U.S. Department of the Interior
U.S. Geological Survey

Utah Water Science Center

Upper Colorado River Streamflow and Reservoir Contents

Provisional Data for:

August 2018

All data contained in this report is provisional and subject to revision.

On the Web at: http://ut.water.usgs.gov/reports/ucr_monthly.html

PROVISIONAL DATA
SUBJECT TO REVISION

U.S. GEOLOGICAL SURVEY
UTAH WATER SCIENCE CENTER
STREAMFLOW AND RESERVOIR CONTENTS IN UPPER COLORADO RIVER BASIN
contact 435-259-4430 or wilkowsk@usgs.gov

August 2018

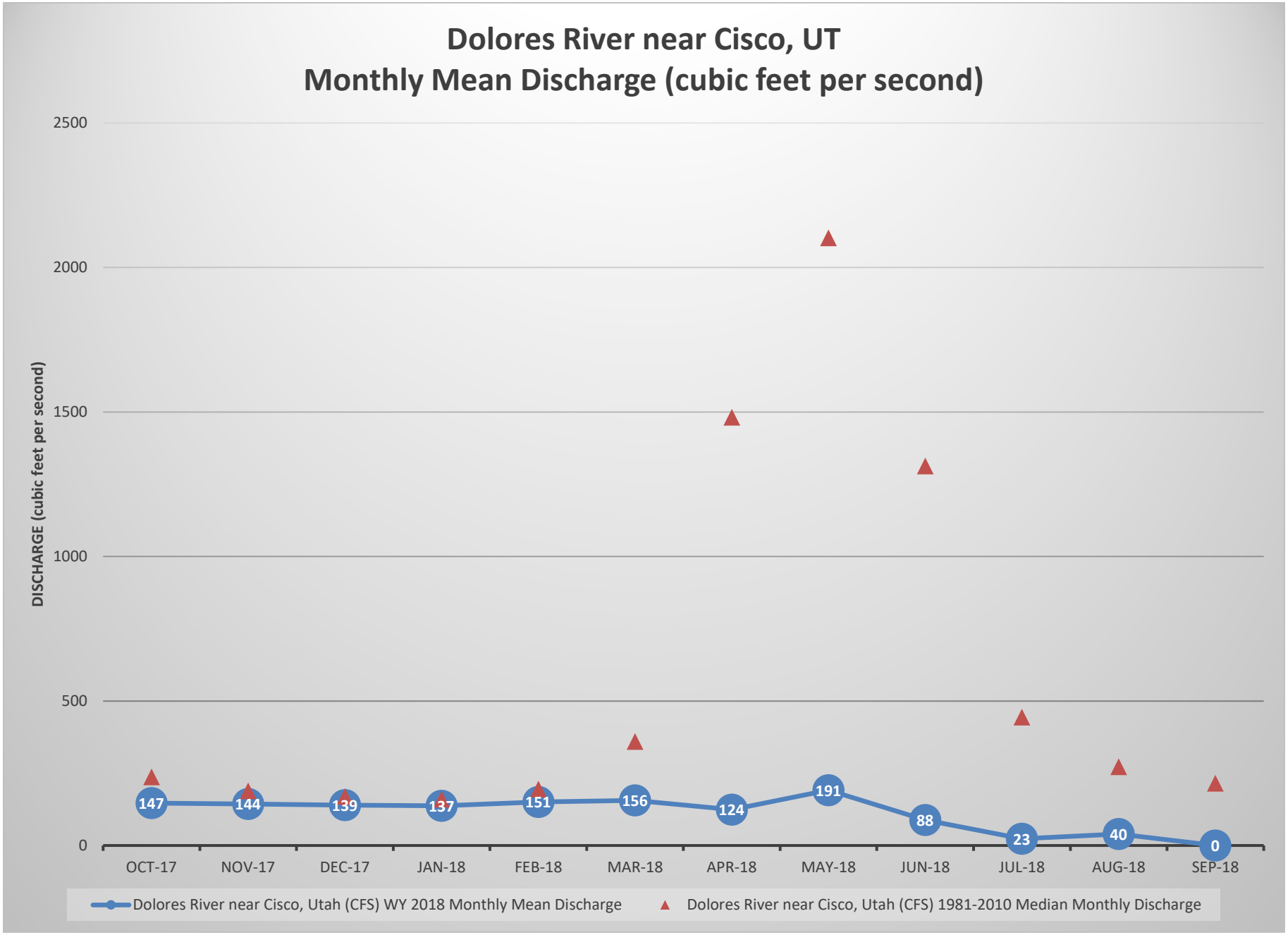
DAYS IN MONTH 31

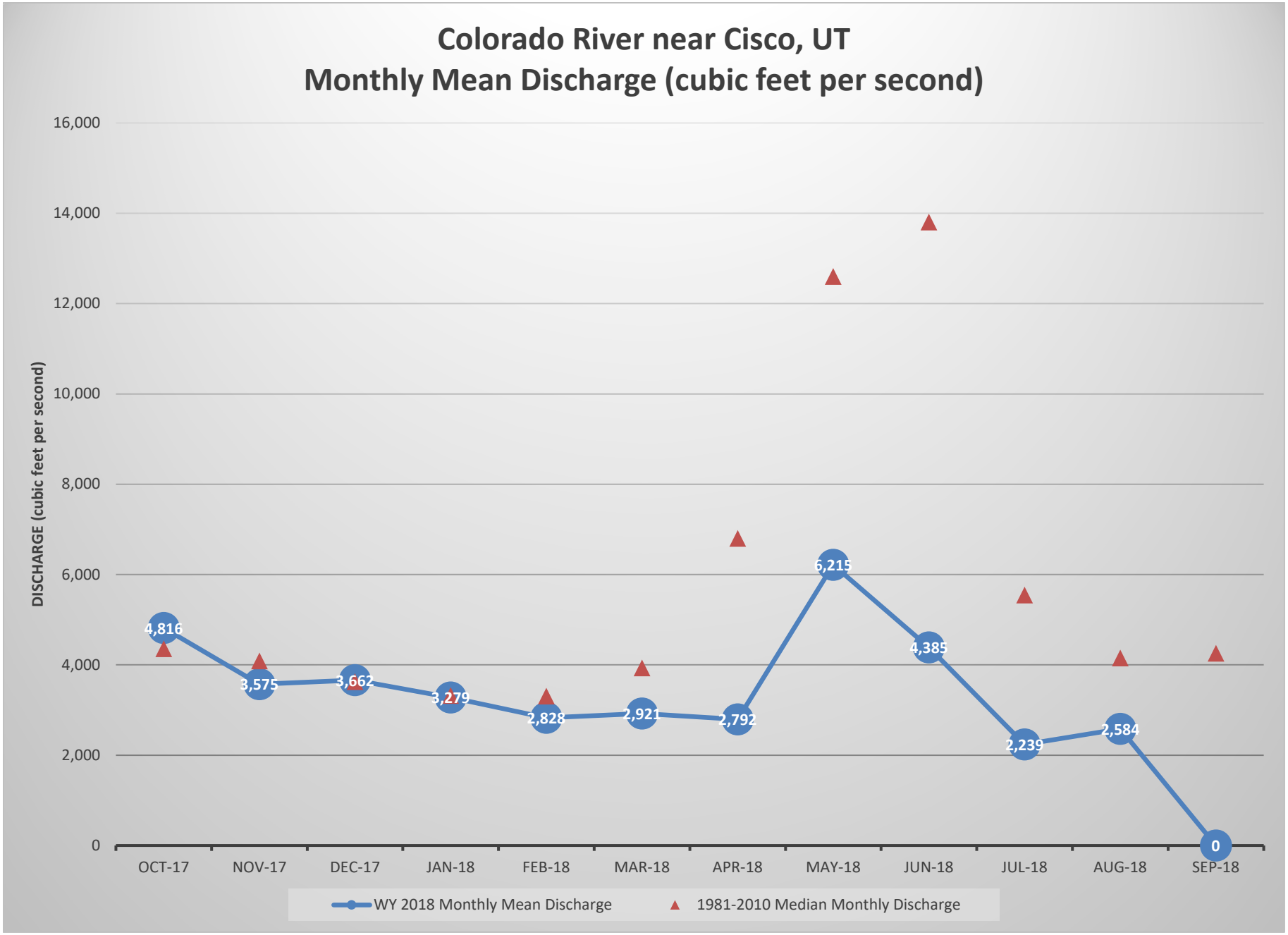
STREAM	MONTHLY DISCHARGE (a) (A)MEDIAN ft^3/s (1981-2010)	MEAN ft^3/s THIS MONTH	PERCENT 30 YEAR MEDIAN	TOTAL ft^3/s DAYS	ACRE FEET	MAXIMUM ft^3/s	DAILY DATE	MINIMUM ft^3/s	DAILY DATE
COLORADO RIVER NR CISCO, UTAH B	4,153	2,584	62%	80,254	158,904	3,460	24-Aug	2,170	18-Aug
GREEN RIVER AT GREEN RIVER , UT C	2,460	2,081	85%	64,611	127,929	2,460	25-Aug	1,710	15-Aug
SAN JUAN RIVER NEAR BLUFF, UT D	1,175	504	43%	15,654	30,996	828	24-Aug	361	11-Aug
DOLORES RIVER NR CISCO, UTAH E	273	40	15%	1,241	2,457	353	28-Aug	2.53	17-Aug

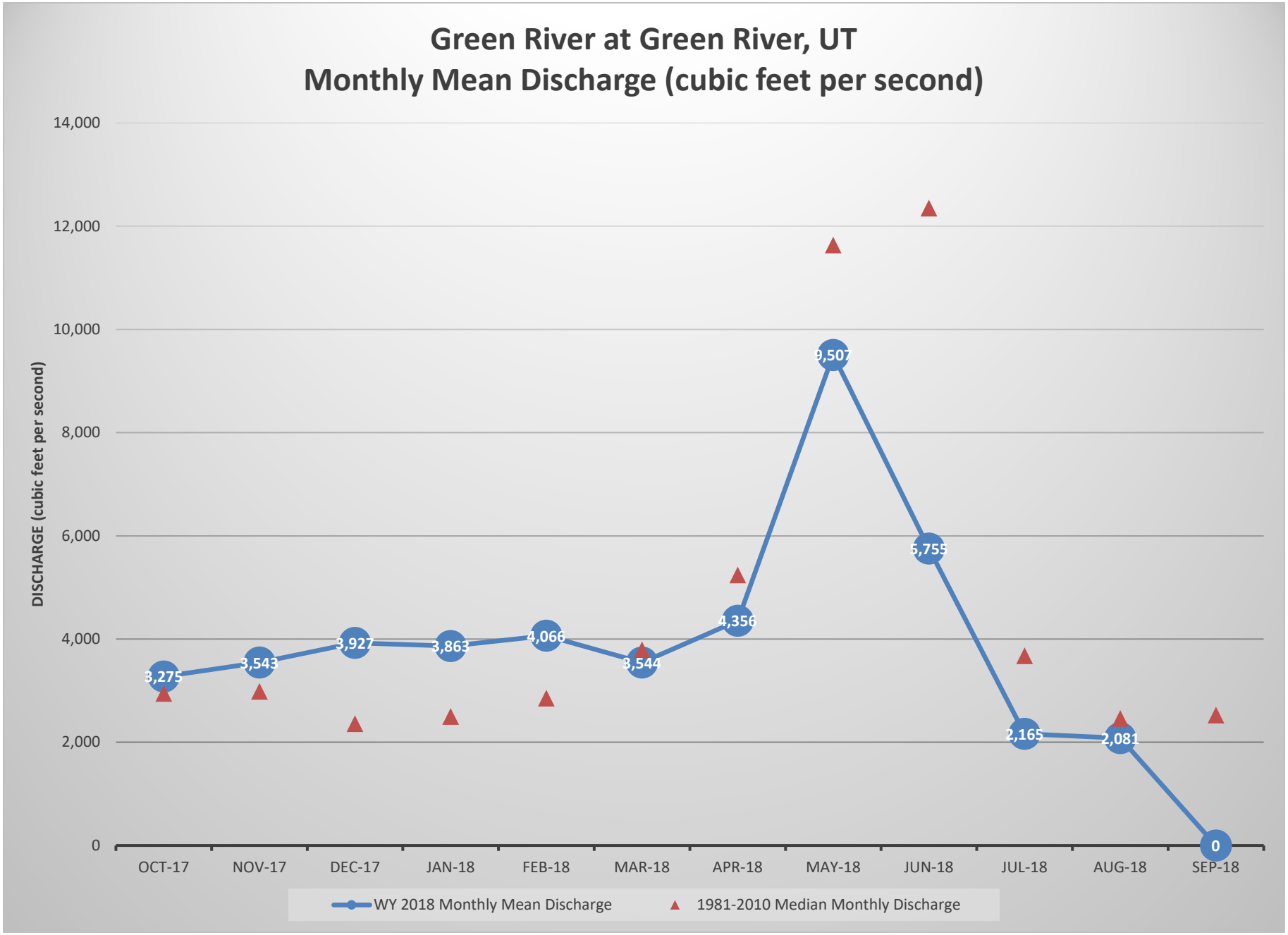
A MEDIAN OF MEAN DISCHARGES FOR THE MONTH FOR 30-YR PERIOD 1981-2010
B STORAGE IN BLUE MESA RESERVOIR BEGAN OCT. 27, 1965
C STORAGE IN FLAMING GORGE RESERVOIR & FONTENELLE RESERVOIR BEGAN NOV. 1, 1962 & OCT., 1964 RESPECTIVELY.
D STORAGE IN NAVAJO RESERVOIR BEGAN JUNE 27, 1962) AND SINCE AUGUST 1964,
D RELEASES TO NAVAJO INDIAN IRRIGATION PROJECT (NIIP) BEGAN JANUARY 1976.
E STORAGE IN MCPHEE RESERVOPIR BEGAN 1984

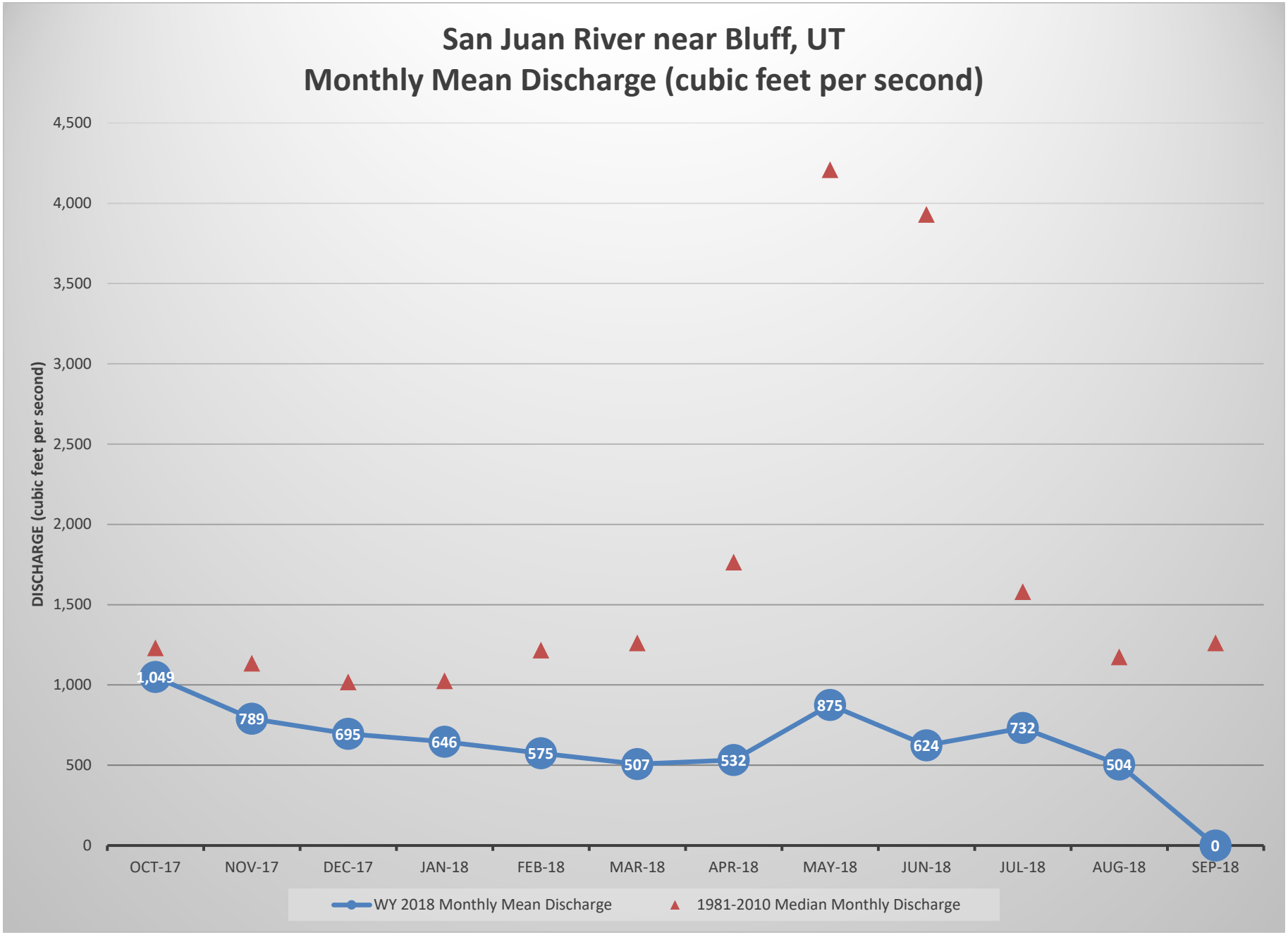
RESERVOIR		DRAINAGE ABOVE DAM (MI^2)	USABLE CAPACITY (AC-FT)	END OF MO. USABLE CONTENTS (AC-FT)	CHANGE DURING MONTH (AC-FT)	PREVIOUS MONTH
BLUE MESA RESERVOIR NEAR SAPINERO, COLORADO		3,426	829,500	334,000	-65,100	399,100
FLAMING GORGE RESERVOIR AT FLAMING GORGE DAM, UT	(b)	15,100	3,739,000	3,453,200	-66,100	3,519,300
FONTENELLE RESERVOIR AT FONTENELLE , WYOMING	(b)	4,280	344,300	298,900	-28,400	327,300
NAVAJO RESERVOIR NEAR ARCHULETA, NEW MEXICO	(b)	3,320	1,696,000	991,300	-88,800	1,080,100
					NIIP 41,800	
LAKE POWELL RESERVOIR AT GLEN CANYON DAM, ARIZONA	(b)	107,700	25,002,000	11,477,400	-639,000	12,116,400
TOTALS			31,620,800	16,554,800	-887,400	17,442,200

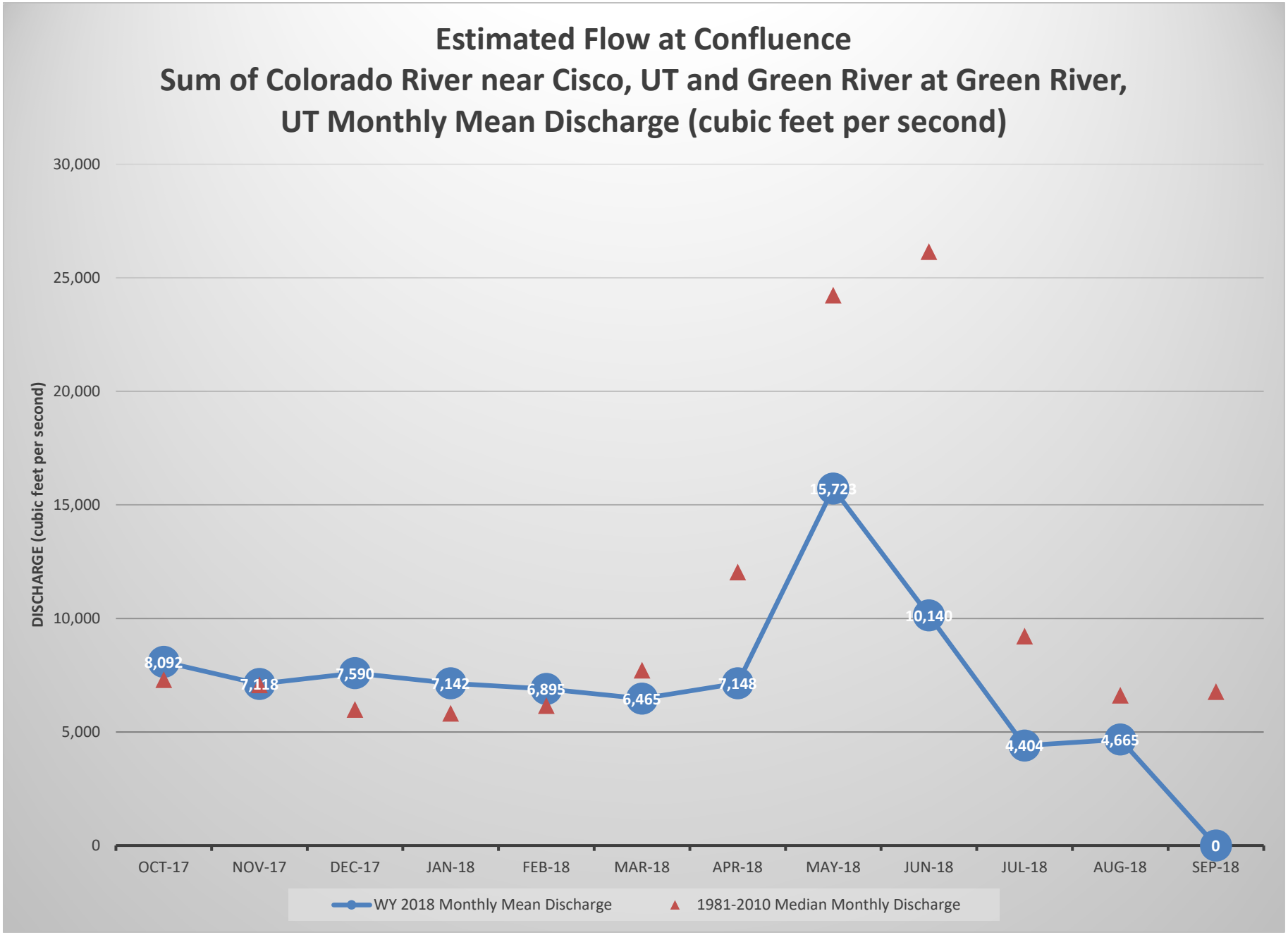
(a) Preliminary Data
(b) Approximate

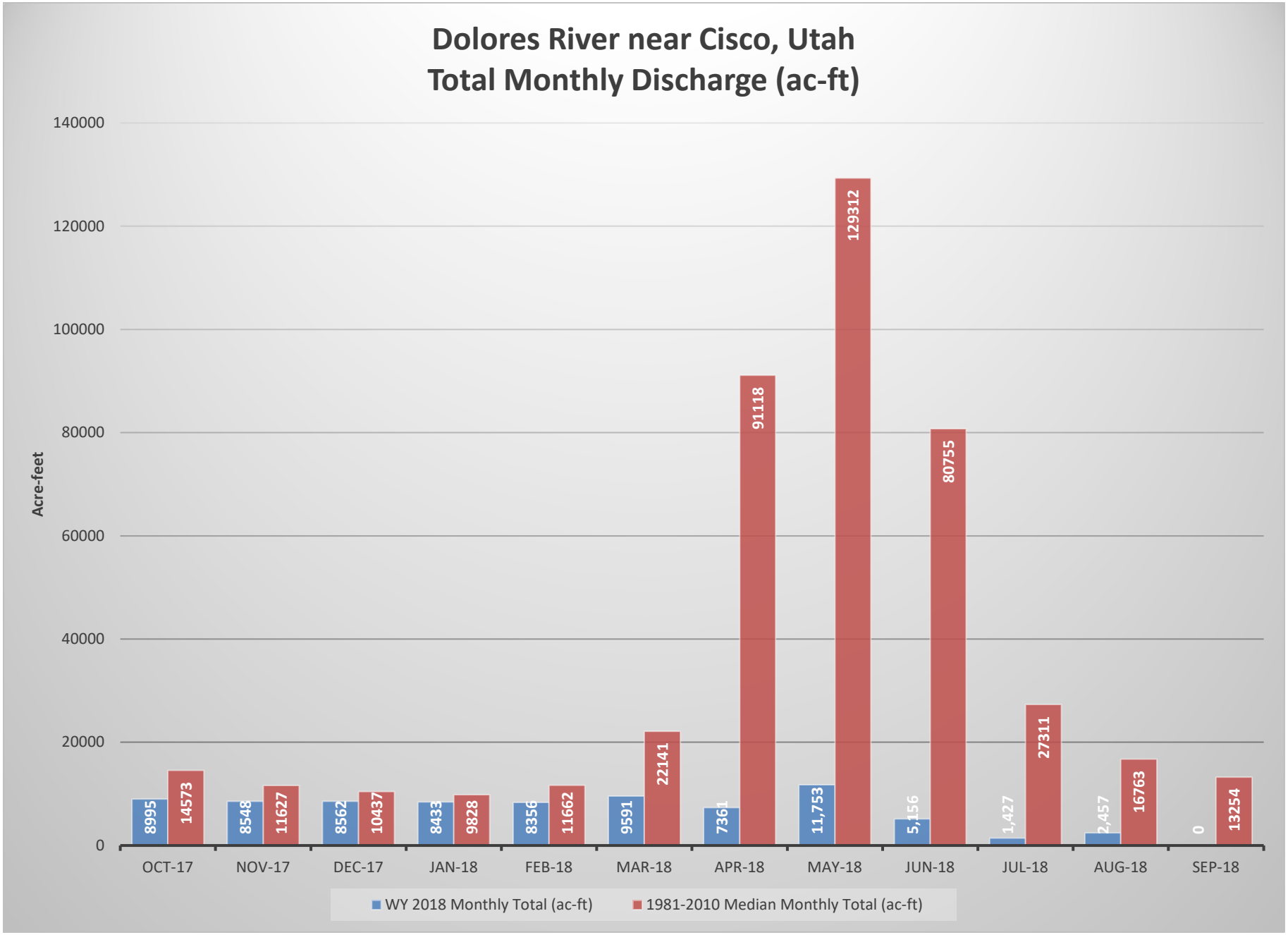

Dolores River near Cisco, UT
Monthly Mean Discharge (cubic feet per second)
DISCHARGE (cubic feet per second)
2500
2000
1500
1000
500
0
147
144
139
137
151
156
124
191
88
23
40
0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
Dolores River near Cisco, Utah (CFS) WY 2018 Monthly Mean Discharge
Dolores River near Cisco, Utah (CFS) 1981-2010 Median Monthly Discharge

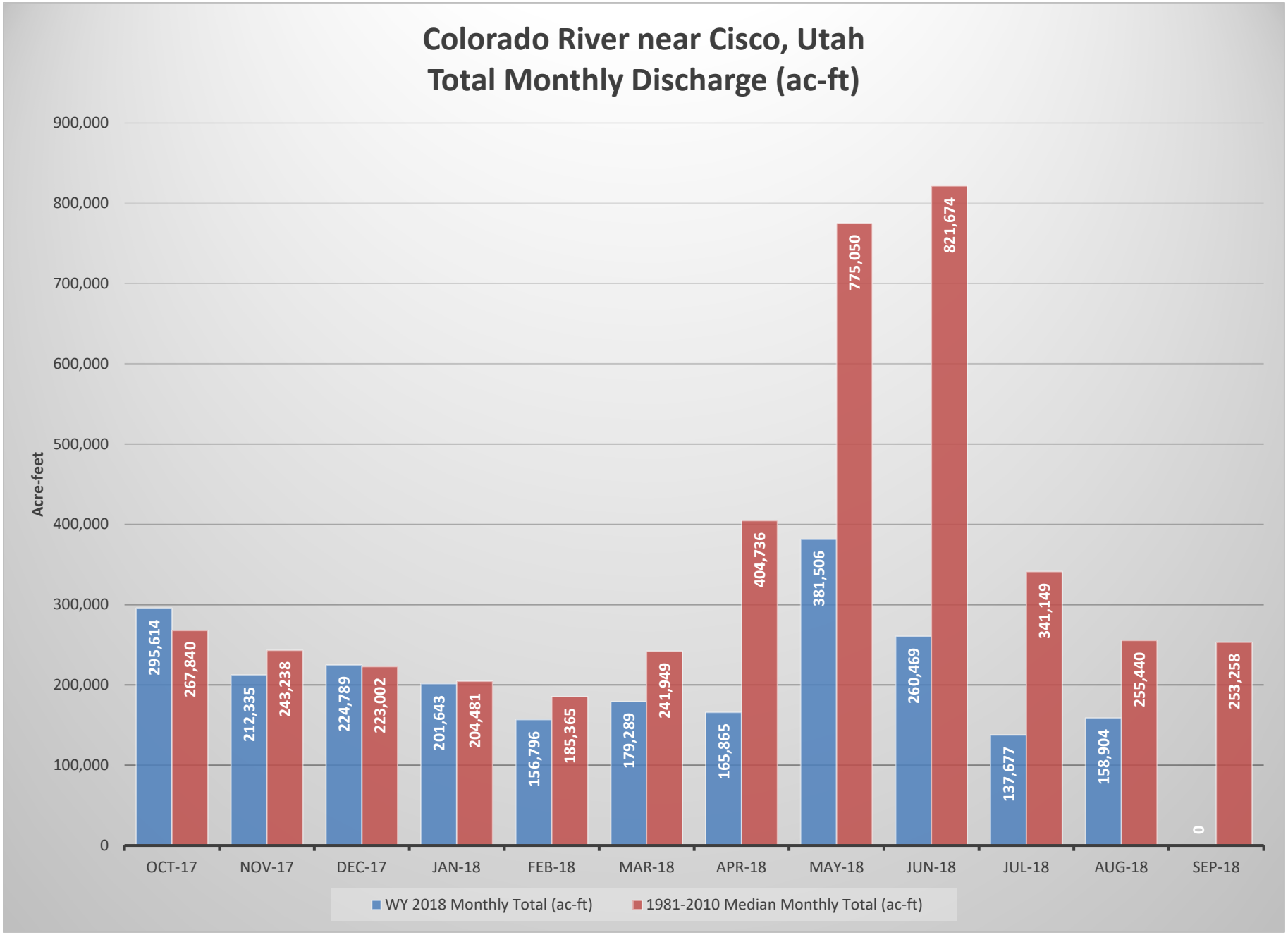

Colorado River near Cisco, UT
Monthly Mean Discharge (cubic feet per second)
DISCHARGE (cubic feet per second)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
4,816
3,575
3,662
3,279
2,828
2,921
2,792
6,215
4,385
2,239
2,584
0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Mean Discharge
1981-2010 Median Monthly Discharge

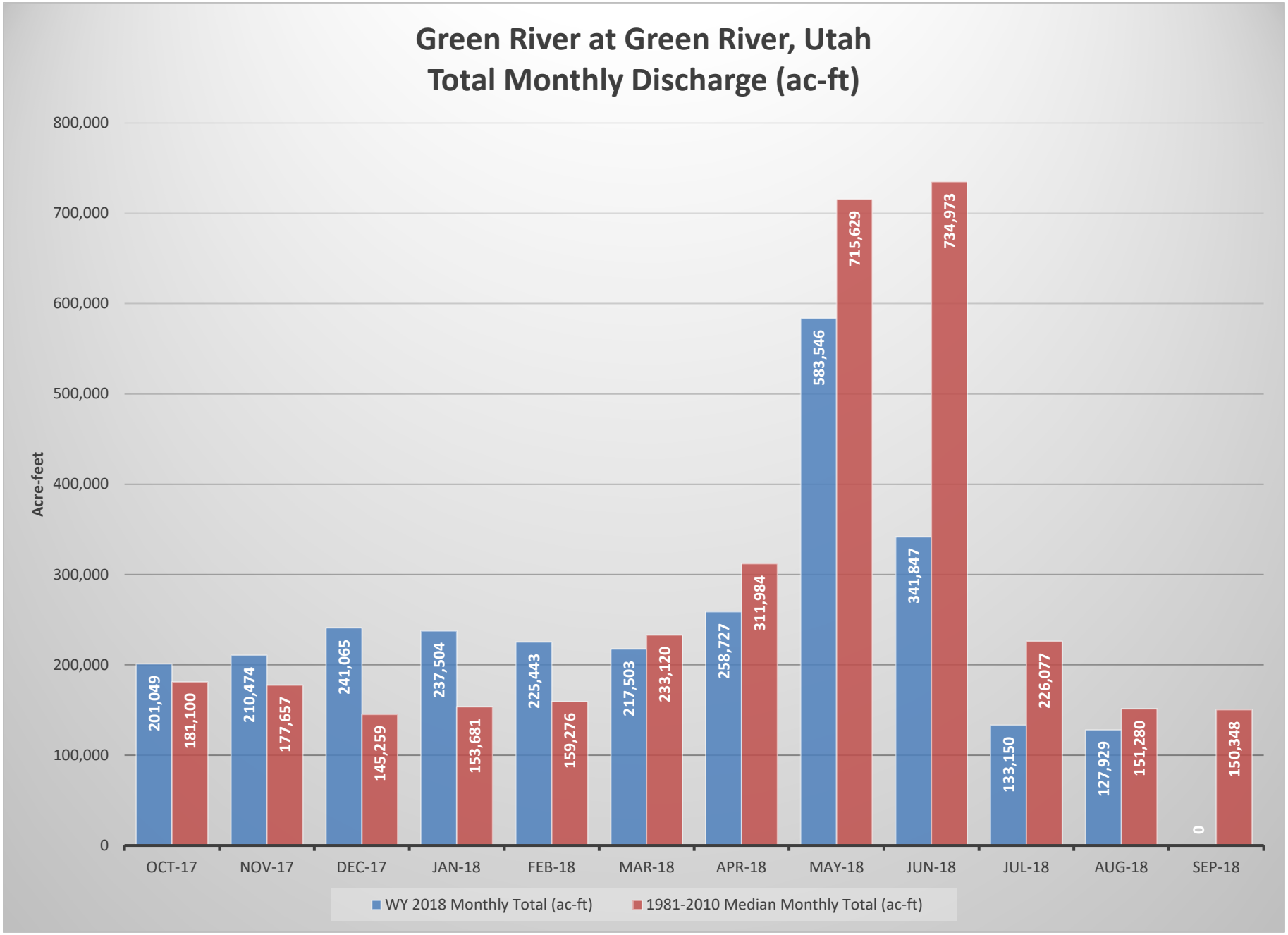

Green River at Green River, UT
Monthly Mean Discharge (cubic feet per second)
DISCHARGE (cubic feet per second)
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
3,275
3,543
3,927
3,863
4,066
3,544
4,356
9,507
5,755
2,165
2,081
0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Mean Discharge
1981-2010 Median Monthly Discharge

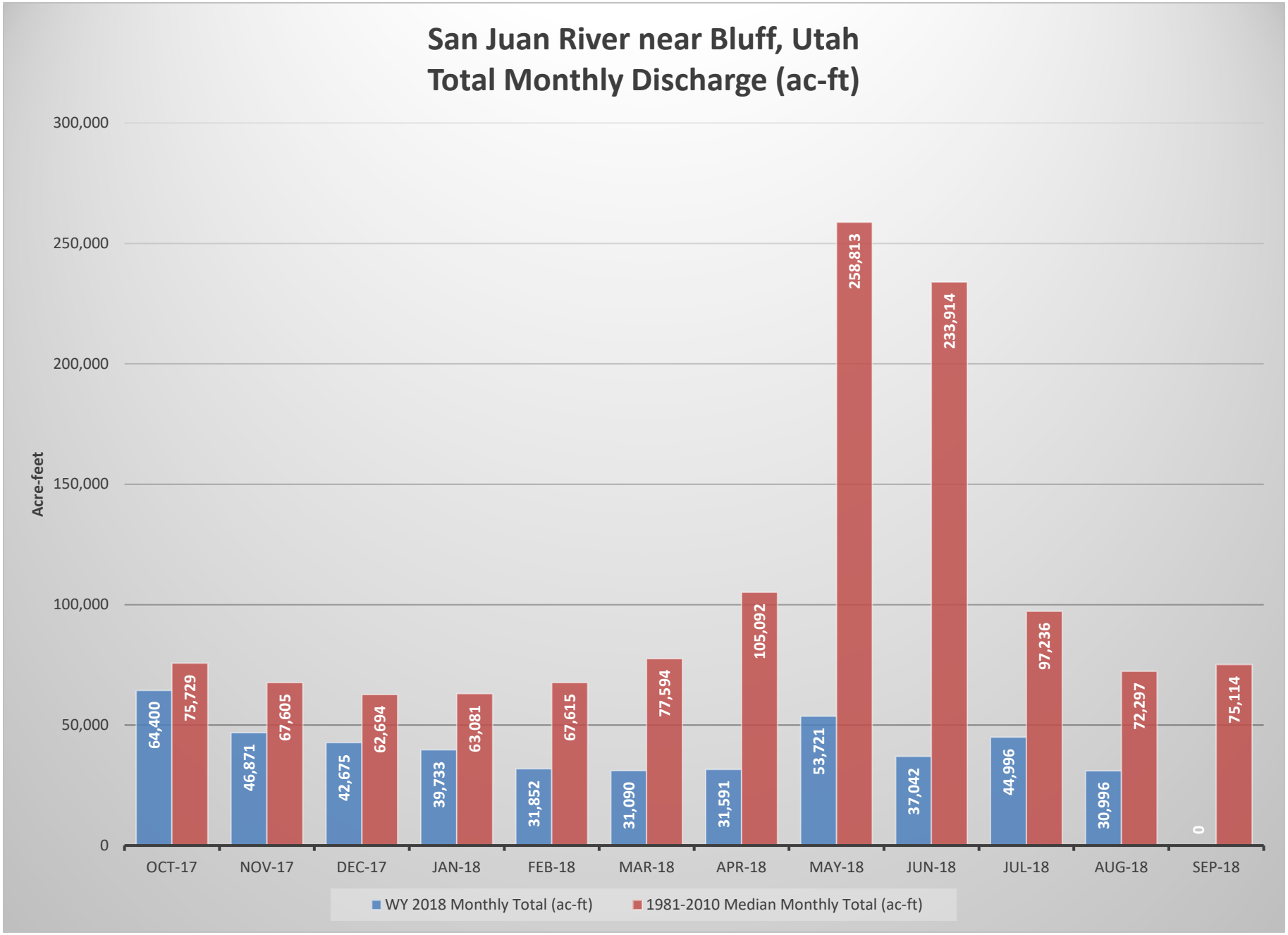

San Juan River near Bluff, UT
Monthly Mean Discharge (cubic feet per second)
DISCHARGE (cubic feet per second)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1,049
789
695
646
575
507
532
875
624
732
504
0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Mean Discharge
1981-2010 Median Monthly Discharge

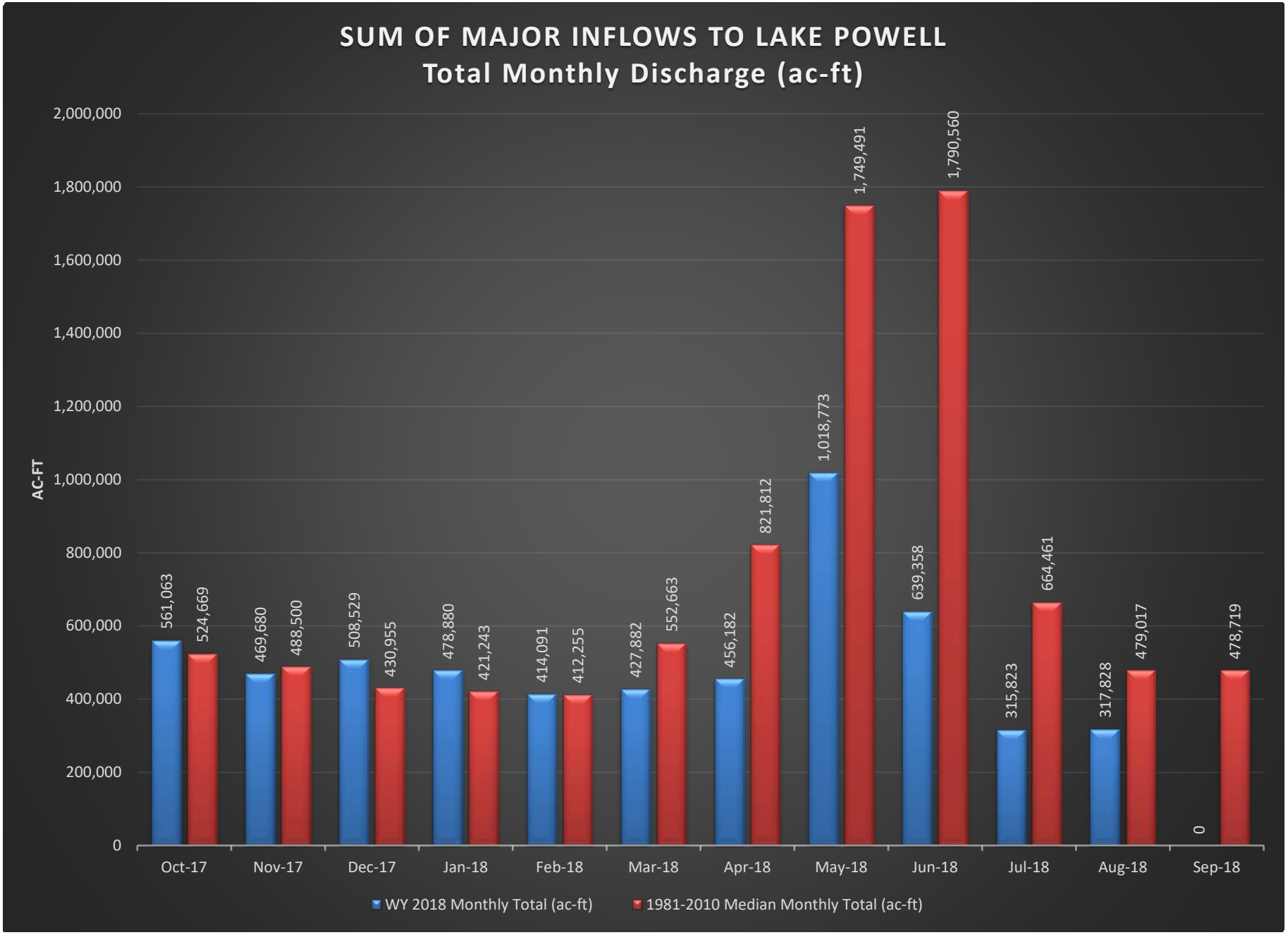

Estimated Flow at Confluence
Sum of Colorado River near Cisco, UT and Green River at Green River, UT Monthly Mean Discharge (cubic feet per second)
DISCHARGE (cubic feet per second)
30,000
25,000
20,000
15,000
10,000
5,000
0
8,092
7,118
7,590
7,142
6,895
6,465
7,148
15,724
10,140
4,404
4,665
0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Mean Discharge
1981-2010 Median Monthly Discharge

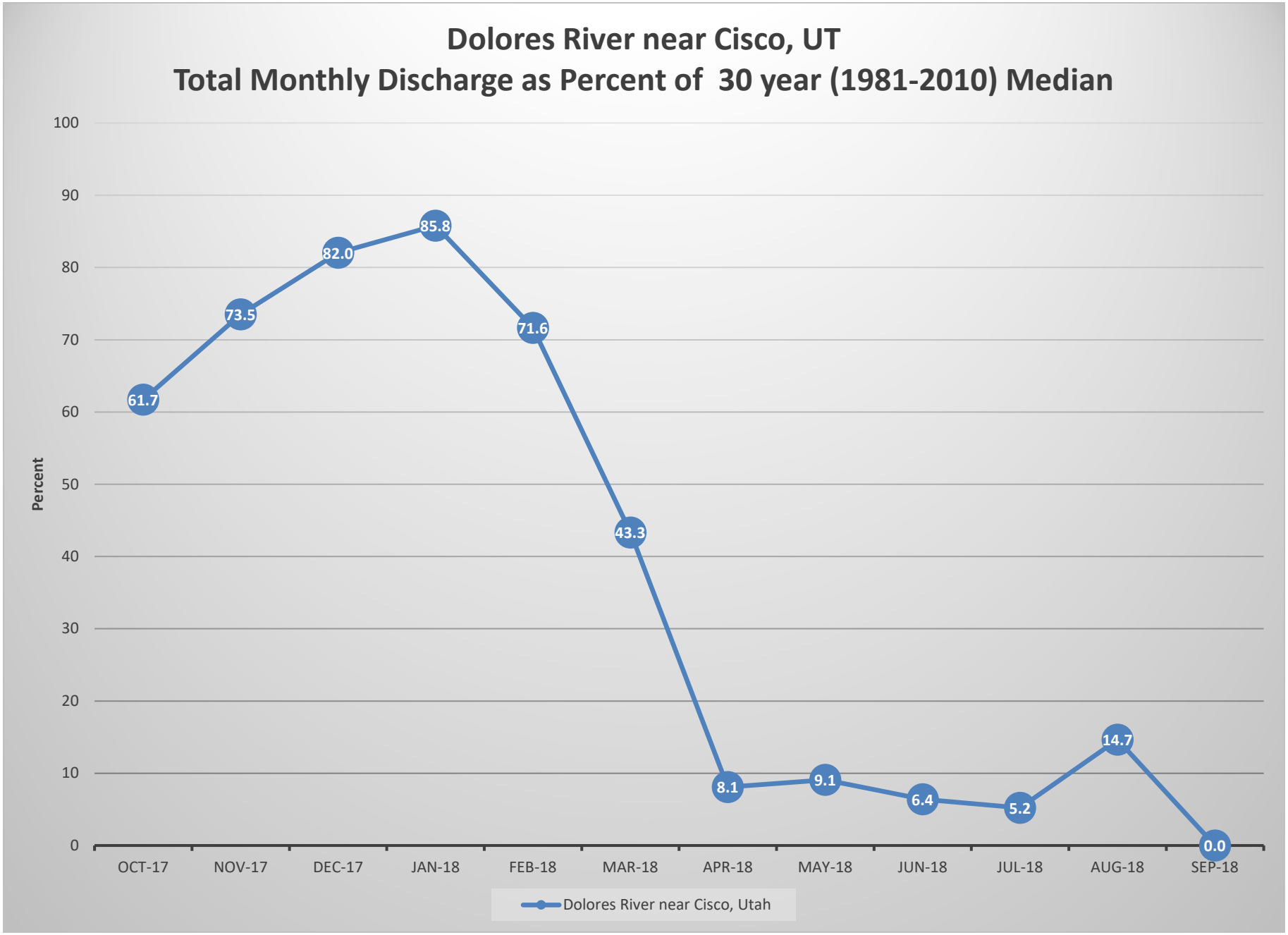

Dolores River near Cisco, Utah
Total Monthly Discharge (ac-ft)
Acre-feet
140000
120000
100000
80000
60000
40000
20000
0
8995
14573
8548
11627
8562
10437
8433
9828
8356
11662
9591
22141
7361
91118
11,753
129312
5,156
80755
1,427
27311
2,457
16763
0
13254
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Total (ac-ft)
1981-2010 Median Monthly Total (ac-ft)

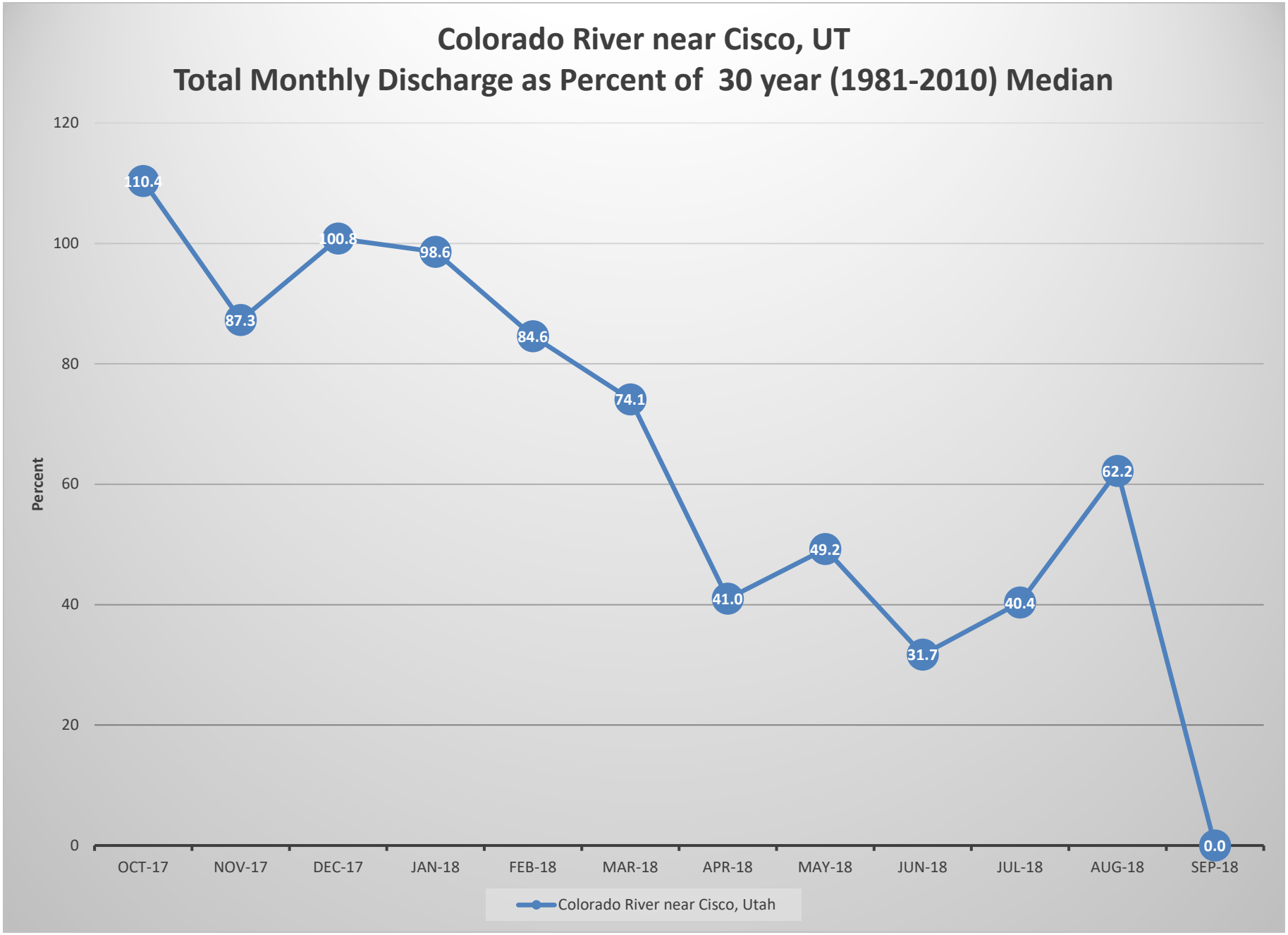

Colorado River near Cisco, Utah
Total Monthly Discharge (ac-ft)
Acre-feet
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
295,614
267,840
212,335
243,238
224,789
223,002
201,643
204,481
156,796
185,365
179,289
241,949
165,865
404,736
381,506
775,050
260,469
821,674
137,677
341,149
158,904
255,440
0
253,258
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Total (ac-ft)
1981-2010 Median Monthly Total (ac-ft)

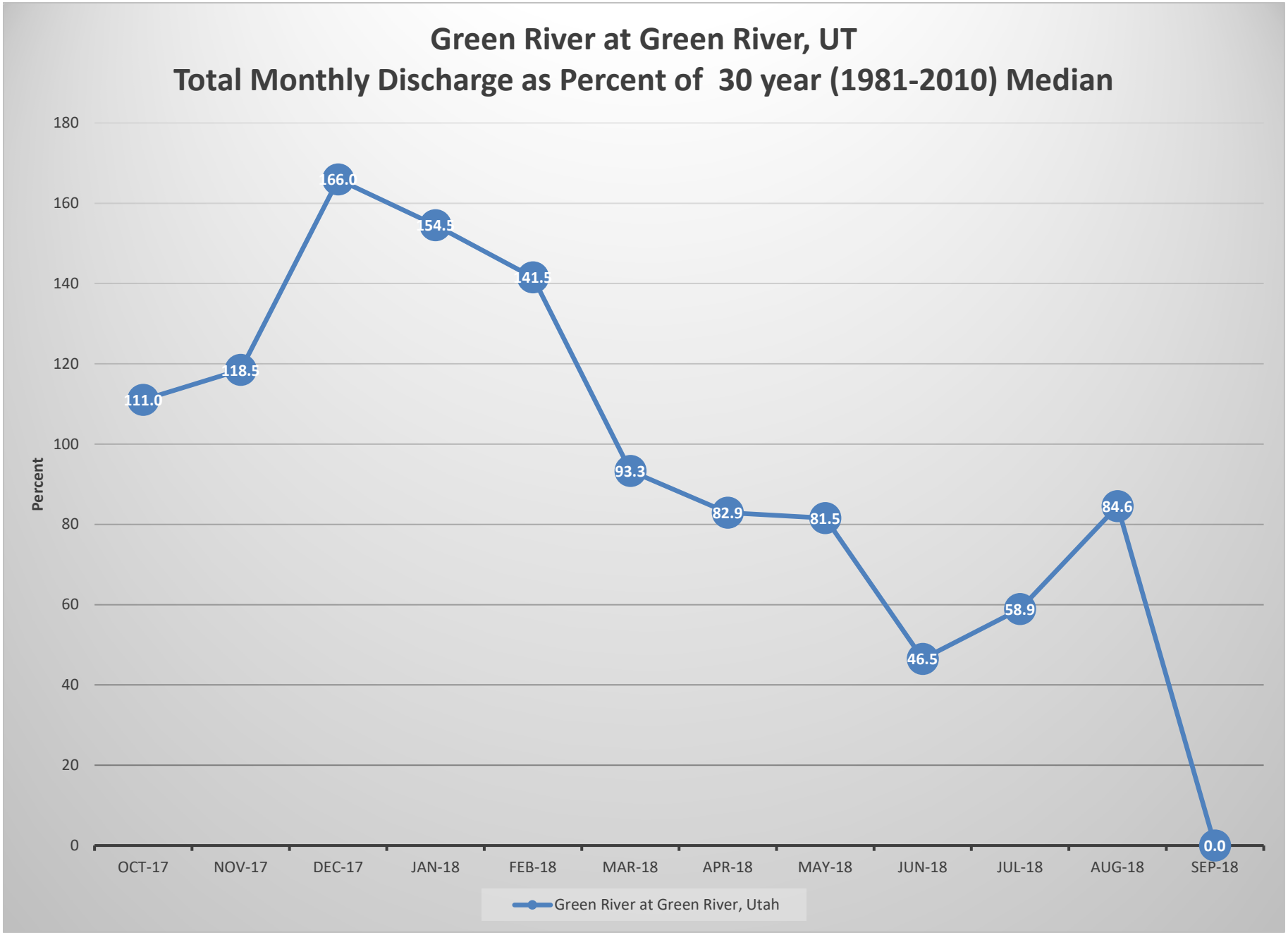

Green River at Green River, Utah
Total Monthly Discharge (ac-ft)
Acre-feet
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
201,049
181,100
210,474
177,657
241,065
145,259
237,504
153,681
225,443
159,276
217,503
233,120
258,727
311,984
583,546
715,629
341,847
734,973
133,150
226,077
127,929
151,280
0
150,348
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Total (ac-ft)
1981-2010 Median Monthly Total (ac-ft)

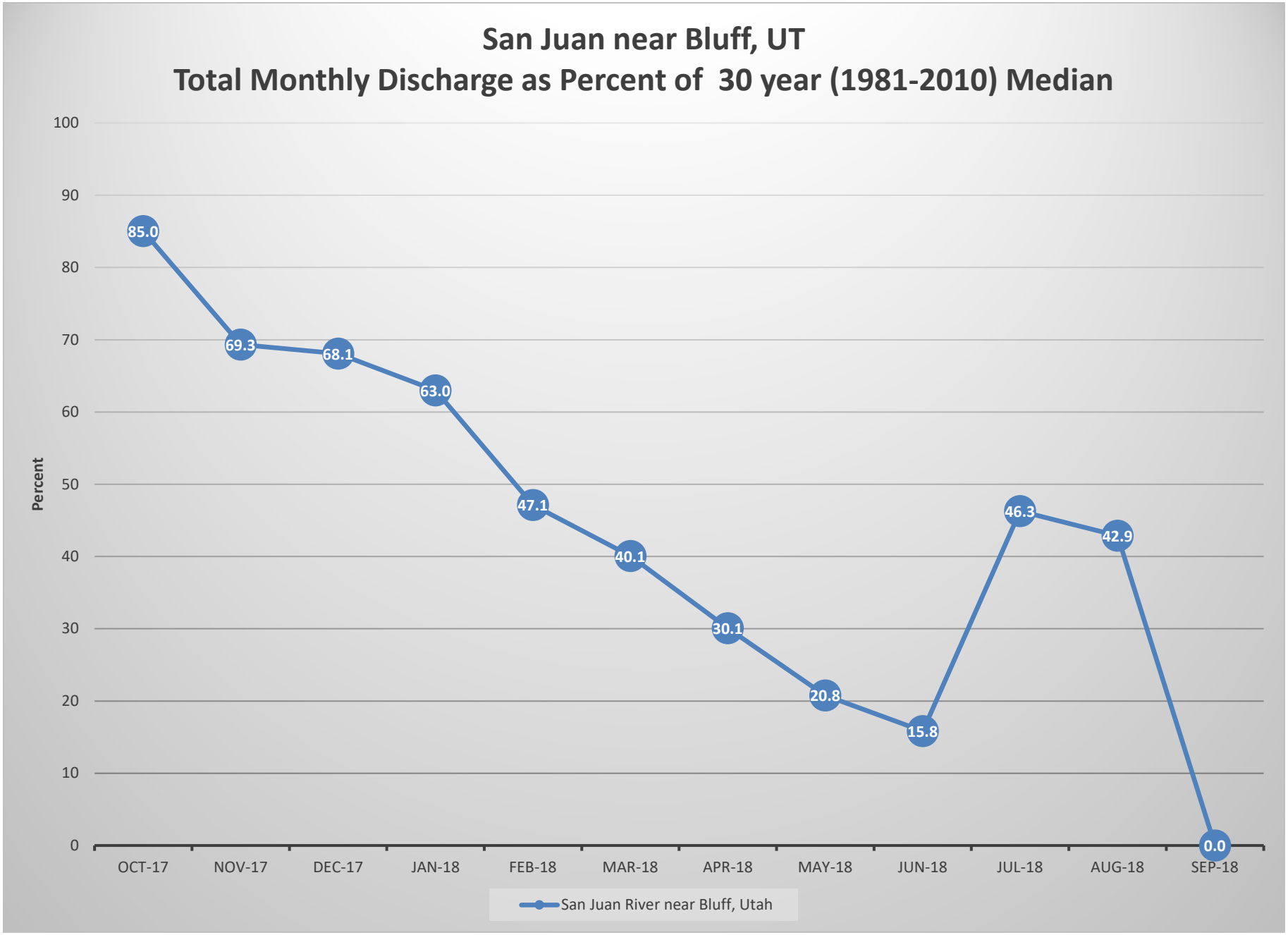

San Juan River near Bluff, Utah
Total Monthly Discharge (ac-ft)
Acre-feet
300,000
250,000
200,000
150,000
100,000
50,000
0
64,400
75,729
46,871
67,605
42,675
62,694
39,733
63,081
31,852
67,615
31,090
77,594
31,591
105,092
53,721
258,813
37,042
233,914
44,996
97,236
30,996
72,297
0
75,114
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
WY 2018 Monthly Total (ac-ft)
1981-2010 Median Monthly Total (ac-ft)

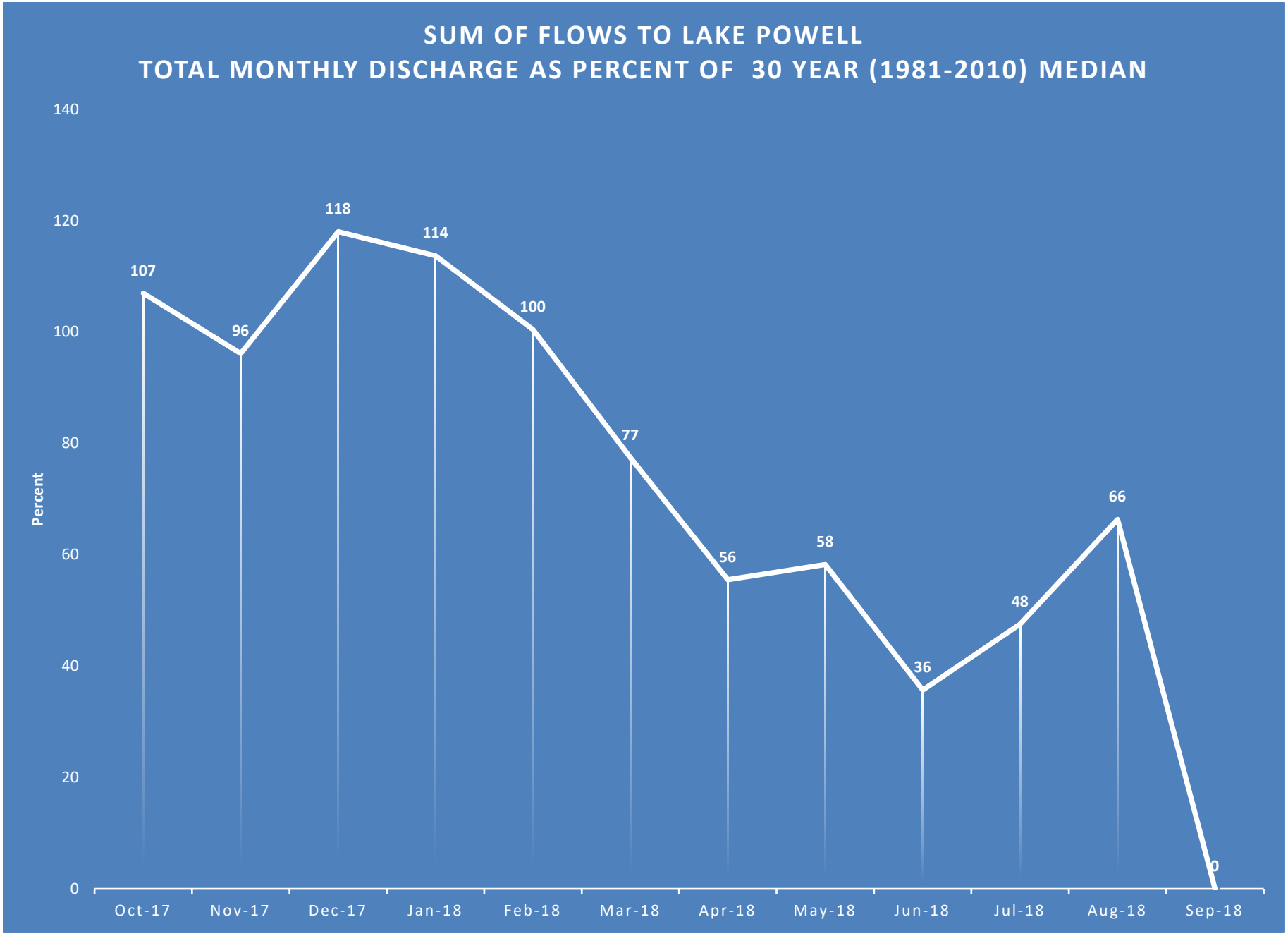

SUM OF MAJOR INFLOWS TO LAKE POWELL
Total Monthly Discharge (ac-ft)
AC-FT
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
561,063
524,669
469,680
488,500
508,529
430,955
478,880
421,243
414,091
412,255
427,882
552,663
456,182
821,812
1,018,773
1,749,491
639,358
1,790,560
315,823
664,461
317,828
479,017
0
478,719
Oct-17
Nov-17
Dec-17
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18
WY 2018 Monthly Total (ac-ft)
1981-2010 Median Monthly Total (ac-ft)

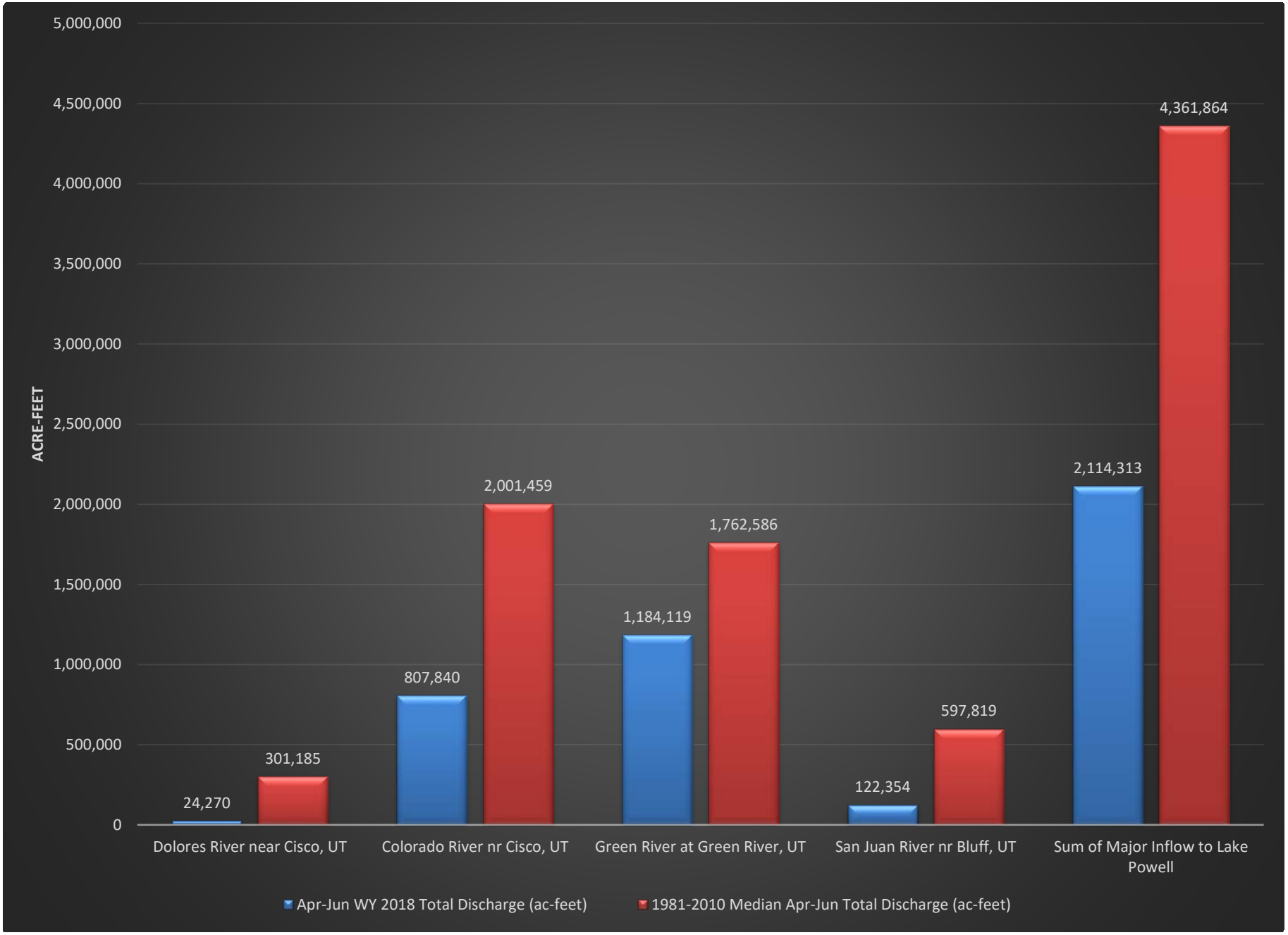

Dolores River near Cisco, UT
Total Monthly Discharge as Percent of 30 year (1981-2010) Median
Percent
100
90
80
70
60
50
40
30
20
10
0
61.7
73.5
82.0
85.8
71.6
43.3
8.1
9.1
6.4
5.2
14.7
0.0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
Dolores River near Cisco, Utah

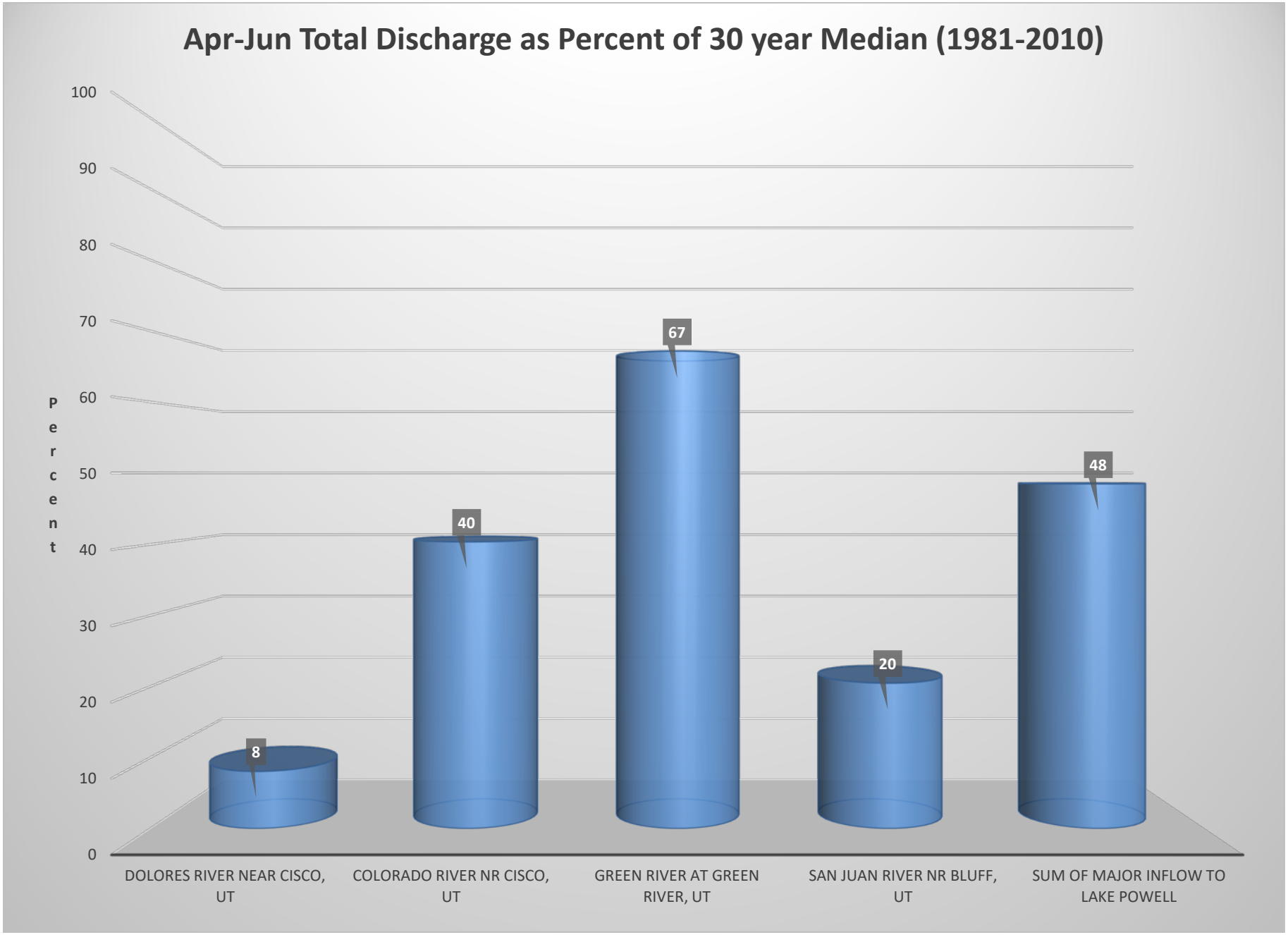

Colorado River near Cisco, UT
Total Monthly Discharge as Percent of 30 year (1981-2010) Median
Percent
120
100
80
60
40
20
0
110.4
87.3
100.8
98.6
84.6
74.1
41.0
49.2
31.7
40.4
62.2
0.0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
Colorado River near Cisco, Utah

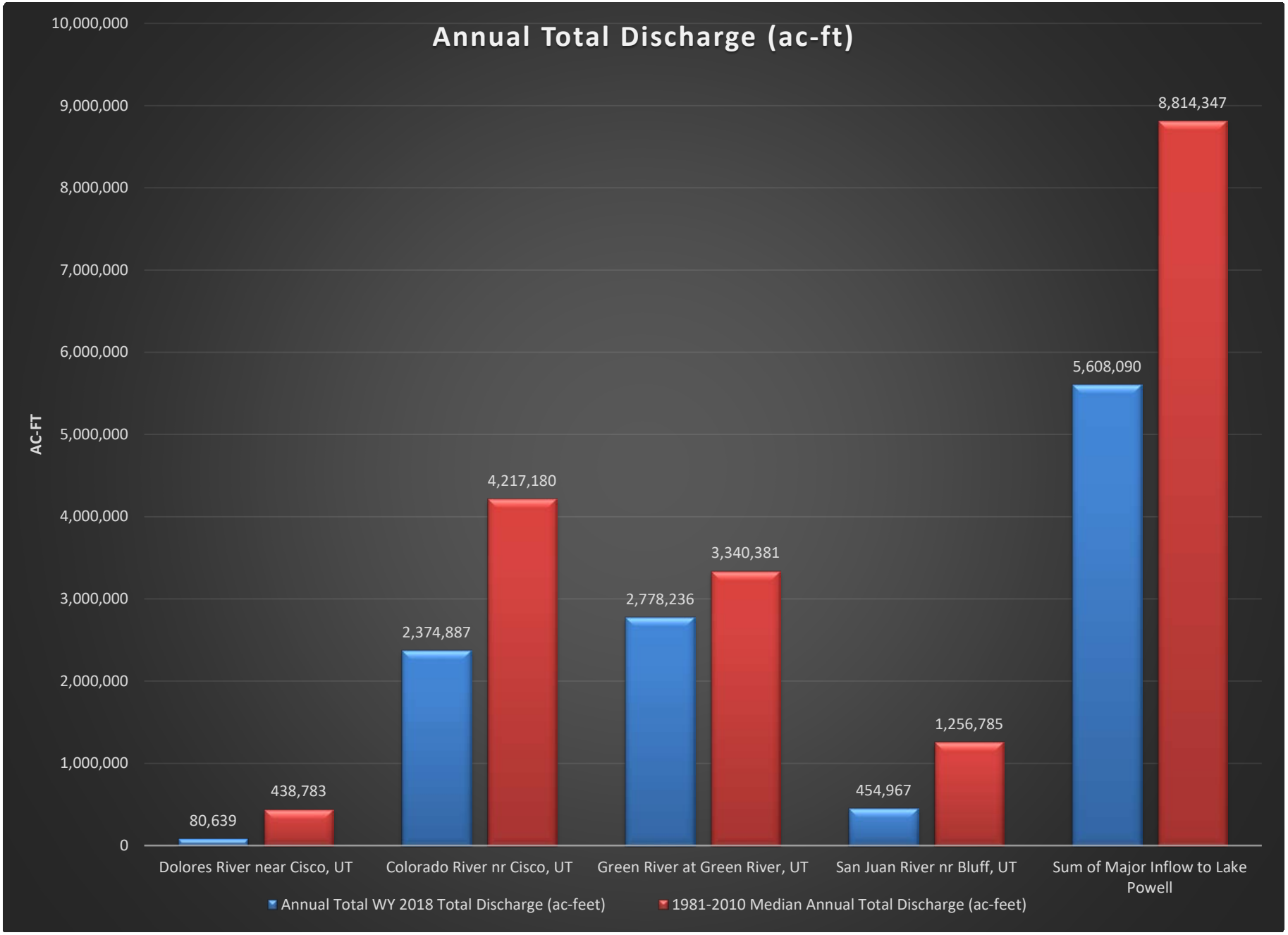

Green River at Green River, UT
Total Monthly Discharge as Percent of 30 year (1981-2010) Median
Percent
180
160
140
120
100
80
60
40
20
0
111.0
118.5
166.0
154.5
141.5
93.3
82.9
81.5
46.5
58.9
84.6
0.0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
Green River at Green River, Utah

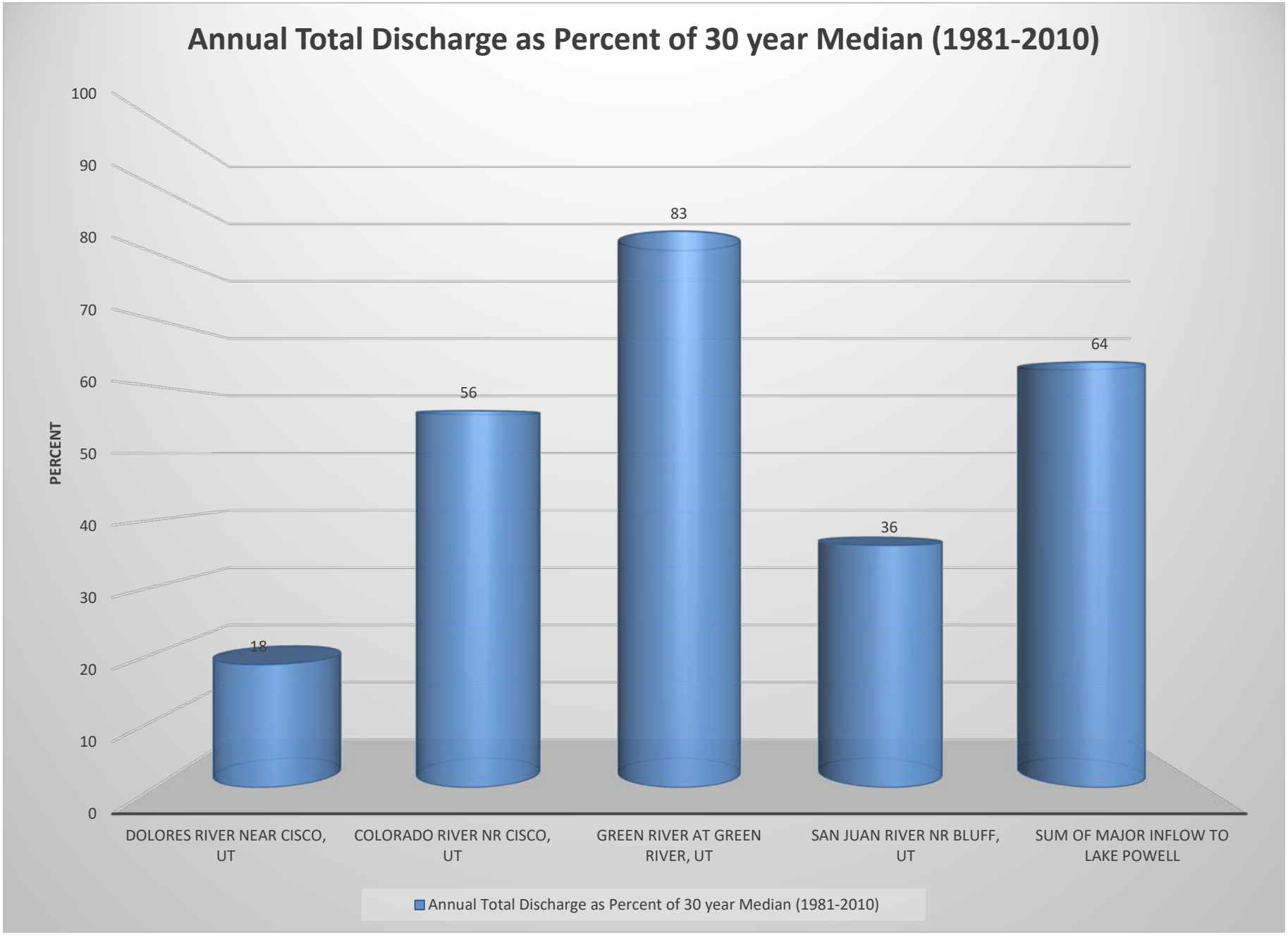

San Juan near Bluff, UT
Total Monthly Discharge as Percent of 30 year (1981-2010) Median
Percent
100
90
80
70
60
50
40
30
20
10
0
85.0
69.3
68.1
63.0
47.1
40.1
30.1
20.8
15.8
46.3
42.9
0.0
OCT-17
NOV-17
DEC-17
JAN-18
FEB-18
MAR-18
APR-18
MAY-18
JUN-18
JUL-18
AUG-18
SEP-18
San Juan River near Bluff, Utah


SUM OF FLOWS TO LAKE POWELL
TOTAL MONTHLY DISCHARGE AS PERCENT OF 30 YEAR (1981-2010) MEDIAN
Percent
140
120
100
80
60
40
20
0
107
96
118
114
100
77
56
58
36
48
66
0
Oct-17
Nov-17
Dec-17
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18


5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
ACRE-FEET
24,270
301,185
807,840
2,001,459
1,184,119
1,762,586
122,354
597,819
2,114,313
4,361,864
Dolores River near Cisco, UT
Colorado River nr Cisco, UT
Green River at Green River, UT
San Juan River nr Bluff, UT
Sum of Major Inflow to Lake Powell
Apr-Jun WY 2018 Total Discharge (ac-feet)
1981-2010 Median Apr-Jun Total Discharge (ac-feet)


Apr-Jun Total Discharge as Percent of 30 year Median (1981-2010)
Percent
100
90
80
70
60
50
40
30
20
10
0
8
40
67
20
48
DOLORES RIVER NEAR CISCO, UT
COLORADO RIVER NR CISCO, UT
GREEN RIVER AT GREEN RIVER, UT
SAN JUAN RIVER NR BLUFF, UT
SUM OF MAJOR INFLOW TO LAKE POWELL


Annual Total Discharge (ac-ft)
AC-FT
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
80,639
438,783
2,374,887
4,217,180
2,778,236
3,340,381
454,967
1,256,785
5,608,090
8,814,347
Dolores River near Cisco, UT
Colorado River nr Cisco, UT
Green River at Green River, UT
San Juan River nr Bluff, UT
Sum of Major Inflow to Lake Powell
Annual Total WY 2018 Total Discharge (ac-feet)
1981-2010 Median Annual Total Discharge (ac-feet)


Annual Total Discharge as Percent of 30 year Median (1981-2010)
PERCENT
100
90
80
70
60
50
40
30
20
10
0
18
56
83
36
64
DOLORES RIVER NEAR CISCO, UT
COLORADO RIVER NR CISCO, UT
GREEN RIVER AT GREEN RIVER, UT
SAN JUAN RIVER NR BLUFF, UT
SUM OF MAJOR INFLOW TO LAKE POWELL
Annual Total Discharge as Percent of 30 year Median (1981-2010)