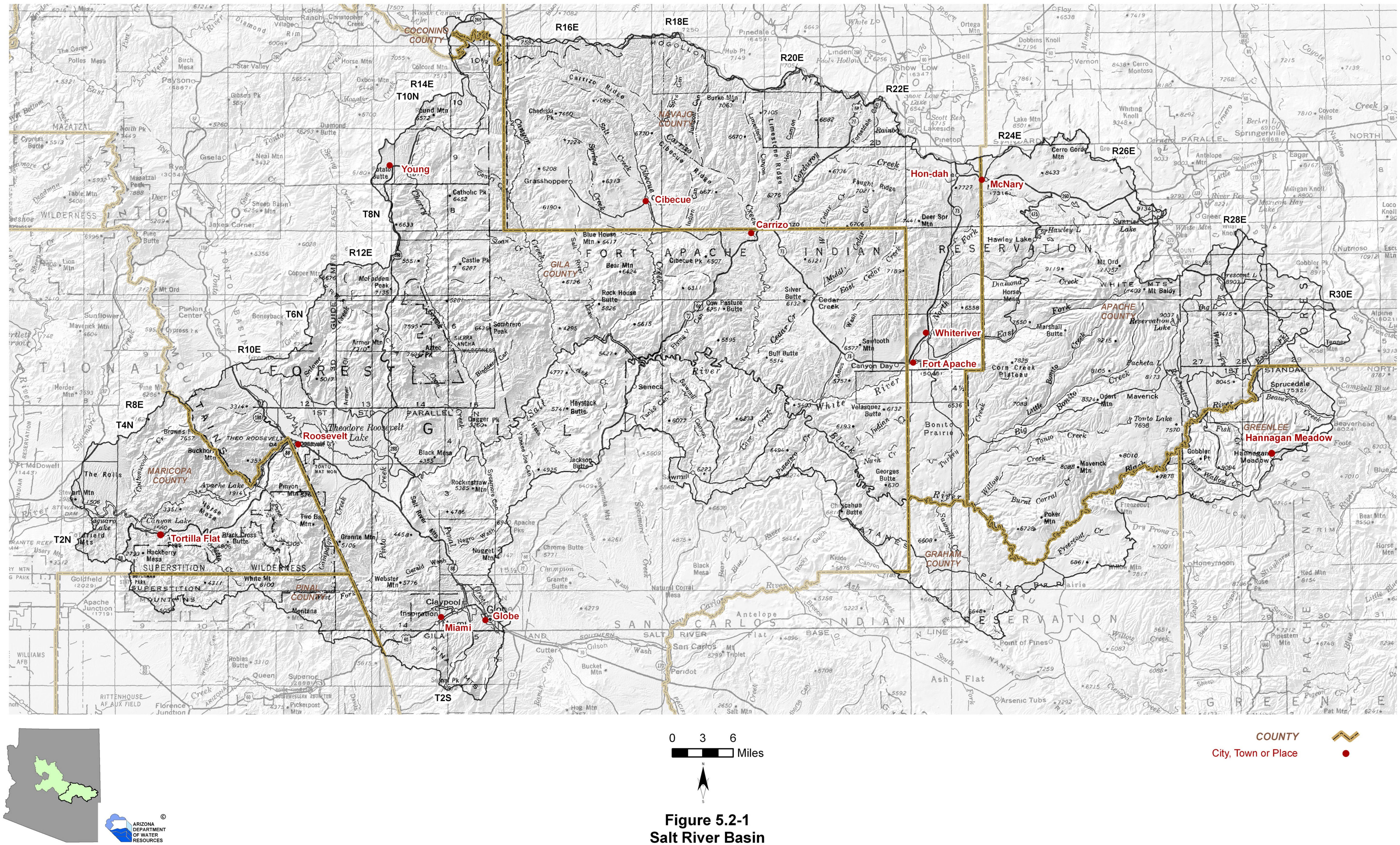
Section 5.2
Salt River Basin

5.2.1 Geography of the Salt River Basin

The Salt River Basin occupies the eastern part of the planning area and is the second largest basin at 5,232 square miles. Geographic features and principal communities are shown on Figure 5.2-1. The basin is characterized by mid- to high-elevation mountain ranges, plateaus and canyons. Vegetation types include: Arizona upland Sonoran desertscrub; semi-desert, plains and Great Basin and subalpine grasslands; interior chaparral; madrean evergreen woodland; Great Basin conifer woodland; and montane and Rocky Mountain subalpine conifer forests. (see Figure 5.0-10) Riparian vegetation includes mesquite, mixed broadleaf and tamarisk along the Salt River and mixed broadleaf along the Black River.

- Principal geographic features shown on Figure 5.2-1 are:
  - Salt River running east to west through the southern part of the basin from the confluence of the White and Black Rivers
  - White River and its tributaries in the northeastern portion of the basin
  - Black River running from the eastern basin boundary to the Salt River, which also demarcates part of Graham, Apache, Navajo and Greenlee county boundaries
  - Other major tributaries to the Salt River including Cherry Creek, Canyon Creek, Cibecue Creek, Carrizo Creek and Cedar Creek
  - Theodore Roosevelt Lake in the western portion of the basin and Apache Lake, Canyon Lake and Saguaro Lake in the vicinity of Tortilla Flat
  - Hawley Lake, Sunrise Lake, Crescent Lake and Big Lake in the high-elevation northeastern portion of the basin
  - Salt River Canyon (not labeled on map) along the Salt River and numerous side canyons such as Sycamore Canyon and Sawmill Canyon
  - Superstition and Pinal Mountains and Natanes Plateau along the southern basin boundary
  - Mogollon Rim along the northern basin boundary
  - Bonito Prairie between the White and Black Rivers south of Fort Apache
  - Four Peaks along the Maricopa and Gila County line in the Mazatzal Mountains and the Sierra Ancha Mountains south of Young
  - White Mountains in Apache County which contain the highest peak in the basin Mt. Baldy at 11,403 feet
  - The lowest point at 1,200 feet where the Salt River exits the basin



Base Map: USGS 1:500,000, 1981

Figure 5.2-1
Salt River Basin
Geographic Features

5.2.2 Land Ownership in the Salt River Basin

Land ownership, including the percentage of ownership by category, for the Salt River Basin is shown in Figure 5.2-2. Principal features of land ownership in this basin are the large contiguous parcels of forest service and tribal lands. A description of land ownership data sources and methods is found in Volume 1, Appendix A. More detailed information on protected areas is found in Section 5.0.4. Land ownership categories are discussed below in the order from largest to smallest percentage in the basin.

Indian Reservation

- 59.4% of the land is under tribal ownership.
- The basin includes two reservations, the Fort Apache Reservation in the north-central portion north of the Black River and the San Carlos Apache Reservation in the south-central portion of the basin.
- All tribal lands are contiguous.
- This basin contains the largest percentage of tribal lands in the planning area.
- Land uses include domestic, commercial, recreation, timber and ranching.

National Forest

- 38.6% of the land is federally owned and managed by the United States Forest Service (USFS).
- Forest lands in the basin are part of the Tonto and Apache-Sitgreaves National Forests.
- The basin contains approximately 236,000 acres in five wilderness areas, four in the Tonto National Forest and one in the Apache-Sitgreaves National Forest. Wilderness areas in the Tonto include the 18,515-acre Salome Wilderness, 21,007-acre Sierra Ancha Wilderness, a significant portion of the 160,135-acre Superstition Wilderness and the 32,088-acre Salt River Wilderness. A portion of the 11,336-acre Bear Wallow Wilderness in the Alpine Ranger District of the Apache-Sitgreaves National Forest is also located in the basin. (see Figure 5.0-13)
- There are numerous small private in-holdings in both forests.
- Land uses include recreation, grazing and timber production.

Private

- 1.5% of the land is private.
- The majority of the private land in the basin is in the vicinity of Miami/Globe and around Young. There are also numerous small private land in-holdings in the Tonto and Apache-Sitgreaves National Forests.
- Land uses include domestic, commercial, mining and ranching.

U.S. Bureau of Land Management (BLM)

- 0.2% of the land is federally owned and managed by the Safford Field Office Bureau of Land Management.
- All BLM lands are in the vicinity of Miami and Globe.
- Primary land uses are mining and grazing.

State Trust Land

- 0.1% of the land in this basin is held in trust for the public schools under the State Trust Land system.
- All state land is in the vicinity of Miami and Globe.
- Primary land use is grazing.

National Park Service (NPS)

- 0.1% of the land is federally owned and managed by the National Park Service as the Tonto National Monument, located in the southwestern portion of the basin near Roosevelt.
- Primary land use is cultural preservation and recreation.

Other (Game and Fish, County and Bureau of Reclamation Lands)

- 0.1% of the land is owned and managed by the Arizona Game and Fish Department.
- All “other” land is located north of the Greenlee and Apache County line.
- Primary land use is unknown.

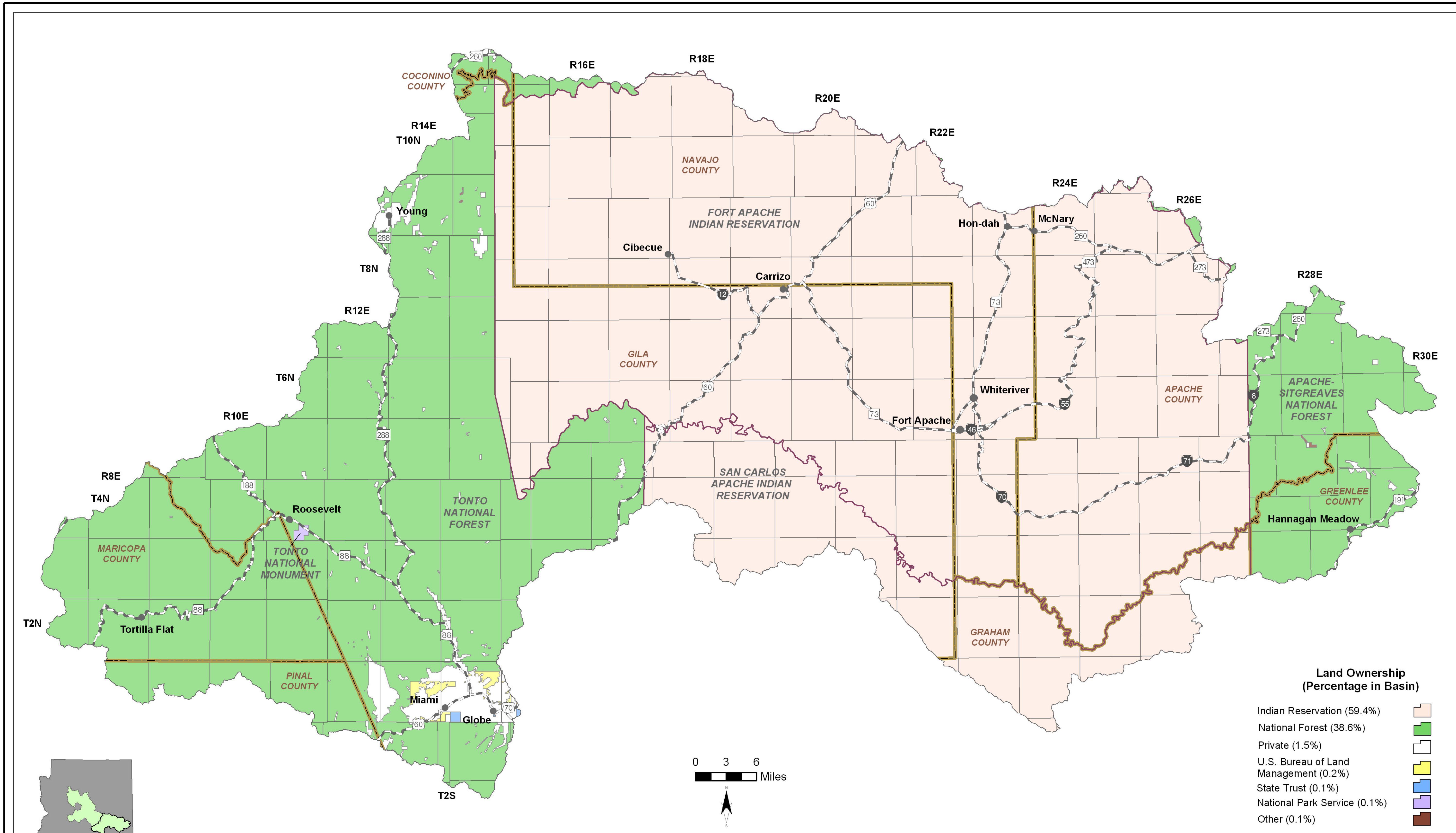


Figure 5.2-2
Salt River Basin
Land Ownership

5.2.3 Climate of the Salt River Basin

Climate data from NOAA/NWS Co-op Network, Evaporation Pan and SNOTEL/Snowcourse stations are compiled in Table 5.2-1 and the locations are shown on Figure 5.2-3. Figure 5.2-3 also shows precipitation contour data from the Spatial Climate Analysis Service (SCAS) at Oregon State University. The Salt River Basin does not contain AZMET stations. More detailed information on climate in the planning area is found in Section 5.0.3. A description of the climate data sources and methods is found in Volume 1, Appendix A.

NOAA/NWS Co-op Network

- Refer to Table 5.2-1A
- There are 13 NOAA/NWS Co-op network climate stations in the basin. The average monthly maximum temperature occurs in July and ranges between 90.3°F at Mormon Flat and 59.2°F at Hawley Lake. The average monthly minimum temperature occurs in January or December and ranges between 24.3°F at Hawley Lake and 52.6°F at Mormon Flat.
- Highest average seasonal rainfall occurs in the summer (June-September) at most stations. For the period of record used, the highest annual rainfall is 39.62 inches at Hawley Lake and the lowest is 13.78 inches at Globe.

Evaporation Pan

- Refer to Table 5.2-1B
- There are three evaporation pan sites in this basin. Elevation at the stations range from 2,200 feet to 8,180 feet and the corresponding annual average evaporation ranges from 96.71 inches to 33.17 inches.

SNOTEL/Snowcourse

- Refer to Table 5.2-1D
- There are 11 snow measurement sites in the basin. Five stations have been discontinued.
- The site elevation ranges from 6,900 feet at Workman Creek and Workman Creek SNOTEL to 9,200 feet at Maverick Fork SNOTEL.
- Seven sites record highest snowpack in March, three in February and one site, Workman Creek, has equally high snowpack in February and March.
- Highest average snowpack is 11.3 inches at Hannagan Meadows SNOTEL.

SCAS Precipitation Data

- See Figure 5.2-3
- Additional precipitation data shows rainfall as high as 36 inches in several places in the basin and as low as 10 inches west of Tortilla Flat.

Table 5.2-1 Climate Data for the Salt River Basin

A. NOAA/NWS Co-op Network:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Temperature Range (in F)		Average Total Precipitation (in inches)				
			Max/Month	Min/Month	Winter	Spring	Summer	Fall	Annual
Black River Pumps	6,040	1971-2000	71.8/Jul	35.1/Jan	4.97	2.00	8.27	4.57	19.81
Cibecue	5,050	1927-1979[1]	73.7/Jul	37.1/Jan	5.57	2.00	5.34	6.08	18.98
Globe	3,550	1894-1975[1]	82.7/Jul	43.6/Jan	2.86	1.17	4.78	4.97	13.78
Globe 2	3,650	1971-2000	81.4/Jul	43.4/Dec	5.28	1.17	6.03	4.52	17.00
Hawley Lake	8,180	1967-1988[1]	59.2/Jul	24.3/Jan	12.49	4.96	12.95	9.22	39.62
Maverick	7,810	1948-1967	60.1/Jul	26.2/Jan	7.07	2.56	12.02	6.21	27.86
Miami	3,560	1971-2000	83.4/Jul	45.5/Jan	6.38	1.36	6.45	5.30	19.49
Mormon Flat	1,710	1971-2000	90.3/Jul	52.6/Dec	5.15	1.02	4.39	4.01	14.57
Pleasant Valley R.S.	5,050	1971-2000	72.5/Jul	38.2/Jan	7.08	1.96	7.85	5.66	22.55
Roosevelt 1WNW	2,210	1971-2000	88.1/Jul	48.4/Jan	6.51	1.20	4.37	4.81	16.89
Sierra Ancha	5,100	1913-1979[1]	77.1/Jul	41.6/Jan	9.45	2.58	7.39	8.67	28.09
Whiteriver 1 SW	5,120	1971-2000	72.4/Jul	39.9/Jan	5.55	2.02	7.81	4.76	20.14
Young	5,050	1903-1964	75.3/Jul, Aug	36.9/Jan	6.00	2.17	8.26	4.59	21.02

Source: WRCC, 2005

Notes:
[1]Average temperature for period of record shown; average precipitation from 1971-2000

B. Evaporation Pan:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Avg. Annual Evap (in inches)
Hawley Lake	8,180	1967 - 1988	33.17
Roosevelt 1 WNW	2,200	1905 - 2002	96.71
Whiteriver	5,280	1900 - 2002	77.65

Source: WRCC, 2005

C. AZMET:

Station Name	Elevation (in feet)	Period of Record	Average Annual Reference Evaportranspiration, in inches (*Number of years to calculate averages*)
None			

D. SNOTEL/Snowcourse:

Station Name	Elevation (in feet)	Period of Record	Average Snowpack, at Beginning of the Month, as Inches Snow Water Content *(Number of measurements to calculate average)*					
			Jan.	Feb.	March	April	May	June
Beaverhead SNOTEL	7,990	1995 - current	1.6 *(12)*	2.4 *(12)*	3.0 *(12)*	0.6 *(12)*	0 *(12)*	0 *(12)*
Buck Sping	7,400	1989 - current	0.8 *(9)*	0.9 *(9)*	1.3 *(9)*	0.2 *(9)*	0 *(0)*	0 *(0)*
Buck Spring SNOTEL	7,400	1985 - 1997 (discontinued)	2.6 *(12)*	4.5 *(12)*	4.0 *(12)*	0.8 *(12)*	0.1 *(12)*	0 *(12)*
Hannagan Meadows SNOTEL	9,020	1964 - current	5.2 *(31)*	8.6 *(43)*	11.3 *(43)*	10.4 *(43)*	2.1 *(26)*	0 *(24)*
Maverick Fork	9,150	1975 - 2003 (discontinued)	4.3 *(26)*	6.9 *(48)*	9.0 *(49)*	8.2 *(47)*	5.1 *(1)*	0 *(0)*
Maverick Fork SNOTEL	9,200	1950 - current	4.2 *(33)*	7.3 *(55)*	9.7 *(56)*	8.3 *(54)*	0.5 *(20)*	0 *(19)*
McNary	7,200	1939 - 1989 (discontinued)	1.9 *(13)*	2.8 *(47)*	2.5 *(47)*	0.8 *(46)*	0 *(1)*	0 *(0)*
Milk Ranch	7,000	1941 - 1989 (discontinued)	0.9 *(9)*	1.9 *(46)*	1.0 *(45)*	0.4 *(42)*	0 *(0)*	0 *(0)*
Wildcat SNOTEL	7,850	1985 - current	1.5 *(22)*	2.7 *(22)*	3.5 *(22)*	1.2 *(22)*	0 *(22)*	0 *(22)*
Workman Creek	6,900	1952 - 1993 (discontinued)	2.7 *(12)*	4.7 *(42)*	4.7 *(42)*	2.8 *(40)*	0 *(0)*	0 *(0)*
Workman Creek SNOTEL	6,900	1961 - current	2.1 *(25)*	5.1 *(46)*	5.3 *(46)*	2.9 *(46)*	0 *(23)*	0 *(24)*

Source: Natural Resources Conservation Service, 2006

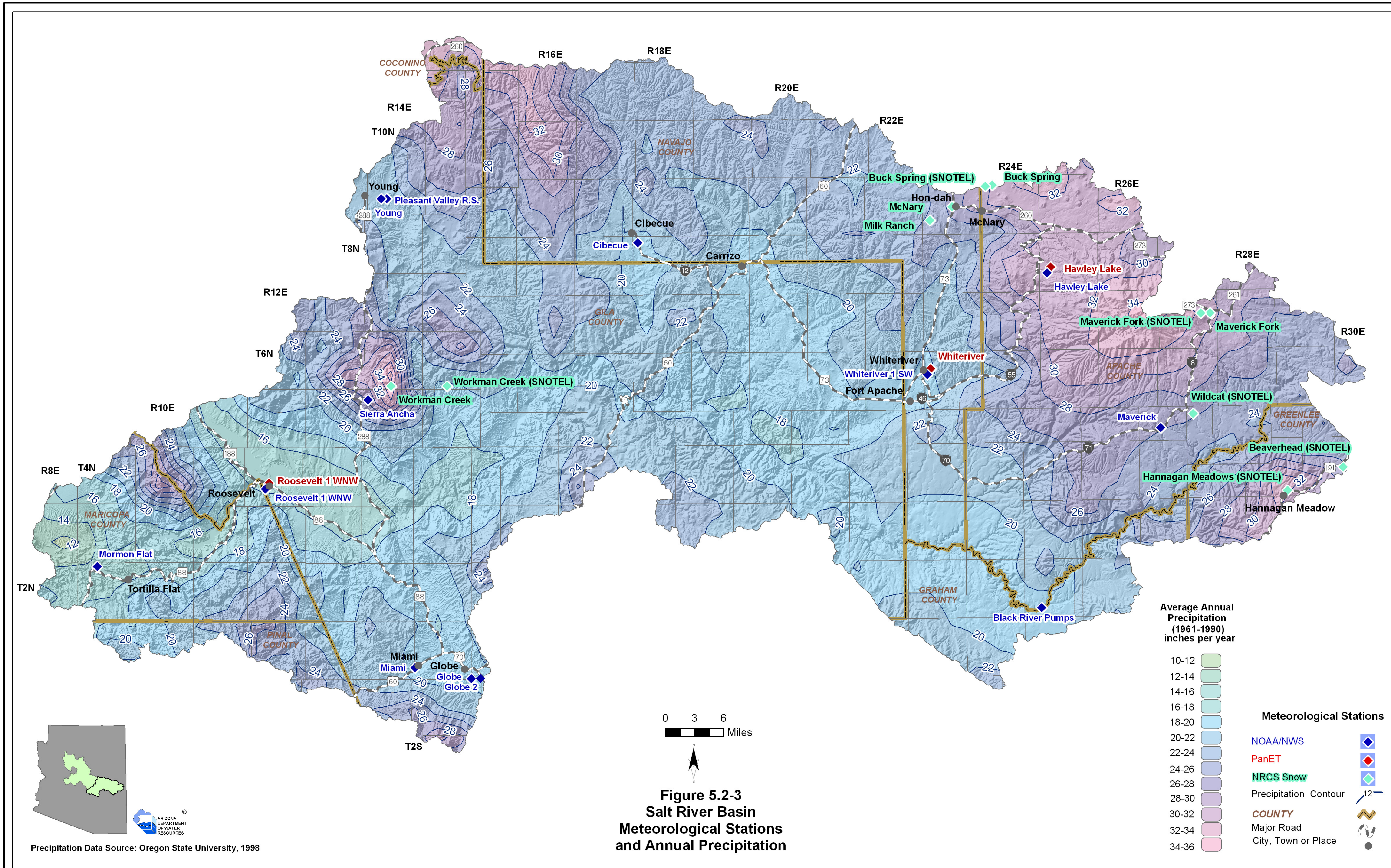


Figure 5.2-3
Salt River Basin
Meteorological Stations
and Annual Precipitation

5.2.4 Surface Water Conditions in the Salt River Basin

Streamflow data, including average seasonal flow, average annual flow and other information is shown in Table 5.2-2. Flood ALERT equipment in the basin is shown in Table 5.2-3. Reservoir and stockpond data, including maximum storage or maximum surface area, are shown in Table 5.2-4. The location of streamflow gages identified by USGS number, flood ALERT equipment, USGS runoff contours and large reservoirs are shown on Figure 5.2-5. Descriptions of stream, reservoir and stockpond data sources and methods are found in Volume 1, Appendix A.

Streamflow Data

- Refer to Table 5.2-2.
- Data from 33 stations located at 22 watercourses are shown in the table and on Figure 5.2-5.
- The average seasonal flow at 17 stations is highest in the winter (January-March) and at 14 stations, located primarily along the major tributaries to the Salt River in the eastern part of the basin and higher in the watershed, the average seasonal flow is highest in the spring (April-June). Two additional stations have the highest average seasonal flow in the summer (July-September).
- The average seasonal flow is lowest at most stations in the summer (July-September).
- The largest annual flow recorded in the basin is 3.2 maf in 1905 at the Salt River at Roosevelt gage with a contributing drainage area of 5,824 square miles. For a hydrograph of average annual flow for this gage from 1914-2007 see Figure 5.2-4.

Flood ALERT Equipment

- Refer to Table 5.2-3.
- As of October 2005 there were five stations in the basin.

Reservoirs and Stockponds

- Refer to Table 5.2-4.
- The basin contains 12 large reservoirs. The largest is Roosevelt with a maximum capacity of 1,653,043 acre-feet.
- The most common use of the large reservoirs is recreation.
- Surface water is stored or could be stored in 62 small reservoirs in the basin.
- There are 807 registered stockponds in this basin.

Runoff Contour

- Refer to Figure 5.2-5.
- Average annual runoff is 10 inches per year, or 533 acre-feet per square mile, in the White Mountains in the eastern portion of the basin and decreases to one inch per year, or 53.3 acre-feet per square mile, in the southwestern portion of the basin.

Figure 5.2-4 Annual Flows (acre-feet) at Salt River near Roosevelt, water years 1914-2008 (Station #9498500)

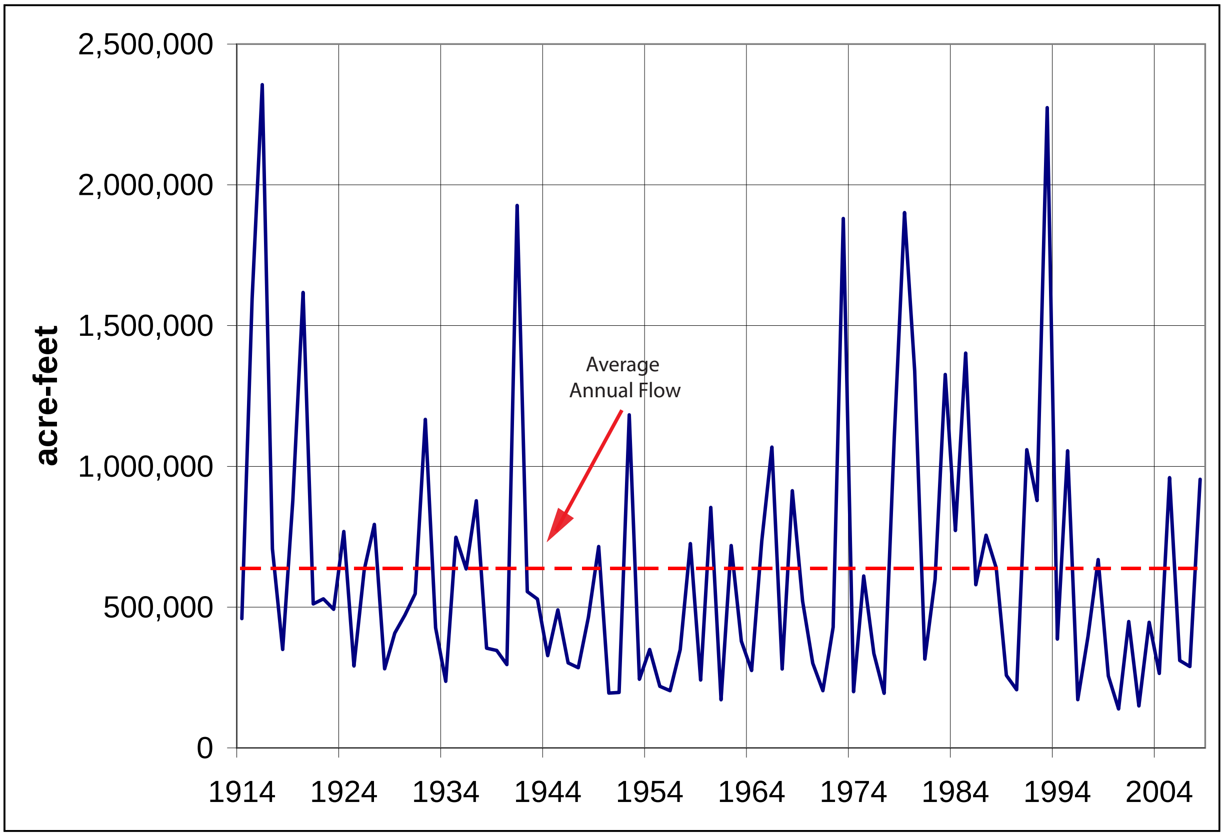


Table 5.2-2 Streamflow Data for the Salt River Basin

Station Number	USGS Station Name	Drainage Area (in mi^2)	Gage Elevation (in feet)	Period of Record	Average Seasonal Flow (% of annual flow)				Annual Flow/Year (in acre-feet)				Years of Annual Flow Record
					Winter	Spring	Summer	Fall	Minimum	Median	Mean	Maximum	
9489070	North Fork of East Fork Black River near Alpine	38	8,650	6/1965-9/1978 (discontinued)	18	68	6	7	1,767 (1967)	5,933	9,121	33,593 (1973)	12
9489082	North Fork of Thomas creek near Alpine	1	8,380	10/1985-9/2001 (reactivated, real time)	25	58	8	8	23 (1989)	62	85	180 (1991)	6
9489100	Black River near Maverick	315	6,850	10/1962-9/1982 (discontinued)	28	49	10	13	27,591 (1977)	86,899	102,892	225,938 (1973)	19
9489200	Pacheta Creek at Maverick	15	7,850	10/1957-9/1980 (discontinued)	22	63	7	8	789 (1961)	4,851	6,443	17,593 (1973)	22
9489500	Black River below Pumping Plant near Point of Pines	560	5,725	6/1953-current (real-time)	37	42	9	13	28,459 (2002)	127,452	151,168	434,496 (1993)	49
9489700	Big Bonito Creek near Fort Apache	119	5,910	10/1957-9/1981 (discontinued)	29	49	11	12	13,828 (1961)	41,267	49,530	102,805 (1979)	23
9490000	Turkey Creek near Fort Apache	13	NA	6/1955-9/1960 (discontinued)	68	18	6	8	442 (1957)	514	1,017	2,599 (1958)	4
9490500	Black River near Fort Apache	1,232	4,345	11/1912-current (real time)	42	35	9	15	45,188 (2002)	233,904	280,932	818,301 (1993)	45
9490800	North Fork White River near Greer	40	8,400	6/1965-9/1978 (discontinued)	14	52	20	15	9704 (1971)	15,569	17,842	40,915 (1973)	13
9491000	North Fork White River near McNary	78	7,723	6/1945-9/1985 (discontinued)	15	57	16	13	12,673 (1951)	32,442	34,855	73,140 (1983)	31
9492000	North Fork White River at White River	357	NA	10/1916 - 6/1922 (discontinued)	21	43	26	10	76,906 (1918)	109,638	118.159	167,933 (1919)	3
9492400	East Fork White River near Fort Apache	39	6,050	8/1957-current (real time)	18	53	16	13	6,930 (2002)	24,984	25,517	54,457 (1993)	45
9492500	Rock Creek near Fort Apache	20	NA	6/1955-9/1960 (discontinued)	50	34	9	8	217 (1958)	1,770	1,613	2,693 (1957)	4
9493500	White River at Fort Apache	499	NA	10/1912-6/1922 (discontinued)	28	44	22	7	110,217 (1918)	196,247	214,840	356,649 (1916)	4
9494000	White River near Fort Apache	632	4,366	10/1917-current (real time)	28	48	12	12	27,446 (2002)	149,177	144,517	345,424 (1993)	45
9494300	Carrizo Creek above Corduroy Creek near Show Low	225	4,800	10/1953-6/1967 (discontinued)	47	12	8	32	1,926 (1961)	6,501	8,683	28,886 (1965)	13
9494500	Corduroy Creek above Forestdale Creek near Show Low	57	6,334	9/1952-6/1961 (discontinued)	64	4	5	27	333 (1955)	2,404	2,867	6,306 (1960)	8
9495500	Forestdale Creek near Show Low	33	6,334	9/1952-6/1961 (discontinued)	28	34	27	11	87 (1956)	1,314	2,190	7,023 (1960)	8

Table 5.2-2 Streamflow Data for the Salt River Basin (Cont)

Station Number	USGS Station Name	Drainage Area (in mi^2)	Gage Elevation (in feet)	Period of Record	Average Seasonal Flow (% of annual flow)				Annual Flow/Year (in acre-feet)				Years of Annual Flow Record
					Winter	Spring	Summer	Fall	Minimum	Median	Mean	Maximum	
9496000	Corduroy Creek near mouth near Show Low	203	5,000	9/1951-9/2005 (discontinued)	54	17	7	21	1,600 (1970)	11,149	16,380	63,927 (1973)	23
9496500	Carrizo Creek near Show Low	439	4,749	6/1951-current (real time)	28	49	10	13	3,758 (1956)	22,232	35,030	124,556 (1993)	41
9496600	Cibecue 1 Tributary Carrizo Creek near Show Low	<0.1	5,400	6/1958-9/1971 (discontinued)	0	0	80	20	1 (1960)	6	8	22 (1964)	12
9496700	Cibecue 2 Tributary Carrizo Creek near Show Low	<0.1	5,240	6/1958-9/1971 (discontinued)	4	0	71	25	2 (1960-1961,1968)	4	6	17 (1963)	12
9497500	Salt River near Chrysotile	2,849	3,355	9/1924-current (real-time)	38	36	12	14	128,176 (2002)	393,581	474,817	1,459,907 (1993)	78
9497800	Cibecue Creek near Chysotile	295	3,200	5/1959-current (real time)	45	17	18	21	10,066 (1961)	23,535	32,597	128,176 (1993)	43
9497850	Canyon Creek near Globe	316	3,080	10/1975-9/1981 (discontinued)	66	15	4	15	13,759 (1981)	99,282	81,149	147,149 (1979)	5
9497900	Cherry Creek near Young	62	4,950	8/1963-9/1977 (discontinued)	49	13	8	29	1,289 (1964)	5,495	7,817	20,706 (1965)	13
9497980	Cherry Creek near Globe	200	3,200	5/1965-current (real-time)	57	11	9	23	2,600 (2002)	15,026	24,302	84,003 (1993)	36
9498400	Pinal Creek at Inspiration Dam near Globe	195	2,740	7/1980-current (real-time)	49	16	16	19	2,868 (1999)	6,087	8,980	61,481 (1993)	22
9498500	Salt River near Roosevelt	4,306	2,177	1/1913-current (real-time)	41	31	13	15	152,798 (2002)	518,499	644,942	2,422,315 (1916)	89
9498501	Pinto Creek below Haunted Canyon near Miami	37	3,180	10/1995-current (real-time)	70	12	3	14	130 (2002)	1,709	1,600	3,722 (1998)	7
9498502	Pinto Creek near Miami	102	2,820	9/1994-current (real-time)	68	15	8	9	449 (1996)	4,168	5,757	19,480 (1995)	8
9498503	South Fork Parker Creek near Roosevelt	1	5,440	11/1985-current (real-time)	73	15	3	10	3 (2002)	192	266	1,036 (1995)	14
9500500	Salt River at Roosevelt	5,824	NA	1/1904-12/1907 (discontinued)	45	29	9	17	254,840 (1904)	1,321,983	1,531,574	3,227,492 (1905)	4

Source: USGS (NWIS) 2005 & 2008

Notes:
Statistics based on Calendar Year
Annual Flow statistics based on monthly values
Summation of Average Annual Flows may not equal 100 due to rounding
Period of record may not equal Year of Record used for annual Flow/Year statistics due to only using years with a 12 month record
In Period of Record, current equals November 2008
Seasonal and annual flow data used for the statistics was retrieved in 2005

Table 5.2-3 Flood ALERT Equipment in the Salt River Basin

Station ID	Station Name	Station Type	Install Date	Responsibility
81	Roosevelt Fire Station	Precipitation	10/2/04	Gila County FCD
910	Beer Tree Crossing Pinal Creek	Precipitation/Stage	NA	Gila County FCD
920	Guzman Crossing Pinal Creek	Precipitation/Stage	NA	Gila County FCD
1712	Pinetop County Club	Precipitation	NA	Navajo County FCD
6780	Saguaro Lake	Weather Station	1/24/00	Maricopa County FCD

Source: ADWR 2005a

Notes:
FCD = Flood Control District
NA = Not available

Table 5.2-4 Reservoirs and Stockponds in the Salt River Basin

A. Large Reservoirs (500 acre-feet capacity and greater)

MAP KEY	RESERVOIR/LAKE NAME (Name of dam, if different)	OWNER/OPERATOR	MAXIMUM STORAGE (AF)	USE[1]	JURISDICTION
1	Roosevelt	Bureau of Reclamation	1,653,043	H,I,R,S	Federal
2	Apache (Horse Mesa Dam)	Bureau of Reclamation	245,048	H,I,R,S	Federal
3	Saguaro (Stewart Mountain Dam)	Bureau of Reclamation	68,800	H,I,S	Federal
4	Canyon (Mormon Flat Dam)	Bureau of Reclamation	57,900	H,I,R,S	Federal
5	Sunrise	White Mountain Apache Tribe	15,000[2]	R	Tribal
6	Big	AZ Game & Fish	10,100	R	State
7	Reservation	San Carlos Apache Tribe	6,000[2]	R	Tribal
8	Crescent	AZ Game & Fish	5,800	F,R	State
9	Horseshoe Cienega	White Mountain Apache Tribe	1,170	R	Tribal
10	Cyclone	White Mountain Apache Tribe	775	R	Tribal
11	Hawley (Davis Dam)	White Mountain Apache Tribe	650	F,R	Tribal

B: Other Large Reservoirs (50 acre surface area or greater)[3]

MAP KEY	RESERVOIR/LAKE NAME (Name of dam, if different)	OWNER/OPERATOR	MAXIMUM SURFACE AREA (acres)	USE	JURISDICTION
12	Nash Creek	White Apache Tribe	69	R	Tribal

Source: Compilation of databases from ADWR & others

C. Small Reservoirs (greater than 15 acre-feet and less than 500 acre-feet capacity)

Total number: 26
Total maximum storage: 3,239 acre-feet

D. Other Small Reservoirs (between 5 and 50 acres surface area)[3]

Total number: 36
Total surface area: 410 acres

E. Stockponds (up to 15 acre-feet capacity)

Total number: 807 (from water right filings)

Notes:
[1]F=fish & wildlife pond; H=hydroelectric; I=irrigation; R=recreation; S=water supply
[2]Normal capacity < 500acre-feet
[3]Capacity data is not available to ADWR

Figure 5.2-5
Salt River Basin
Surface Water Conditions

5.2.5 Perennial/Intermittent Streams and Major Springs in the Salt River Basin

Major and minor springs with discharge rates and date of measurement, and the total number of springs in the basin are shown in Table 5.2-5. The locations of major springs and perennial and intermittent streams are shown on Figure 5.2-6. Descriptions of data sources and methods for intermittent and perennial reaches and springs are found in Volume 1, Appendix A.

- There are numerous perennial streams located throughout the basin, particularly in the high elevation eastern portion, and include the Salt River, Black River, White River, East Fork White River, North Fork White River, Carrizo Creek, Cibecue Creek, Canyon Creek and Cherry Creek.
- Most of the intermittent streams are found in the western portion of the basin.
- There are 26 major springs with a measured discharge of 10 gallons per minute (gpm) or greater at any time. The largest discharge rate is 8,980 at Alchesay spring.
- Springs with measured discharge of 1 to 10 gpm are not mapped but coordinates are given in Table 5.2-5B. There is one minor spring identified in this basin.
- Listed discharge rates may not be indicative of current conditions. Many of the measurements were taken during or prior to 1952.
- The total number of springs, regardless of discharge, identified by the USGS varies from 624 to 822, depending on the database reference.

Table 5.2-5 Springs in the Salt River Basin

A. Major Springs (10 gpm or greater):

Map Key	Name	Location		Discharge (in gpm)[1]	Date Discharge Measured
		Latitude	Longitude		
1	Alchesay	335641	1095523	8,980	During or prior to 1952
2	Canyon[2]	334040	1111242	2,224	During or prior to 2001
3	Mann[2]	340340	1094810	1,980	10/24/1979
4	Gooseberry Creek	340654	1094117	1,000	5/22/1952
5	Warm	334403	1101256	874	During or prior to 1982
6	Unnamed	341740	1104858	480	11/5/2002
7	Unnamed	341738	1104853	410	11/5/2002
8	Unnamed	341738	1104853	310	11/5/2002
9	Blue Lake	340402	1094805	260	5/19/1952
10	Gomez[2, 3]	340338	1095156	200	6/18/1946
11	Boy	340420	1094703	200	5/20/1952
12	Ess	334049	1093308	200	6/18/1952
13	Big	340539	1095932	150	6/20/1952
14	Upper Bull Cienega	340348	1095315	100[4]	6/20/1952
15	Government[2]	340410	1095210	75	6/18/1946
16	Maurel[2, 3]	332422	1104425	50	4/11/1946
17	Unnamed[2, 3]	334942	1095100	40	2/19/1952
18	Haystack # 1[2]	340450	1095037	40[4]	6/18/1946
19	Warm	334358	1101253	30[5]	During or prior to 1992
20	Earl Spring # 3[2]	340424	1095123	20[4]	6/18/1946
21	Unnamed[3]	340441	1094840	20[4]	6/20/1946
22	Haystack # 2[2]	340450	1095052	20	6/18/1946
23	Columbine	335631	1095510	Greater than 10	6/5/2005
24	White	341109	1103055	Greater than 10	6/6/2005
25	Williams (Fish Hatchery)	340341	1094832	Greater than 10	6/5/2005
26	Unnamed[3]	334414	1101339	10[5]	During or prior to 1982

B. Minor Springs (1 to 10 gpm):

Name[1]	Location		Discharge (in gpm)[1]	Date Discharge Measured
	Latitude	Longitude		
Bull Cienega	340348	1095314	2	6/20/1952

Source: Compilation of databases from ADWR & others

C. Total number of springs, regardless of discharge, identified by USGS (see ALRIS, 2005a and USGS, 2006a): 624 to 822

Notes:
[1]Most recent measurement identified by ADWR
[2]Spring is not displayed on current USGS topo maps
[3]Location approximated by ADWR
[4]Estimated discharge
[5]Average discharge

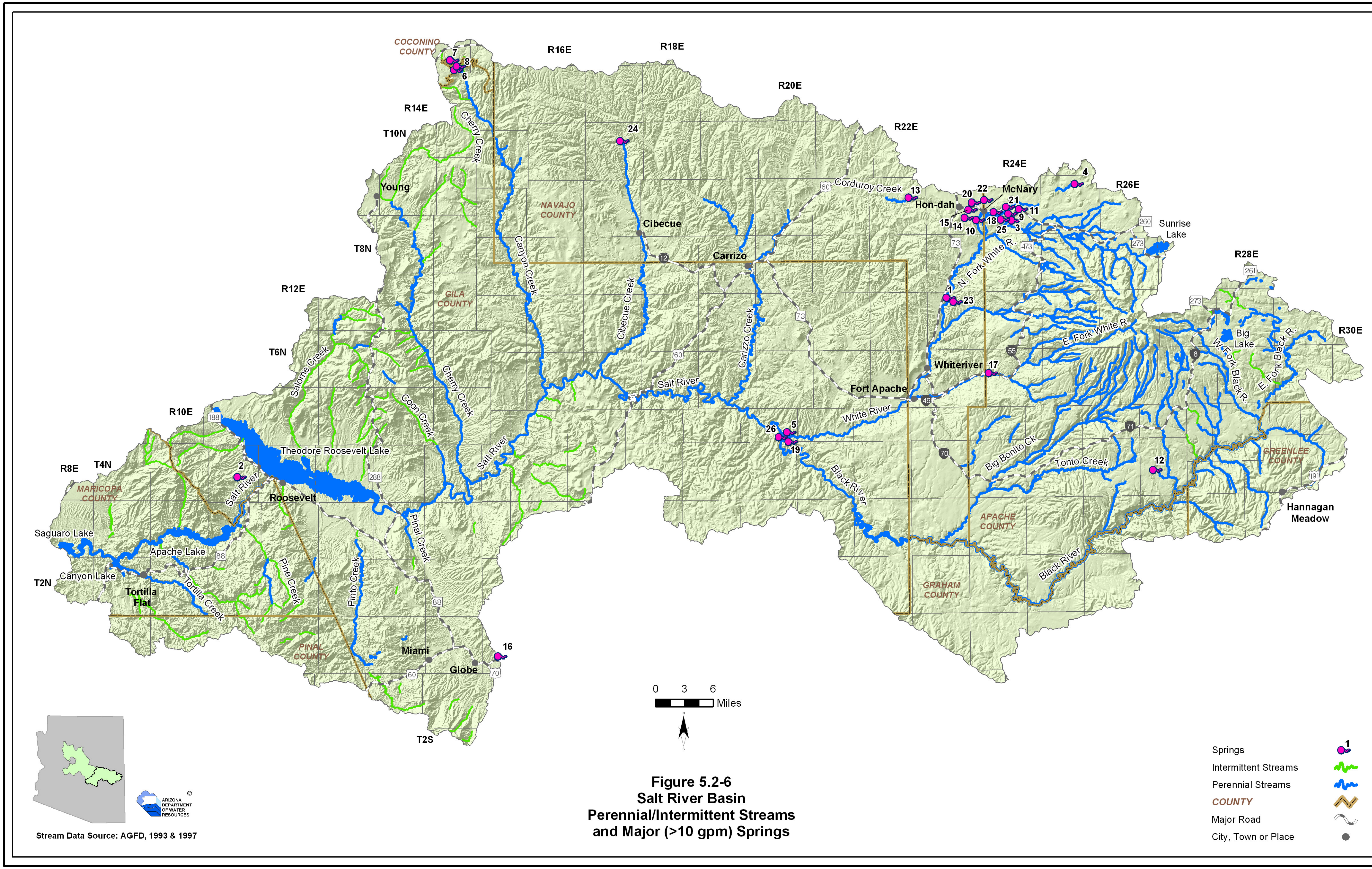


Figure 5.2-6
Salt River Basin
Perennial/Intermittent Streams
and Major (>10 gpm) Springs

5.2.6 Groundwater Conditions of the Salt River Basin

Major aquifers, well yields, estimated natural recharge, estimated water in storage, number of index wells and date of last water-level sweep are shown in Table 5.2-6. Figure 5.2-7 shows aquifer flow direction and water-level change between 1990-1991 and 2003-2004. Figure 5.2-8 contains hydrographs for selected wells shown on Figure 5.2-7. Figure 5.2-9 shows well yields in five yield categories. A description of aquifer data sources and methods as well as well data sources and methods, including water-level changes and well yields are found in Volume 1, Appendix A.

Major Aquifers

- Refer to Table 5.2-6 and Figure 5.2-7.
- Major aquifers in the basin include recent stream alluvium, volcanic rock (Pinetop-Lakeside Aquifer) and sedimentary rock (Gila Conglomerate, and C and R Aquifers).
- Most of the basin geology consists of consolidated crystalline and sedimentary rock.
- The basin contains four sub-basins: Black River, White River, Salt River Canyon and Salt River Lakes.
- Flow directions are generally not available due to the consolidated nature of the basin geology. Groundwater flow in the C-aquifer in the northwestern portion of the basin is from north to south.

Well Yields

- Refer to Table 5.2-6 and Figure 5.2-9.
- As shown on Figure 5.2-9, well yields in this basin range from less than 100 gpm to greater than 2,000 gpm.
- One source of well yield information, based on 140 reported wells, indicates that the median well yield in this basin is 170 gpm.

Natural Recharge

- Refer to Table 5.2-6.
- The natural recharge estimate for this basin is 178,000 acre-feet per year (AFA).

Water in Storage

- Refer to Table 5.2-6.
- The storage estimate for this basin is more than 8.7 million acre-feet to a depth of 1,200 feet.

Water Level

- Refer to Figure 5.2-7. Water levels are shown for wells measured in 2003-2004.
- The Department annually measures one index well in this basin, located near Young. Hydrographs for this well and two additional wells are shown in Figure 5.2-8.
- All water level information is from the western portion of the basin. These data show the deepest recorded water level at 82 feet and the shallowest at eight feet, both located north of Miami-Globe.

Table 5.2-6 Groundwater Data for the Salt River Basin

Basin Area, in square miles:	5,232	
Major Aquifer(s):	**Name and/or Geologic Units**	
	Recent Stream Alluvium	
	Volcanic Rock (Pinetop-Lakeside Aquifer)	
	Sedimentary Rock (Gila Conglomerate)	
	Sedimentary Rock (C and R Aquifers)	
Well Yields, in gal/min:	60 (1 well measured)	Measured by ADWR (GWSI) and/or USGS
	Range 2-2,000 Median 170 (140 wells reported)	Reported on registration forms for large (>10-inch) diameter wells (Wells55)
	Range 10-300	ADWR (1990 and 1994b)
	Range 0-500	Anning and Duet (1994)
Estimated Natural Recharge, in acre-feet/year:	178,000	Freethey and Anderson (1986)
Estimated Water Currently in Storage, in acre-feet:	>8,700,000 (to 1,200 ft)	ADWR (1992)
Current Number of Index Wells:	1	
Date of Last Water-level Sweep:	NA	

NA - Not applicable

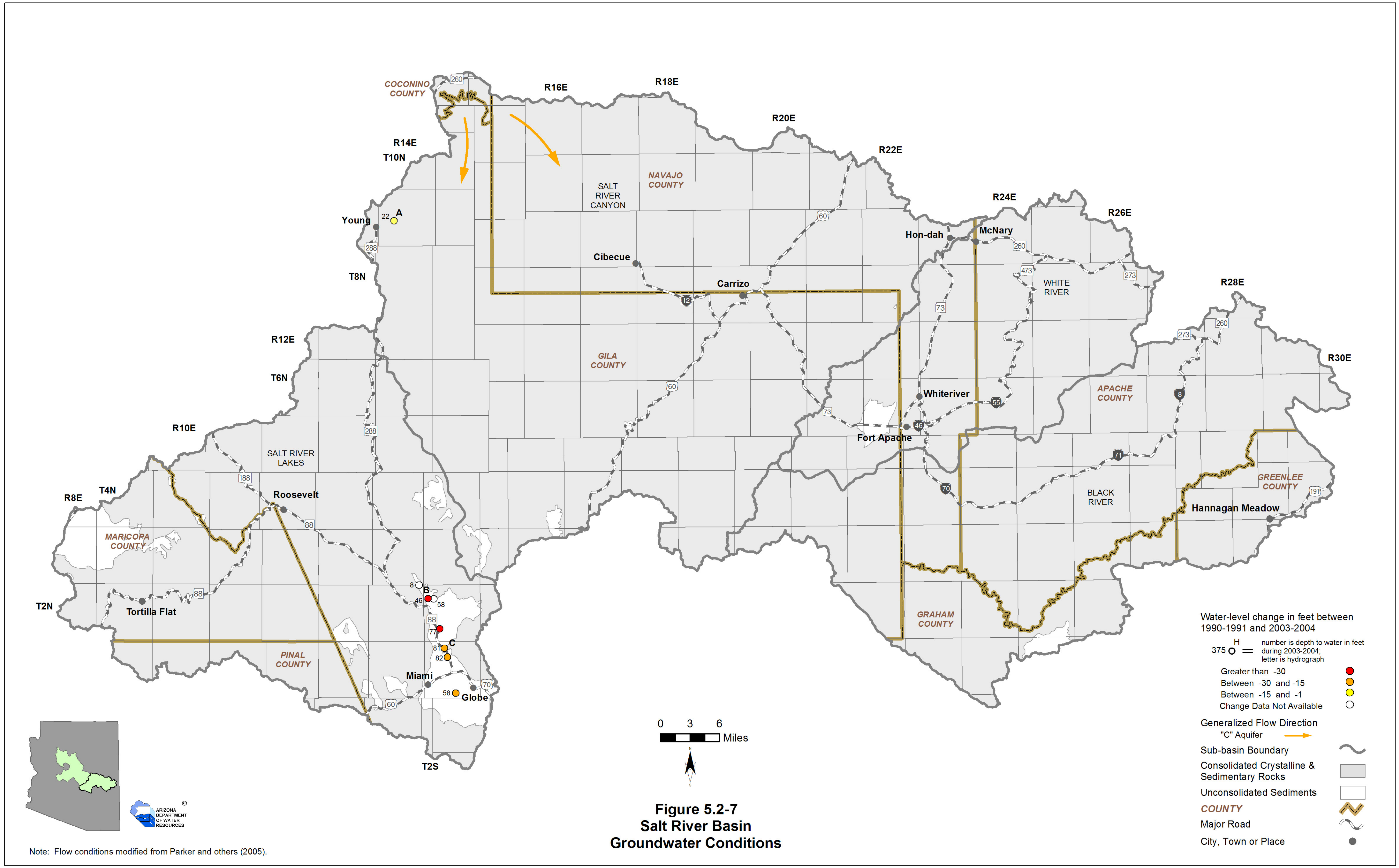
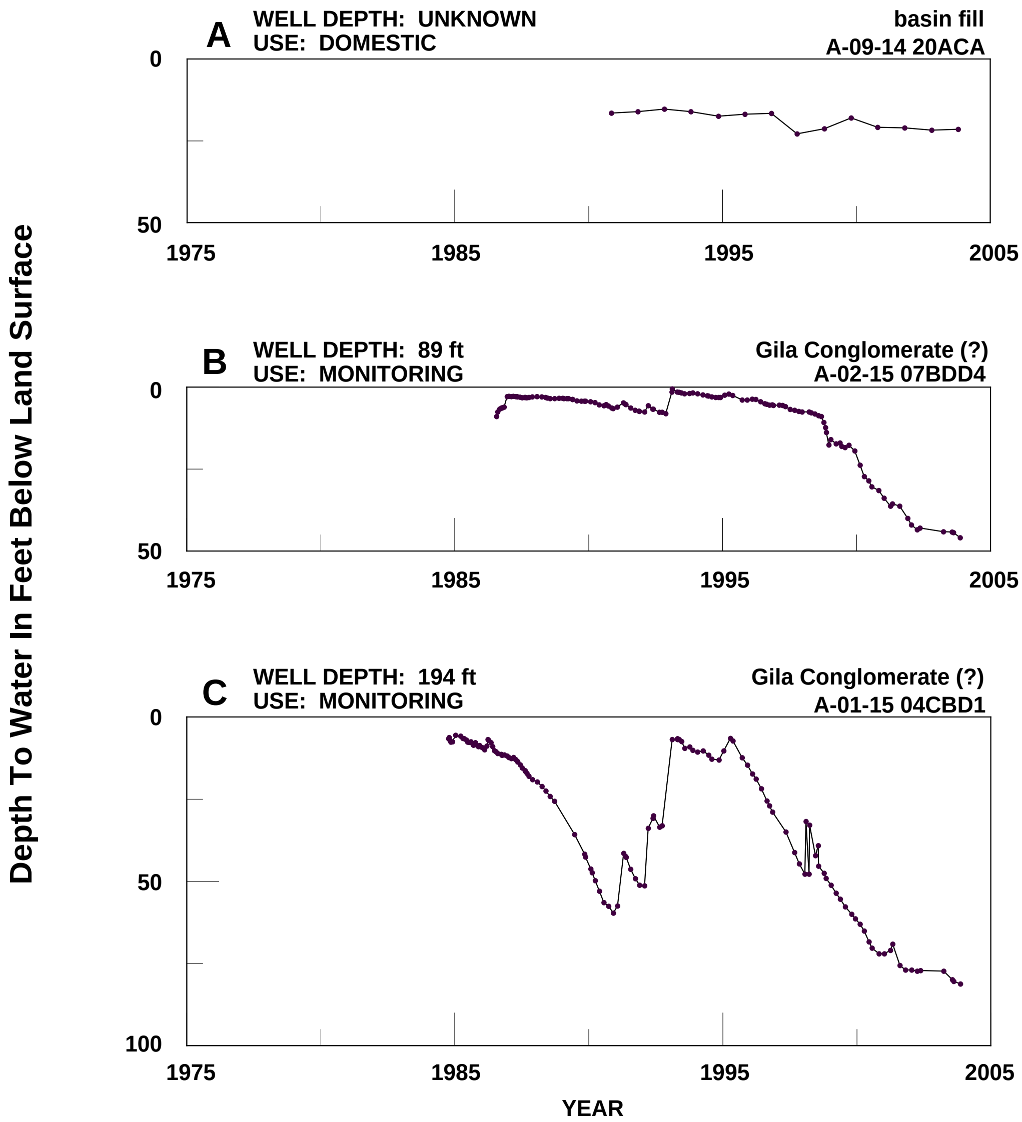


Figure 5.2-7
Salt River Basin
Groundwater Conditions

Figure 5.2-8
Salt River Basin
Hydrographs Showing Depth to Water in Selected Wells



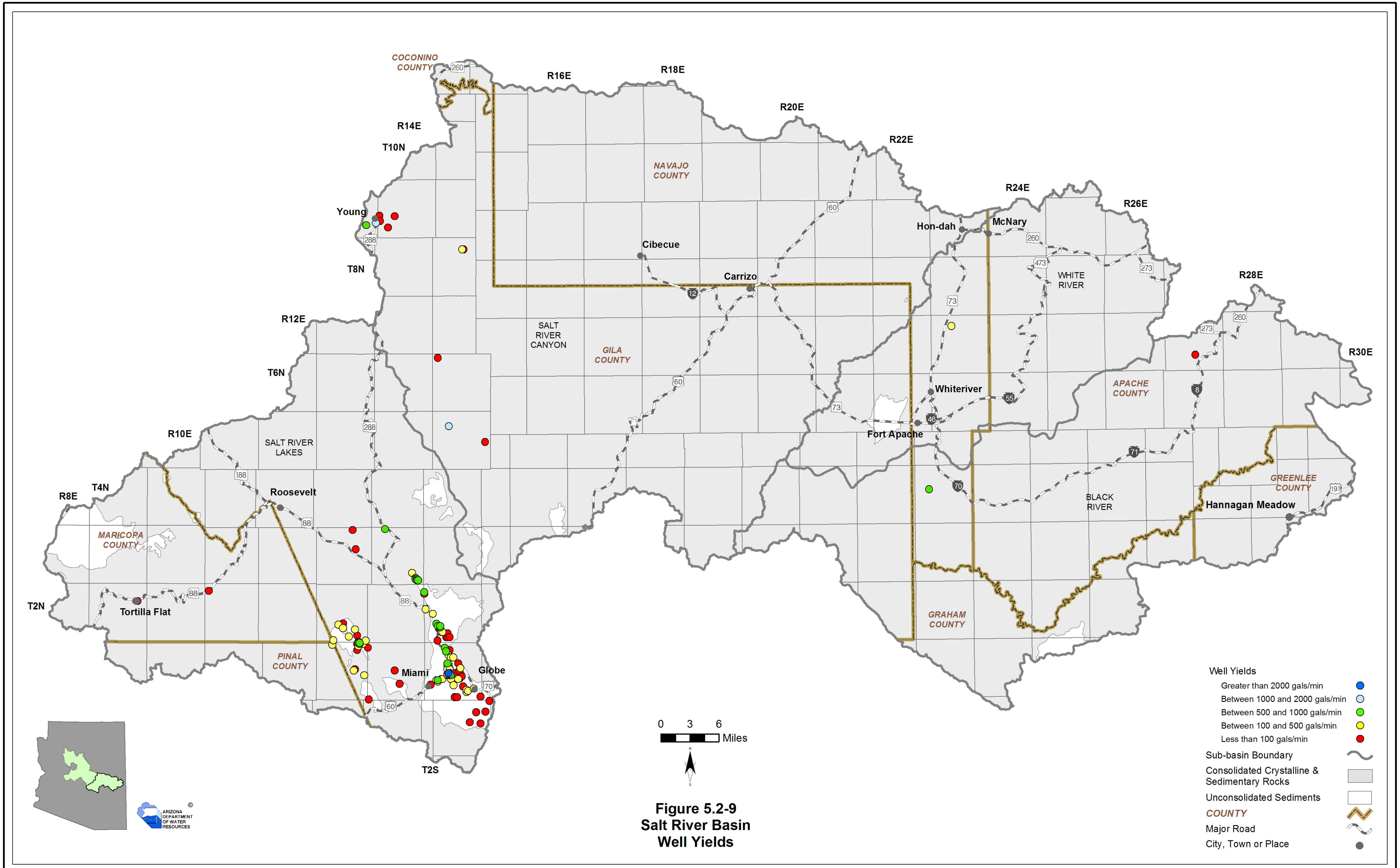


**Figure 5.2-9
Salt River Basin
Well Yields**

5.2.7 Water Quality of the Salt River Basin

Wells, springs and mine sites with parameter concentrations that have equaled or exceeded drinking water standard(s), including location and parameter(s) are shown in Table 5.2-7A. Impaired lakes and streams with site type, name, length of impaired reach, area of impaired lake, designated use standard and parameter(s) exceeded is shown in Table 5.2-7B. Figure 5.2-10 shows the location of water quality occurrences keyed to Table 5.2-7. All community water systems are regulated under the Safe Drinking Water Act and treat water supplies to meet drinking water standards. Not all parameters were measured at all sites; selective sampling for particular constituents is common. A description of water quality data sources and methods is found in Volume 1, Appendix A.

Well, Mine or Spring sites that have equaled or exceeded drinking water standards (DWS)

- Refer to Table 5.2-7A.
- Seventy sites have parameter concentrations that have equaled or exceeded drinking water standards. All but one occurrence is in the southwest portion of the basin.
- The most commonly equaled or exceeded parameter was cadmium.
- Other standards equaled or exceeded in the basin include fluoride, beryllium, copper, lead, chromium, total dissolved solids, nitrates, arsenic and radionuclides.

Lakes and Streams with impaired waters

- Refer to Table 5.2-7B.
- Water quality standards in this basin were exceeded for two lakes and four stream reaches on two streams.
- The most commonly equaled or exceeded standard was copper. Other standards equaled or exceeded include dissolved oxygen, high pH and selenium.
- The three impaired reaches of Pinto Creek are part of the ADEQ water quality improvement effort called the Total Maximum Daily Load (TMDL) program. Phase I of the TMDL reports have been approved and specific site standards are being developed.
- Canyon Lake, Crescent Lake and the Gibson Mine tributary are not a part of the TMDL program at this time.

Effluent Dependent Reaches

- Refer to Figure 5.2-10
- There is one effluent dependent reach in this basin, Pinal Creek, located north of Globe.

Table 5.2-7 Water Quality Exceedences in the Salt River Basin[1]

A. Wells, Springs and Mines

Map Key	Site Type	Site Location			Parameter(s) Concentration has Equaled or Exceeded Drinking Water Standard (DWS)[2]
		Township	Range	Section	
1	Well	4 North	29 East	34	NO3
2	Well	3 North	12 East	14	Rad
3	Well	3 North	13 East	2	As
4	Well	3 North	13 East	9	As
5	Well	3 North	13 East	10	As
6	Well	3 North	13 East	15	As
7	Well	3 North	13 East	15	As
8	Well	3 North	14 East	26	Pb, TDS
9	Well	3 North	14 East	26	Pb, TDS
10	Well	2 North	9 East	11	As, F
11	Well	2 North	11 East	6	Rad
12	Spring	2 North	13 East	16	Rad
13	Well	2 North	14 East	1	F
14	Well	2 North	15 East	6	F
15	Well	2 North	15 East	6	F
16	Well	2 North	15 East	6	F
17	Well	2 North	15 East	6	F
18	Well	2 North	15 East	6	F
19	Well	2 North	15 East	7	Be, Cd, Cu, F, Pb
20	Well	2 North	15 East	7	Be, Cd, Cu, Pb
21	Well	2 North	15 East	7	Be, Cd, Cu, F, Pb
22	Well	2 North	15 East	7	Be, Cd, Cu, F
23	Well	2 North	15 East	7	Cd
24	Well	2 North	15 East	7	Be, Cd, Cr, Pb, TDS
25	Well	2 North	15 East	7	Pb
26	Well	2 North	15 East	7	Be, Cd, Cr, Pb, TDS
27	Well	2 North	15 East	7	Pb
28	Well	2 North	15 East	7	Cd, Pb, TDS
29	Well	2 North	15 East	7	Cd, Pb, TDS
30	Well	2 North	15 East	7	Cd
31	Well	2 North	15 East	18	Be, Cd, Cu, F, Pb, TDS
32	Well	2 North	15 East	18	Be, Cd, Cu, F, Pb, TDS
33	Well	2 North	15 East	18	Be, Cd, F, Pb
34	Well	2 North	15 East	29	TDS
35	Well	2 North	15 East	29	Be, Cd, Cu, F, Pb, TDS
36	Well	2 North	15 East	29	Be, Cd, Cu, F, Pb, TDS
37	Well	2 North	15 East	29	Be, Cd, Cu, F, Pb, TDS
38	Well	2 North	15 East	29	Cd
39	Well	2 North	15 East	32	As
40	Well	1 North	14 East	27	As
41	Well	1 North	15 East	4	Be, Cd, Cr, F, Pb, TDS
42	Well	1 North	15 East	4	Be, Cd, Cu, Cr, F, Pb, TDS
43	Well	1 North	15 East	4	Be, Cd, Cu, Cr, F, Pb, TDS
44	Well	1 North	15 East	4	Be, Cd, Cu, F, Pb
45	Well	1 North	15 East	4	Pb
46	Well	1 North	15 East	9	Be, Cd, Cu, Cr, F, Pb, TDS
47	Well	1 North	15 East	9	Be, Cd, Cu, Cr, F, Pb, TDS
48	Well	1 North	15 East	9	Be, Cd, Cu, Cr, F, Pb, TDS
49	Well	1 North	15 East	9	Be, Cd, Cu, F, Pb, TDS
50	Well	1 North	15 East	9	Pb
51	Well	1 North	15 East	9	Be, Cd, Cu, F, Pb
52	Well	1 North	15 East	9	Cu
53	Well	1 North	15 East	9	Cu
54	Well	1 North	15 East	9	Be, Cd, Cu, Cr, F, Pb, TDS
55	Well	1 North	15 East	9	Be, Cd, Cu, F, TDS
56	Well	1 North	15 East	9	Be, Cd, Cu, F, TDS
57	Well	1 North	15 East	9	Be, Cd, Cu, F, TDS

Table 5.2-7 Water Quality Exceedences in the Salt River Basin (Cont)[1]

A. Wells, Springs and Mines

Map Key	Site Type	Site Location			Parameter(s) Concentration has Equaled or Exceeded Drinking Water Standard (DWS)[2]
		Township	Range	Section	
58	Well	1 North	15 East	9	Be, Cd, Cu, Pb
59	Well	1 North	15 East	9	Be, Cd, Cu, TDS
60	Well	1 North	15 East	23	Cd
61	Well	1 North	15 East	23	Cd
62	Well	1 North	15 East	23	Cd
63	Well	1 North	15 East	23	Cd
64	Well	1 North	15 East	23	Cd
65	Well	1 North	15 East	34	Cd
66	Well	1 North	15 East	34	Cd, Pb
67	Well	1 North	15 East	35	Cd
68	Well	1 South	13 East	12	NO3
69	Well	1 South	14 East	2	F
70	Well	1 South	15 East	12	NO3

Source: Compilation of databases from ADWR & others

B. Lakes and Streams

Map Key	Site Type	Site Name	Length of Impaired Stream Reach (in miles)	Area of Impaired Lake (in acres)	Designated Use Standard[3]	Parameter(s) Exceeding Use Standard[2]
a	Lake	Canyon Lake	NA	450	A&W	DO
b	Lake	Crescent Lake	NA	150	A&W, FBC, AgL, AgI	pH
c	Stream	Gibson Mine tributary (headwaters to Pinto Creek)	1	NA	A&W	Cu
d	Stream	Pinto Creek (headwaters to tributary latitude 331927, longitude 1105456)	3	NA	A&W	Cu
e	Stream	Pinto Creek (Ripper Spring Canyon to Roosevelt Lake)	18	NA	A&W	Cu, Se
f	Stream	Pinto Creek tributary (latitude 331927, longitude 1105456 to Ripper Spring)	16	NA	A&W	Cu

Source: ADEQ 2005d

Notes:

[1] Water quality samples collected between 1984 and 2002.

[2] As = Arsenic
Be = Beryllium
Cd = Cadmium
Cr = Chromium
Cu = Copper
DO = Dissolved oxygen
F= Fluoride
Pb = Lead
NO3 = Nitrate
pH = Measurement of acidity or alkalinity
Rad = One or more of the following radionuclides - Gross Alpha, Gross Beta, Radium, and Uranium
Se = Selenium
TDS = Total Dissolved Solids

[3] A&W = Aquatic and Wildlife
FBC = Full Body Contact
AgL - Agricultural - livestock watering
AgI = Agricultural - irrigation
NA = Not Applicable

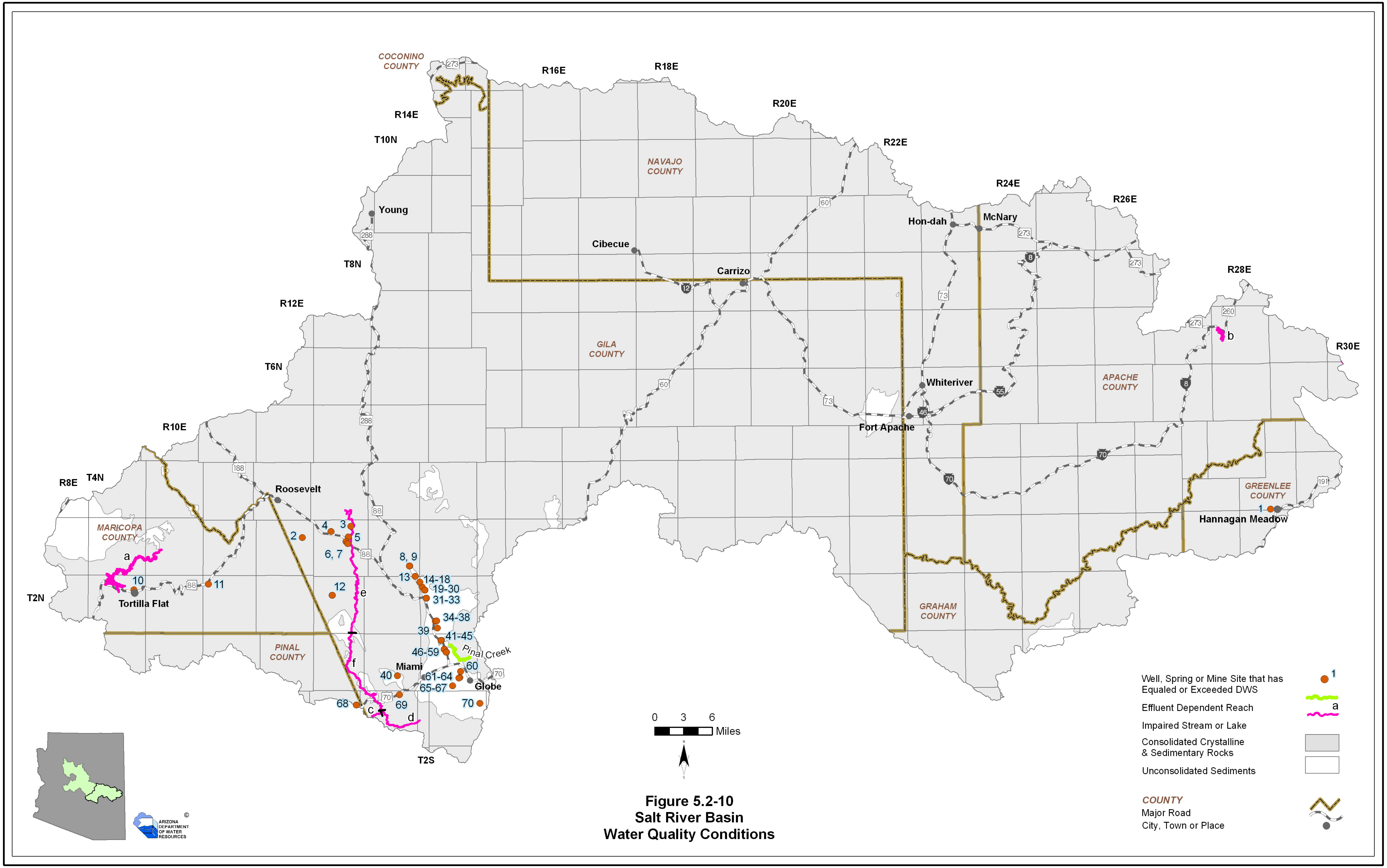


Figure 5.2-10
Salt River Basin
Water Quality Conditions

5.2.8 Cultural Water Demand in the Salt River Basin

Cultural water demand data including population, number of wells and the average well pumpage and surface water diversions by the municipal, industrial and agricultural sectors are shown in Table 5.2-8. Effluent generation including facility ownership, location, population served and not served, volume treated, disposal method and treatment level is shown in Table 5.2-9. Figure 5.2-11 shows the location of demand centers. A description of cultural water demand data sources and methods is found in Volume 1, Appendix A. More detailed information on cultural water demand is found in Section 5.0.7.

Cultural Water Demand

- Refer to Table 5.2-8 and Figure 5.2-11.
- Population in this basin has increased from 27,318 in 1980 to 29,057 in 2000.
- Total groundwater use has decreased in this basin since 1971, from an average of 20,000 AFA from 1971-1975 to an average of 12,600 AFA in 2001-2005.
- From 1991-2005 municipal groundwater use averaged 4,000 AFA.
- Groundwater use for industrial purposes has decreased from 10,500 AFA during 1991-1995 to 8,100 AFA in 2001-2005.
- Groundwater use for irrigation occurs on non-reservation lands and has remained constant at less than 1,000 AFA during 1991-2005.
- Information on surface water diversions is not available from 1971-1990. Surface water diversions for both municipal and irrigation uses are assumed to have remained constant from 1991-2005. Municipal use averaged less than 300 AFA and irrigation use averaged 6,400 AFA.
- Surface water diversions for industrial use have decreased from an average of 6,300 AFA during 1991-1995 to 4,900 AFA in 2001-2005.
- Municipal and industrial demand is found in the Globe – Miami area, around Young and near Fort Apache and Whiteriver on the Fort Apache Indian Reservation.
- There are three large copper mines, Pinto Valley, Carlotta and Miami Mine, and two small mines or quarries located in the vicinity of Miami. Not all mines are currently in production.
- As of 2005 there were 1,593 registered wells with a pumping capacity of less than or equal to 35 gpm and 412 wells with a pumping capacity of more than 35 gpm.

Effluent Generation

- Refer to Table 5.2-9.
- There are twelve wastewater treatment facilities in this basin.
- Information on population served was available for seven facilities and information on effluent generation was available for six facilities. These facilities serve over 18,000 people and generate over 2,600 acre-feet of effluent per year.
- Of the seven facilities with information on the effluent disposal method: two discharge to evaporation ponds; two discharge for irrigation; one facility discharges to the Globe WWTF and two discharge into a watercourse.

Table 5.2-8 Cultural Water Demand in the Salt River Basin[1]

Year	Estimated and Projected Population	Number of Registered Water Supply Wells Drilled		Average Annual Demand (in acre-feet)						
				Well Pumpage			Surface-Water Diversions			Data Source
		Q ≤ 35 gpm	Q > 35 gpm	Municipal	Industrial	Agricultural	Municipal	Industrial	Agricultural	
1971										
1972										
1973				20,000			NR			
1974										
1975										
1976		821[2]	231[2]							
1977										
1978				20,000			NR			
1979										
1980	27,318									ADWR (1994b)
1981	27,453									
1982	27,589									
1983	27,724	187	34	20,000			NR			
1984	27,859									
1985	27,995									
1986	28,130									
1987	28,265									
1988	28,401	91	49	22,000			NR			
1989	28,536									
1990	28,671									
1991	28,710									
1992	28,748									
1993	28,787	131	24	3,900	10,500	<1,000	<300	6,300	6,400	
1994	28,825									
1995	28,864									
1996	28,903									
1997	28,941									
1998	28,980	223	63	4,100	7,500	<1,000	<300	6,600	6,400	USGS (2007) ADWR (2008b) ADWR (2008c) ADWR (1992) Truini (2005)
1999	29,018									
2000	29,057									
2001	29,305									
2002	29,554									
2003	29,802	140	11	4,000	8,100	<1,000	<300	4,900	6,400	
2004	30,051									
2005	30,299									
2010	31,541									
2020	33,978									
2030	36,094									
	WELL TOTALS:	**1,593**	**412**							

Notes:
NR - Not reported
[1] Does not include effluent or evaporation losses from stockponds and reservoirs.
[2] Includes all wells through 1980.

Table 5.2-9 Effluent Generation in the Salt River Basin

Facility Name	Ownership	City/Location Served	Population Served	Volume Treated/Generated (acre-feet/year)	Disposal Method							Current Treatment Level	Population Not Served	Year of Record
					Water-course	Evaporation Pond	Irrigation	Wildlife Area	Golf Course/Turf/ Landscape	Discharge to Another Facility	Infiltration Basins			
Arizona DOC/Globe	Department of Corrections	Prison	NA											
Cobra Valley Plaza	Cobra Valley SD	Claypool	100	11	Miami Wash							Secondary	NA	2000
Globe Central Heights Collection Systems	Globe	Globe	190	NA						Globe WWTF		NA		2001
Globe Holgate STP	Globe	Globe	190	22	NA							Secondary	NA	2000
Globe WWTF	Globe	Globe	190	784	Unnamed wash to Pinal Creek		X					Secondary	NA	2001
Hon-Dah WWTP	White Mountain Apache Tribe	Resort	NA											
Houston Creek Landing	Private	Star Valley	NA											
Miami WWTF	Miami	Miami	5,238	488			X					Secondary	762	2000
Pinal Creek	Globe	Globe	NA	NA			Reuse					NA		2004
Roosevelt WWTP	Tonto National Forest	Recreation Area	NA											
White Mountain Apache	White Mountain Apache Tribe	Reservation	2,000	224		X						Secondary	1,250	2000
White River	White Mountain Apache Tribe	White River	10,700	1,120		X						Secondary	2000	2000
Total			**18,608**	**2,649**										

Source: Compilation of databases from ADWR & others

Notes:
Year of Record is for the volume of effluent treated/generated
NA: Data not currently available to ADWR
WWTF: Waste Water Treatment Facility
WWTP: Waste Water Treatment Plant
STP:Sewage Treatment Plant
SD: Sanitation District

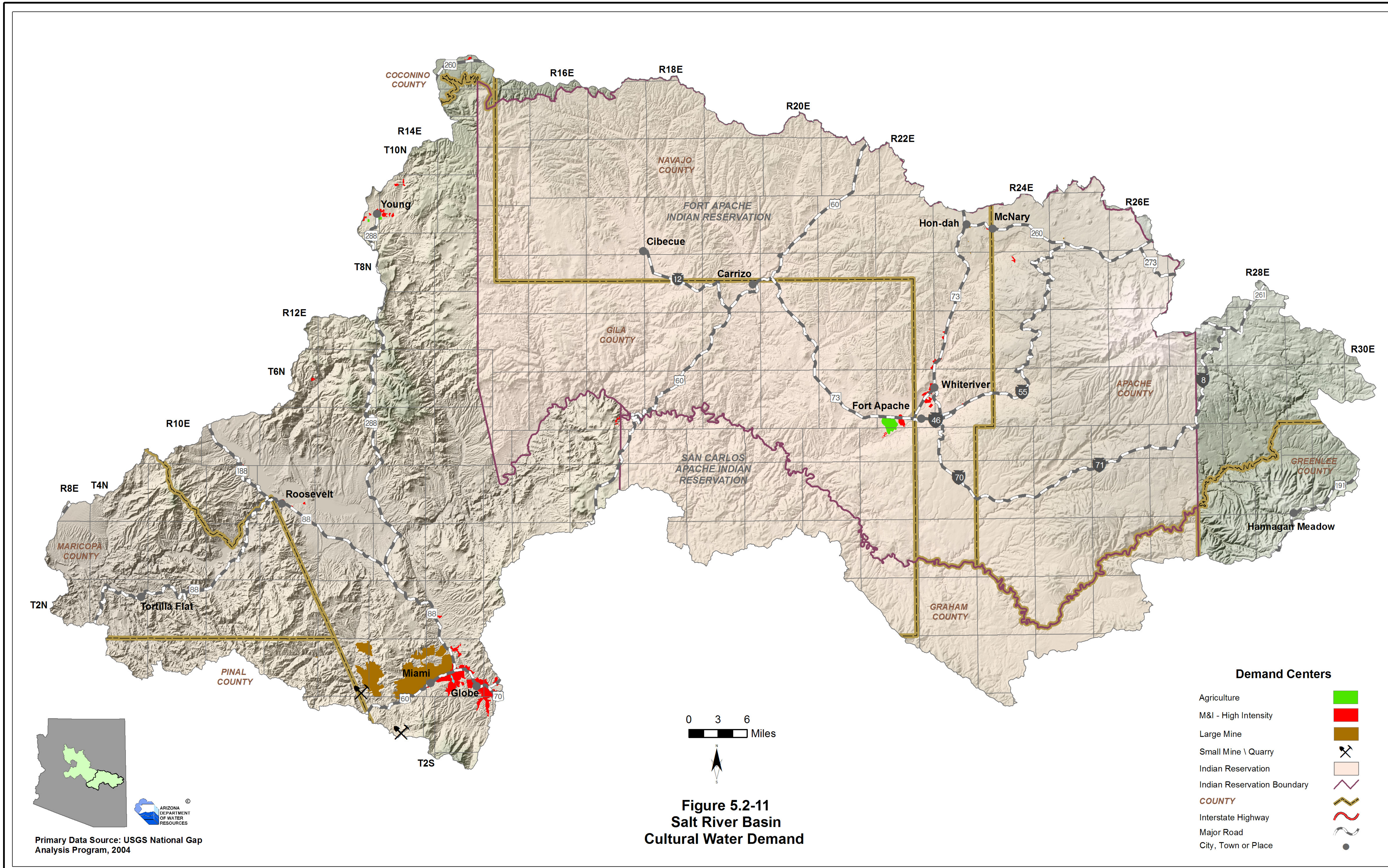


Figure 5.2-11
Salt River Basin
Cultural Water Demand

5.2.9 Water Adequacy Determinations in the Salt River Basin

Water adequacy determination information including the subdivision name, location, number of lots, adequacy determination, reason for the inadequacy determination, date of determination and subdivision water provider are shown in Table 5.2-10. Figure 5.2-12 shows the locations of subdivisions keyed to the Table. A description of the Water Adequacy Program is found in Volume 1, Appendix C. Adequacy determination data sources and methods are found in Volume 1, Appendix A.

- A total of seventeen water adequacy determinations for 968 lots have been made in this basin through December 2008.
- Fifteen subdivisions received inadequate determinations. The most common reason for an inadequacy determination is because the applicant did not submit the necessary information and/or the available hydrologic data was insufficient to make a determination.
- There is one designated provider, City of Globe, with an undetermined projected or annual estimated demand.
- The number of lots receiving a water adequacy determination, by county, are:

County	Number of Subdivision Lots	Number of Lots Determined to be Adequate	Percent Adequate
Apache County	0	0	NA
Coconino County	0	0	NA
Gila County	909	47	5%
Greenlee County	0	0	NA
Graham County	0	0	NA
Navajo County	59	59	100%
Maricopa County	0	0	NA

Table 5.2-10. Adequacy Determinations in the Salt River Basin[1]

A. Water Adequacy Reports

Map Key	Subdivision Name	County	Location			No. of Lots	ADWR File No[2]	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination[3]	Date of Determination	Water Provider at the Time of Application
			Township	Range	Section						
1	Cherry Creek Estates Amended	Gila	9 North	14 East	4	55	53-500451	Inadequate	A1	04/18/88	Dry Lot Subdivision
2	Copper Canyon Ranches #1	Gila	1 North	15 East	2, 3, 10	53	53-500504	Inadequate	A1	10/16/90	Dry Lot Subdivision
3	Country Club Annex	Gila	1 North	15 East	22	46	53-500521	Inadequate	A1	07/30/85	Arizona Water Company
4	Country Club Annex Unit 1	Gila	1 North	15 East	22	34	53-300428	Inadequate	A1	03/27/98	Arizona Water Company
5	Dream Catcher Ranch	Gila	6 North	13 East	24, 25	63	53-300058	Inadequate	A2	10/20/95	Dry Lot Subdivision
6	Kristy Terrace	Gila	1 North	15 East	22	10	53-500849	Inadequate	A1, A2	06/10/76	Arizona Water Company
7	Kristy Terrace # 2	Gila	1 North	15 East	22	7	53-500850	Inadequate	A1	04/20/84	Arizona Water Company
8	Miami Gardens	Gila	1 North	15 East	21, 27	40	53-500975	Inadequate	A2	07/07/75	Arizona Water Company
9	Morning Shadow Estates	Gila	1 North	15 East	22	50	53-501015	Inadequate	A2	02/23/77	Arizona Water Company
10	Mountain Gate Unit One	Navajo	9 North	22 East	16	59	53-400802	Adequate		10/09/02	Arizona Water Company - Lakeside
11	Pinto Creek Valley	Gila	3 North	13 East	11	NA	53-501193	Inadequate	A1	05/22/92	Roosevelt Lake Resort Water Company
12	Pioneer Hills	Gila	1 North	15 East	15, 22	170	53-501195	Inadequate	A1, A2	09/03/74	Arizona Water Company
13	Quail Run Mobile Home Subdivision	Gila	3 North	13 East	15	74	53-300053	Inadequate	A1	10/11/95	Quail Run Homeowners' Association
14	Quail Run Subdivision	Gila	3 North	13 East	15	74	53-300174	Inadequate	A1	07/17/96	Quail Run Homeowners' Association
15	Roosevelt Lake RV Resort	Gila	3 North	13 East	15	167	53-501342	Inadequate	A1	03/11/93	Utility Management Services and Operations,
16	Sierra Grande	Gila	1 North	15 East	14	19	53-501400	Inadequate	A2	02/07/75	Arizona Water Company
17	Tierra Madre	Gila	9 North	13 East	24	47	NA	Adequate		02/23/77	Dry Lot Subdivision
				14 East	19						

B. Designated Adequate Water Supply

Map Key	Water Provider Name	County	Designation No.	Projected or Annual Estimated Demand *(af/yr)*	Date Application Received	Date Application Issued	Year of Projected or Annual Demand
a	City of Globe	Gila	40-900003	No amount designated	NA	5/15/1973	No data, hydrologic study needed

Source: ADWR 2008a

Notes:

[1]Each determination of the adequacy of water supplies available to a subdivision is based on the information available to ADWR and the standards of review and policies in effect at the time the determination was made. In some cases, ADWR might make a different determination if a similar application were submitted today, based on the hydrologic data and other information currently available, as well as current rules and policies.

[2] Prior to February 1995, ADWR did not assign file numbers to applications for adequacy. Between 1995-2006 all applications for adequacy were given a file number with a 22 prefix. In 2006 a 53 prefix was assigned to all water adequacy reports and applications regardless of their issue date.

[3] A. Physical/Continuous
1) Insufficient Data (applicant chose not to submit necessary information, and/or available hydrologic data insufficient to make determination)
2) Insufficient Supply (existing water supply unreliable or physically unavaible; for groundwater, depth-to-water exceeds criteria)
3) Insufficient Infrastructure (distribution system is insufficient to meet demands or applicant proposed water hauling)
B. Legal (applicant failed to demonstrate a legal right to use the water or failed to demonstrate the provider's legal authority to serve the subdivision)
C. Water Quality
D. Unable to locate records
NA = Not Available

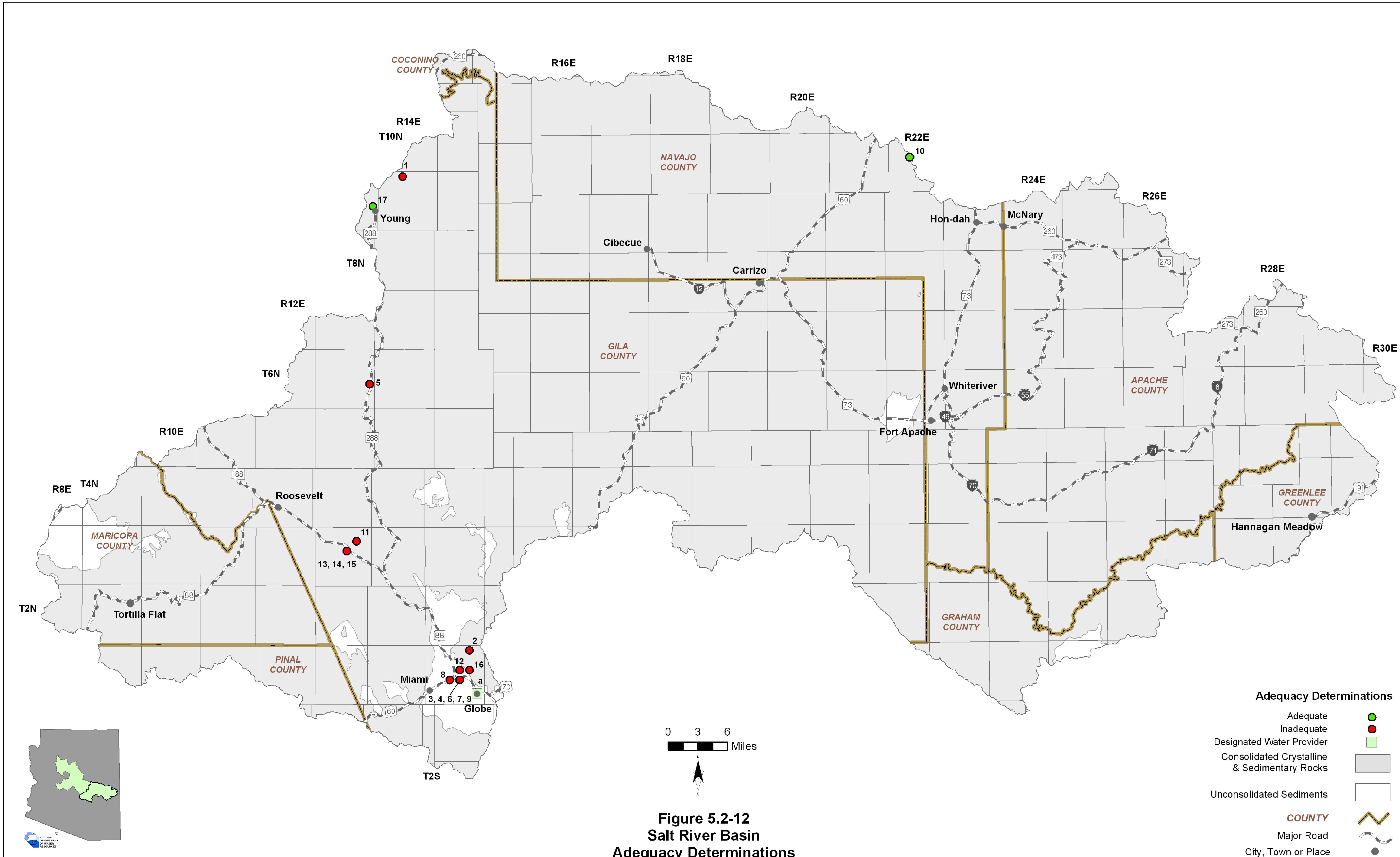


Figure 5.2-12
Salt River Basin
Adequacy Determinations

Salt River Basin

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