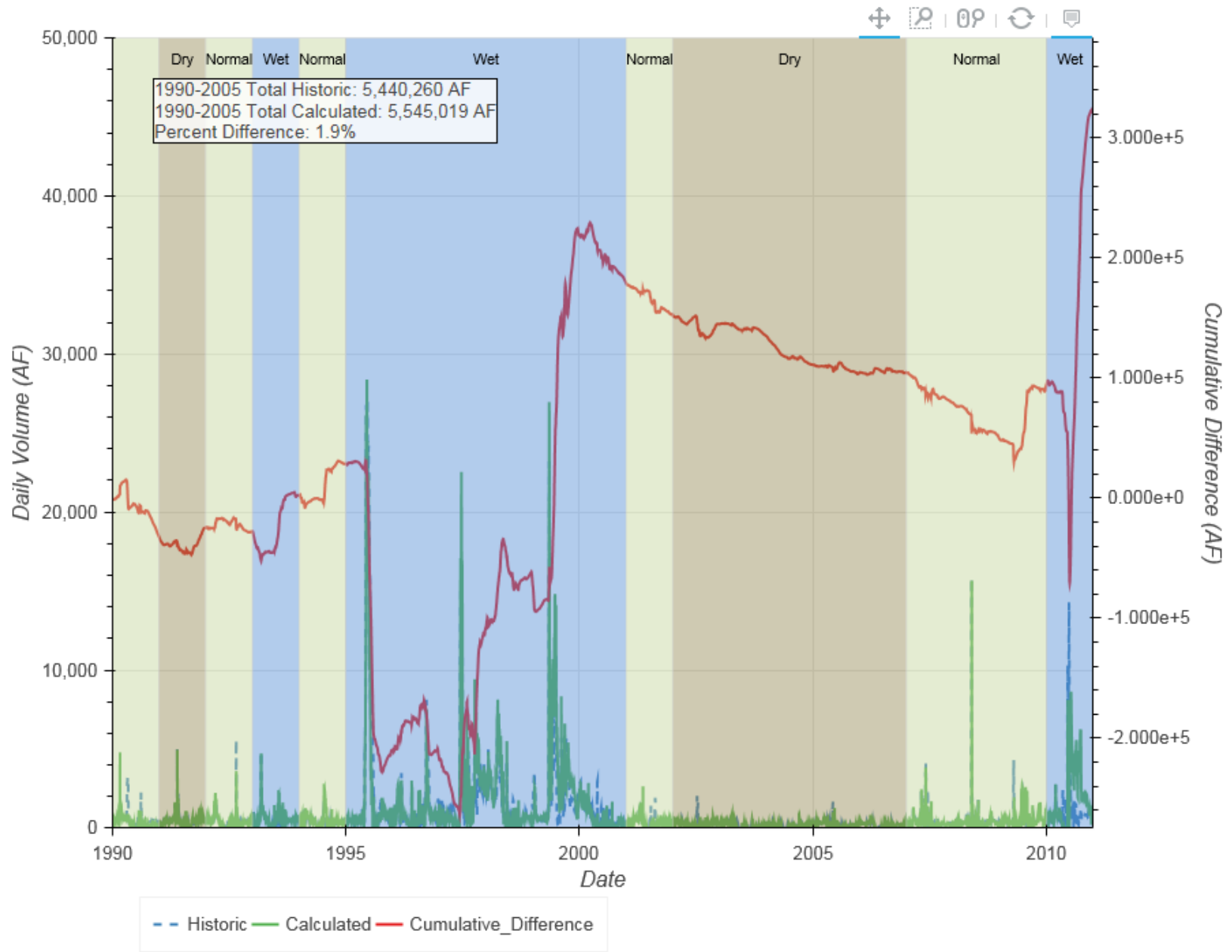
# Platte River at Cozad



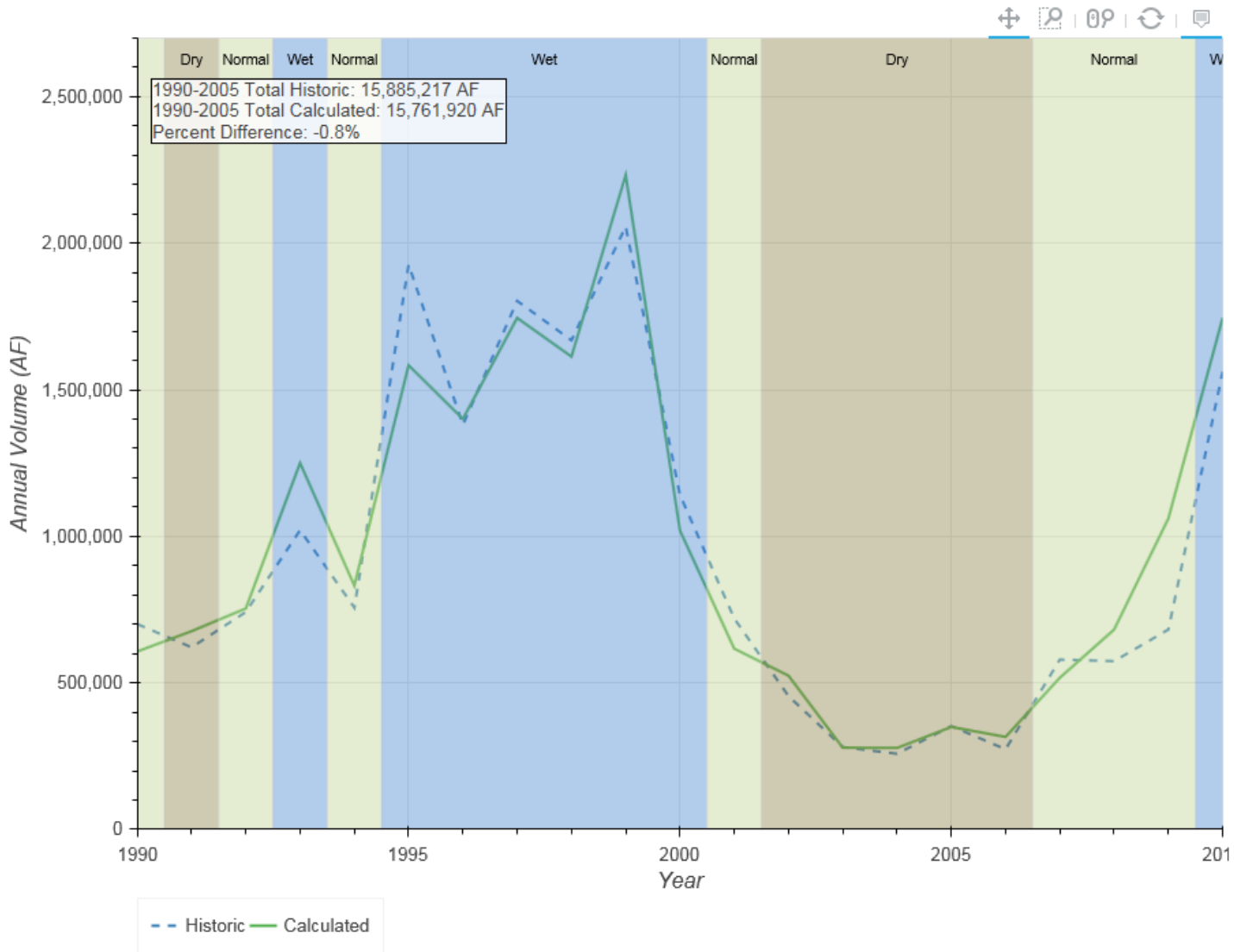
Year	Historic	Calculated
1990	167,641	135,606
1991	155,609	162,836
1992	160,903	157,900
1993	199,259	229,091
1994	149,776	176,488
1995	1,170,889	931,968
1996	361,609	354,704
1997	825,790	934,641
1998	574,665	611,116
1999	886,756	1,177,633
2000	281,115	241,042
2001	151,938	125,617
2002	99,625	91,890
2003	78,813	68,981
2004	81,502	57,435
2005	94,370	88,072
2006	76,439	76,187
2007	154,284	129,244
2008	174,593	143,937
2009	179,660	225,598
2010	450,832	679,493
Total	6,476,068	6,799,478



# Platte River at Cozad

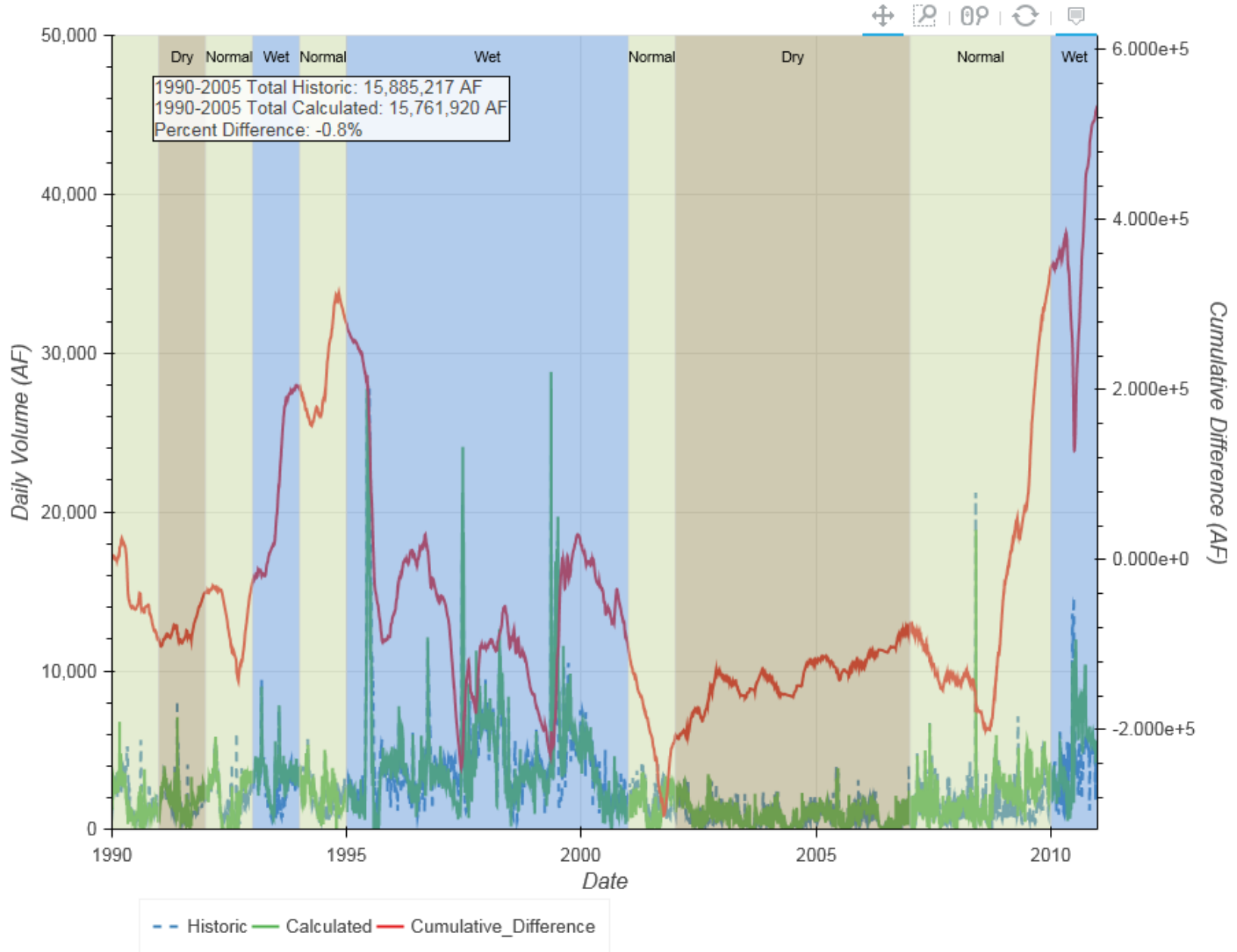


# Platte River near Overton

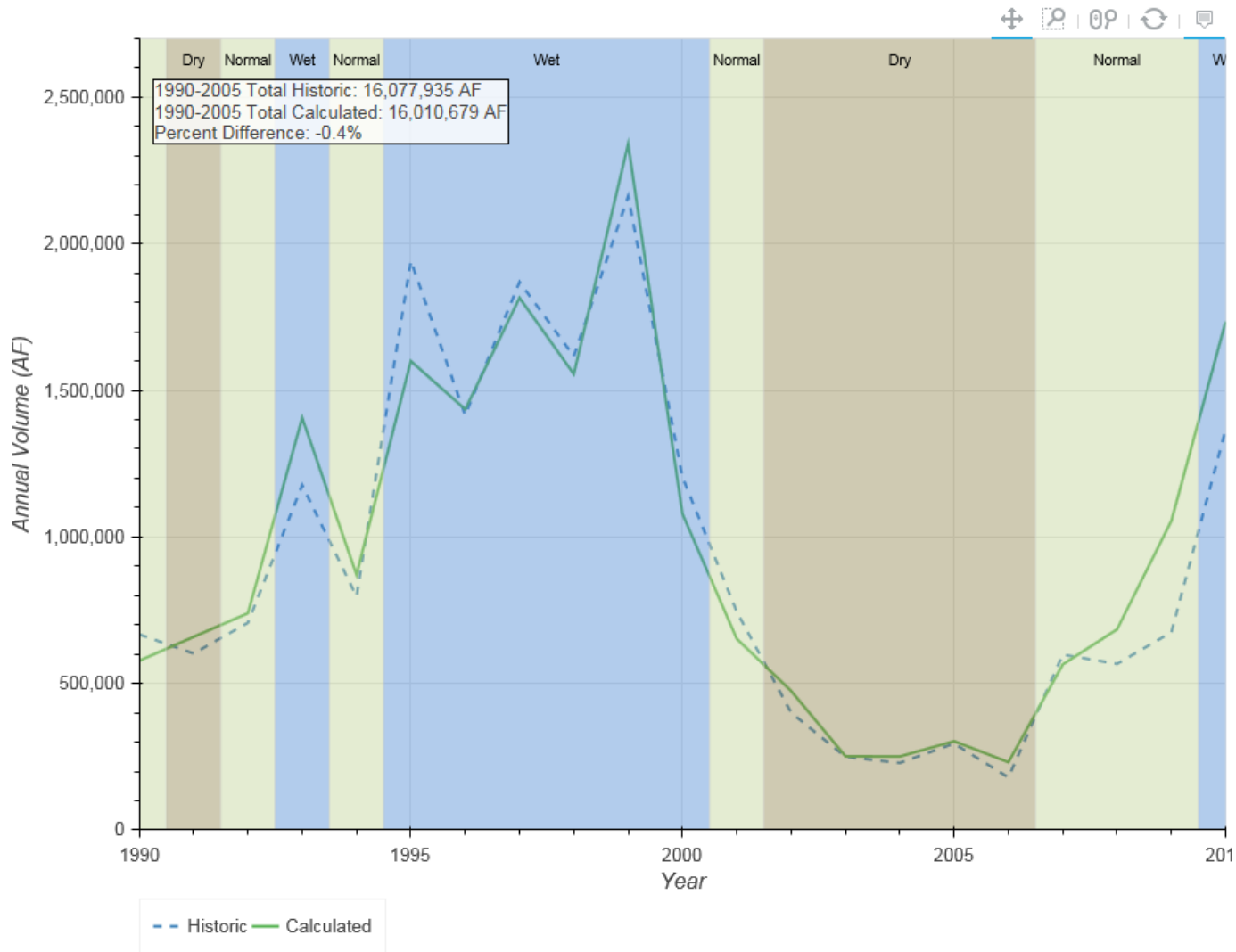


Year	Historic	Calculated
1990	700,628	607,149
1991	621,295	676,390
1992	741,735	754,006
1993	1,021,095	1,250,103
1994	756,629	831,859
1995	1,927,021	1,583,560
1996	1,380,383	1,400,621
1997	1,803,308	1,745,248
1998	1,668,903	1,613,285
1999	2,057,094	2,232,598
2000	1,141,077	1,019,584
2001	719,633	616,646
2002	454,949	524,547
2003	280,957	278,765
2004	258,060	277,860
2005	352,453	349,700
2006	273,459	315,578
2007	579,340	517,504
2008	574,130	681,862
2009	681,929	1,061,041
2010	1,561,636	1,745,388
Total	19,555,712	20,083,294

# Platte River near Overton

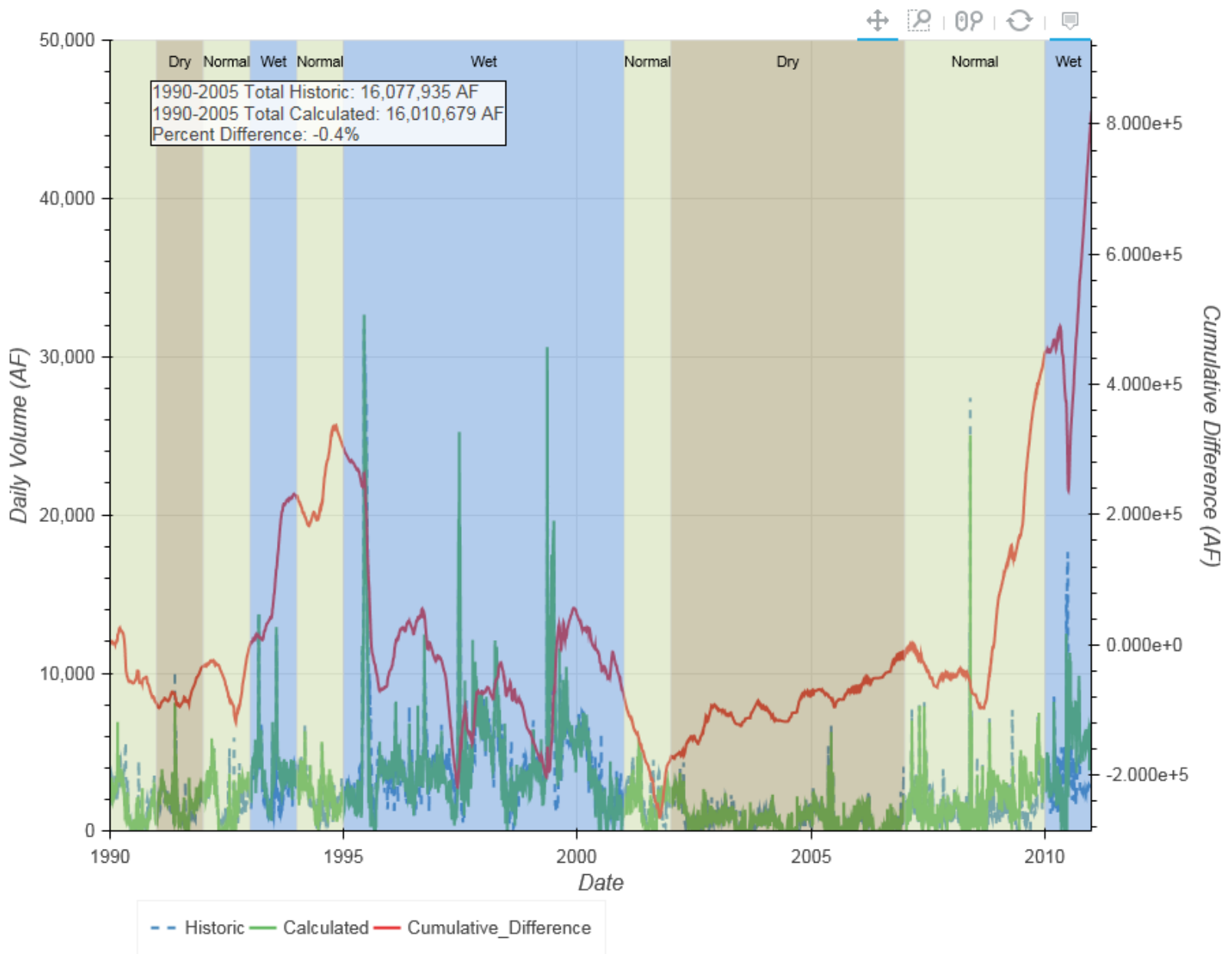


# Platte River near Odessa

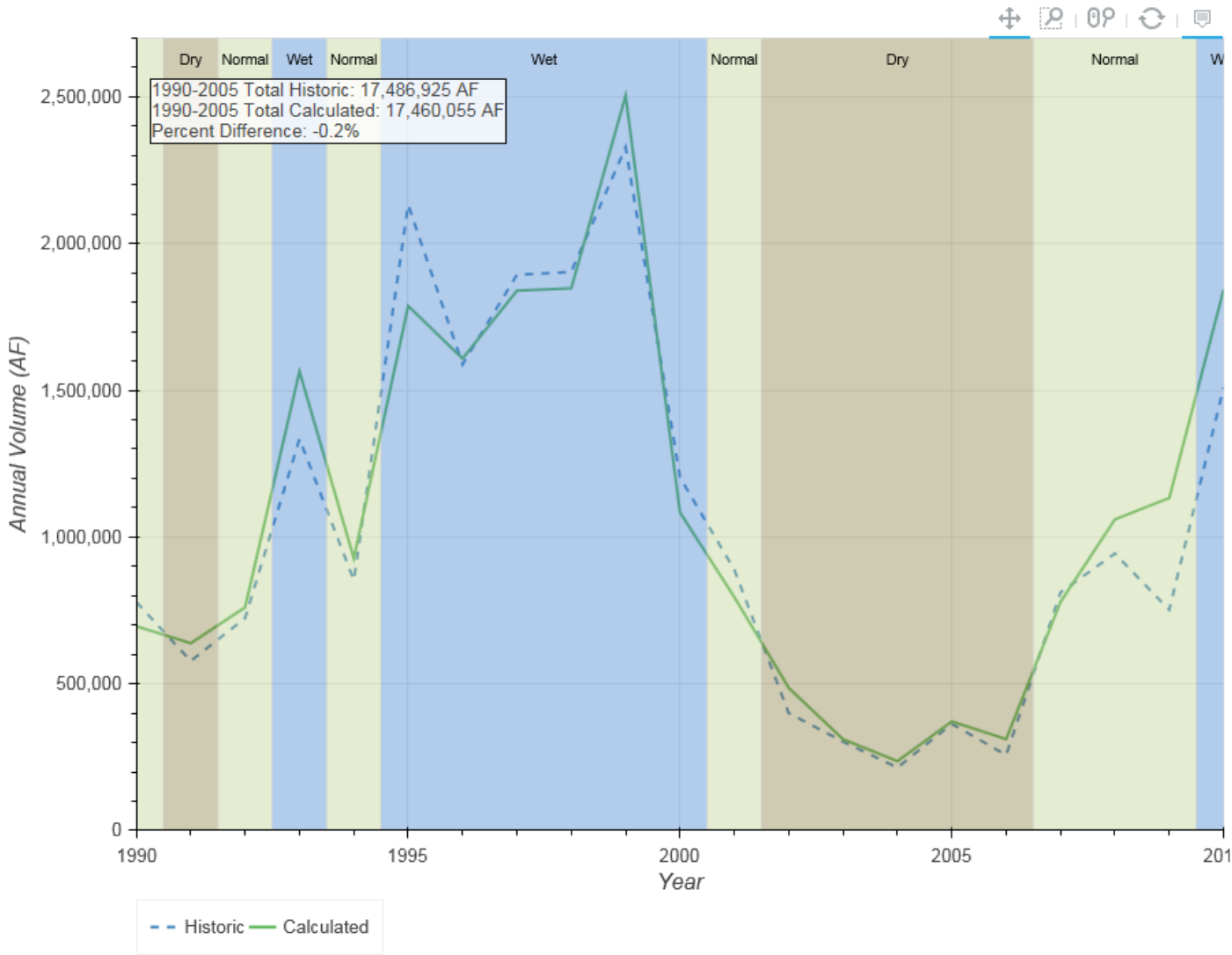


Year	Historic	Calculated
1990	667,446	577,604
1991	602,142	658,934
1992	707,046	739,550
1993	1,176,478	1,406,222
1994	797,078	870,817
1995	1,941,739	1,599,867
1996	1,415,587	1,435,448
1997	1,869,606	1,815,485
1998	1,616,537	1,555,445
1999	2,161,583	2,340,735
2000	1,203,935	1,078,321
2001	744,726	652,299
2002	400,515	474,401
2003	249,635	251,731
2004	228,927	250,756
2005	294,957	303,064
2006	179,550	231,278
2007	598,344	564,634
2008	566,745	684,627
2009	674,803	1,055,152
2010	1,366,224	1,734,814
Total	19,463,602	20,281,184

# Platte River near Odessa

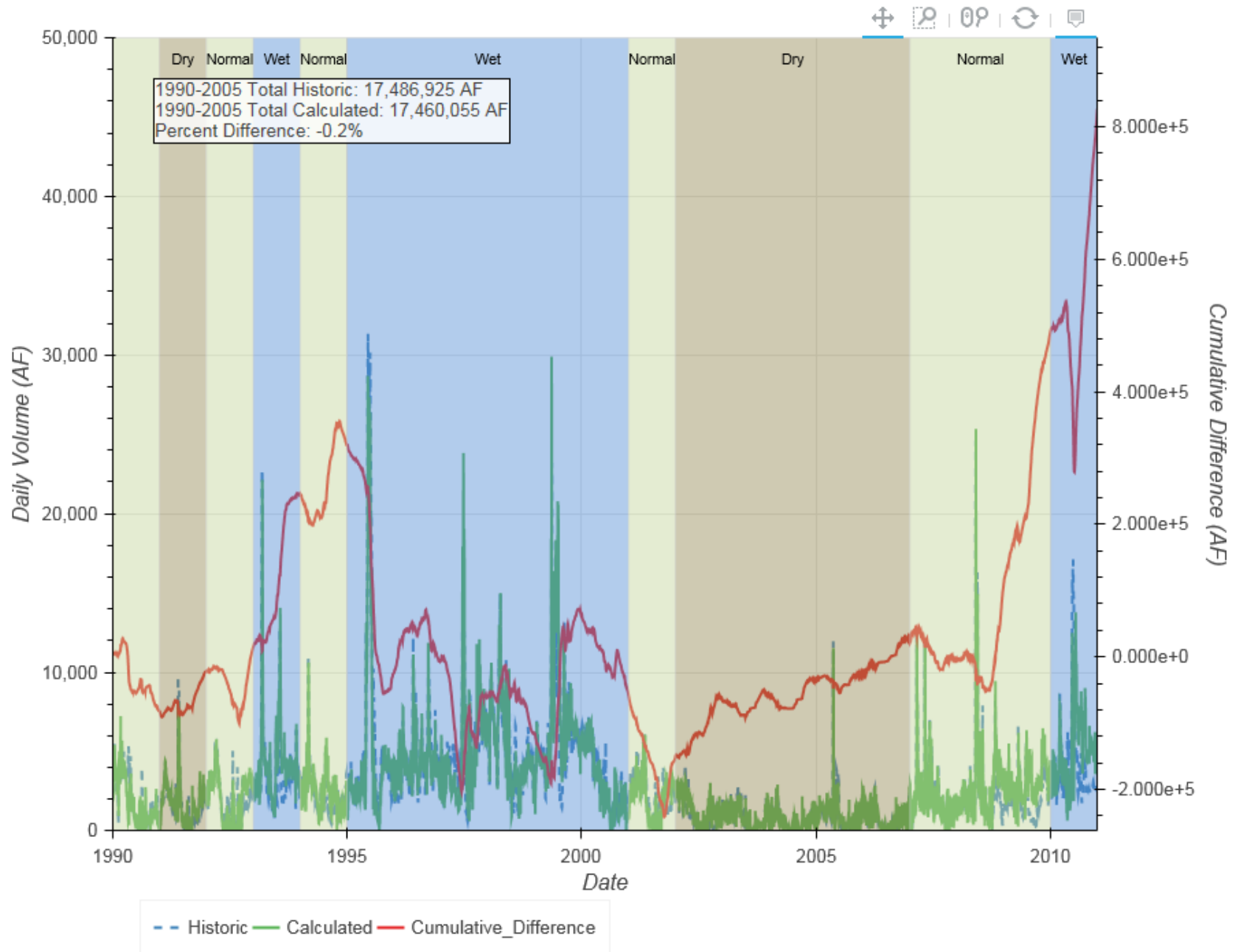


# Platte River near Grand Island

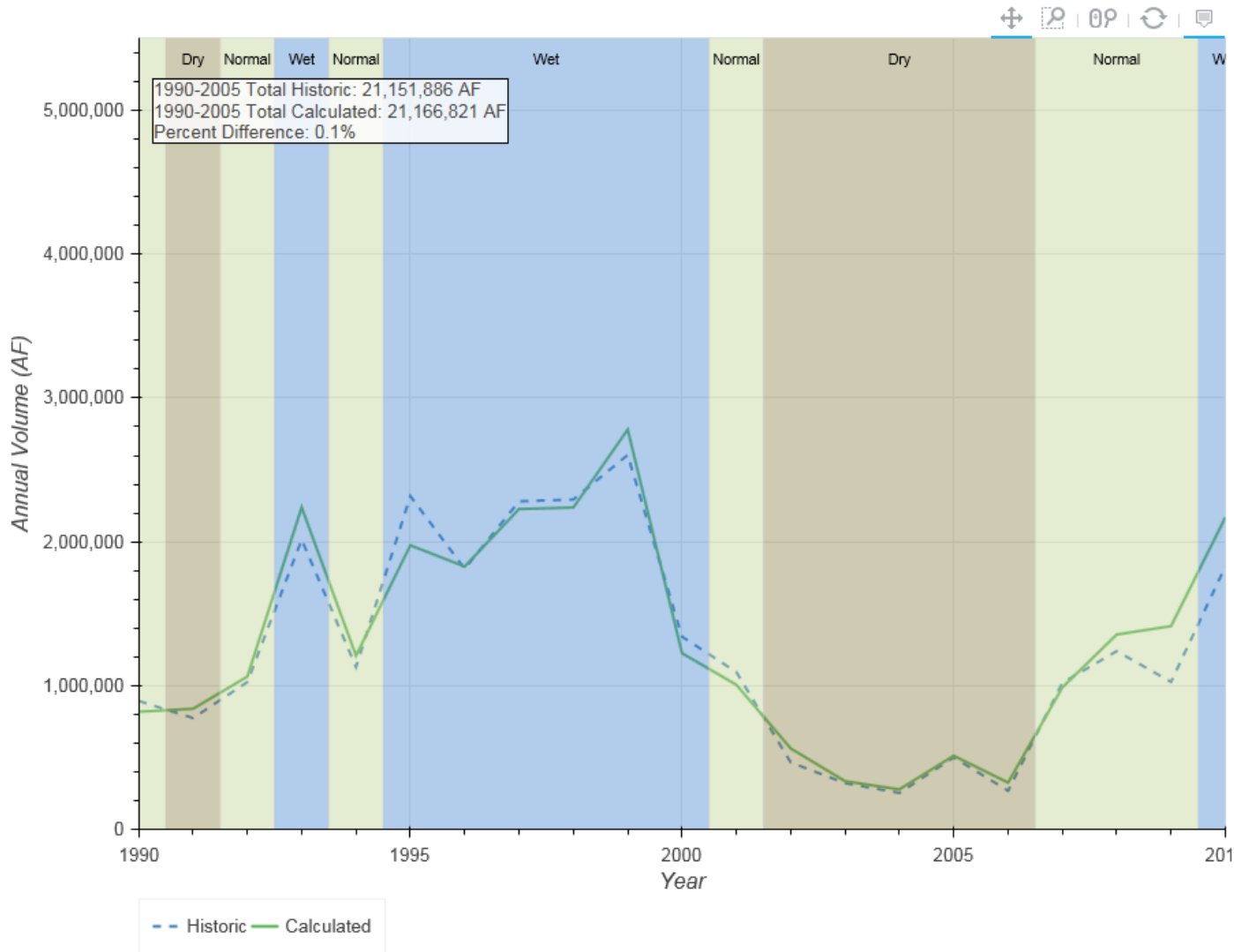


Year	Historic	Calculated
1990	778,459	696,226
1991	577,996	638,378
1992	723,935	760,780
1993	1,334,416	1,564,660
1994	853,154	927,812
1995	2,132,257	1,787,712
1996	1,588,520	1,608,199
1997	1,893,910	1,839,415
1998	1,903,442	1,847,688
1999	2,327,940	2,504,238
2000	1,203,136	1,083,978
2001	888,411	795,307
2002	400,261	486,215
2003	302,990	311,135
2004	214,682	236,467
2005	363,416	371,846
2006	257,343	311,521
2007	811,390	778,976
2008	944,067	1,060,320
2009	752,027	1,133,161
2010	1,509,920	1,842,438
Total	21,761,672	22,586,472

# Platte River near Grand Island



# Platte River near Duncan



Year	Historic	Calculated
1990	896,040	820,576
1991	776,920	841,449
1992	1,026,615	1,064,747
1993	2,015,677	2,240,740
1994	1,132,088	1,209,800
1995	2,318,108	1,976,446
1996	1,813,170	1,829,241
1997	2,281,898	2,228,463
1998	2,294,396	2,238,632
1999	2,603,722	2,780,319
2000	1,342,044	1,227,281
2001	1,096,421	1,007,709
2002	469,059	565,879
2003	324,942	338,399
2004	257,187	281,609
2005	503,598	515,532
2006	272,373	328,543
2007	1,021,702	989,541
2008	1,241,399	1,357,192
2009	1,028,436	1,415,599
2010	1,830,319	2,170,714
Total	26,546,116	27,428,411



# Platte River near Duncan

