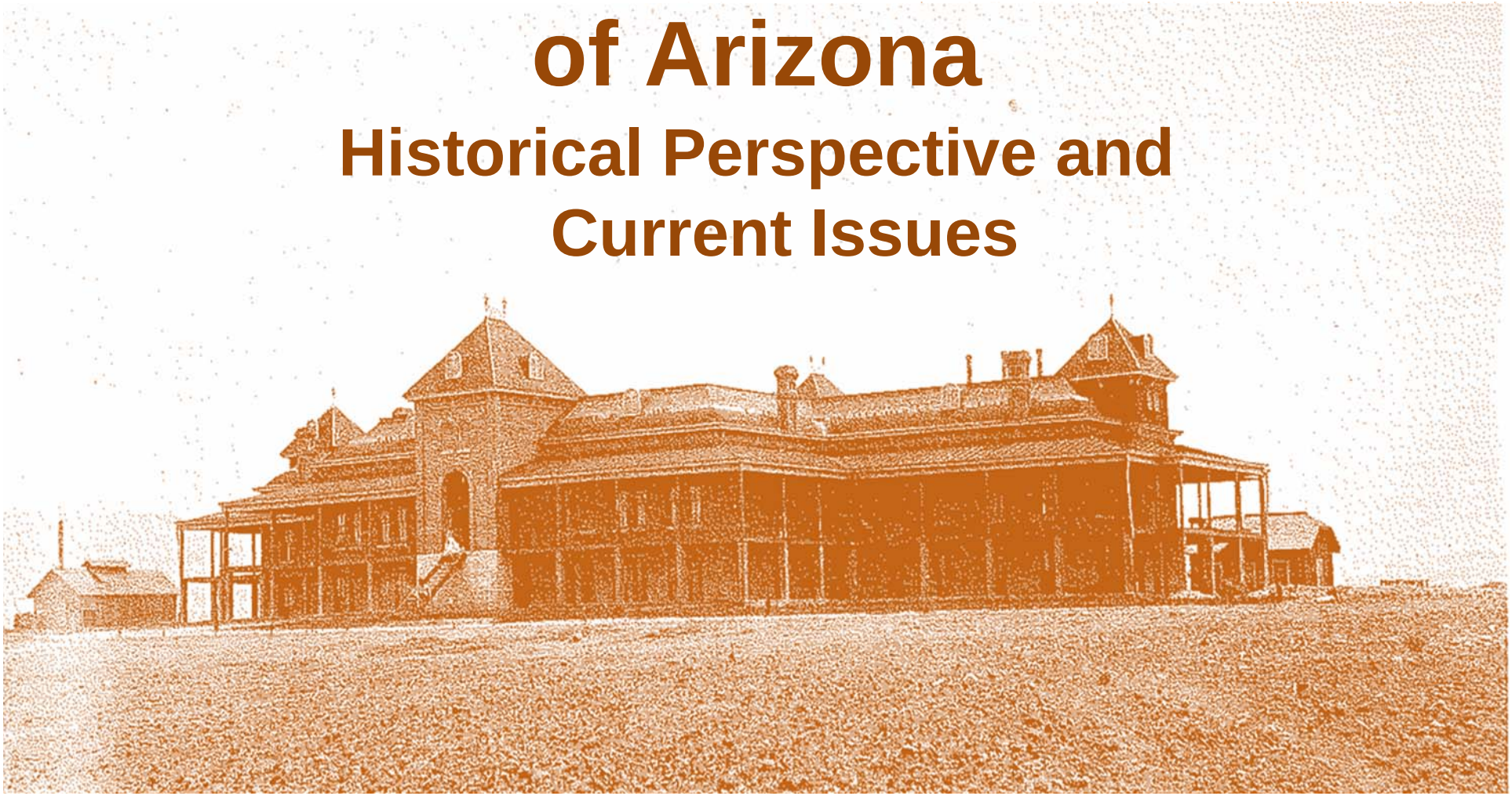
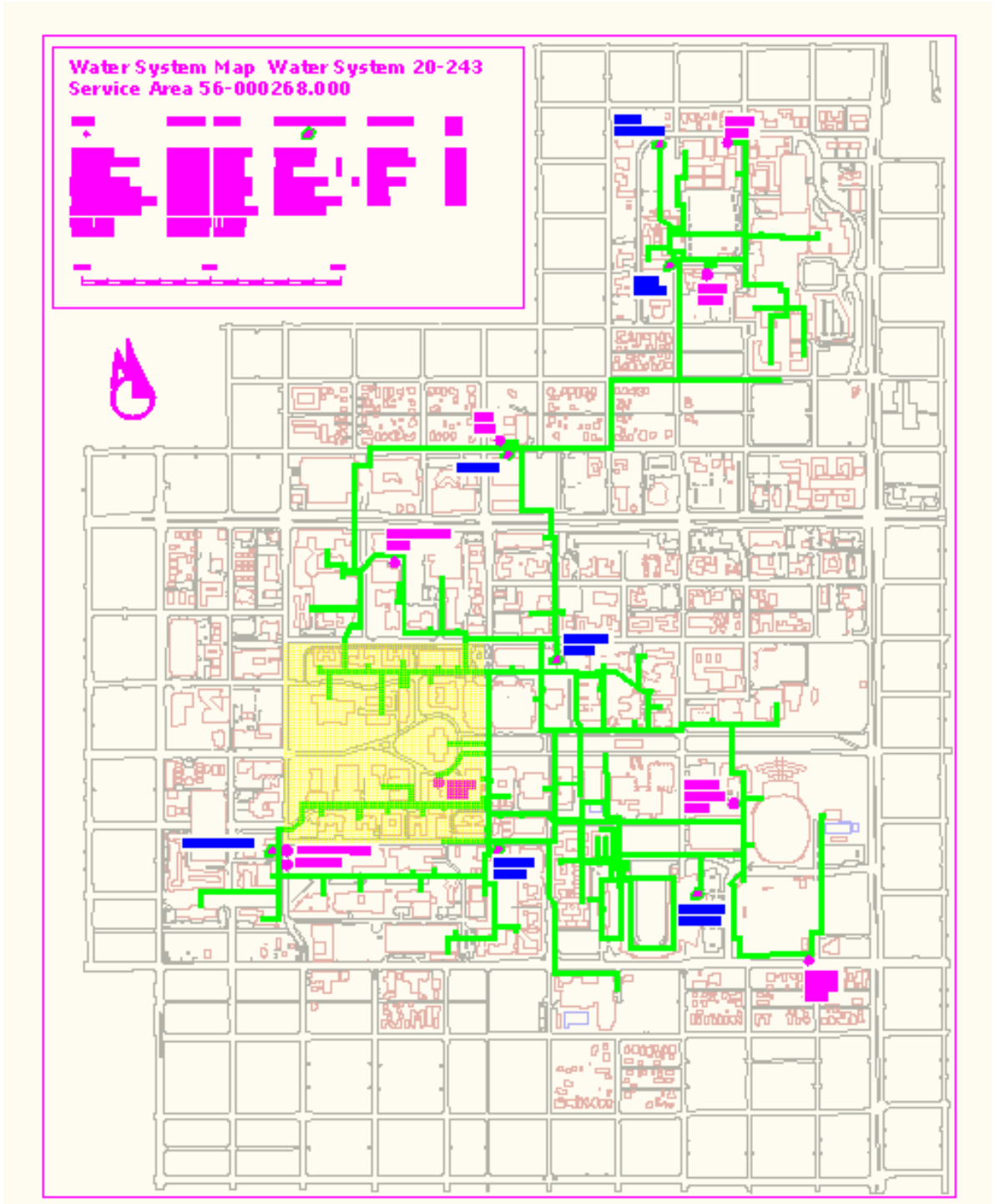
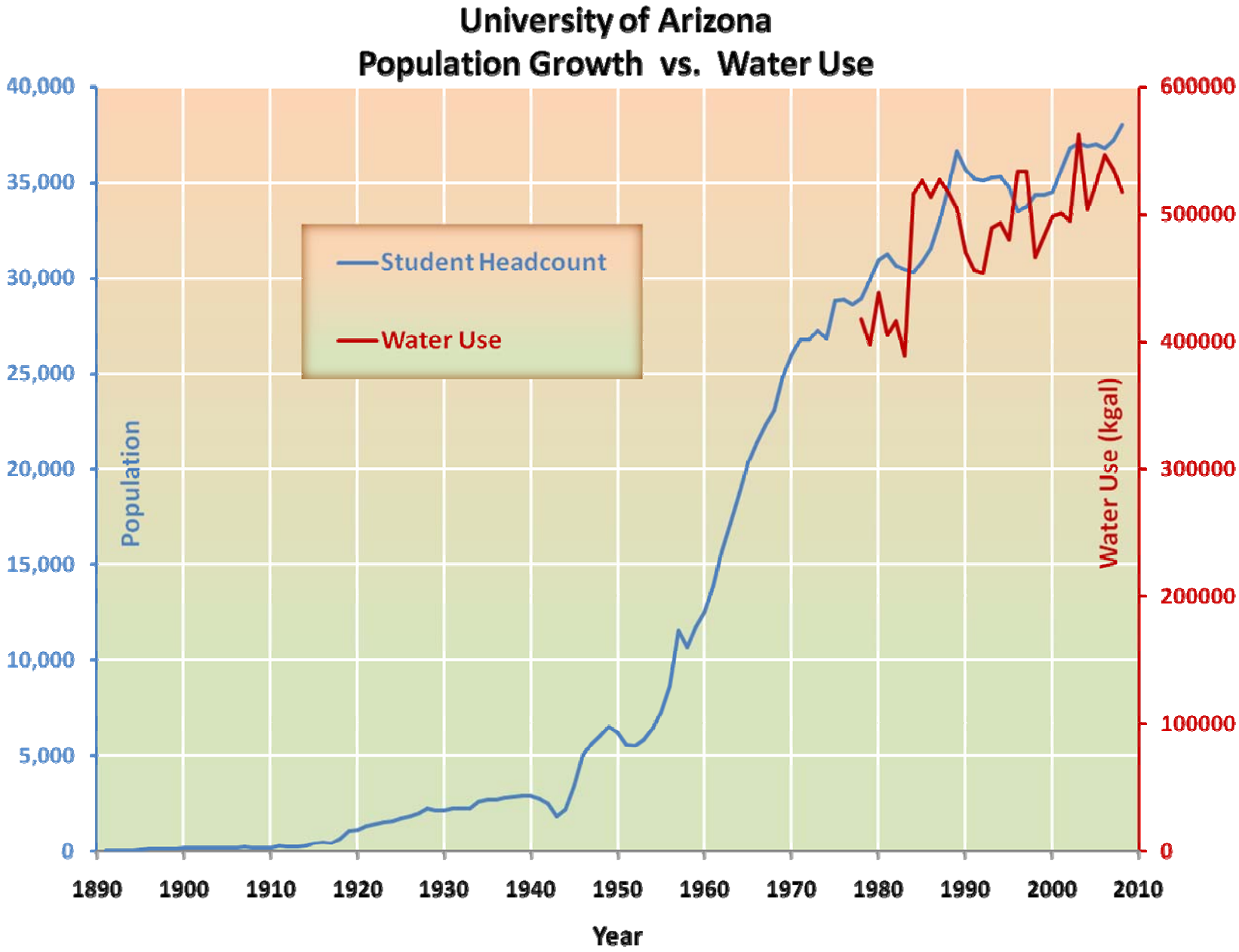
Water Use at the University of Arizona

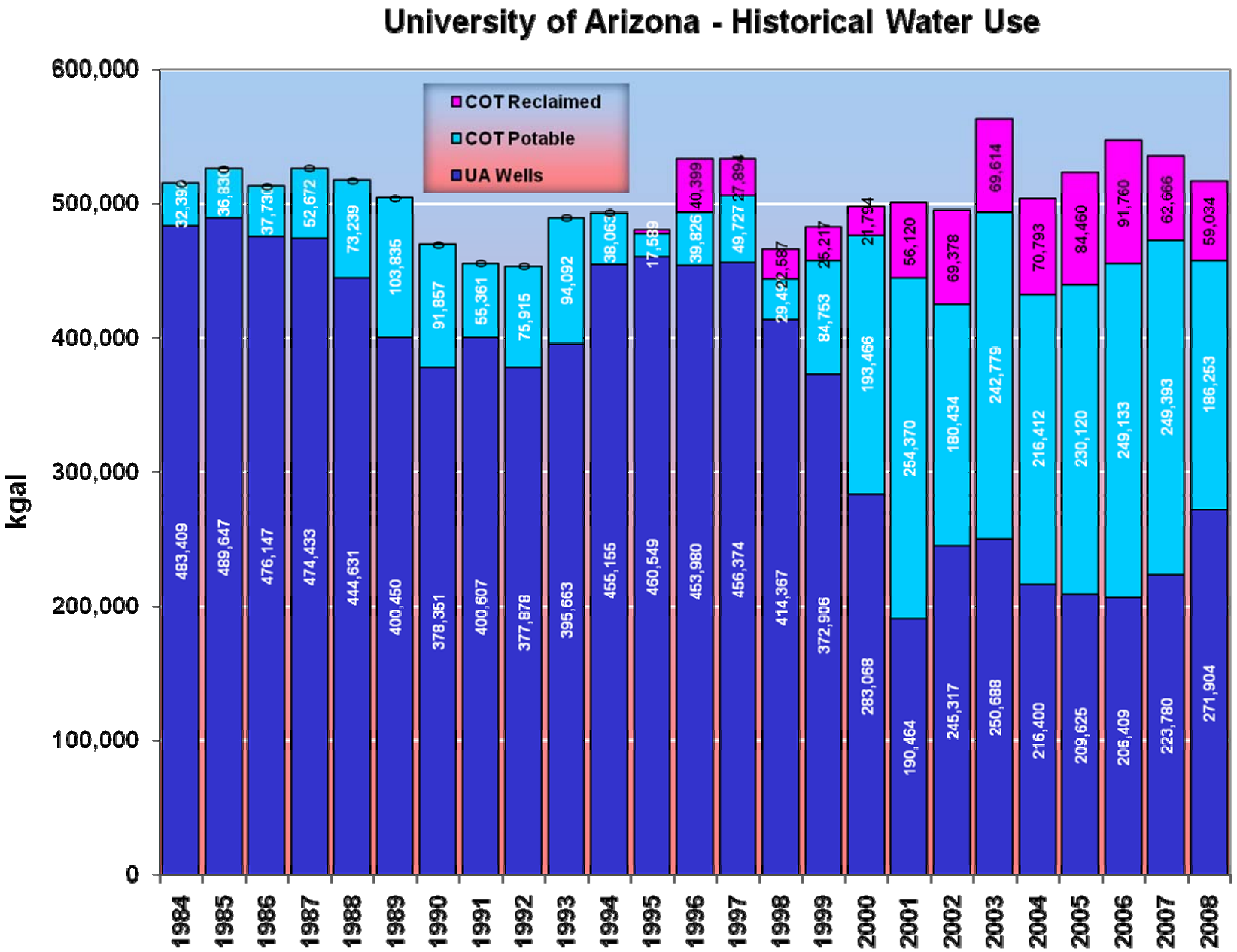
Historical Perspective and Current Issues

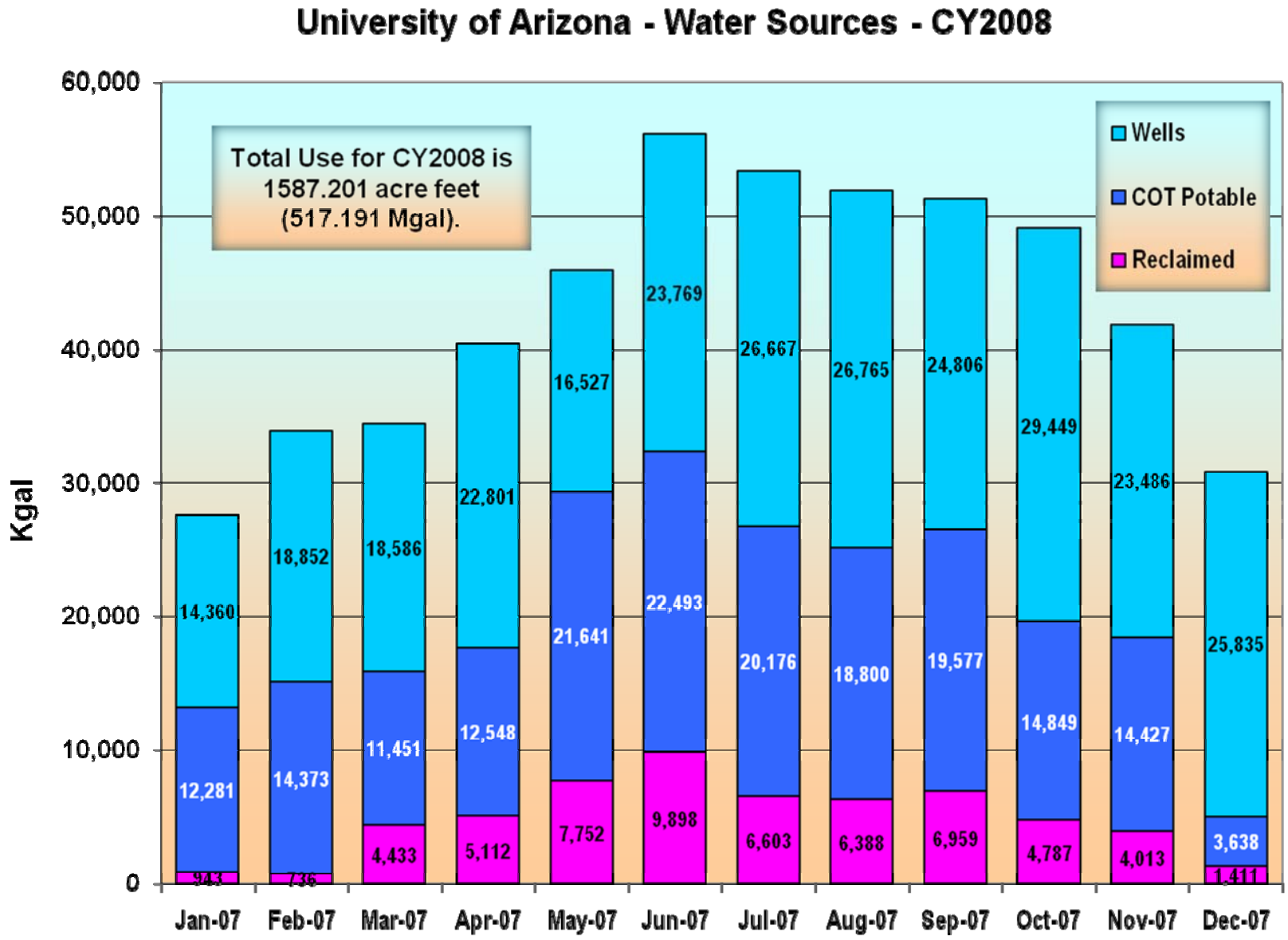


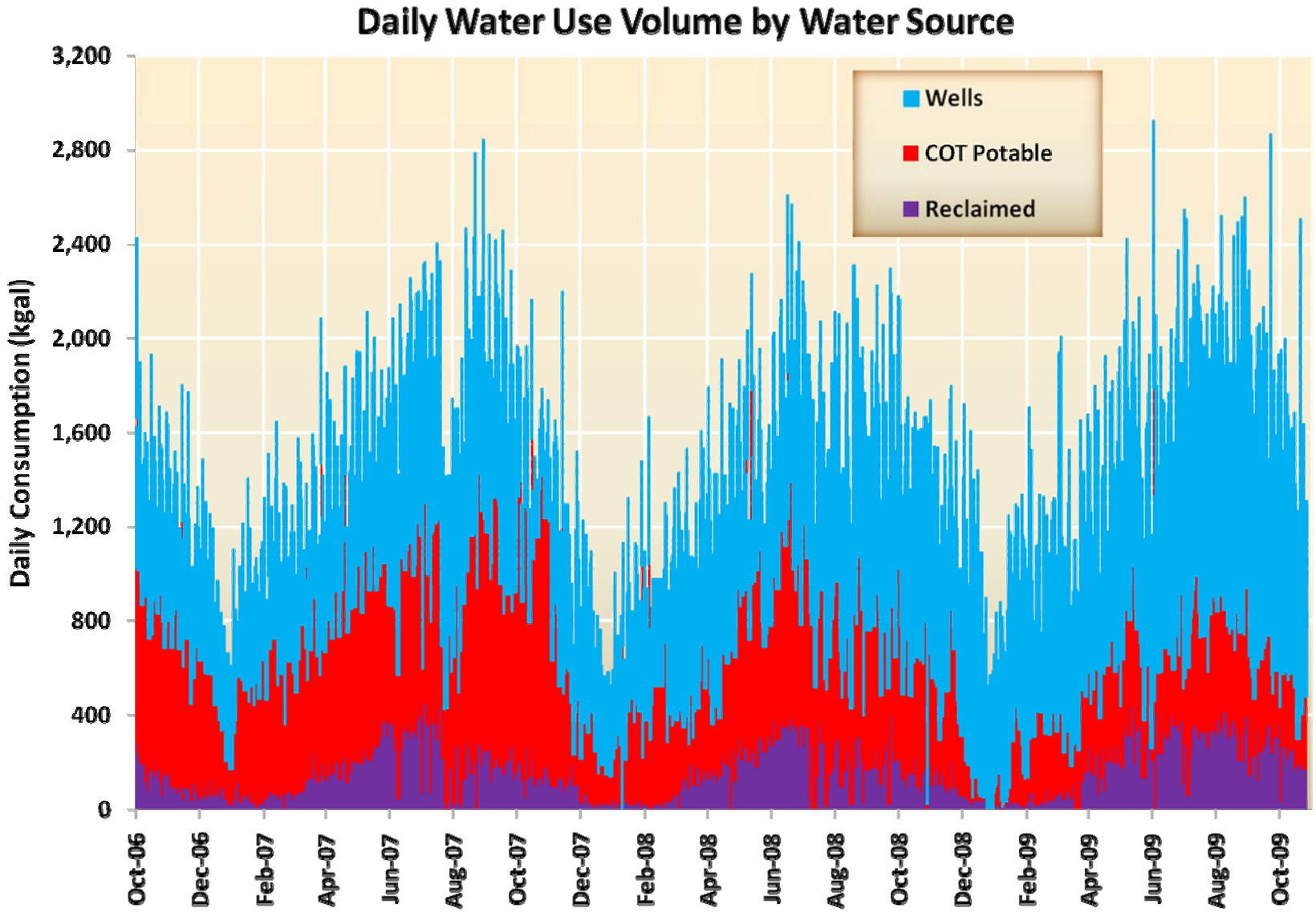
U of A - 1901

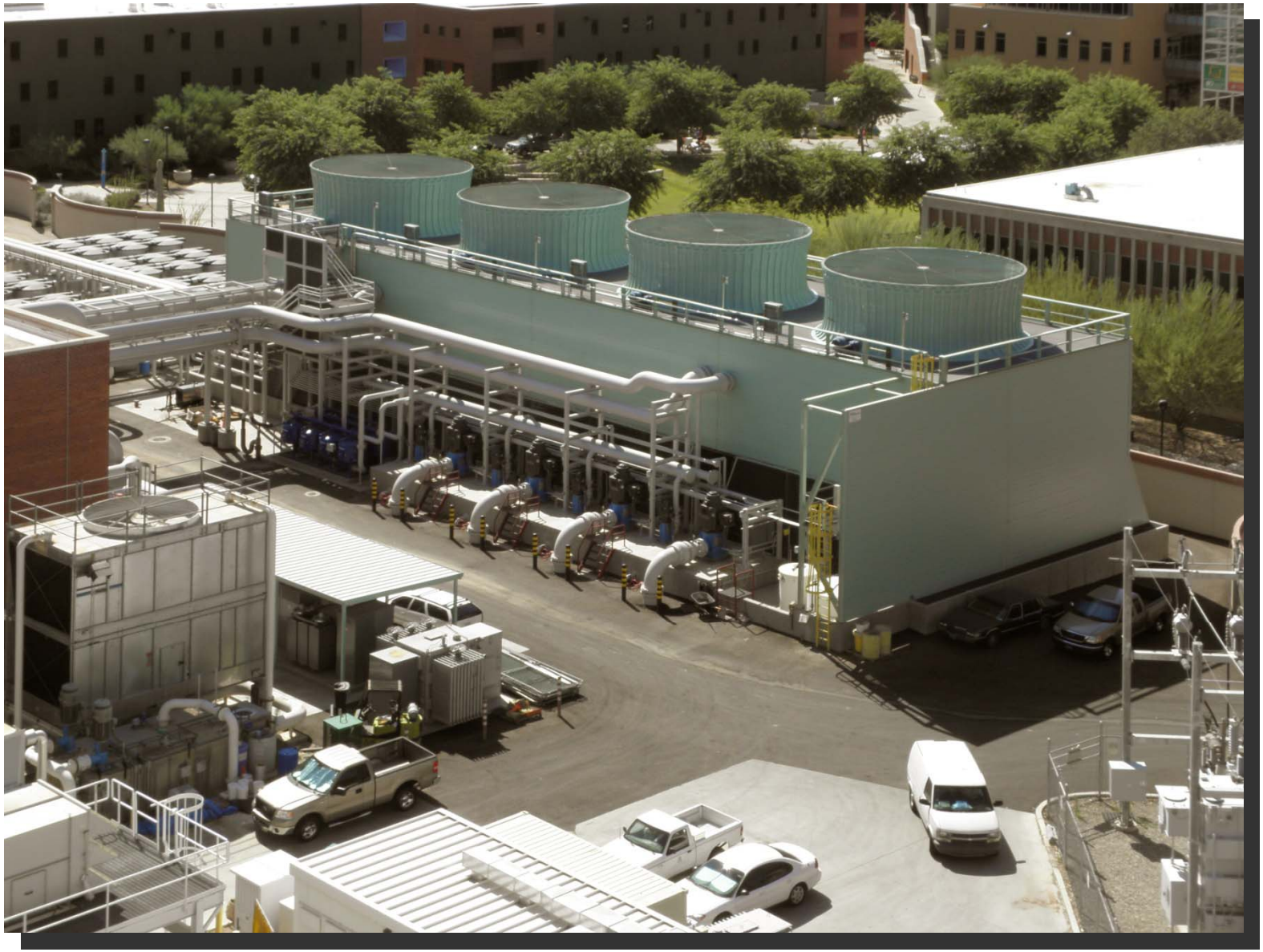

Water System Map Water System 20-243
Service Area 56-000268.000

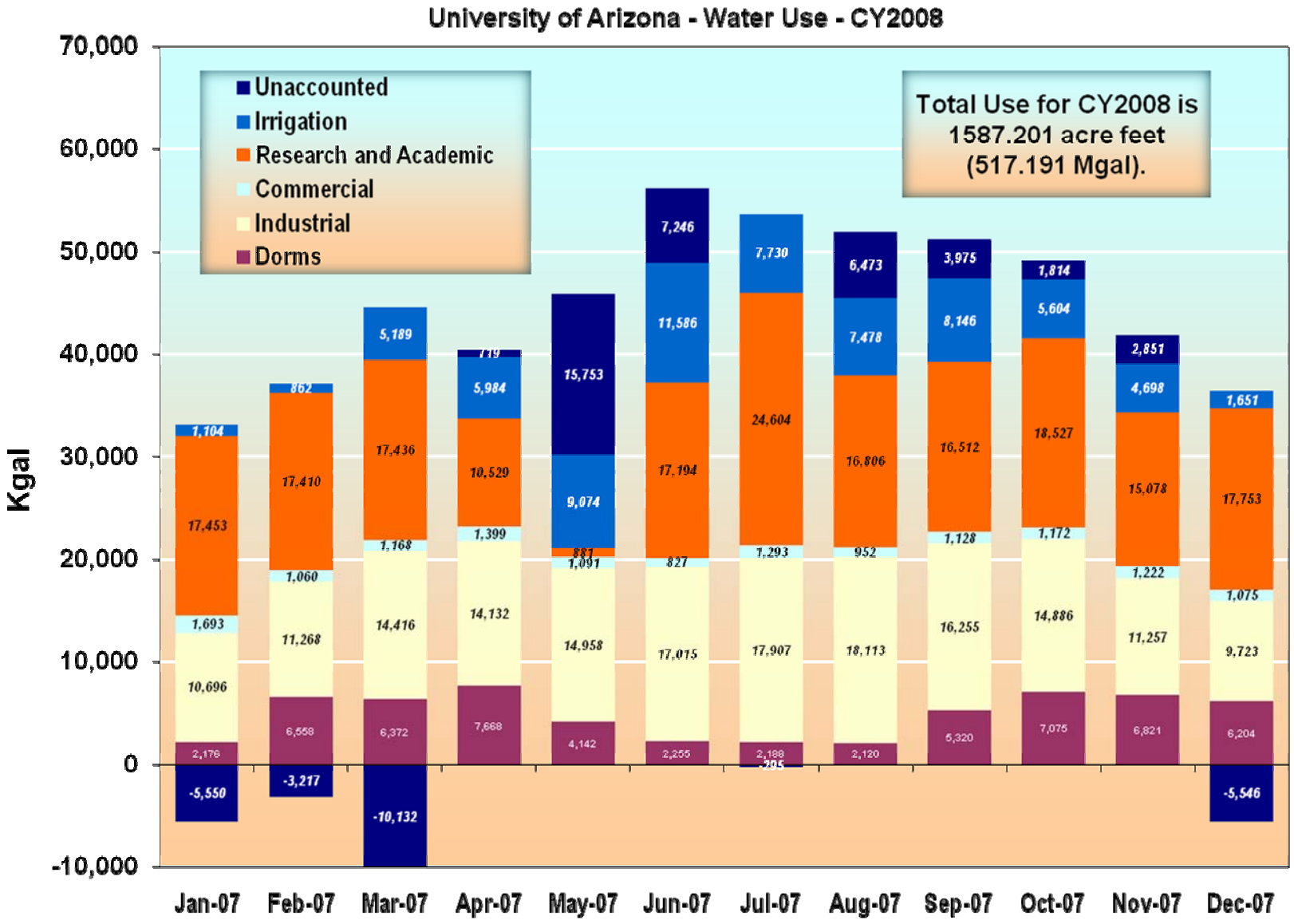

University of Arizona
Population Growth vs. Water Use
Student Headcount
Water Use
Population
Water Use (kgal)
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
600000
500000
400000
300000
200000
100000
0
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
Year


University of Arizona - Historical Water Use
kgal
600,000
500,000
400,000
300,000
200,000
100,000
0
COT Reclaimed
COT Potable
UA Wells
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
483,409
489,647
476,147
474,433
444,631
400,450
378,351
400,607
377,878
395,663
455,155
460,549
453,980
456,374
414,367
372,906
283,068
190,464
245,317
250,688
216,400
209,625
206,409
223,780
271,904
32,390
36,830
37,730
52,672
73,239
103,835
91,857
55,361
75,915
94,092
38,063
17,589
39,826
40,399
49,727
27,894
29,422
2,587
84,753
25,217
193,466
21,794
254,370
56,120
180,434
69,378
242,779
69,614
216,412
70,793
230,120
84,460
249,133
91,760
249,393
62,666
186,253
59,034


University of Arizona - Water Sources - CY2008
Total Use for CY2008 is 1587.201 acre feet (517.191 Mgal).
Wells
COT Potable
Reclaimed
Kgal
60,000
50,000
40,000
30,000
20,000
10,000
0
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
14,360
12,281
943
18,852
14,373
736
18,586
11,451
4,433
22,801
12,548
5,112
16,527
21,641
7,752
23,769
22,493
9,898
26,667
20,176
6,603
26,765
18,800
6,388
24,806
19,577
6,959
29,449
14,849
4,787
23,486
14,427
4,013
25,835
3,638
1,411


Daily Water Use Volume by Water Source
Daily Consumption (kgal)
3,200
2,800
2,400
2,000
1,600
1,200
800
400
0
Wells
COT Potable
Reclaimed
Oct-06
Dec-06
Feb-07
Apr-07
Jun-07
Aug-07
Oct-07
Dec-07
Feb-08
Apr-08
Jun-08
Aug-08
Oct-08
Dec-08
Feb-09
Apr-09
Jun-09
Aug-09
Oct-09




University of Arizona - Water Use - CY2008
Unaccounted
Irrigation
Research and Academic
Commercial
Industrial
Dorms
Total Use for CY2008 is 1587.201 acre feet (517.191 Mgal).
Kgal
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
-10,000
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
1,104
17,453
1,693
10,696
2,176
-5,550
862
17,410
1,060
11,268
6,558
-3,217
5,189
17,436
1,168
14,416
6,372
-10,132
719
5,984
10,529
1,399
14,132
7,668
15,753
9,074
881
1,091
14,958
4,142
7,246
11,586
17,194
827
17,075
2,255
7,730
24,604
1,293
17,907
2,188
295
6,473
7,478
16,806
952
18,113
2,120
3,975
8,146
16,512
1,128
16,255
5,320
1,814
5,604
18,527
1,172
14,886
7,075
2,851
4,698
15,078
1,222
11,257
6,821
1,651
17,753
1,075
9,723
6,204
-5,546

Water Conservation

- **Past efforts**
  - **Irrigation conversion – from flood to sprinkler**
  - **Reclaimed water use**
  - **One-pass elimination**
  - **Waterless urinals**
  - **Xeriscape**
  - **Irrigation automation**
  - **Plant efficiency improvements**

Water Conservation

- **Present and future efforts**
  - **Continued reclaimed water use expansion**
  - **Waterless urinals**
  - **Increased metering and charge-backs**
  - **Cooling tower blow-down re-softening**
  - **Water re-use**
  - **Water harvesting**