

Known Operating ASR Systems in the United States (as of May 2004)

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Please provide updates, comments, corrections, missing information.

	State	Location/Owner	Description	Contact
1.	AZ	Sun Lake City, Arizona	Began operation in 1998. Three ASR wells storing 2.4 MGD reclaimed water, with seasonal recovery for irrigation purposes.	Mr. Dave Voorhees Superintendent Pima Utility 24,607 South Price Road Sun Lakes, Arizona 85248 602-895-5009
2.	AZ	Chandler, Arizona	Four operating ASR wells at the Ocotillo ASR Facility, in operation since September 2002, which receive reclaimed water from the Ocotillo Water Reclamation Facility.	Mr. John Pinkston Wastewater Facilities Superintendent Municipal Utilities Department Administration 215 E. Buffalo St., Suite 202 (480) 782-3800
3.	AZ	Chandler, Arizona	Five wells in operation at the Tumbleweed Park Recharge Facility, with 2 additional ASR wells in design. The first 3 wells began operating in 2001; Wells 4 and 5 started up in January 2004. These wells receive water from the Airport Water Reclamation Facility.	Mr. John Pinkston Wastewater Facilities Superintendent Municipal Utilities Department Administration 215 E. Buffalo St., Suite 202 (480) 782-3800
4.	AZ	Fountain Hills, Arizona	Three wells operational, storing reclaimed water.	
5.	AZ	Glendale, Arizona	Four wells in operation at Arrowhead WWTP, storing reclaimed water.	
6.	AZ	Honeywell, Phoenix, Arizona		
7.	CA	City of Pasadena, California	Began operation in 1992. Two or more ASR wells. Water source is from the Metropolitan Water District of South California (MWDSC).	Mr. Shan Kwan Water Business Unit Director 818-770-8625

8.	CA	City of Oxnard, California	Began operation in 1991. Four ASR wells with 11 MGD recovery capacity. Water source is from MWDSC.	Mr. Ken Ortega Water Production Supervisor 805-385-8252
9.	CA	Goleta Water District, California	Began operation in 1978. Nine ASR wells and several injection wells. Water source is from the Cachuma reservoir.	Mr. Kevin Walsh General Manager 805-969-6761
10.	CA	Calleguas Municipal Water District, California	Began operation in 1992. Expansion in 1994 to two ASR wells. Four additional wells constructed and in testing. Fourteen additional wells are under construction. Water source from MWDSC.	Mr. Don Kendall General Manager 2100 Olsen Road Thousand Oaks, CA 91360 (805) 526-9323
11.	CA	Foothill Municipal Water District, California	Began operation in 1994. One ASR well. Water source is State Water Project.	Anthony C. Zampello Manager 818-790-4036
12.	CA	Camarillo, California	Began operation in 1992. Two ASR wells. Water source is State Water Project.	Mr. Tom Smith Water Superintendent 805-388-5373
13.	CA	Pleasanton, California	Zone 7 Water Agency. This is a retrofit of a single existing high capacity well.	
14.	CA	Livermore, California	Two ASR wells in operation.	
15.	CA	Roseville, California	At least one well in operation.	
16.	CA	Santa Clara County Water District, San Jose, California	At least one well in operation	
17.	CA	Victor Valley Water District, Victor Valley, California	Began operation in 2003. Four ASR wells. Water source is CA aqueduct.	Mr. Reggie Lamson (510)595-2120 Call Phyllis for details.
18.	Canada	Kitchener-Waterloo, Canada		
19.	CO	Centennial Water & Sanitation District, Highlands Ranch, Colorado	Began operation in 1993. Four ASR wells, with expansion under way. Water source is from the McClellan reservoir.	Mr. Paul Grundemann Director of Utilities 62 W Plaza Dr. Highlands Ranch, CO 80126 303-791-7181

20.	CO	Castle Pines North, CO		
21.	FL	Peace River/Manasota Regional Water Supply Authority, Florida	Began operation in 1985, expanded in 1988 and 1995. Currently 9 ASR wells, being expanded to 21 wells. Water source is from the Peace River.	Kevin Morris Peace River/Manasota Regional Water Supply Authority 941-316-1776
22.	FL	Cocoa, Florida	Began operation in 1987, expanded in 1991, and 1995-1996. Currently six ASR wells. Water source is from a distant wellfield, and also from Taylor Creek Reservoir.	Mr. Carl Larrabee, Jr., PE Director of Utilities/Public Works Everett J. Wegerif, P.E. Water Resources Manager City of Cocoa 600 School Street Cocoa, FL 32922 407-639-7650
23.	FL	Palm Bay (formerly Port Malabar), Florida	Began operation in 1989. One ASR well. Water source is from a local shallow aquifer.	Richard Nipper Operations Division Manager 321-952-3410
24.	FL	Manatee County, Florida	Began operation in 1983. Major expansion under way. Currently 2 ASR wells, being expanded to 6 wells. Water source is from the Manatee reservoir and a distant wellfield.	Mr. John Zimmerman Assistant Director Bruce McLeod 941-792-8811
25.	FL	City of Boynton Beach, Florida	Began operation in 1993. One ASR well. Expansion planned. Water source is from a local shallow aquifer.	Mr. Pete Mazella Assistant Director of Utilities 561-375-6400
26.	FL	Florida Water Services, Marco Island, Florida	Began operation in 1998. Four ASR wells storing partially treated surface water from a rockpit, for recovery to augment seasonal raw water supplies.	Mr. H. John Losche, P.E., South Region Engineer 941-368-1615
27.	FL	Miami-Dade Water & Sewer Dept., Florida	Three ASR wells in operation at West Wellfield, pumping untreated groundwater from shallow fresh aquifer and storing it in a deep brackish aquifer for dry season recovery. Two other wells at Southwest wellfield constructed but not yet operational.	Bill Pitt 786-552-8171 Jorge Rodriguez, P. E., Director Miami-Dade Water and Sewer Authority 3171 SW 38th Avenue Miami, FL 33146 (305) 669-7602
28.	FL	City of Delray Beach, Florida	One ASR well became operational during 2001.	

29.	FL	City of Punta Gorda, Florida	One ASR well became operational during 2001, others planned.	
30.	FL	City of Tampa, Florida	Eight ASR wells operational, storing treated drinking water.	
31.	FL	Lee County, Florida	Seven ASR wells with a recovery capacity of 4.5 MGD. The water source is shallow groundwater treated to drinking standards prior to recharge into a deep brackish aquifer for seasonal storage.	Glenn Semanisin, P.E. Lee County Utilities 239-479-8598
32.	FL	Collier County, Florida		
33.	FL	West Palm Beach, Florida		
34.	IA	Des Moines Water Works, Iowa	Began operation in 1998. One ASR well at Ankeny, storing treated drinking water from the Racoon River in dolomite and sandstone formations at depths of 2100 to 2600 feet.	Mr. Randy Beavers Director of Engineering 515-283-8725
35.	ID	Micron Technologies, Boise, Idaho	One ASR well in operation, the primary purpose of which is to provide thermal energy storage so that water temperature stays about the same all year round for chip manufacturing purposes. This is perhaps the only industrial ASR application to date in the U.S.	
36.	ID	United Water, Boise, Idaho	United Water has I believe two or three ASR wells in operation, retrofits of existing water supply wells that had been abandoned due to poor water quality but were successfully rehabilitated for ASR purposes.	
37.	KS	City of Wichita, Kansas		
38.	NJ	Wildwood, New Jersey	Began operation in 1968. Four ASR wells. Water source is from a distant wellfield.	Mr. Ron Grookett Director of Water 609-522-7744

39.	NJ	Gordons Corner, New Jersey	Began operation in 1971. Two ASR wells. Water source from local wellfield.	Mr. Paul Burdan General Manager 908-946-9333
40.	NJ	NJAWC Western Division, Murray Avenue, New Jersey	Began operation in 1994. One ASR well. Water source is from the Delaware River.	Mr. Joe Dugandzic, Engineer 609-573-6818
41.	NJ	Brick Township Municipal Utilities Authority, Brick, New Jersey	Began operation in 1996. One well. Water source is from the Metedeconk River.	Mr. Pete Canal, Engineer 908-458-7000
42.	NJ	Evesham Township Municipal Utilities Authority, Evesham, New Jersey	Began operation in 1997. One ASR well. Water source is from an overlying (Mount Laurel) aquifer.	Mr. Robert Lender, Superintendent of Water Operations 609-983-1081
43.	NJ	Swimming River, New Jersey		
44.	NJ	Toms River, New Jersey		
45.	NJ	Monroe South, New Jersey		
46.	NJ	Matchaponix, New Jersey		
47.	NV	Las Vegas Valley Water District, Nevada	Began operation in 1988 with expansion continuing. Over 35 ASR wells with more than 100 MGD recovery capacity, plus several injection wells. Water source is from Lake Mead.	Mr. Tom Morris Manager of Recharge Operations 702-870-2011
48.	NV	City of North Las Vegas, Nevada	Began operation in 1990. Expansion to 6 ASR wells during 1995. Water source is from Lake Mead.	Mr. Ken Allbright, P.E. Administrator Department of Public Works 702-657-2203
49.	OR	Salem, Oregon	Began operation in 1996. Six ASR wells. Water source is from the North Santiam River.	Mr. Paul Eckley, P.E., Chief Utilities Engineer City of Salem Public Works Department, Room 325 555 Liberty Street, S.E. Salem, OR 97301-3503

				503-588-6211
50.	OR	Beaverton, Oregon	4 wells, 5 MGD. Began operating in 1998.	David Winship, P.G. City Engineer
51.	OR	Tualatin Valley Water District, Beaverton, Oregon	2 wells; one in operation since 1999. Source is Bull Run SW.	
52.	OR	City of Pendleton, Oregon	2 wells, 5 MGD. Began operating in 2003. Source is Umatilla River.	
53.	OR	City of Tigard, Oregon	1 well, 1 MGD. In operation since 2003. Source is Trask River.	
54.	OR	City of Portland, Oregon	2 wells, 3 MGD. In operation since 2003. Source is Bull River.	
55.	SC	Mount Pleasant Waterworks & Sewer Commission, South Carolina	Began operation in 1995. Three wells operational. Water source is from local deep, brackish aquifer and reverse osmosis treatment.	Mr. Clay Duffie, Executive Director Mount Pleasant Waterworks & Sewer Commission 1250 Fairmont Avenue P.O. Box 330 Mount Pleasant, SC 29465-0330 803-884-9626
56.	SC	Grand Strand Water and Sewer Authority, South Carolina	Began operation about 1997. Four wells operational, storing treated drinking water produced from Bull Creek.	Mr. Fred Richardson, Executive Director 843-347-4641
57.	SC	Beaufort-Jasper Water and Sewer Authority, South Carolina	One ASR well began operation in 1999. Two additional wells, 2001-2002, utilizing treated drinking water from the Savannah River.	Mr. Dean Moss, General Manager Beaufort-Jasper Water and Sewer Authority 843-987-9292
58.	SC	Kiawah Island Utility, Kiawah Island, South Carolina	Two operational ASR wells.	Ms. Becky Dennis, General Manager Kiawah Island Utility 31 Sora Rail Road Kiawah Island, SC 29455 (843) 768-0641
59.	TX	Kerrville, Texas	Began operation in 1996. Two ASR wells. Water source is from the Guadalupe River.	Mr. John Wendele Water Resources Administrator City of Kerrville 210-257-8000

60.	TX	El Paso, Texas	El Paso has about 11 wells in operation, and I heard recently that more are planned. They are primarily injection wells, but are equipped with pumps and are backflushed regularly, so that makes them ASR wells.	
61.	TX	San Antonio Water System, Texas		
62.	UT	Jordan Valley Water District, Utah (formerly Salt Lake County Water Conservancy District)	Began operation about 1993. One ASR well and one injection well. Expansion under way to 24 ASR wells. Water source is from the Salt Lake aqueduct.	Mr. Richard Bay Assistant Chief Engineer 801-565-8903
63.	UT	Brigham City, Utah	Has a new ASR system in operation.	
64.	UT	St. George, Utah	Offstream reservoir surface recharge to sandstone aquifer.	
65.	VA	Chesapeake, Virginia	Began operation in 1992. One ASR well. Water source is from the Northwest River.	Mr. Amar Dwarkanath Director of Utilities 757-382-6401
66.	WA	Lakehaven Utility District, Federal Way, Washington	1 ASR well. Began operation in early 1990s. Water source is untreated groundwater from shallow aquifer, stored in deeper aquifer.	Mr. John Bowman
67.	WA	Seattle Water Department, Washington	Began operation in 1992. Three ASR wells. Water source is from the Cedar River.	Mr. Robert Schwartz Senior Civil Engineer 206-684-5926
68.	WA	Walla Walla, Washington	2 wells, 4 MGD. Began operating in 2000. Water source is Willow Creek.	Robert Gordon, P.E. Water Division Superintendent
69.	WI	Oak Creek, Wisconsin	One ASR well is in operation, storing treated drinking water from Lake Michigan.	