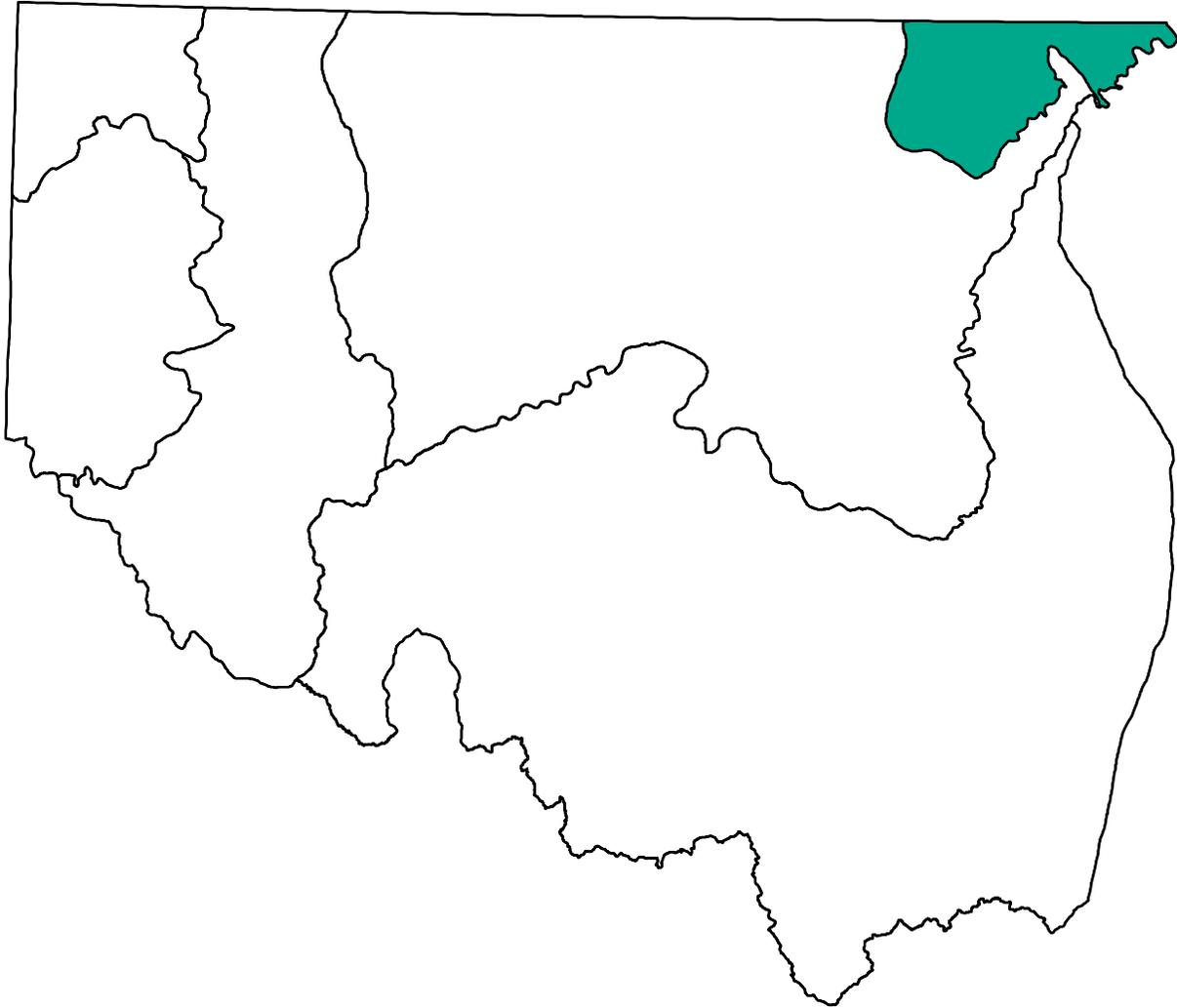


Section 6.4

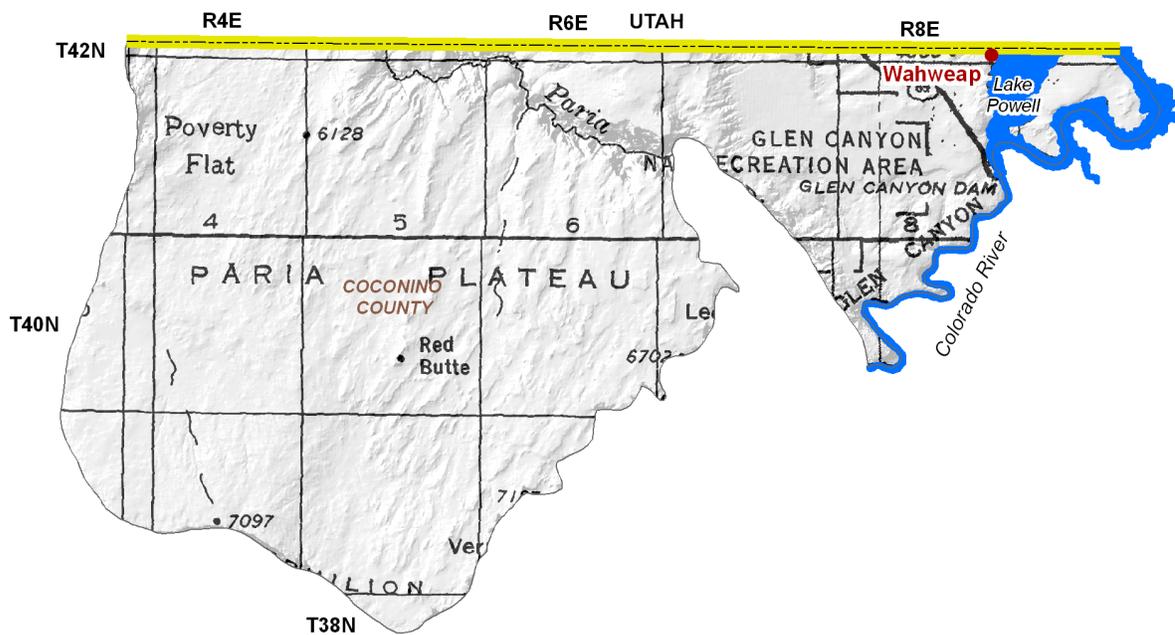
Paria Basin



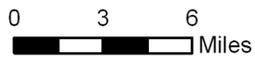
6.4.1 Geography of the Paria Basin

The Paria Basin, located in the northeastern part of the planning area is 408 square miles in area, the smallest basin in the planning area. Geographic features and principal communities are shown on Figure 6.4-1. The basin is characterized by a plateau and canyons. Vegetation types include Great Basin desertscrub and Great Basin conifer woodland. (See Figure 6.0-9)

- Principal geographic features shown on Figure 6.4-1 are:
 - Principal basin community of Wahweap
 - The Paria Plateau
 - Paria River in the north central portion of the basin
 - Lake Powell on the eastern basin boundary
- Not well shown on Figure 6.4-1 are the Vermilion Cliffs, which form the southern basin boundary and the highest point in the basin at 7,326 feet.



Base Map: USGS 1:500,000, 1981



Utah State Boundary
City, Town or Place



Figure 6.4-1
Paria Basin
Geographic Features

6.4.2 Land Ownership in the Paria Basin

Land ownership, including the percentage of ownership by category, for the Paria Basin is shown in Figure 6.4-2. The principal feature of land ownership in this basin is the large portion of land, 86% of the total basin area, in the Vermilion Cliffs National Monument. A description of land ownership data sources and methods is found in Volume 1, Section 1.3.8. Land ownership categories are discussed below in the order of percentage from largest to smallest in the basin.

U.S. Bureau of Land Management (BLM)

- 83.7% of the land is federally owned and managed by the Arizona Strip Field Office of the Bureau of Land Management.
- Most of the BLM land in the basin is within the Vermilion Cliffs National Monument and includes a portion of the 79,000 acre Vermilion Cliffs Wilderness.
- Land uses include resource conservation, recreation and grazing.

National Park Service (NPS)

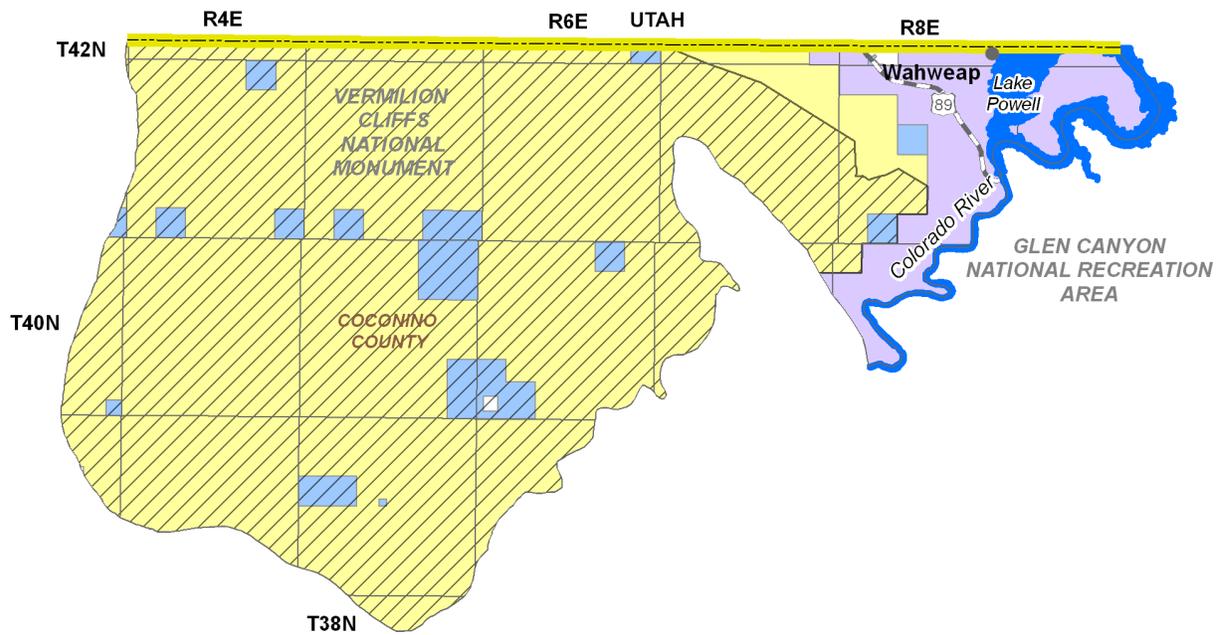
- 10.9% of the land is federally owned and managed by the National Park Service as the Glen Canyon National Recreation Area.
- Primary land use is recreation.

State Trust Land

- 5.2% of the land is held in trust for the public schools under the State Trust Land system.
- State land is located throughout the basin interspersed with BLM land.
- Primary land use is grazing.

Private

- 0.2% of the land is private, consisting of two small parcels.
- Private land is located in the vicinity of Wahweap and surrounded by state trust land in the central portion of the basin.
- Land uses include domestic, commercial and ranching.



**Land Ownership
(Percentage in Basin)**

- U.S. Bureau of Land Management (83.7%)
- National Park Service (10.9%)
- State Trust (5.2%)
- Private (0.2%)
- National Monument
- Utah State Boundary
- Major Road
- City, Town or Place



0 3 6 Miles



**Figure 6.4-2
Paria Basin
Land Ownership**



Source: ALRIS, 2004
Bureau of Land management, 1999 & 2000

6.4.3 Climate of the Paria Basin

Climate data from NOAA/NWS Co-op Network and Evaporation Pan stations are compiled in Table 6.4-1 and the locations are shown on Figure 6.4-3. Figure 6.4-3 also shows precipitation contour data from the Spatial Climate Analysis Service (SCAS) at Oregon State University. The Paria Basin does not contain AZMET or SNOTEL/ Snowcourse stations. A description of the climate data sources and methods is found in Volume 1, Section 1.3.3.

NOAA/NWS Co-op Network

- Refer to Table 6.4-1A
- Temperatures at the one NOAA/NWS Co-op Network station range from an average annual high of 84.5°F to an average annual low of 37.5°F.
- The highest average seasonal rainfall occurs in the summer season (July-September) when 30% of the annual rainfall occurs. Average annual rainfall is 6.78 inches.

Evaporation Pan

- Refer to Table 6.4-1B
- There is one evaporation pan station in the basin. This pan is at 3,720 feet and has an average annual evaporation rate of 100.18 inches.

SCAS Precipitation Data

- See Figure 6.4-3
- Additional precipitation data shows average annual rainfall as high as 16 inches in the southern portion of the basin and as low as four inches along the Colorado River.

Table 6.4-1 Climate Data for the Paria Basin

A. NOAA/NWS Co-op Network:

| Station Name | Elevation (in feet) | Period of Record Used for Averages | Average Temperature Range (in F) | | Average Precipitation (in inches) | | | | |
|--------------|------------------------|--|----------------------------------|-----------|-----------------------------------|--------|--------|------|--------|
| | | | Max/Month | Min/Month | Winter | Spring | Summer | Fall | Annual |
| Wahweap | 3,730 | 1971-2000 | 84.5/Jul | 37.5/Jan | 1.70 | 1.09 | 2.02 | 1.97 | 6.78 |

Source: WRCC, 2003

Notes:

¹Average 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) |
|--------------|------------------------|--|---------------------------------|
| Wahweap | 3,720 | 1961 - 2000 | 100.18 |

Source: WRCC, 2003

C. AZMET:

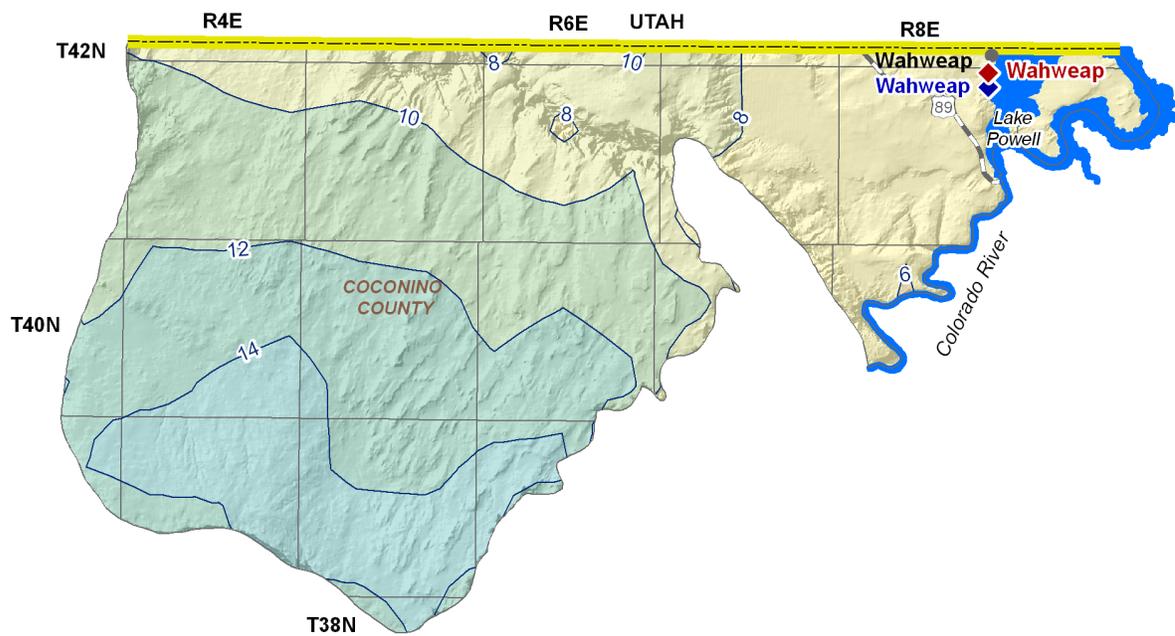
| Station Name | Elevation (in feet) | Period of Record Used for Averages | Average Annual Reference Evapotranspiration, in inches (Number of years to calculate averages) |
|--------------|------------------------|--|---|
| None | | | |

Source: Arizona Meteorological Network, 2005

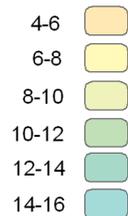
D. SNOTEL/Snowcourse:

| Station Name | Elevation (in feet) | Period of Record Used for Averages | Average Snowpack, at Beginning of the Month, as Inches Snow Water Content (Number of measurements to calculate average) | | | | | |
|--------------|------------------------|--|--|------|-------|-------|-----|------|
| | | | Jan. | Feb. | March | April | May | June |
| None | | | | | | | | |

Source: NRCS, 2005



Average Annual
Precipitation
(1961-1990)
inches per year



Meteorological Stations



Precipitation Contour

Utah State Boundary

Major Road

City, Town or Place



Figure 6.4-3
Paria Basin
Meteorological Stations
and Annual Precipitation



Precipitation Data Source: Oregon State
University, 1998

6.4.4 Surface Water Conditions in the Paria Basin

There are no streamflow data or flood ALERT equipment in this basin. Reservoir and stockpond data, including maximum storage or maximum surface area, are shown in Table 6.4-4. The USGS runoff contours and large reservoirs are shown on Figure 6.4-4. A description of stream data sources and methods is found in Volume 1, Section 1.3.16. A description of reservoir data sources and methods is found in Volume 1, Section 1.3.11. A description of stockpond data sources and methods is found in Volume 1, Section 1.3.15.

Reservoirs and Stockponds

- Refer to Table 6.4-4.
- The only large reservoir in the basin is Lake Powell with a maximum storage capacity of 20.3 million acre-feet. Most of the storage is in Utah.
- Lake Powell is used for hydroelectric, irrigation, recreation and other uses.
- There are 57 registered stockponds in this basin.

Runoff Contour

- Refer to Figure 6.4-4.
- Average annual runoff is highest, 0.5 inches per year or 26 acre-feet per square mile, in the southwestern portion and decreases to 0.1 inches, or five acre-feet per square mile, in the eastern portion of the basin.

Table 6.4-2 Streamflow Data for the Paria Basin

| Station Number | USGS Station Name | Drainage Area (in mi ²) | Mean Basin Elevation (in feet) | Period of Record | Average Seasonal Flow (% of annual flow) | | | | Annual Flow/Year (in acre-feet) | | | | Years of Record |
|----------------|-------------------|-------------------------------------|--------------------------------|------------------|--|--------|--------|------|---------------------------------|--------|------|---------|-----------------|
| | | | | | Winter | Spring | Summer | Fall | Minimum | Median | Mean | Maximum | |
| None | | | | | | | | | | | | | |

Sources: USGS NWIS, USGS 1998 and USGS 2003.

Table 6.4-3 Flood ALERT Equipment in the Paria Basin

| Station ID | Station Name | Station Type | Install Date | Responsibility |
|------------|--------------|--------------|--------------|----------------|
| None | | | | |

Table 6.4-4 Reservoirs and Stockponds in the Paria Basin

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

| MAP KEY | RESERVOIR/LAKE NAME <i>(Name of dam, if different)</i> | OWNER/OPERATOR | MAXIMUM STORAGE (AF) | USE ¹ | JURISDICTION |
|---------|---|-----------------------|----------------------|------------------|--------------|
| 1 | Powell (Glen Canyon Dam) | Bureau of Reclamation | 20,325,000 | H,I,O,R | Federal |

Source: US Army Corps of Engineers, 2005

B. Other Large Reservoirs (50 acre surface area or greater)

| MAP KEY | RESERVOIR/LAKE NAME <i>(Name of dam, if different)</i> | OWNER/OPERATOR | MAXIMUM SURFACE AREA (acres) | USE | JURISDICTION |
|--------------------------------------|---|----------------|---------------------------------|-----|--------------|
| None identified by ADWR at this time | | | | | |

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

Total number: 0

Total maximum storage: 0 acre-feet

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

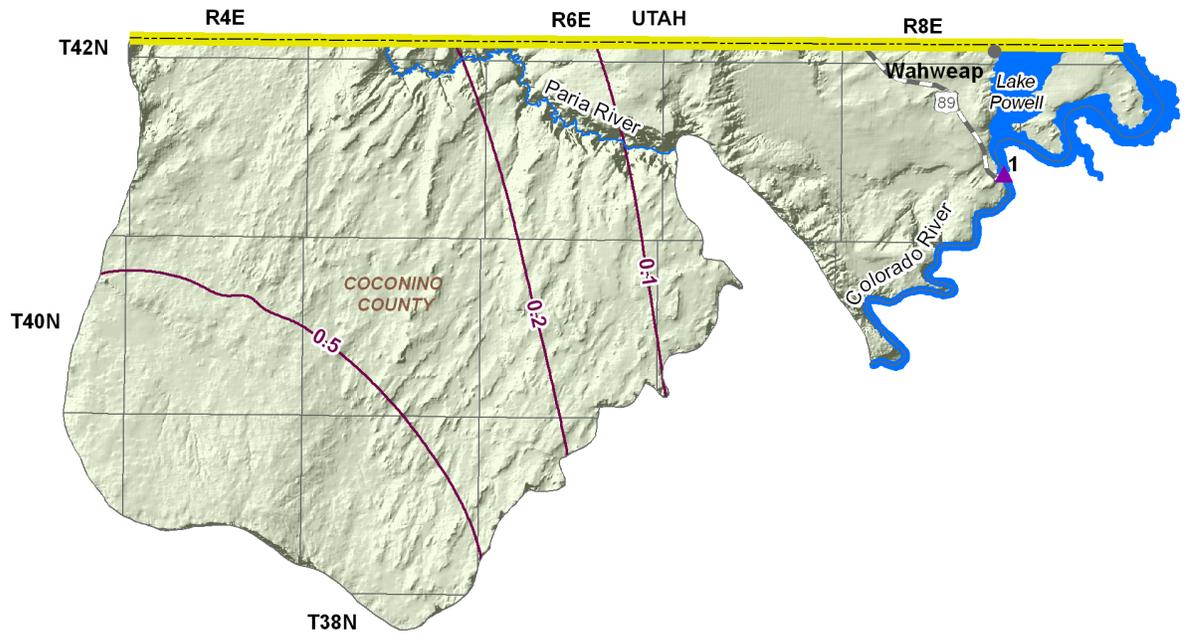
Total number: 0

Total surface area: 0 acres

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

Total number: 57

¹ H=hydroelectric; I=irrigation; O=other; R=recreation



Stream Data Source: ALRIS 2005

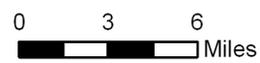


Figure 6.4-4
Paria Basin
Surface Water Conditions

- USGS Annual Runoff Contour for 1951-1980 (in inches) 
- Stream Channel (width of line reflects stream order) 
- Large Reservoir 
- Utah State Boundary 
- Major Road 
- City, Town or Place 

6.4.5 Perennial/Intermittent Streams and Major Springs in the Paria Basin

The total number of springs in the basin are shown in Table 6.4-5. The locations of perennial streams are shown on Figure 6.4-5. A description of data sources and methods for intermittent and perennial reaches is found in Volume 1, Section 1.3.16. A description of spring data sources and methods is found in Volume 1, Section 1.3.14.

- There are no intermittent streams and the only perennial streams are the Colorado River and the Paria River.
- There are no major or minor springs.
- The total number of springs, regardless of discharge, identified by the USGS varies from 2 to 3, depending on the database reference.

Table 6.4-5 Springs in the Paria Basin

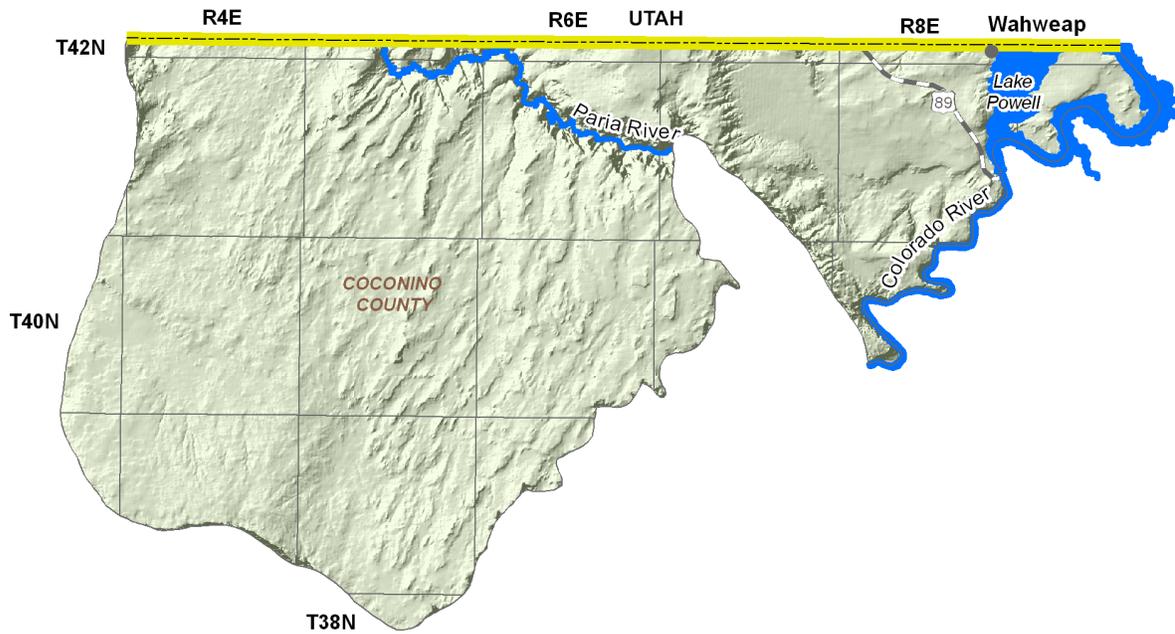
A. Major Springs (10 gpm or greater):

| Map Key | Name | Location | | Discharge (in gpm) | Date Discharge Measured |
|--------------------------------------|------|----------|-----------|--------------------|-------------------------|
| | | Latitude | Longitude | | |
| None identified by ADWR at this time | | | | | |

B. Minor Springs (1 to 10 gpm):

| Name | Location | | Discharge (in gpm) | Date Discharge Measured |
|--------------------------------------|----------|-----------|--------------------|-------------------------|
| | Latitude | Longitude | | |
| None identified by ADWR at this time | | | | |

C. Total number of springs, regardless of discharge, identified by USGS (see ALRIS, 2005 and NHD, 2006): 2 to 3



Stream Data Source: AGFD, 1993 & 1997

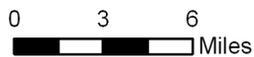


Figure 6.4-5
Paria Basin
Perennial/Intermittent Streams
and Major (>10 gpm) Springs

- Perennial Stream
- Utah State Boundary
- Major Road
- City, Town or Place



6.4.6 Groundwater Conditions of the Paria Basin

Major aquifers, well yields, estimated water in storage, number of index wells and date of last water-level sweep are shown in Table 6.4-6. Figure 6.4-6 shows water-level change between 1990-1991 and 2003-2004. Figure 6.4-7 contains hydrographs for selected wells shown on Figure 6.4-6. Figure 6.4-8 shows well yields in two yield categories. A description of aquifer data sources and methods is found in Volume 1, Section 1.3.2. A description of well data sources and methods, including water-level changes and well yields, is found in Volume 1, Section 1.3.19.

Major Aquifers

- Refer to Table 6.4-6 and Figure 6.4-6.
- The major aquifer in the basin is sedimentary rock (N Aquifer).
- Almost all of the basin geology consists of consolidated crystalline and sedimentary rock.
- Data on groundwater flow direction is not available for this basin.

Well Yields

- Refer to Table 6.4-6 and Figure 6.4-8.
- As shown on Figure 6.4-8, well yields in this basin range from less than 100 gallons per minute (gpm) to 1,000 gpm. All well yield data is from the northeastern portion of the basin near Wahweap.
- One source of well yield information, based on three reported wells, indicates that the median well yield in this basin is 520 gpm in the vicinity of Wahweap.

Water in Storage

- Refer to Table 6.4-6.
- There is one estimate of water in storage for this basin. This estimate, from a 1994 ADWR study, indicates there is 1,500,000 acre-feet of water in storage to a depth of 1,200 feet.

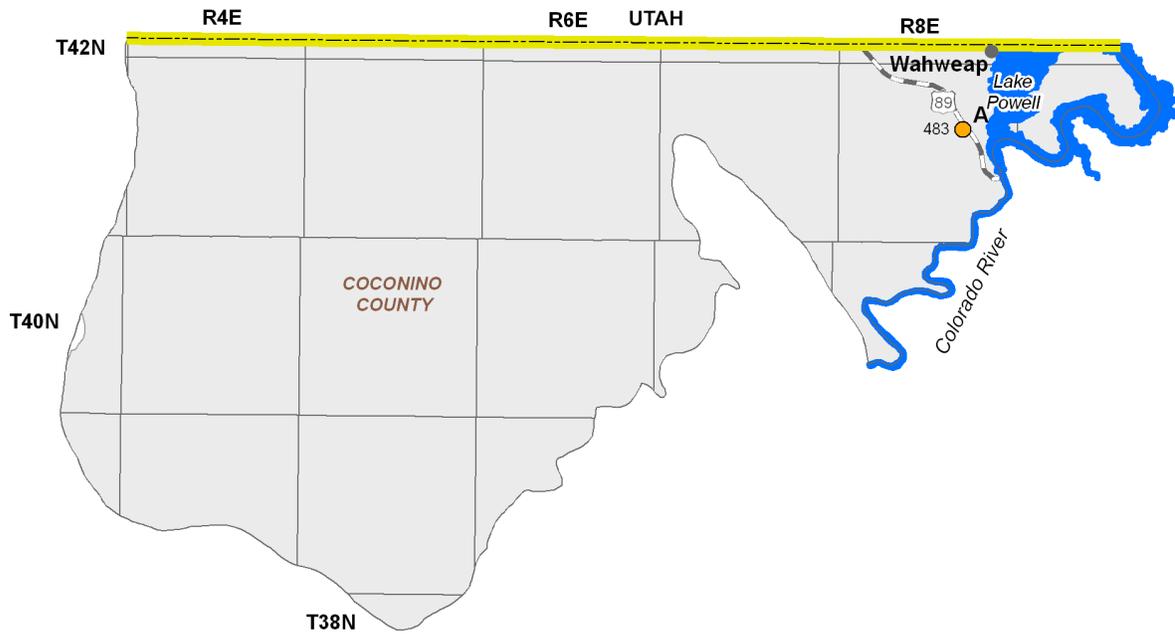
Water Level

- Refer to Figure 6.4-6. Water levels are shown for a well measured in 2003-2004.
- The Department annually measures one index well in this basin; this well has a depth to water of 483 feet.
- A hydrograph corresponding to the well found on Figure 6.3-6 is shown in Figure 6.3-7.

Table 6.4-6 Groundwater Data for the Paria Basin

| | | |
|--|--|---|
| Basin Area (in square miles): | 408 | |
| Major Aquifer(s): | Name and/or Geologic Units | |
| | Sedimentary Rock (N Aquifer) | |
| Well Yields, in gal/min: | N/A | Measured by ADWR and/or USGS |
| | Range 30-600 Median 520 (3 wells reported) | Reported on registration forms for large (> 10-inch) diameter wells |
| | Range 30-1,400 | ADWR (1990 and 1994) |
| | Range 0-500 | USGS (1994) |
| Estimated Natural Recharge, in acre-feet/year: | N/A | |
| Estimated Water Currently in Storage, in acre-feet: | 1,500,000 (to 1,200 ft) | ADWR (1994) |
| | N/A | Arizona Water Commission (1975) |
| Current Number of Index Wells: | 1 | |
| Date of Last Water-level Sweep: | 1976 (34 wells measured) | |

N/A = Not Available



ARIZONA
DEPARTMENT
OF WATER
RESOURCES

0 3 6 Miles



Figure 6.4-6
Paria Basin
Groundwater Conditions

Water-level change in feet between
1990-1991 and 2003-2004

H = number is depth to water in feet
375 O = during 2003-2004;
letter is hydrograph

Between -30 and -15



Consolidated Crystalline &
Sedimentary Rocks



Utah State Boundary



Major Road

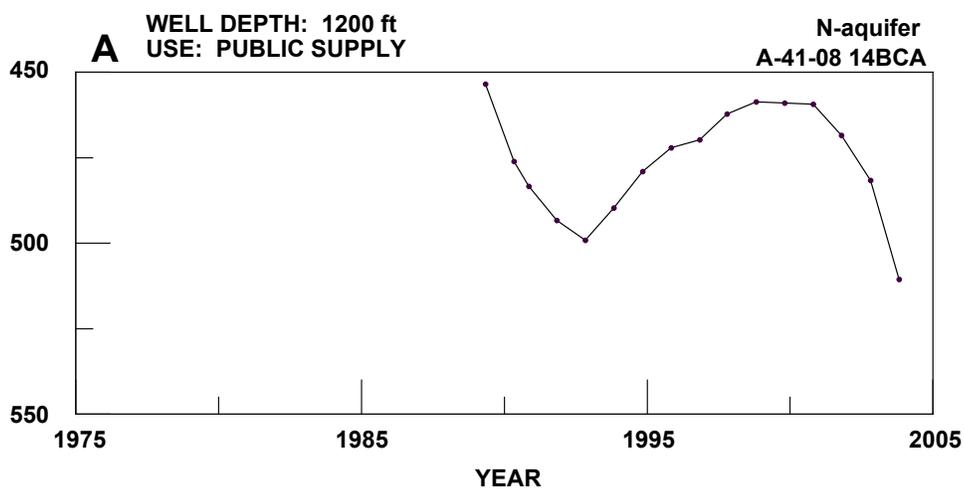


City, Town or Place



Figure 6.4-7
Paria Basin
Hydrographs Showing Depth to Water in Selected Wells

Depth To Water In Feet Below Land Surface



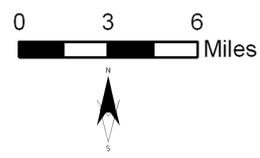
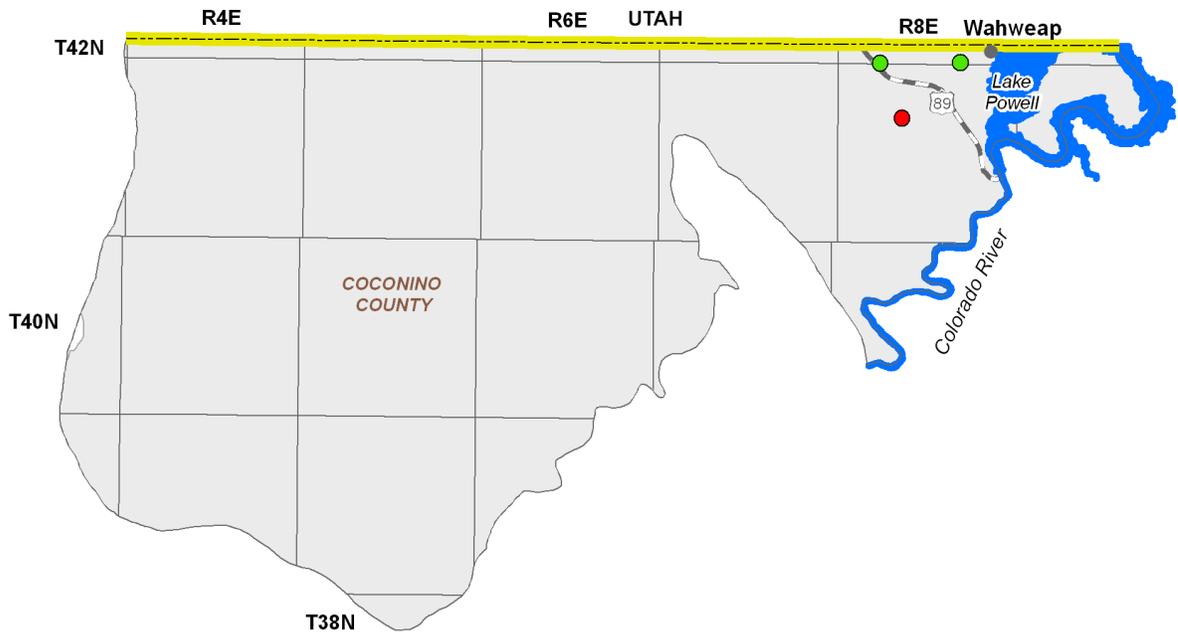


Figure 6.4-8
Paria Basin
Well Yields

- Well Yields
 - Between 500 and 1000 gals/min ●
 - Less than 100 gals/min ●
- Consolidated Crystalline & Sedimentary Rocks
- Unconsolidated Sediments
- Utah State Boundary
- Major Road
- City, Town or Place

6.4.7 Water Quality of the Paria 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 6.4-7A. 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 6.4-7B. Figure 6.4-9 shows the location of water quality occurrences keyed to Table 6.4-7. A description of water quality data sources and methods is found in Volume 1, Section 1.3.18. Not all parameters were measured at all sites; selective sampling for particular constituents is common.

Wells, Springs and Mines

- Refer to Table 6.4-7A.
- Seven wells have parameter concentrations that have equaled or exceeded the drinking water standard for arsenic.

Lakes and Streams

- Refer to Table 6.4-7B.
- The water quality standard for suspended sediment concentration was exceeded in one 29-mile stream reach, the Paria River from the Utah border to the Colorado River. A portion of this impaired reach is located in the Kanab Plateau Basin.
- This reach is not part of the ADEQ water quality improvement effort called the Total Maximum Daily Load (TMDL) Program at this time.

Table 6.4-7 Water Quality Exceedences in the Paria Basin¹

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 | 42 North | 8 East | 32 | As |
| 2 | Well | 42 North | 8 East | 35 | As |
| 3 | Well | 42 North | 8 East | 35 | As |
| 4 | Well | 42 North | 8 East | 36 | As |
| 5 | Well | 41 North | 8 East | 4 | As |
| 6 | Well | 41 North | 8 East | 14 | As |
| 7 | Well | 41 North | 8 East | 14 | As |

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 | Stream | Paria River (Utah border to Colorado River) | 29 ⁴ | NA | A&W | SSC |

Notes:

NA = Not Applicable

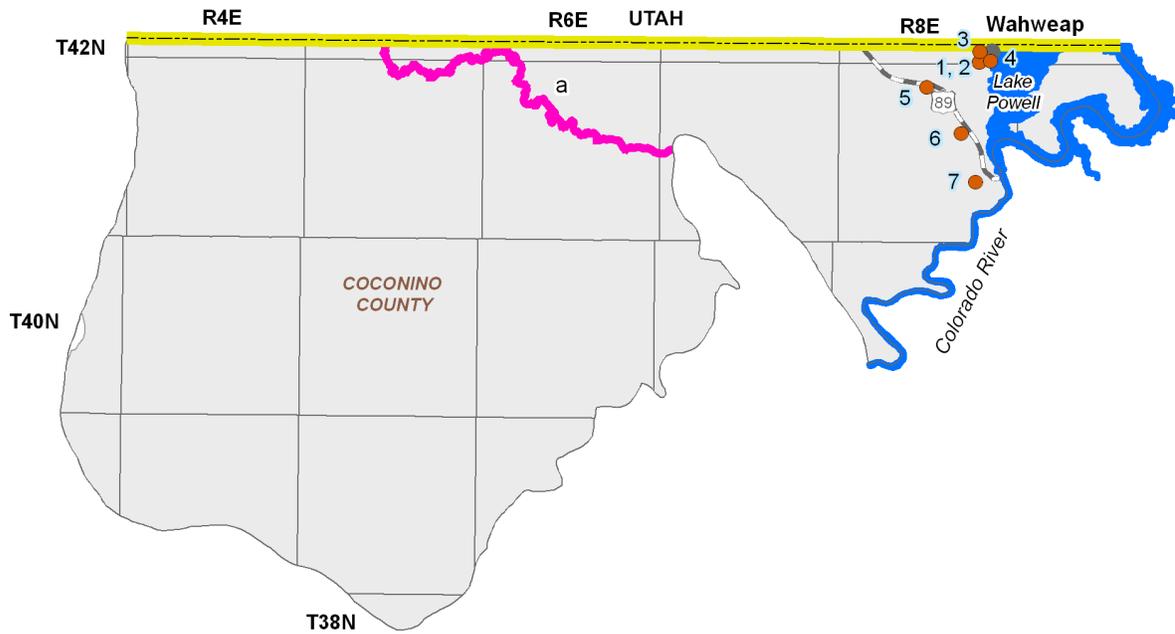
¹ Water quality samples collected between 1977 and 2001.

² As = Arsenic

SSC = Suspended Sediment Concentration

³ A&W = Aquatic and Wildlife

⁴ Total length of the impaired reach. A portion of this reach is in the Kanab Plateau Basin.



ARIZONA
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OF WATER
RESOURCES

0 3 6 Miles



Figure 6.4-9
Paria Basin
Water Quality Conditions

- Well, Spring or Mine Site that has Equaled or Exceeded DWS ● 1
- Impaired Stream or Lake ~ a
- Consolidated Crystalline & Sedimentary Rocks
- Unconsolidated Sediments
- Utah State Boundary ~
- Major Road
- City, Town or Place ●

6.4.8 Cultural Water Demands in the Paria 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 6.4-8. There is no recorded effluent generation in this basin. Figure 6.4-10 shows the location of demand centers. A description of cultural water demand data sources and methods is found in Volume 1, Section 1.3.5. More detailed information on cultural water demands is found in Section 6.0.7.

Cultural Water Demands

- Refer to Table 6.4-8 and Figure 6.4-10.
- Population in this basin increased from 237 in 1980 to 555 in 2000 and is projected to increase to 703 in 2050.
- All water use is for municipal demand in the vicinity of Wahweap.
- Groundwater demand was reported as 1,000 acre-feet per year on average from 1971-1990 and less than 300 acre-feet per year on average from 1991-2003.
- There is no reported surface water use in this basin.
- As of 2003 there were 12 registered wells with a pumping capacity of less than or equal to 35 gallons per minute and 3 wells with a pumping capacity of more than 35 gallons per minute.

Table 6.4-8 Cultural Water Demands in the Paria Basin¹

| Year | Recent (Census) and Projected (DES) Population | Number of Registered Water Supply Wells Drilled | | Average Annual Demand (in acre-feet) | | | | | | Data Source |
|----------------------|--|---|----------------|--------------------------------------|------------|------------|--------------------------|------------|------------|-------------|
| | | | | Well Pumpage | | | Surface-Water Diversions | | | |
| | | Q ≤ 35 gpm | Q > 35 gpm | Municipal | Industrial | Irrigation | Municipal | Industrial | Irrigation | |
| 1971 | | | | | | | | | | |
| 1972 | | | | | | | | | | |
| 1973 | | | | | | 1,000 | | | NR | |
| 1974 | | | | | | | | | | |
| 1975 | | 12 ² | 3 ² | | | | | | | |
| 1976 | | | | | | | | | | |
| 1977 | | | | | | 1,000 | | | NR | |
| 1978 | | | | | | | | | | |
| 1979 | | | | | | | | | | |
| 1980 | 237 | | | | | | | | | |
| 1981 | 262 | | | | | | | | | |
| 1982 | 287 | | | | | | | | | |
| 1983 | 312 | 0 | 0 | | | 1,000 | | | NR | |
| 1984 | 337 | | | | | | | | | |
| 1985 | 362 | | | | | | | | | |
| 1986 | 387 | | | | | | | | | |
| 1987 | 412 | | | | | | | | | |
| 1988 | 437 | 0 | 0 | | | 1,000 | | | NR | |
| 1989 | 462 | | | | | | | | | |
| 1990 | 487 | | | | | | | | | |
| 1991 | 494 | | | | | | | | | |
| 1992 | 500 | | | | | | | | | |
| 1993 | 507 | 0 | 0 | <300 | NR | NR | | | NR | |
| 1994 | 514 | | | | | | | | | |
| 1995 | 521 | | | | | | | | | |
| 1996 | 528 | | | | | | | | | |
| 1997 | 535 | | | | | | | | | |
| 1998 | 541 | 0 | 0 | <300 | NR | NR | | | NR | |
| 1999 | 548 | | | | | | | | | |
| 2000 | 555 | | | | | | | | | |
| 2001 | 562 | | | | | | | | | |
| 2002 | 570 | 0 | 0 | <300 | NR | NR | | | NR | |
| 2003 | 577 | | | | | | | | | |
| 2010 | 623 | | | | | | | | | |
| 2020 | 638 | | | | | | | | | |
| 2030 | 647 | | | | | | | | | |
| 2040 | 656 | | | | | | | | | |
| 2050 | 703 | | | | | | | | | |
| WELLS TOTALS: | | 12 | 3 | | | | | | | |

¹ Does not include evaporation losses from stockponds and reservoirs.

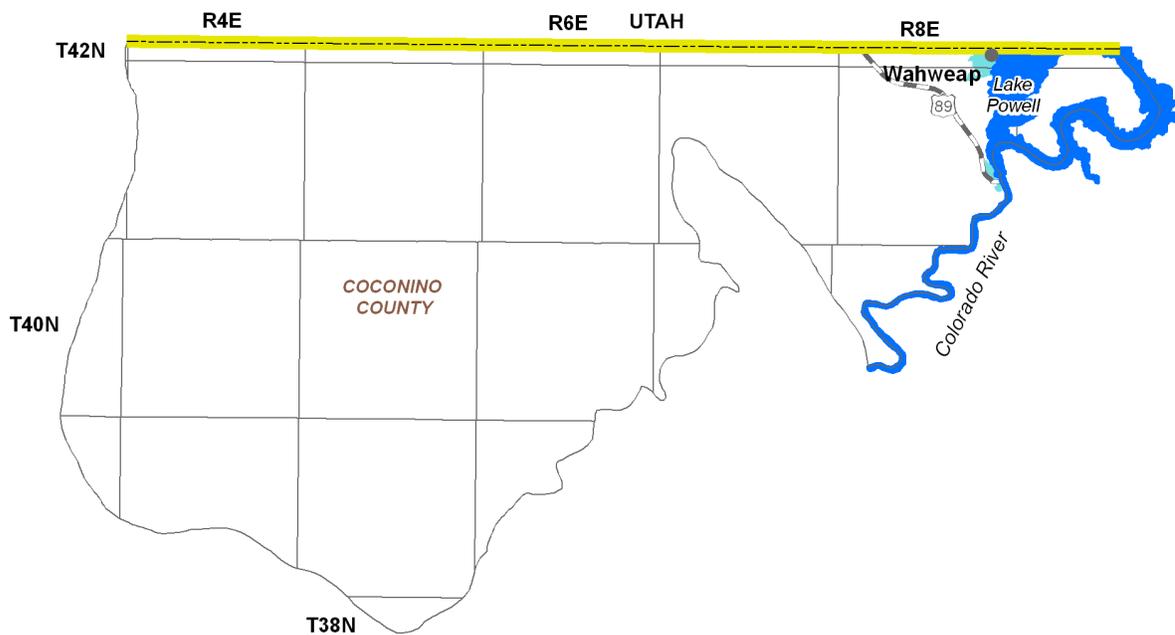
² Includes all wells through 1980.

NR - Not reported

Table 6.4-9 Effluent Generation in the Paria Basin

| Facility Name | Ownership | City/Location Served | Population Served | Volume Treated/Generated (acre-feet) | Disposal Method | | | | | | Current Treatment Level | Population Not Served | Year of Record |
|---|-----------|----------------------|-------------------|--------------------------------------|-----------------|------------------|------------|-------------|-----------------|---------------|-------------------------|-----------------------|----------------|
| | | | | | Water-course | Evaporation Pond | Irrigation | Golf Course | Municipal Reuse | Wildlife Area | | | |
| No Wastewater Treatment Facilities Identified by ADWR in this Basin | | | | | | | | | | | | | |





Primary Data Source: USGS National Gap Analysis Program, 2004



Figure 6.4-10
Paria Basin
Cultural Water Demand

Demand Centers

- M&I - Low Intensity 
- Utah State Boundary 
- Major Road 
- City, Town or Place 

6.4.9 Water Adequacy Determinations in the Paria 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 6.4-10. Figure 6.4-11 shows the locations of subdivisions keyed to the Table. A description of the Water Adequacy Program is found in Volume 1, Appendix A. Adequacy determination data sources and methods are found in Volume 1, Sections 1.3.1.

Water Adequacy Reports

- See Table 6.4-10
- All subdivisions reviewed for an adequacy determination are in Coconino County in the vicinity of Wahweap. Six water adequacy determinations for 991 lots total have been made in this basin through May, 2005, and all were determined to be adequate.

Table 6.4-10 Adequacy Determinations in the Paria Basin

| 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 | Greenehaven | Coconino | 42 North | 8 East 32 | 770 | | Adequate | 12/28/77 | Greenehaven Development Corporation | |
| 2 | Greenehaven # 4 | Coconino | 42 North | 8 East 32 | 12 | | Adequate | 06/03/88 | Greenehaven Water Company | |
| 4 | Greenehaven # 5 | Coconino | 42 North | 8 East 32 | 86 | 22-400507 | Adequate | 07/03/01 | Greenehaven Water Company | |
| 3 | Greenehaven # 6 | Coconino | 42 North | 8 East 32 | 83 | 22-400505 | Adequate | 07/03/01 | Greenehaven Water Company | |
| 5 | Greenehaven Mobile Home Estates | Coconino | 42 North | 8 East 32 | NA | | Adequate | 07/08/81 | Greenehaven Water Company | |
| 6 | Patio Homes at Lake Powell | Coconino | 42 North | 8 East 32 | 40 | 22-400698 | Adequate | 04/02/02 | Greenehaven Water Company | |

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.

² 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.

³ Prior to February 1995, ADWR did not assign file numbers to applications for adequacy determination.

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 unavailable; for groundwater, depth-to-water exceeds criteria)

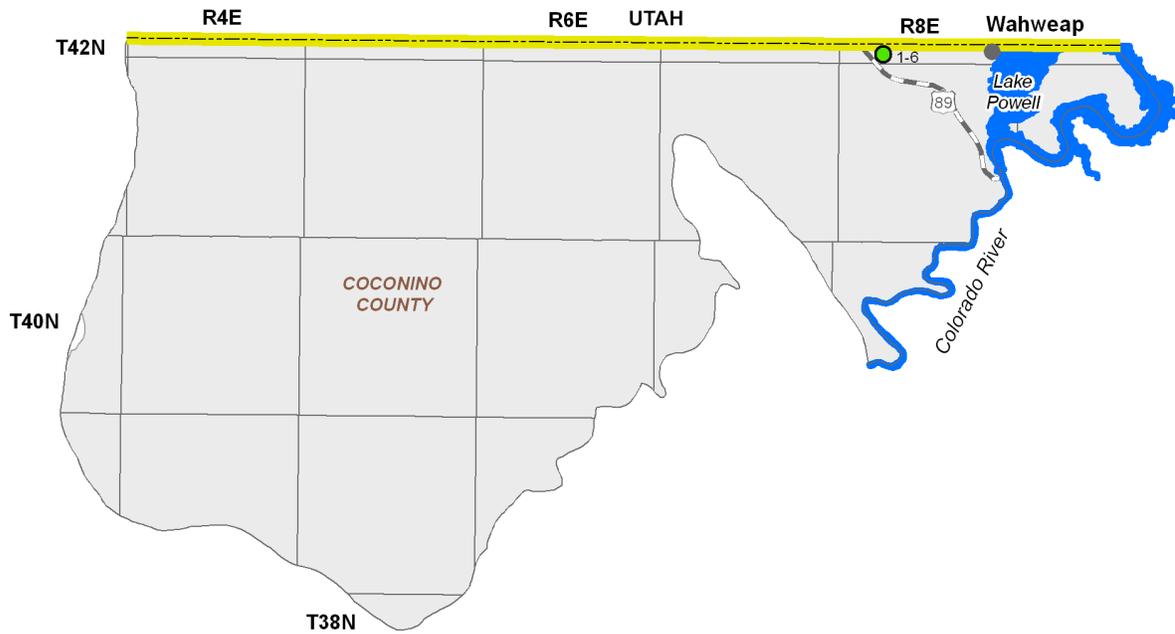
3) Insufficient Infrastructure (distribution system is insufficient to meet demands or applicant proposed water hauling)

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 to ADWR at this time



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RESOURCES

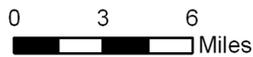


Figure 6.4-11
Paria Basin
Adequacy Determinations

- Adequacy Determinations**
- Adequate ●
 - Consolidated Crystalline & Sedimentary Rocks
 - Unconsolidated Sediments
 - Utah State Boundary
 - Major Road
 - City, Town or Place

Paria Basin

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