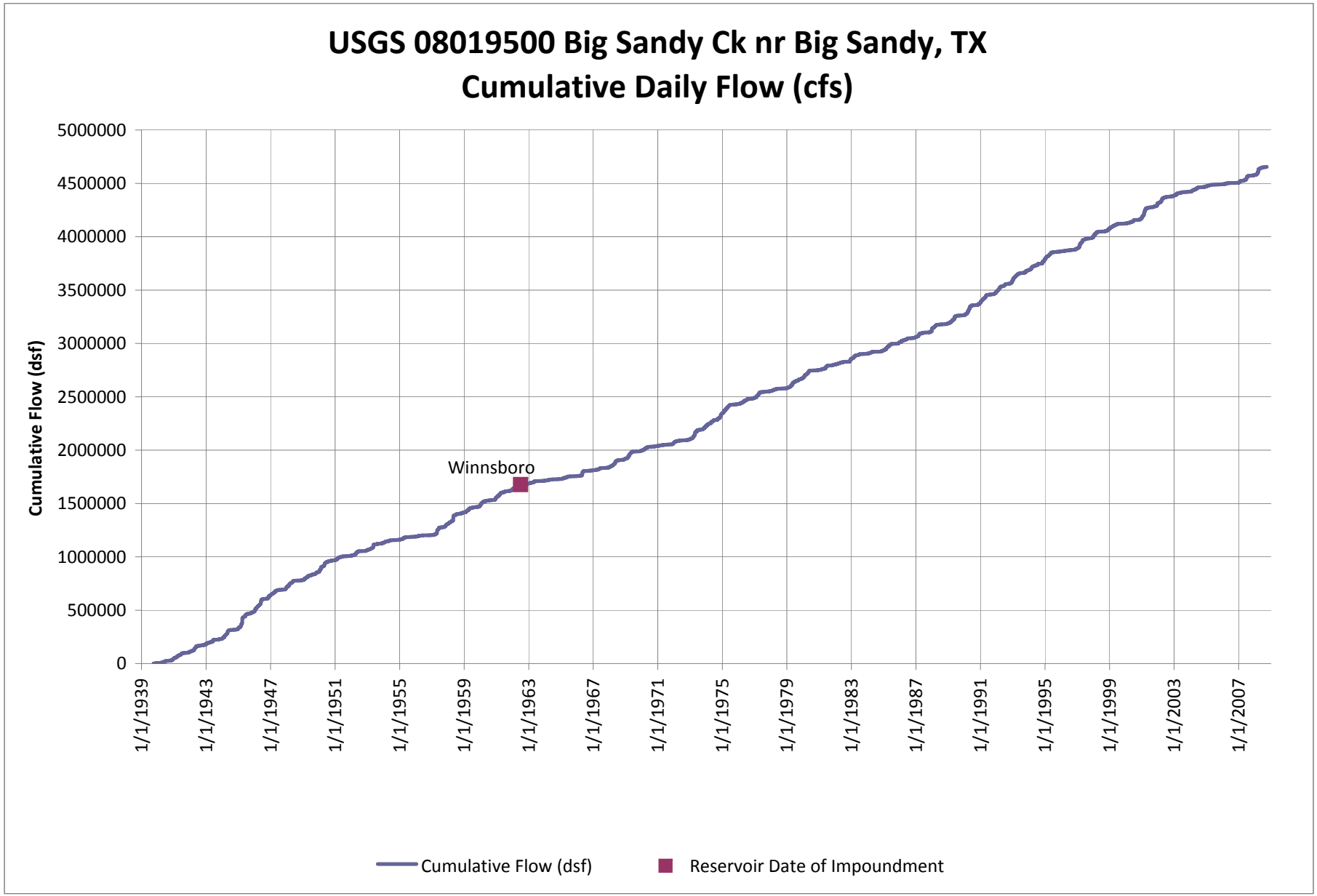
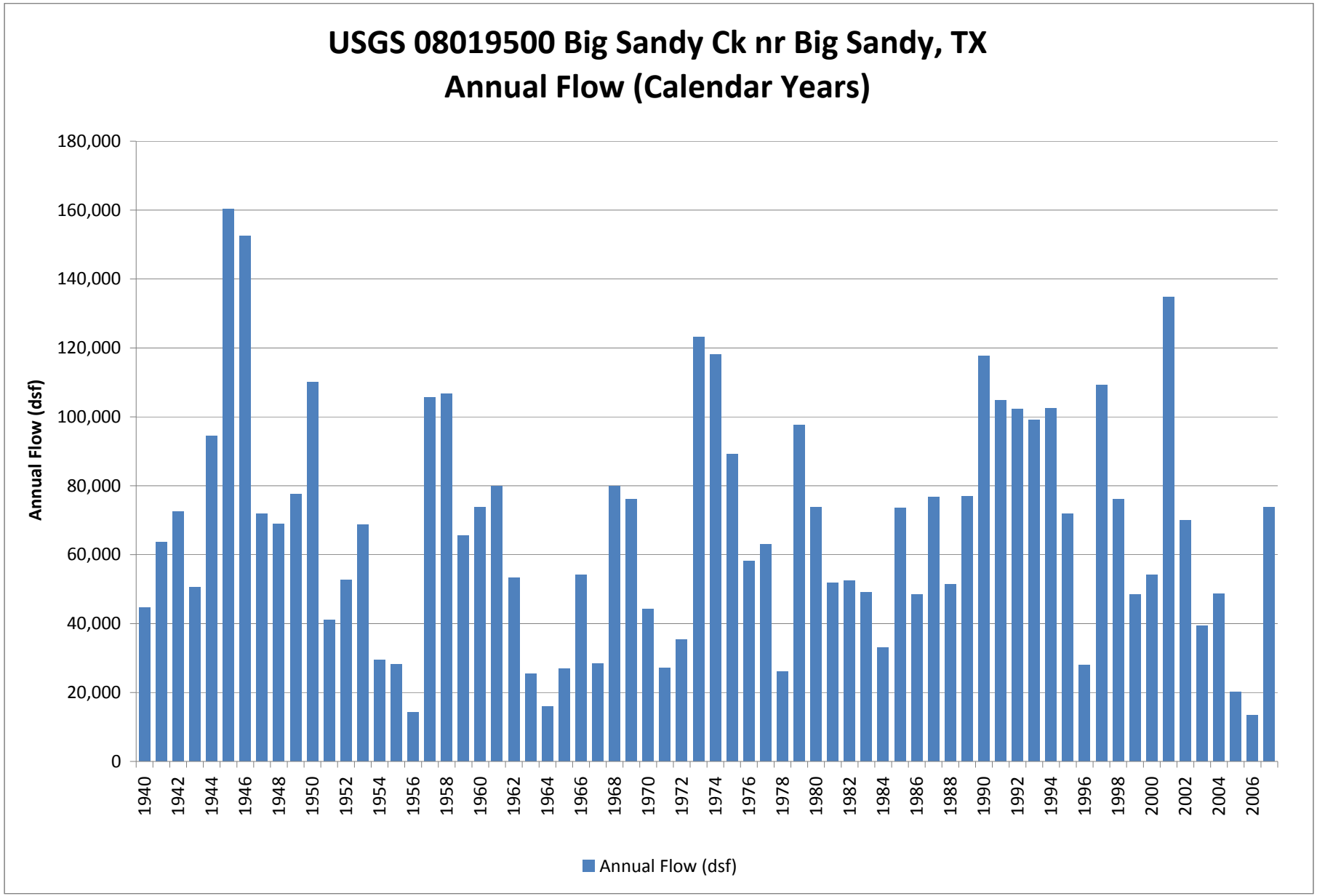
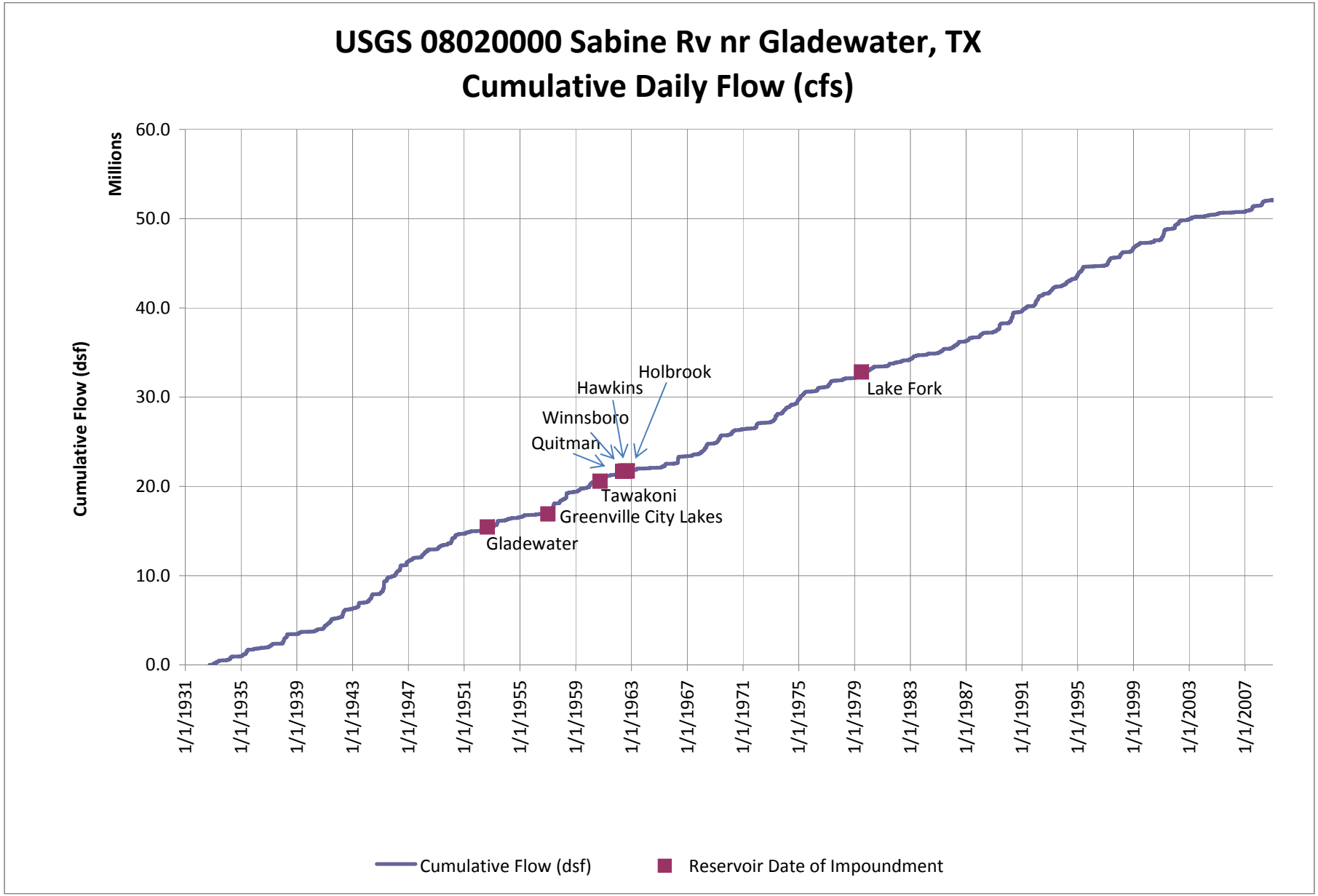
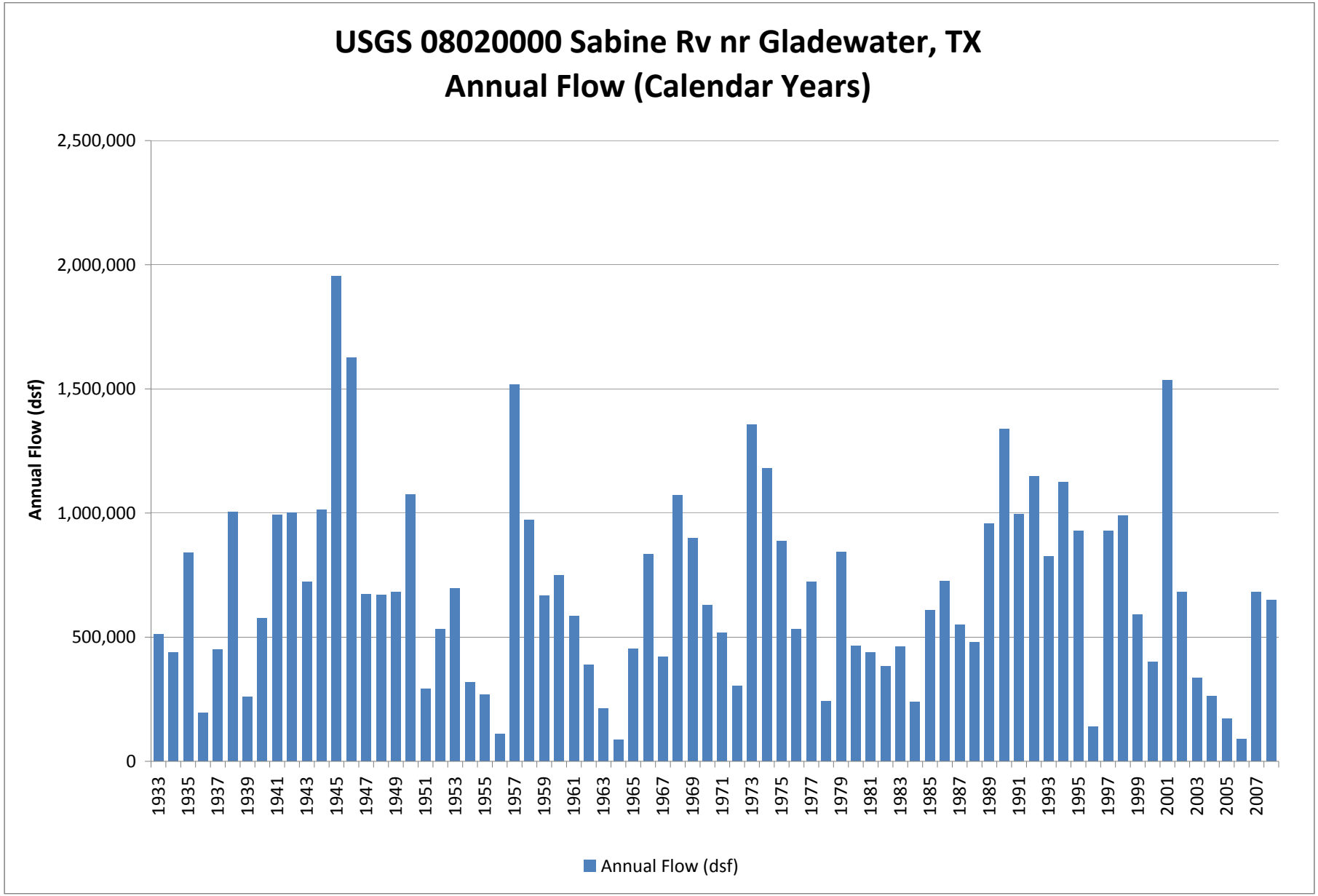
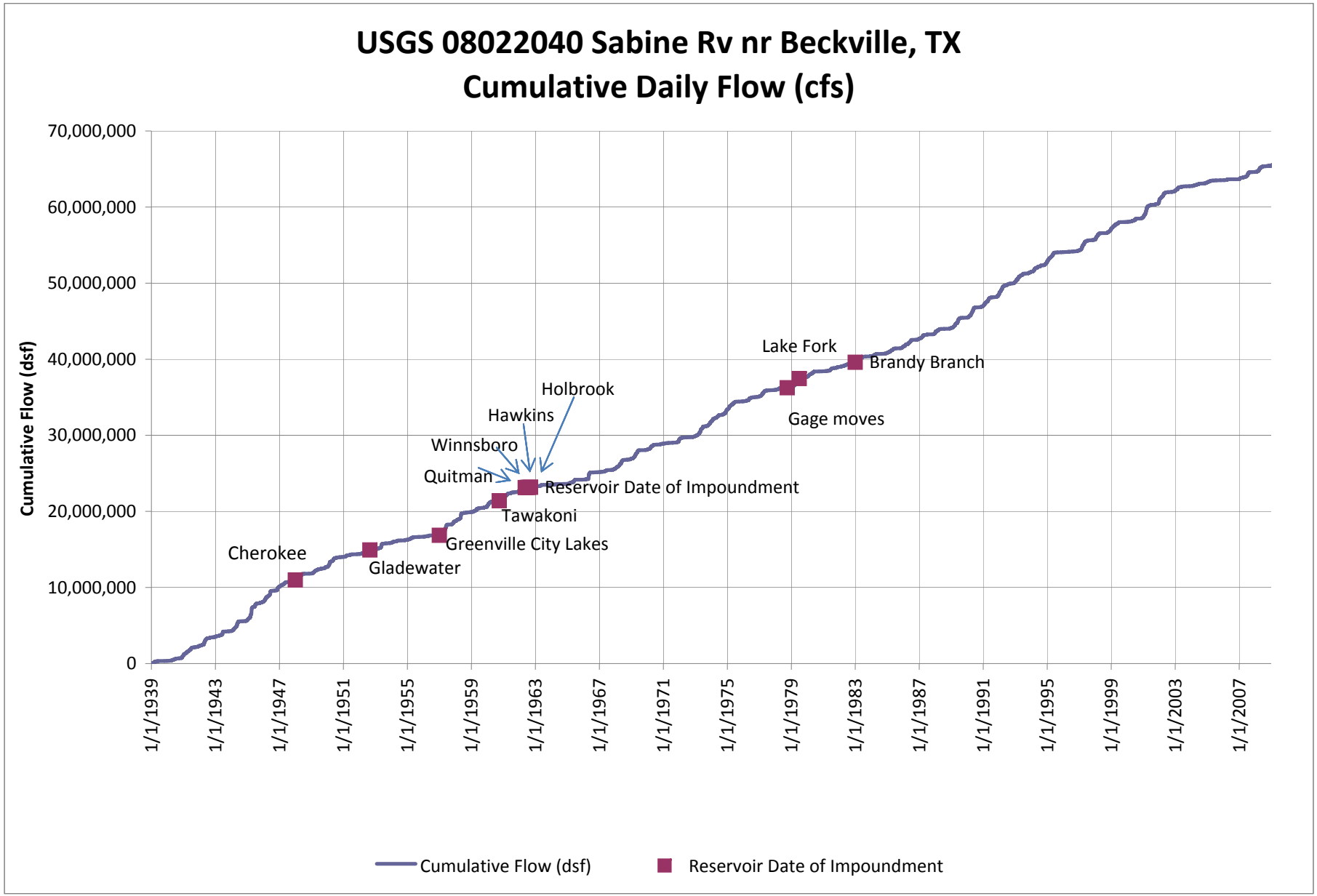
Attachment A
Gage Graphs

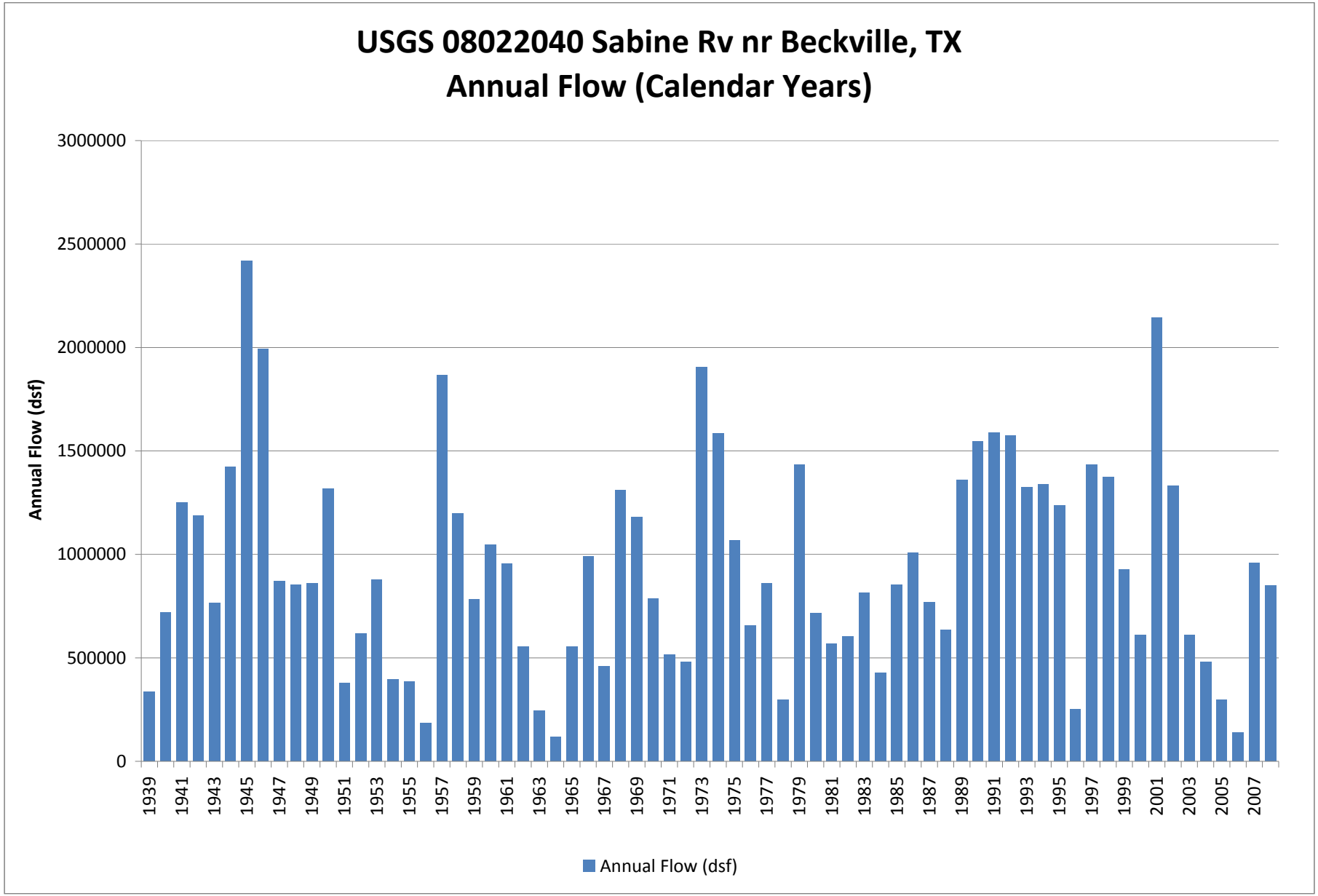

USGS 08019500 Big Sandy Ck nr Big Sandy, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Winnsboro
1/1/1939
1/1/1943
1/1/1947
1/1/1951
1/1/1955
1/1/1959
1/1/1963
1/1/1967
1/1/1971
1/1/1975
1/1/1979
1/1/1983
1/1/1987
1/1/1991
1/1/1995
1/1/1999
1/1/2003
1/1/2007
Cumulative Flow (dsf)
Reservoir Date of Impoundment

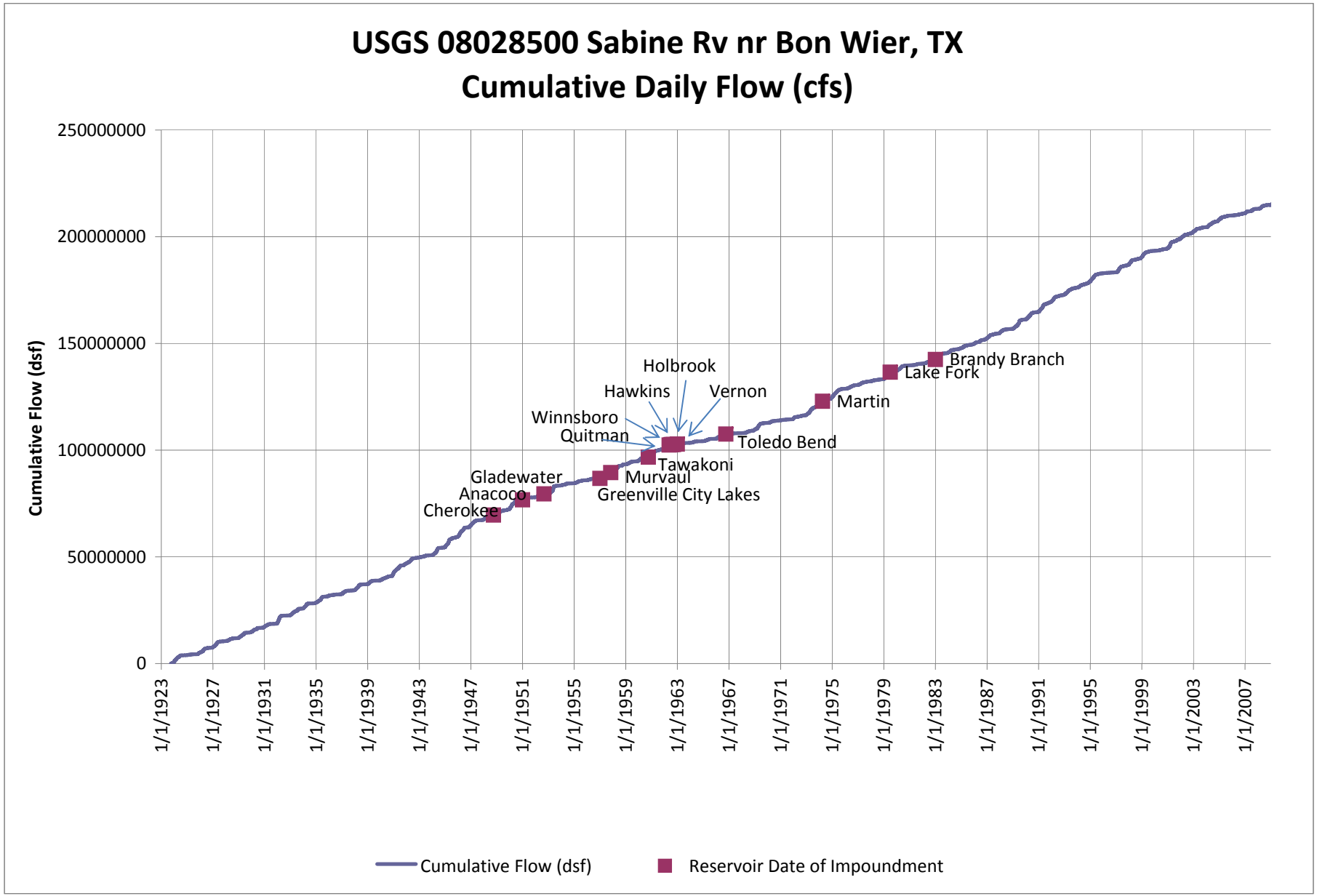

USGS 08019500 Big Sandy Ck nr Big Sandy, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1940
1942
1944
1946
1948
1950
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
Annual Flow (dsf)

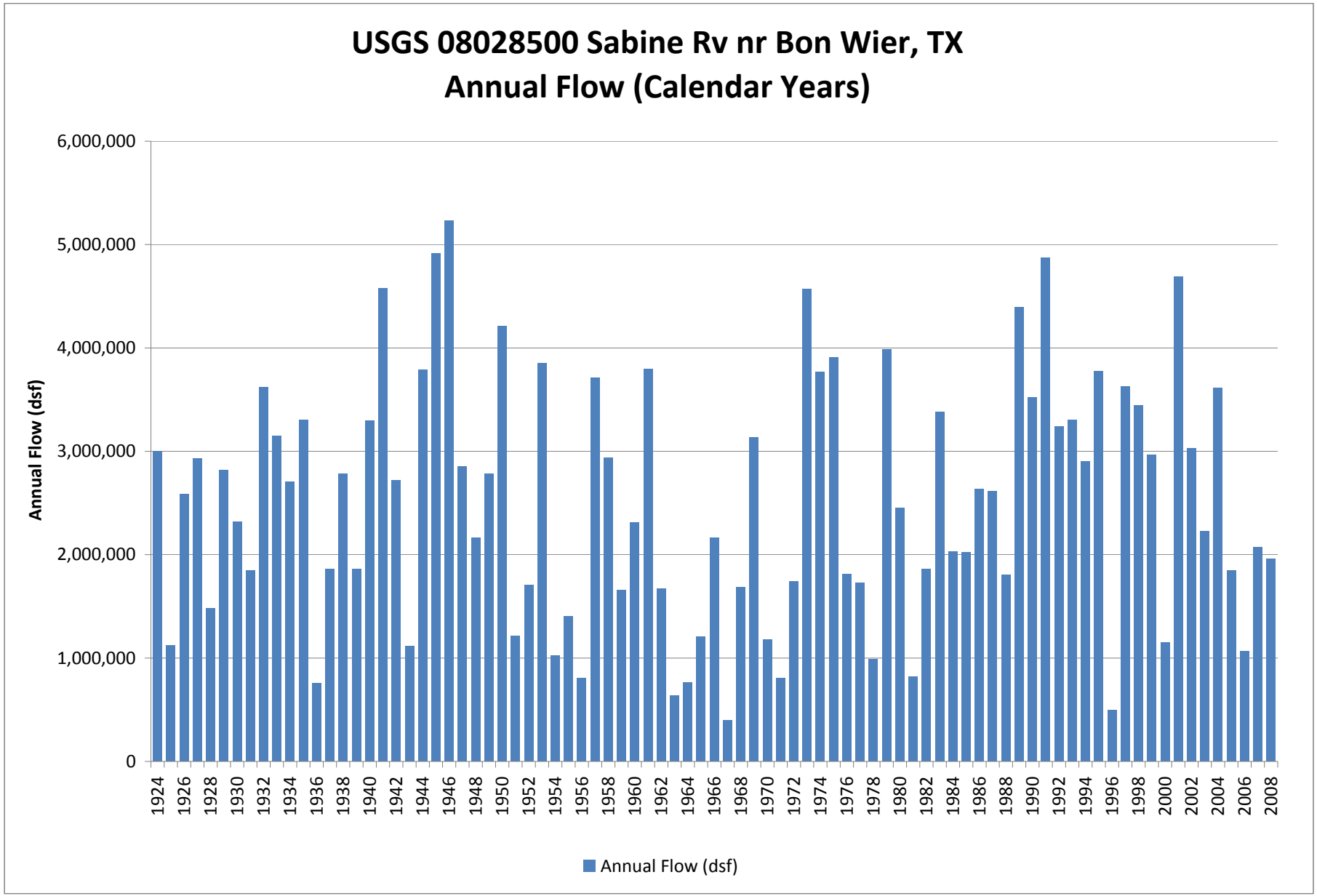

USGS 08020000 Sabine Rv nr Gladewater, TX
Cumulative Daily Flow (cfs)
Millions
Cumulative Flow (dsf)
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/1/1931
1/1/1935
1/1/1939
1/1/1943
1/1/1947
1/1/1951
1/1/1955
1/1/1959
1/1/1963
1/1/1967
1/1/1971
1/1/1975
1/1/1979
1/1/1983
1/1/1987
1/1/1991
1/1/1995
1/1/1999
1/1/2003
1/1/2007
Holbrook
Hawkins
Winnsboro
Quitman
Lake Fork
Tawakoni
Greenville City Lakes
Gladewater
Cumulative Flow (dsf)
Reservoir Date of Impoundment

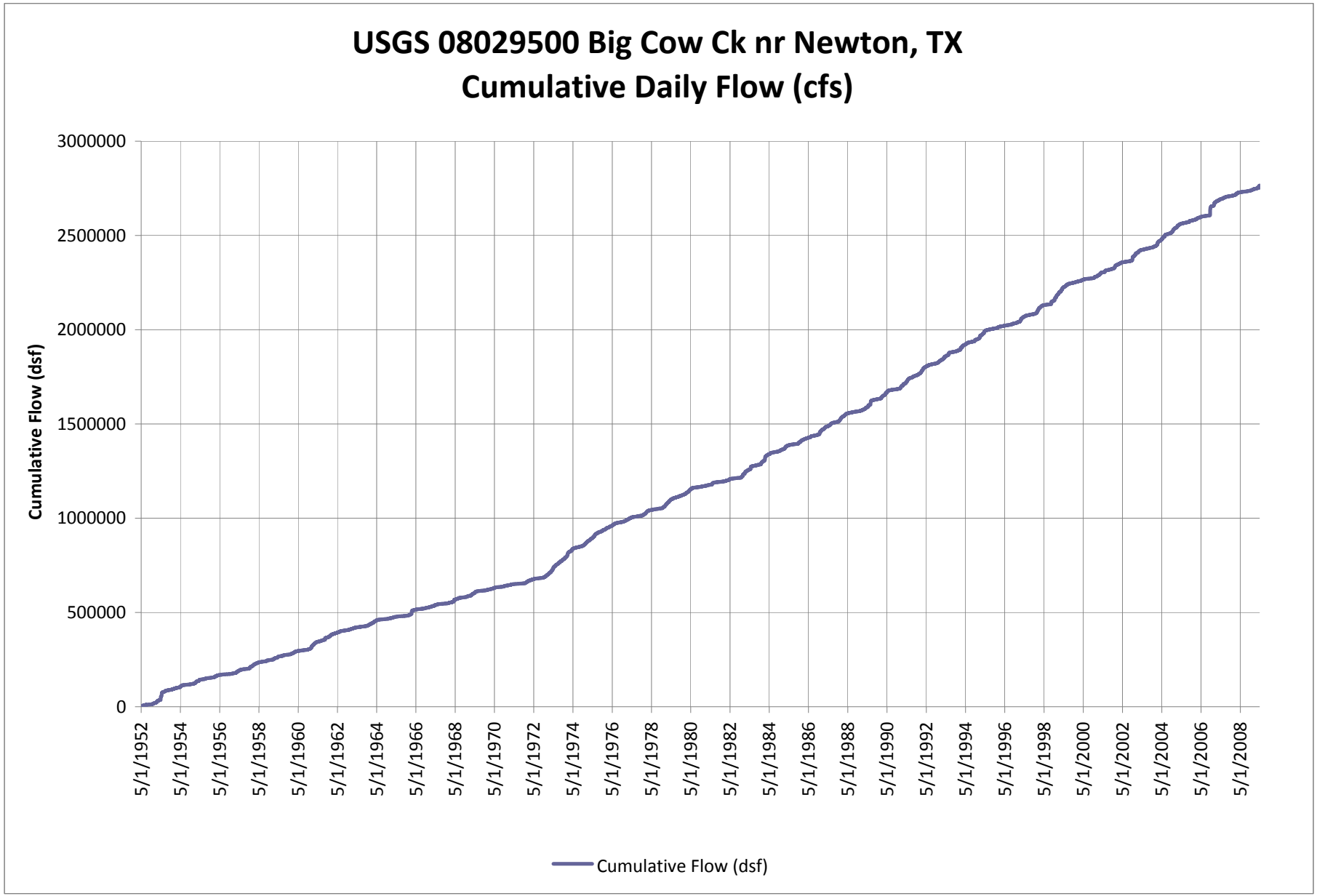

USGS 08020000 Sabine Rv nr Gladewater, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Annual Flow (dsf)

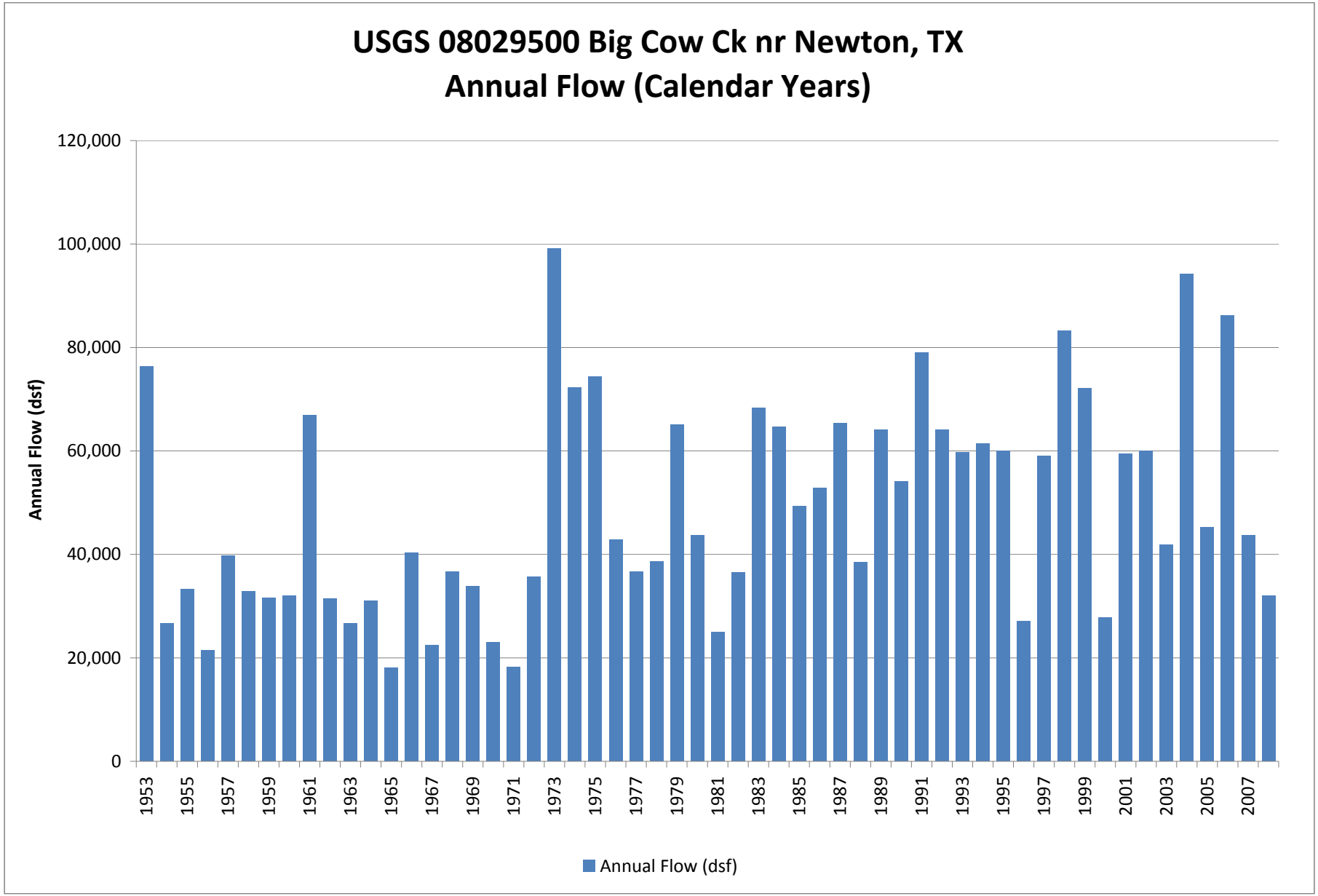

USGS 08022040 Sabine Rv nr Beckville, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
70,000,000
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
1/1/1939
1/1/1943
1/1/1947
1/1/1951
1/1/1955
1/1/1959
1/1/1963
1/1/1967
1/1/1971
1/1/1975
1/1/1979
1/1/1983
1/1/1987
1/1/1991
1/1/1995
1/1/1999
1/1/2003
1/1/2007
Cherokee
Gladewater
Greenville City Lakes
Tawakoni
Quitman
Winnsboro
Hawkins
Holbrook
Reservoir Date of Impoundment
Gage moves
Lake Fork
Brandy Branch
Cumulative Flow (dsf)
Reservoir Date of Impoundment

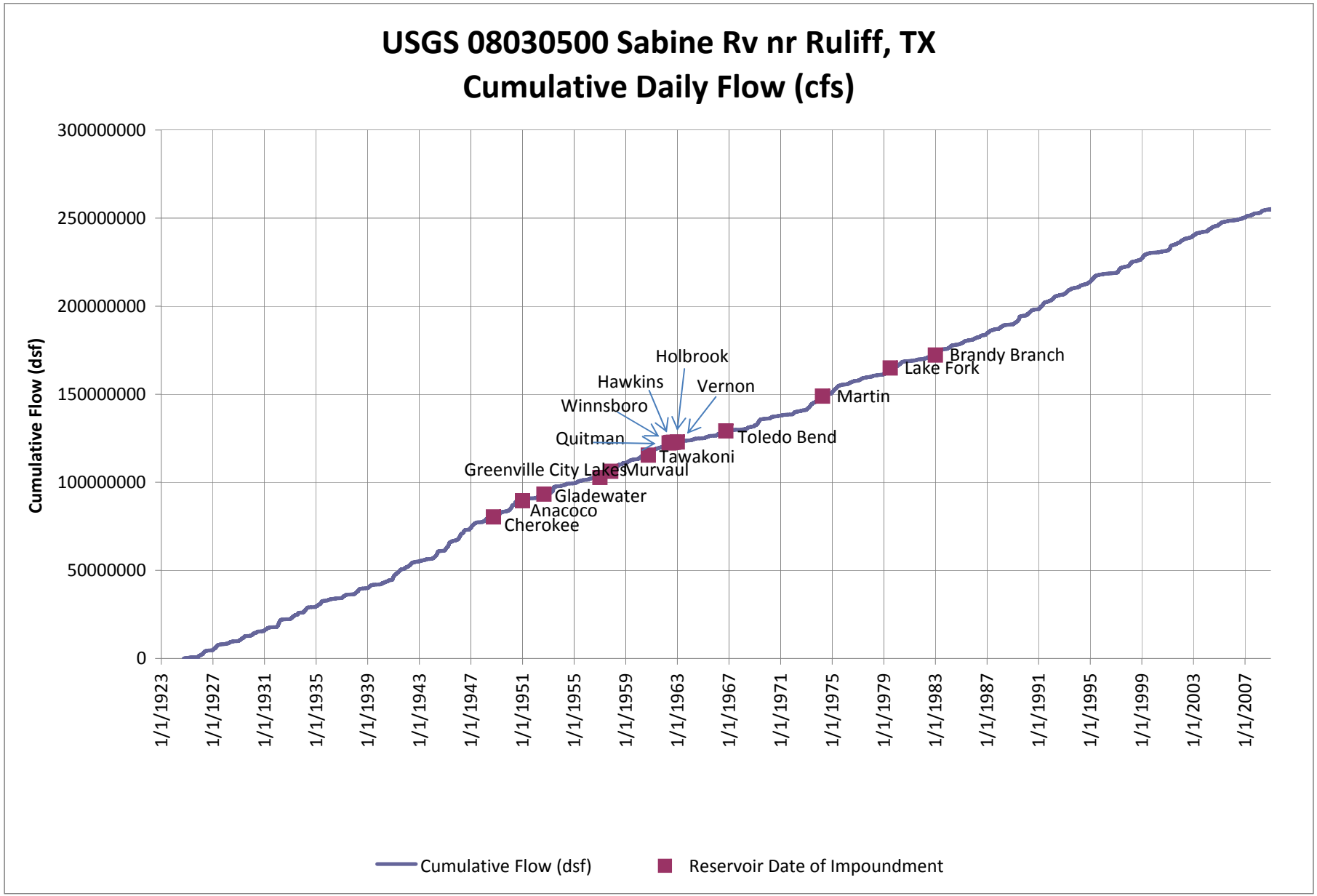

USGS 08022040 Sabine Rv nr Beckville, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
3000000
2500000
2000000
1500000
1000000
500000
0
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Annual Flow (dsf)

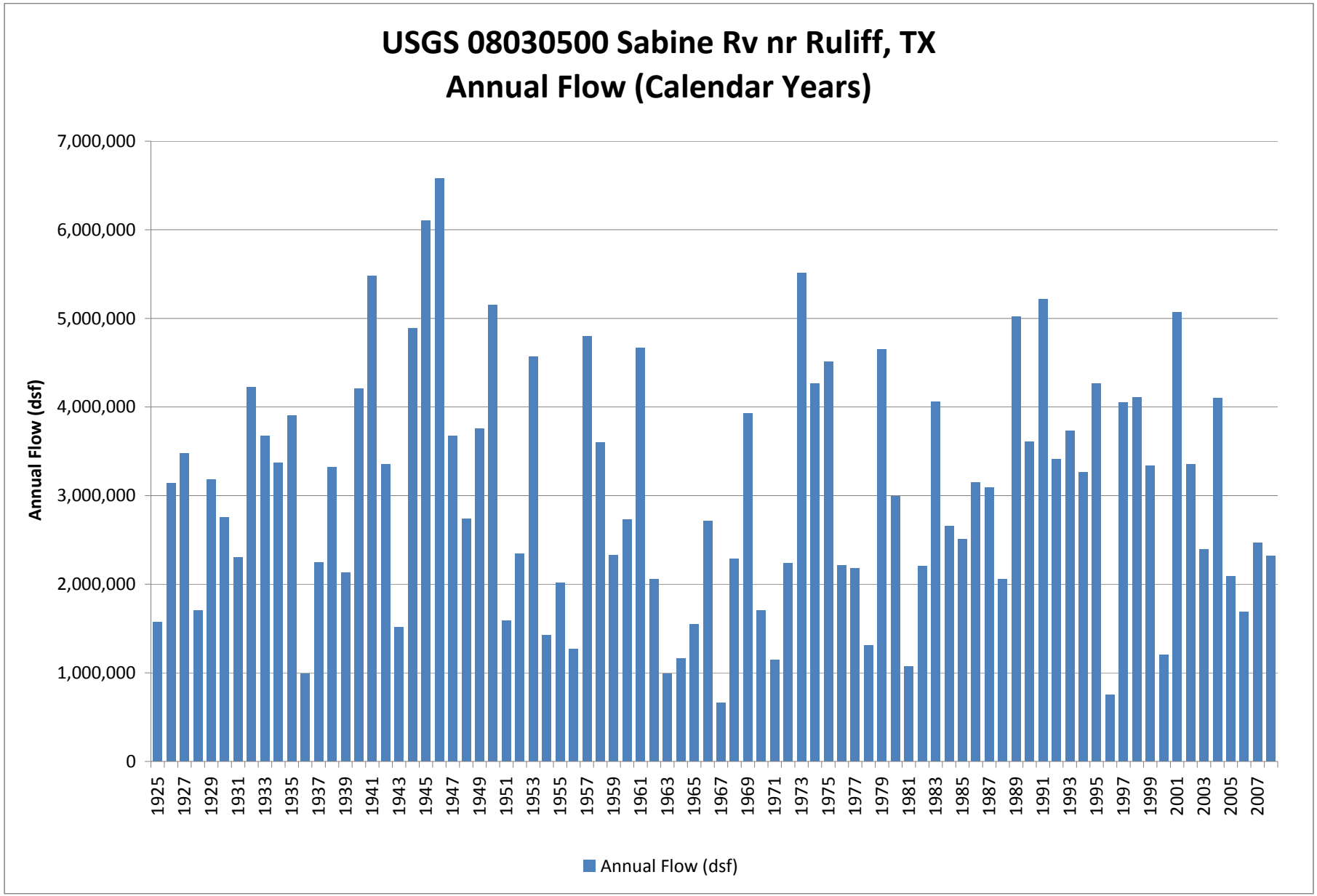

USGS 08028500 Sabine Rv nr Bon Wier, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
250000000
200000000
150000000
100000000
50000000
0
1/1/1923
1/1/1927
1/1/1931
1/1/1935
1/1/1939
1/1/1943
1/1/1947
1/1/1951
1/1/1955
1/1/1959
1/1/1963
1/1/1967
1/1/1971
1/1/1975
1/1/1979
1/1/1983
1/1/1987
1/1/1991
1/1/1995
1/1/1999
1/1/2003
1/1/2007
Cherokee
Anacoco
Gladewater
Greenville City Lakes
Murvaul
Tawakoni
Quitman
Winnsboro
Hawkins
Holbrook
Vernon
Toledo Bend
Martin
Lake Fork
Brandy Branch
Cumulative Flow (dsf)
Reservoir Date of Impoundment

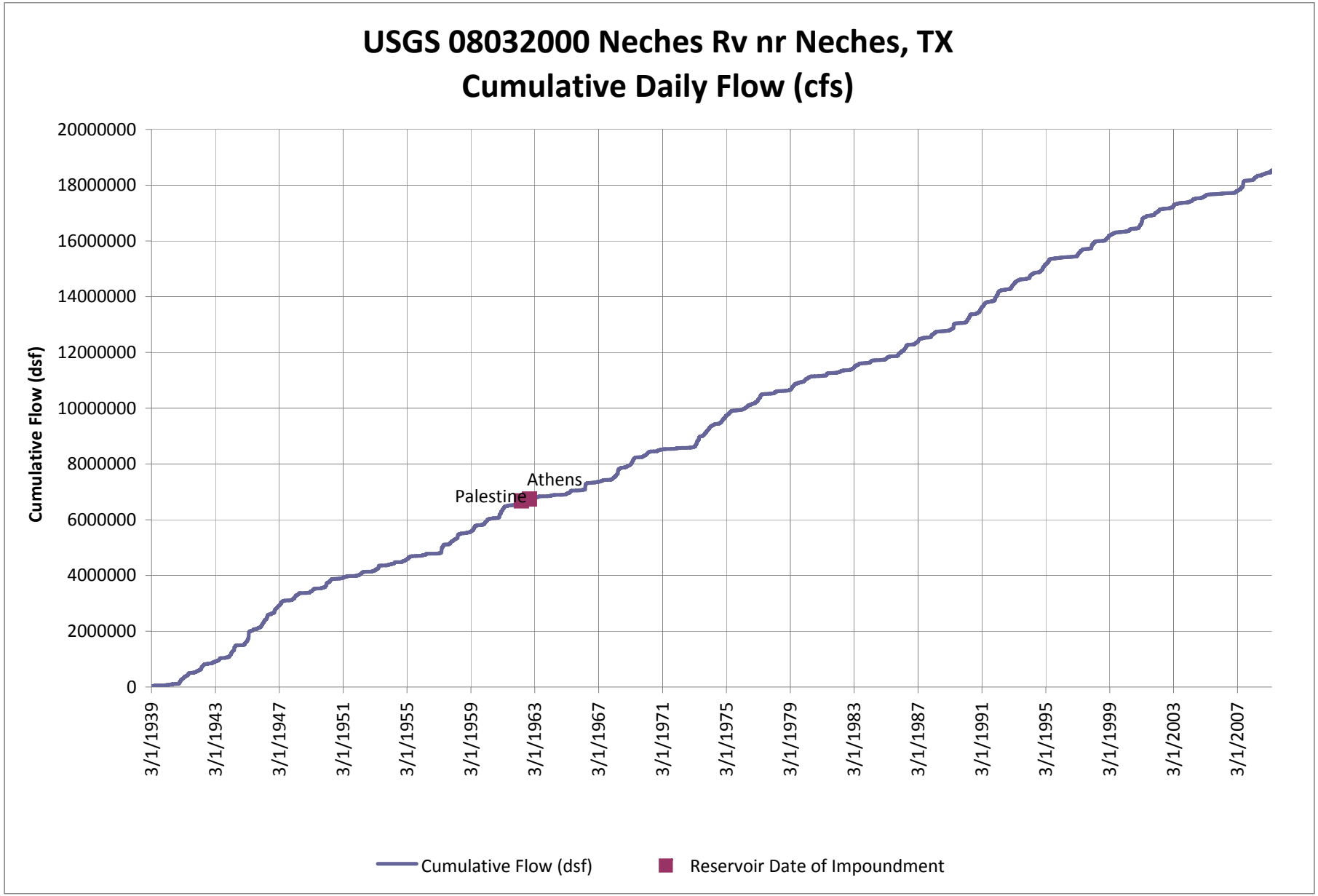

USGS 08028500 Sabine Rv nr Bon Wier, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
1924
1926
1928
1930
1932
1934
1936
1938
1940
1942
1944
1946
1948
1950
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
Annual Flow (dsf)

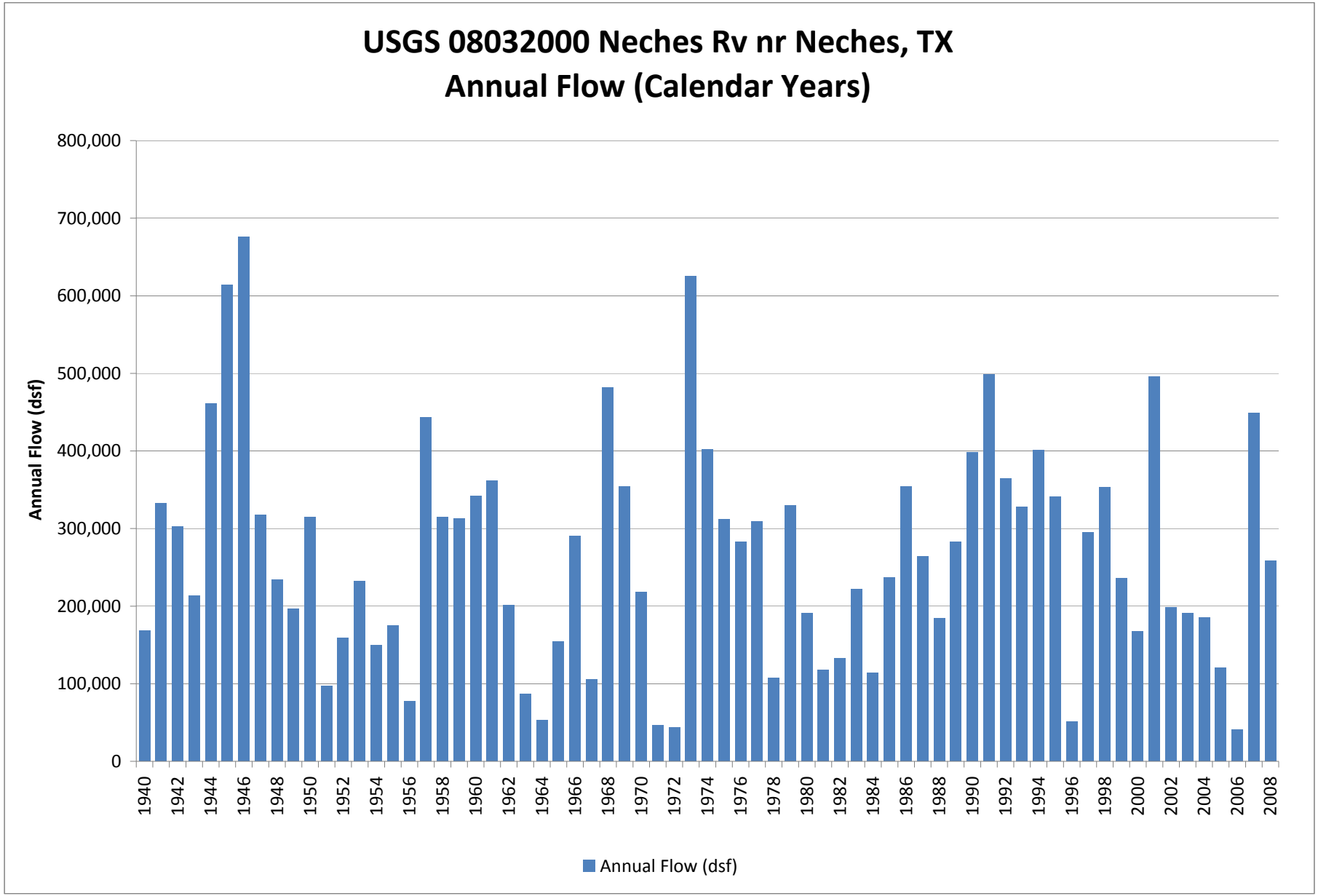

USGS 08029500 Big Cow Ck nr Newton, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
3000000
2500000
2000000
1500000
1000000
500000
0
5/1/1952
5/1/1954
5/1/1956
5/1/1958
5/1/1960
5/1/1962
5/1/1964
5/1/1966
5/1/1968
5/1/1970
5/1/1972
5/1/1974
5/1/1976
5/1/1978
5/1/1980
5/1/1982
5/1/1984
5/1/1986
5/1/1988
5/1/1990
5/1/1992
5/1/1994
5/1/1996
5/1/1998
5/1/2000
5/1/2002
5/1/2004
5/1/2006
5/1/2008
Cumulative Flow (dsf)

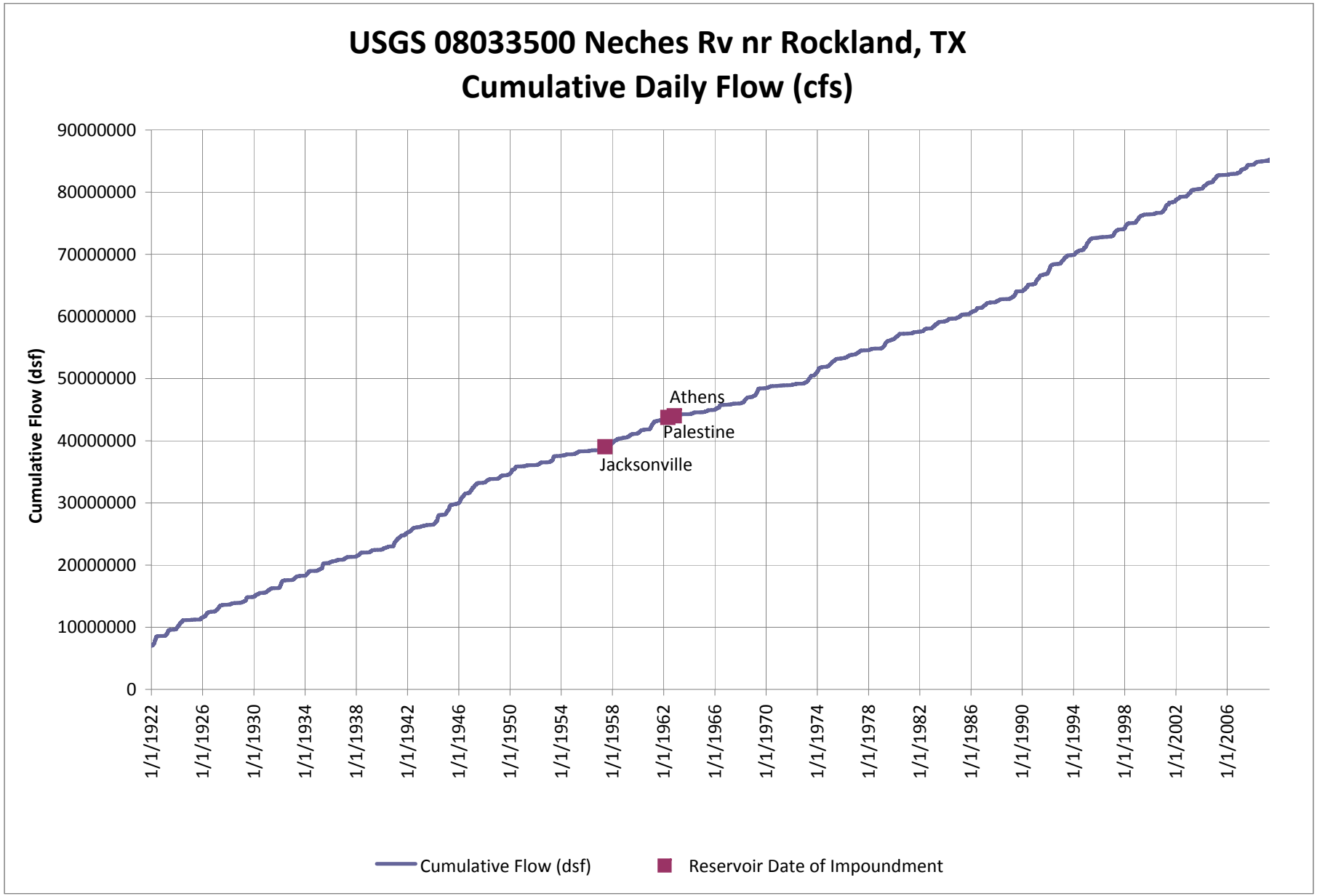

USGS 08029500 Big Cow Ck nr Newton, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
120,000
100,000
80,000
60,000
40,000
20,000
0
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Annual Flow (dsf)

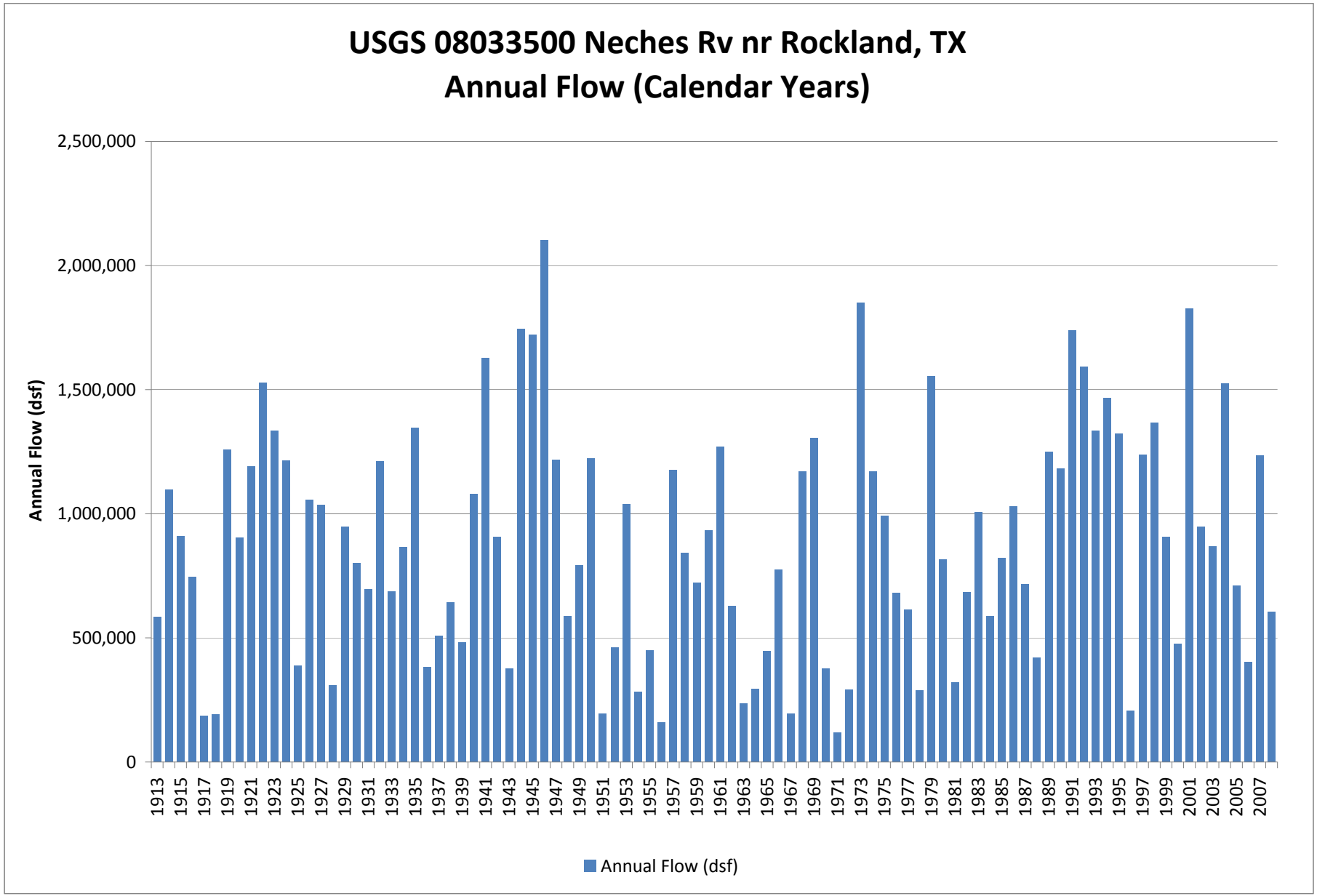

USGS 08030500 Sabine Rv nr Ruliff, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
300000000
250000000
200000000
150000000
100000000
50000000
0
1/1/1923
1/1/1927
1/1/1931
1/1/1935
1/1/1939
1/1/1943
1/1/1947
1/1/1951
1/1/1955
1/1/1959
1/1/1963
1/1/1967
1/1/1971
1/1/1975
1/1/1979
1/1/1983
1/1/1987
1/1/1991
1/1/1995
1/1/1999
1/1/2003
1/1/2007
Holbrook
Hawkins
Vernon
Winnsboro
Quitman
Tawakoni
Greenville City Lakes
Murvaul
Gladewater
Anacoco
Cherokee
Toledo Bend
Martin
Lake Fork
Brandy Branch
Cumulative Flow (dsf)
Reservoir Date of Impoundment

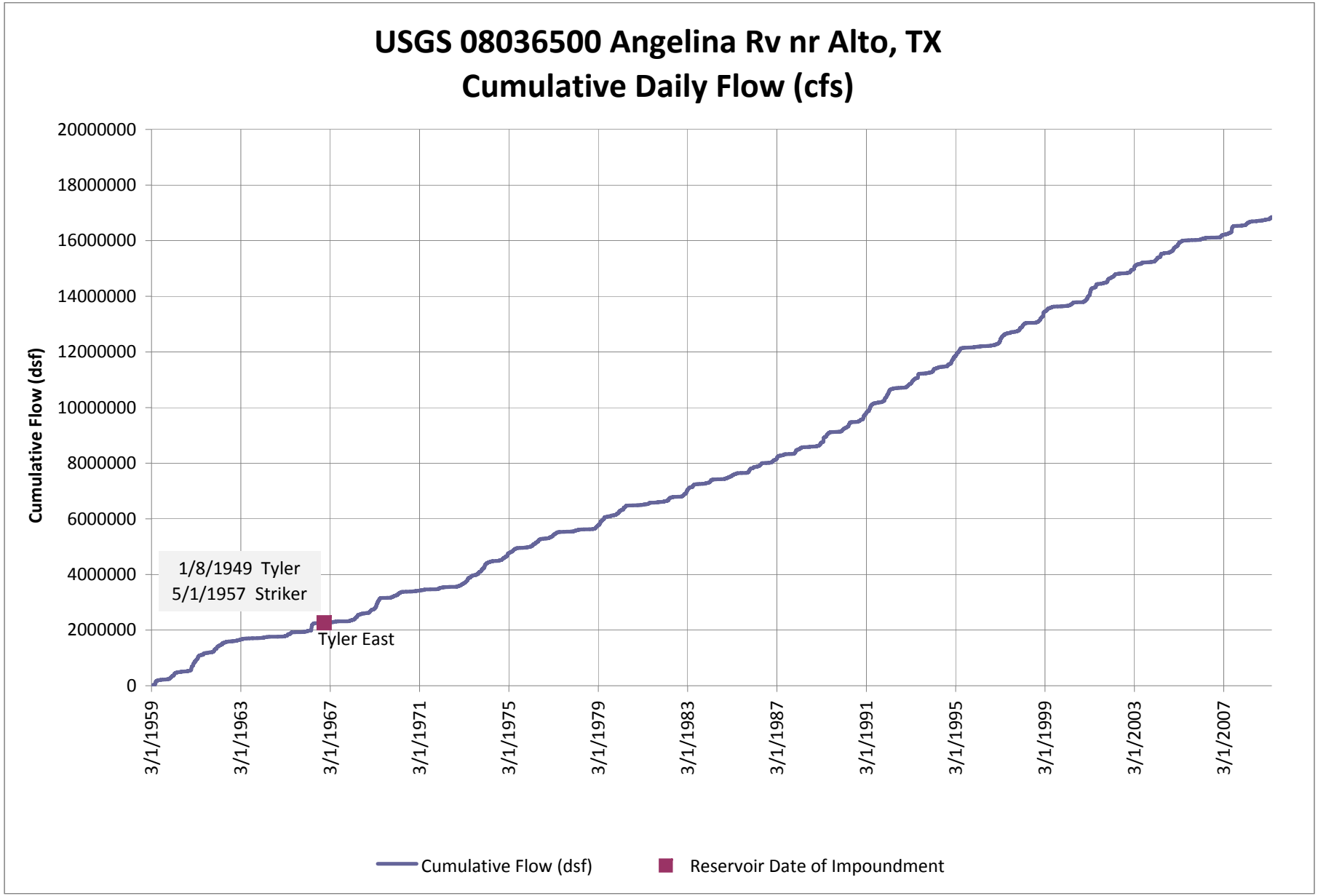

USGS 08030500 Sabine Rv nr Ruliff, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
1925
1927
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Annual Flow (dsf)

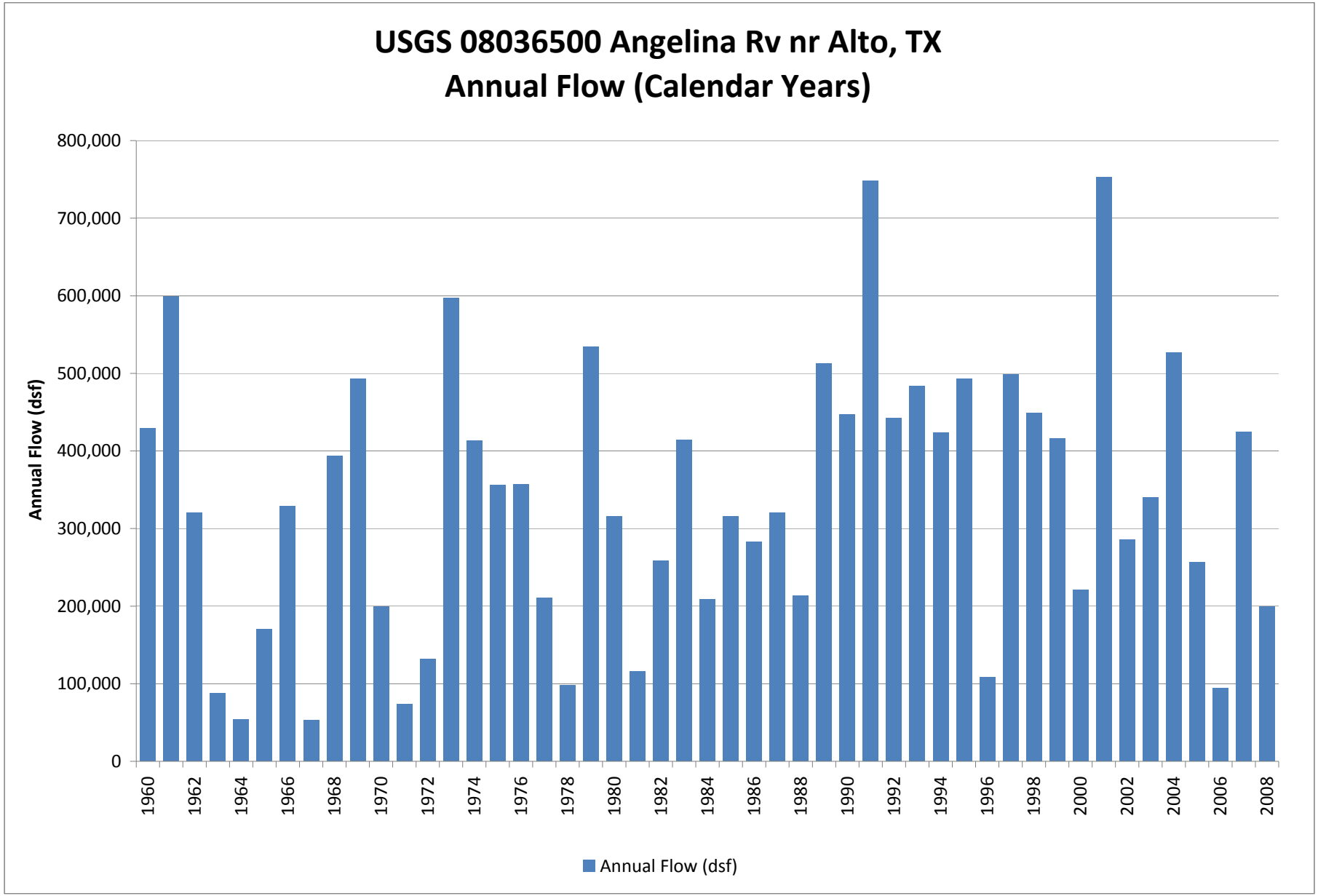

USGS 08032000 Neches Rv nr Neches, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
20000000
18000000
16000000
14000000
12000000
10000000
8000000
6000000
4000000
2000000
0
Palestine
Athens
3/1/1939
3/1/1943
3/1/1947
3/1/1951
3/1/1955
3/1/1959
3/1/1963
3/1/1967
3/1/1971
3/1/1975
3/1/1979
3/1/1983
3/1/1987
3/1/1991
3/1/1995
3/1/1999
3/1/2003
3/1/2007
Cumulative Flow (dsf)
Reservoir Date of Impoundment

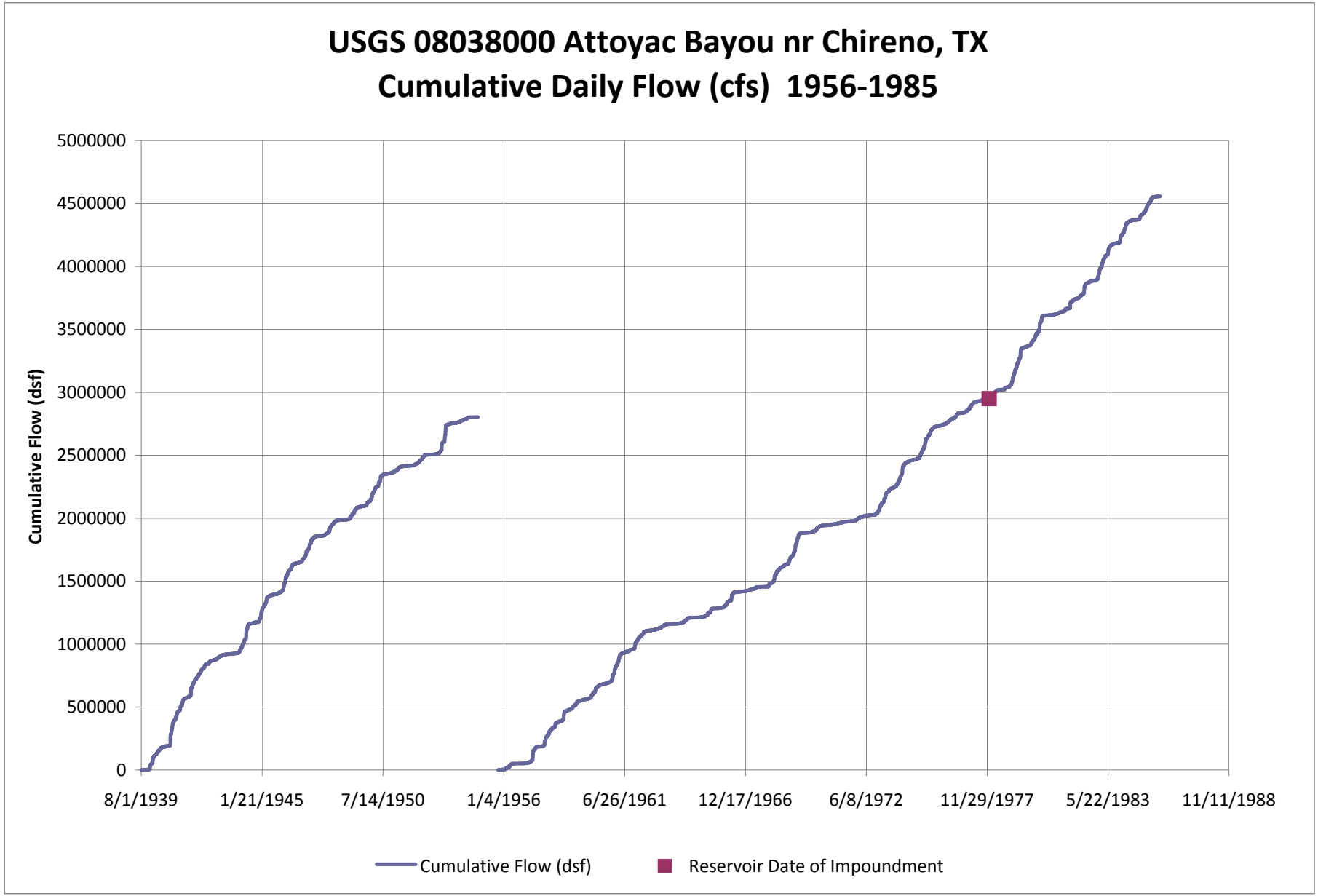

USGS 08032000 Neches Rv nr Neches, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1940
1942
1944
1946
1948
1950
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
Annual Flow (dsf)

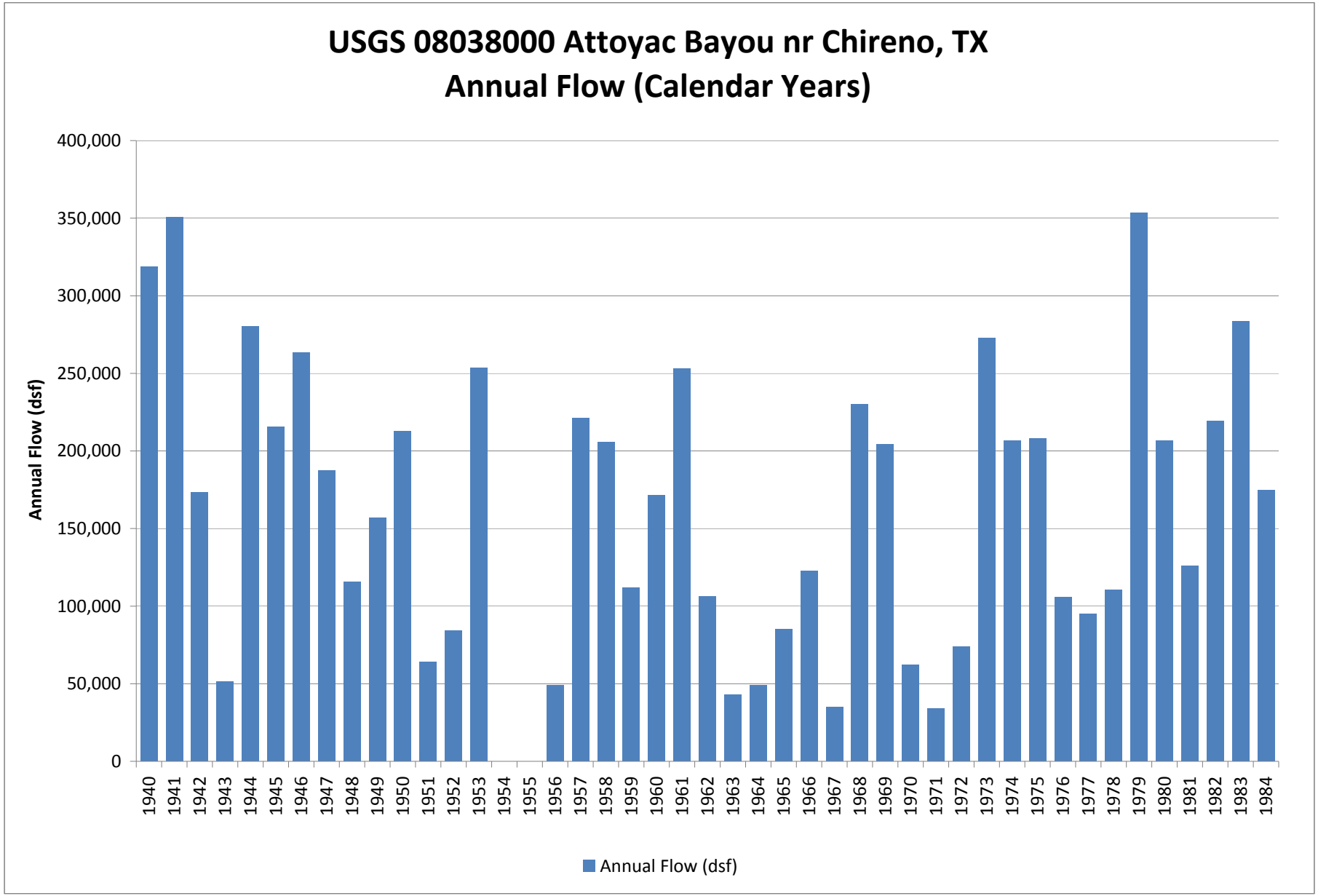

USGS 08033500 Neches Rv nr Rockland, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
90000000
80000000
70000000
60000000
50000000
40000000
30000000
20000000
10000000
0
1/1/1922
1/1/1926
1/1/1930
1/1/1934
1/1/1938
1/1/1942
1/1/1946
1/1/1950
1/1/1954
1/1/1958
1/1/1962
1/1/1966
1/1/1970
1/1/1974
1/1/1978
1/1/1982
1/1/1986
1/1/1990
1/1/1994
1/1/1998
1/1/2002
1/1/2006
Athens
Palestine
Jacksonville
Cumulative Flow (dsf)
Reservoir Date of Impoundment

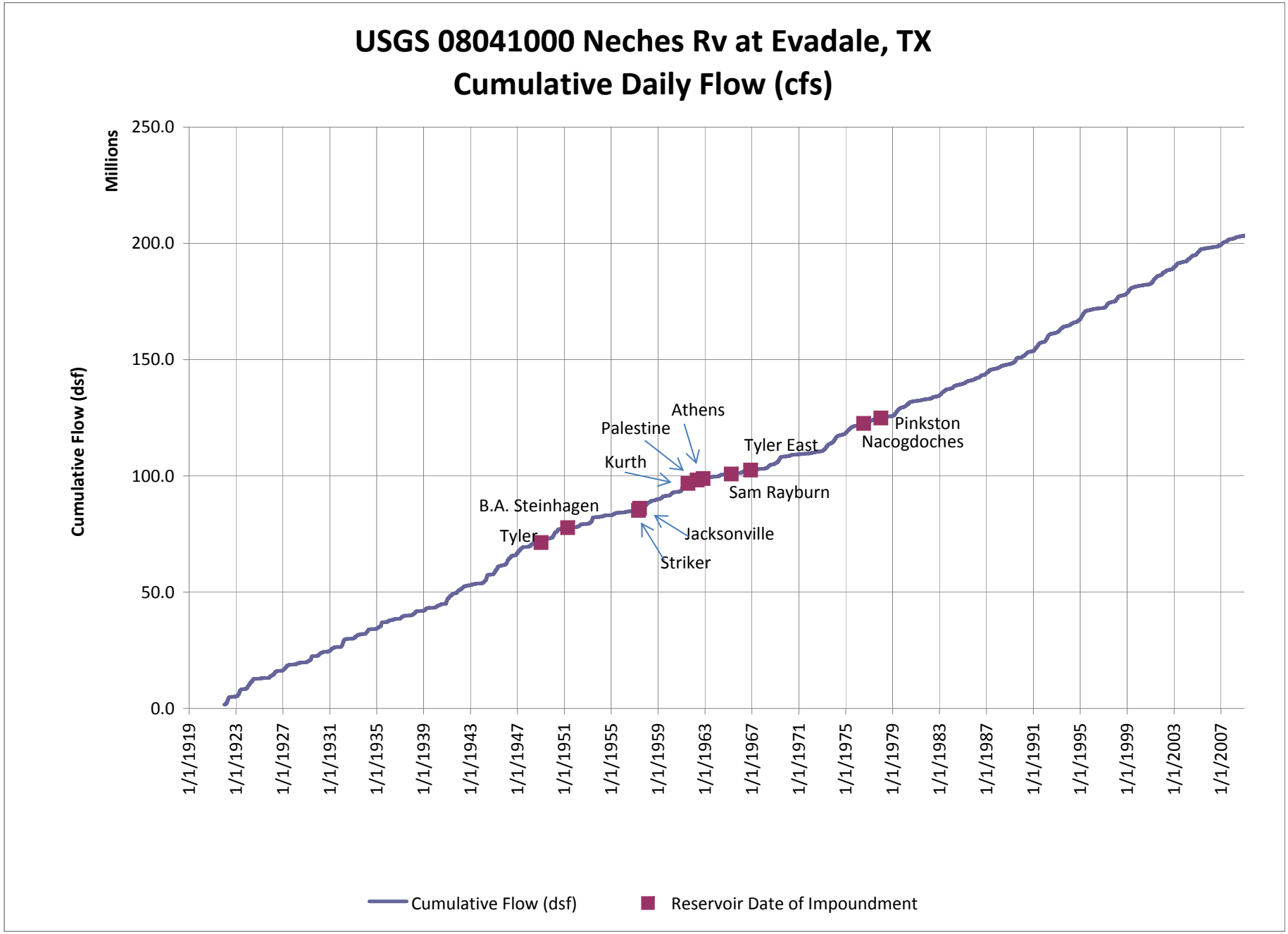

USGS 08033500 Neches Rv nr Rockland, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
1913
1915
1917
1919
1921
1923
1925
1927
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Annual Flow (dsf)

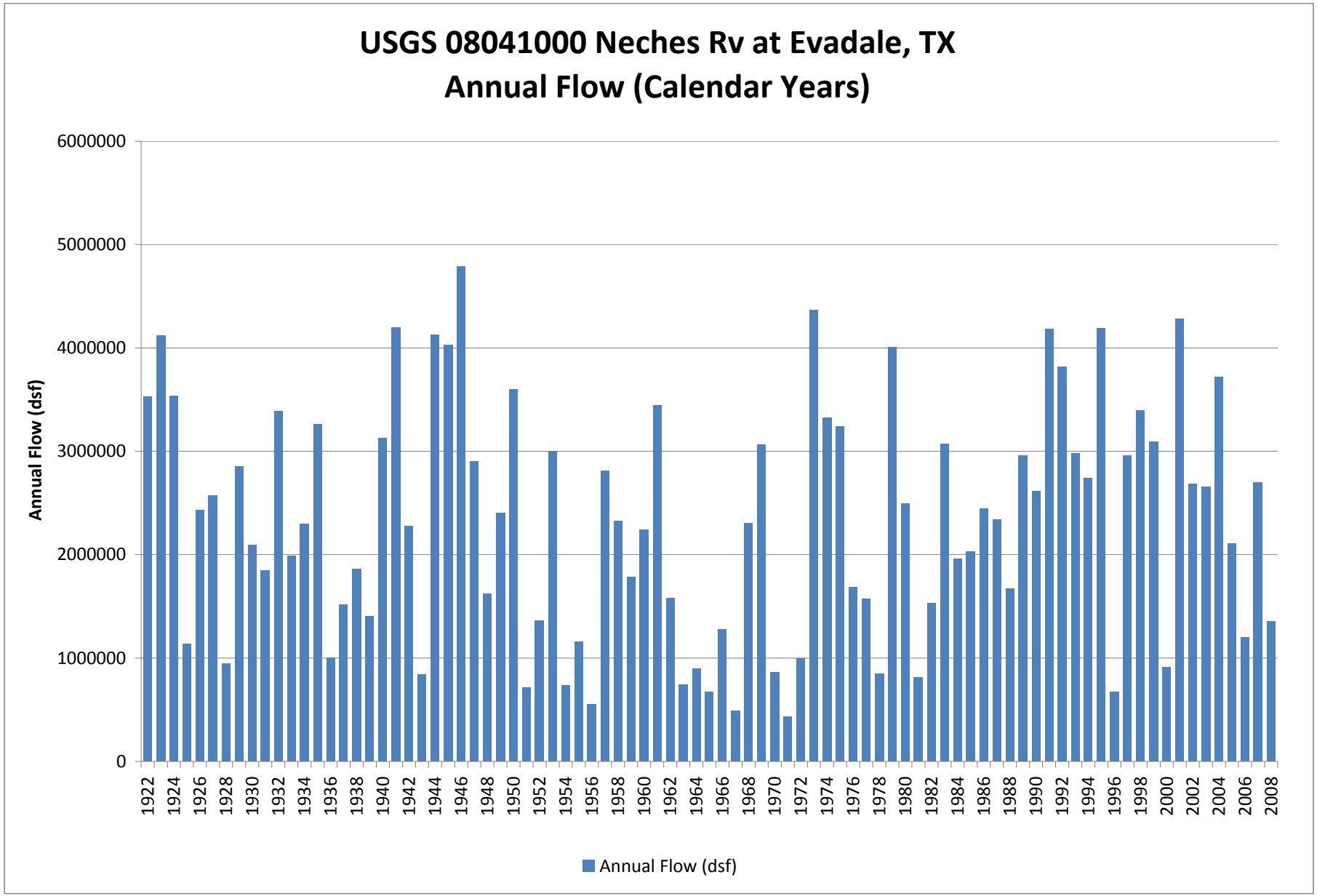

USGS 08036500 Angelina Rv nr Alto, TX
Cumulative Daily Flow (cfs)
Cumulative Flow (dsf)
20000000
18000000
16000000
14000000
12000000
10000000
8000000
6000000
4000000
2000000
0
1/8/1949 Tyler
5/1/1957 Striker
Tyler East
3/1/1959
3/1/1963
3/1/1967
3/1/1971
3/1/1975
3/1/1979
3/1/1983
3/1/1987
3/1/1991
3/1/1995
3/1/1999
3/1/2003
3/1/2007
Cumulative Flow (dsf)
Reservoir Date of Impoundment

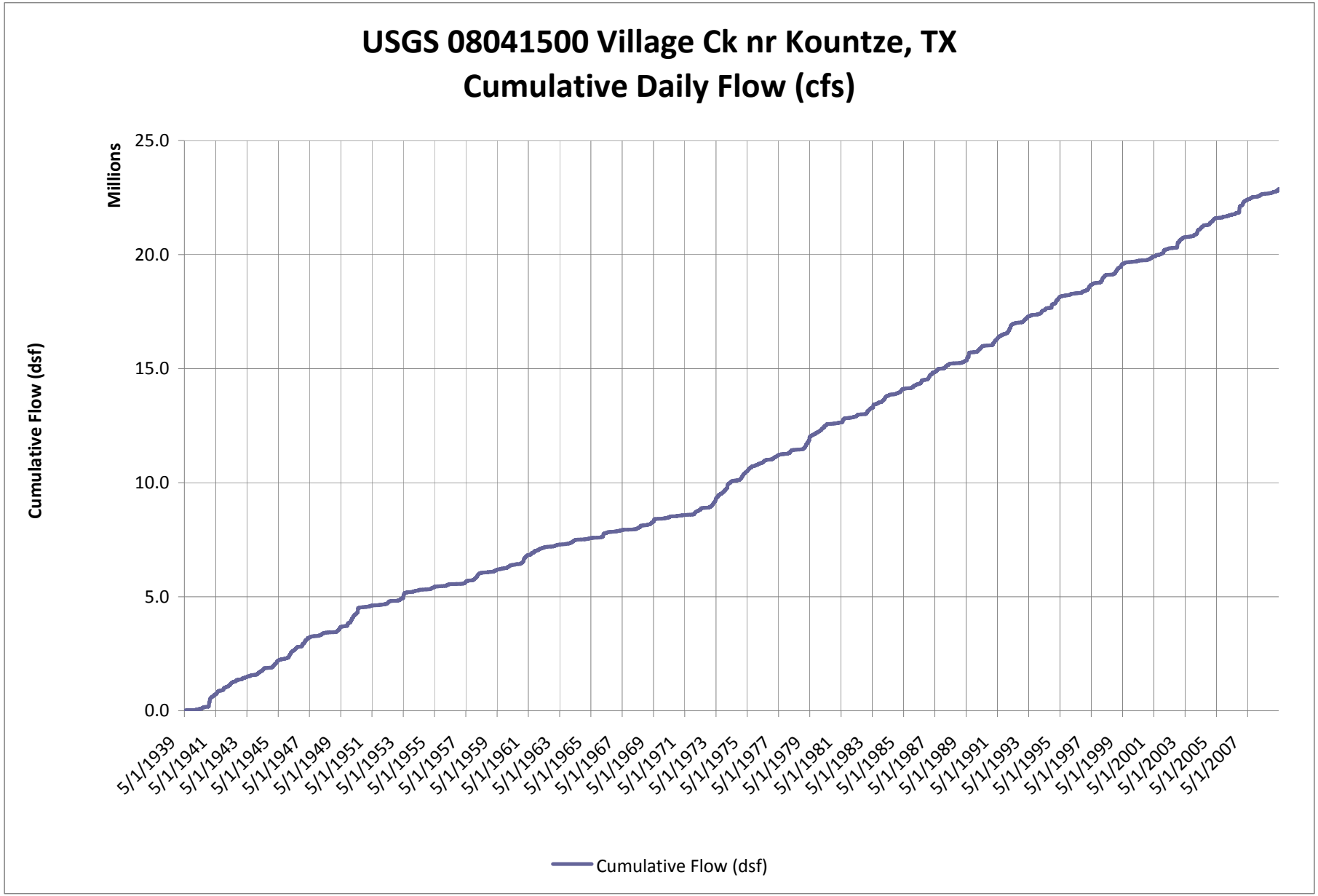

USGS 08036500 Angelina Rv nr Alto, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
Annual Flow (dsf)

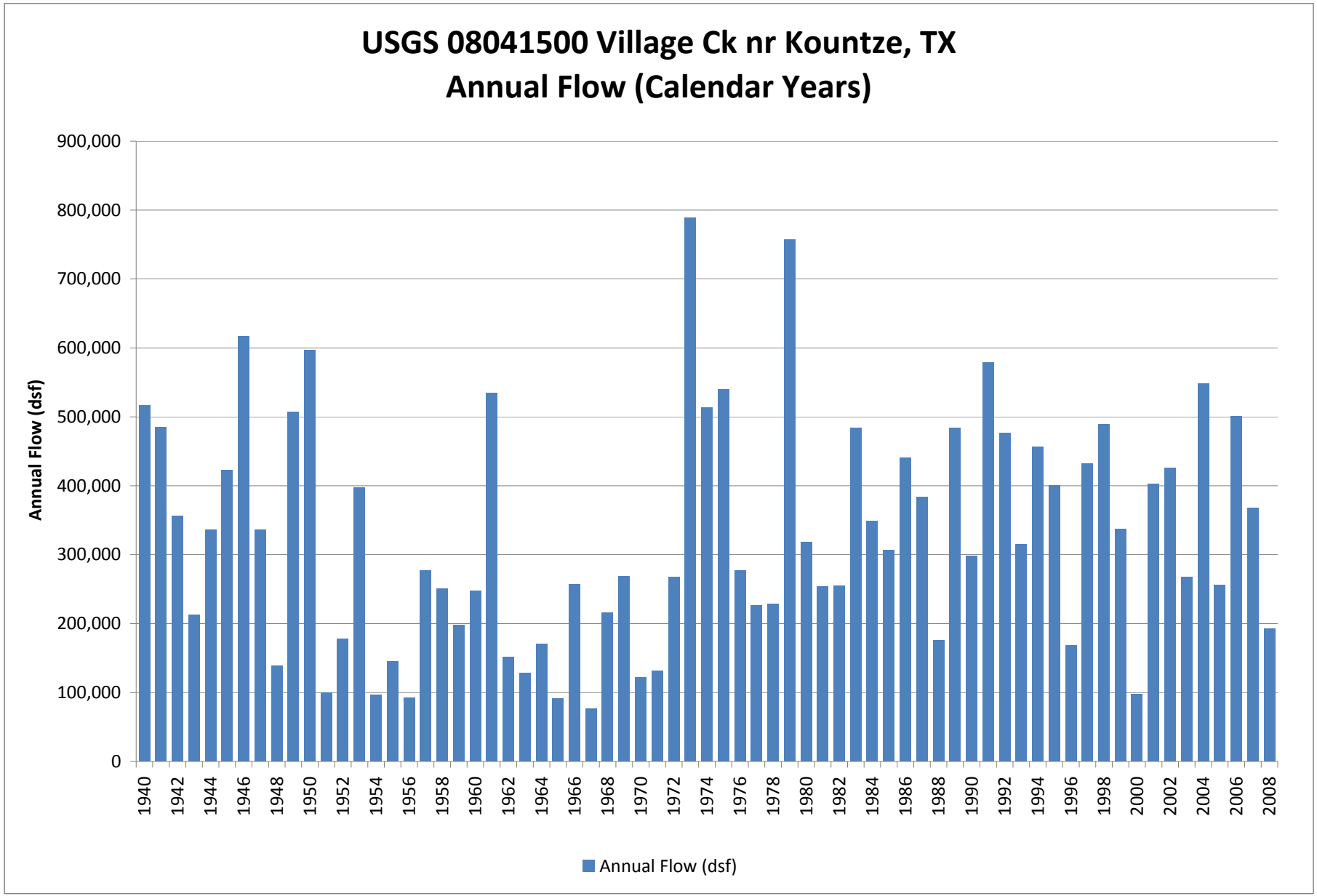

USGS 08038000 Attoyac Bayou nr Chireno, TX
Cumulative Daily Flow (cfs) 1956-1985
Cumulative Flow (dsf)
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
8/1/1939
1/21/1945
7/14/1950
1/4/1956
6/26/1961
12/17/1966
6/8/1972
11/29/1977
5/22/1983
11/11/1988
Cumulative Flow (dsf)
Reservoir Date of Impoundment


USGS 08038000 Attoyac Bayou nr Chireno, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
Annual Flow (dsf)


USGS 08041000 Neches Rv at Evadale, TX
Cumulative Daily Flow (cfs)
Millions
Cumulative Flow (dsf)
250.0
200.0
150.0
100.0
50.0
0.0
1/1/1919
1/1/1923
1/1/1927
1/1/1931
1/1/1935
1/1/1939
1/1/1943
1/1/1947
1/1/1951
1/1/1955
1/1/1959
1/1/1963
1/1/1967
1/1/1971
1/1/1975
1/1/1979
1/1/1983
1/1/1987
1/1/1991
1/1/1995
1/1/1999
1/1/2003
1/1/2007
Athens
Palestine
Kurth
Tyler East
Pinkston
Nacogdoches
Sam Rayburn
B.A. Steinhagen
Tyler
Jacksonville
Striker
Cumulative Flow (dsf)
Reservoir Date of Impoundment


USGS 08041000 Neches Rv at Evadale, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
6000000
5000000
4000000
3000000
2000000
1000000
0
1922
1924
1926
1928
1930
1932
1934
1936
1938
1940
1942
1944
1946
1948
1950
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
Annual Flow (dsf)


USGS 08041500 Village Ck nr Kountze, TX
Cumulative Daily Flow (cfs)
Millions
Cumulative Flow (dsf)
25.0
20.0
15.0
10.0
5.0
0.0
5/1/1939
5/1/1941
5/1/1943
5/1/1945
5/1/1947
5/1/1949
5/1/1951
5/1/1953
5/1/1955
5/1/1957
5/1/1959
5/1/1961
5/1/1963
5/1/1965
5/1/1967
5/1/1969
5/1/1971
5/1/1973
5/1/1975
5/1/1977
5/1/1979
5/1/1981
5/1/1983
5/1/1985
5/1/1987
5/1/1989
5/1/1991
5/1/1993
5/1/1995
5/1/1997
5/1/1999
5/1/2001
5/1/2003
5/1/2005
5/1/2007
Cumulative Flow (dsf)


USGS 08041500 Village Ck nr Kountze, TX
Annual Flow (Calendar Years)
Annual Flow (dsf)
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1940
1942
1944
1946
1948
1950
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
Annual Flow (dsf)