

Tucson AMA, Upper Santa Cruz Subbasin	SUPPLY	Unit	Description	Water Utility Provider/Generator/Other									Effluent Generation Only		Other Use		Current Use	Hydro-regional Use	
				Tucson Water	Metro - Main	Metro - Hub	Town of Oro Valley	Flowing Wells Irrigation District	Sahuarita Water Co	Town of Marana	Vail Water Co.	Spanish Trail Water Co.	Willow Springs	Pima County	Marana WRF, Robson Ranch, Saddlebrooke, UA Tech Park, Marana, Milagro	Secretary of the Interior	Riparian Vegetation ET	Acre-feet	Acre-feet
LOCAL RENEWABLE SUPPLY: Groundwater, effluent, and harvested water	(AF)		Annual natural ground-water recharge														51,300	51,300	
	(AF)		Treated wastewater available for reuse	25,234	1,820	N/A	1,950	499	1,117	90	Unknown	42	N/A	3,315	6,463	28,200	(1,700)	67,030	41,040
	(AF)		Rainwater, stormwater, and greywater that can be harvested for use	Unknown. Adopting rainwater, stormwater, greywater harvesting practices will help close the gap between current demand and hydro-regional supply and achieve regional self-sufficiency.													Unknown	Unknown	
IMPORTED, Unsustainable Supply: Colorado River water	(AF)		Water diverted from the Colorado River and transported to southern Arizona through Central Arizona Project	144,172	13,460	-	10,305	2,873	-	1,528	1,857	3,037	-					177,232	-
Total	(AF)			169,406	15,280	-	12,255	3,372	1,117	1,618	1,857	3,079	-	3,315	6,463	28,200	(1,700)	295,562	92,340
DEMAND	Unit	Description														Current Use (AF)	Hydro-regional Use (AF)		
Municipal Potable Water	(AF)		Potable water distributed through local water utilities	94,056	7,179	788	9,734	2,404	1,547	2,195	1,197	183	N/A					119,283	51,300
Effluent	(AF)		Treated wastewater distributed for irrigation use	15,681	-	-	1,950	3	617	-	-	42	N/A	1,652	3,648			23,593	23,593
Harvested Water	(AF)		Rainwater, stormwater, and greywater that is harvested for potable or irrigation use or groundwater recharge	Unknown. Adopting rainwater, stormwater, greywater harvesting practices will help close the gap between current demand and hydro-regional supply and achieve regional self-sufficiency.													Unknown	Unknown	
Total	(AF)			109,737	7,179	788	11,684	2,407	2,164	2,195	1,197	225	N/A	1,652	3,648			142,876	74,893
BALANCE	(AF)		Remaining water either recharged in groundwater facilities or discharged in Santa Cruz River to support riparian habitat	59,669	8,101	(788)	571	965	(1,047)	(577)	660	2,854	N/A	1,663	2,815			152,686	17,447
Population Served				717,875	44,939	3,702	42,903	15,820	14,852	15,174	11,039	866	N/A					867,170	867,170
Residential water use percentage	%		Portion of total water demand that is used for residential needs	68%	64%	92%	85%	85%	85%	85%	85%	85%						81.5%	81.5%
Total daily water use	gpcd		gallons per person per day consumed for all potable and treated wastewater demands (e.g. commercial, industrial, and residential)	136	143	190	243	136	130	129	97	232						147	77
Residential daily water use	gpcd		gallons per person per day consumed for residential demands (i.e. residential properties only)	80	91	174	172	115	79	110	82	160						100	43

Notes:

<i>Hydro-regional</i>	Hydro-regionalism refers to the principle and practice of meeting local water needs with renewable supplies from the local watershed. "Renewable supplies from the local watershed" does not include Colorado River water delivered hundreds of miles through Central Arizona Project to southern Arizona.
<i>Population</i>	2013 numbers except for: Tucson Water (2015 based on C&E annual report draft) and Metro Water (based on May 9, 2016 Board of Directors Portfolio Report)
<i>Potable Water Demand</i>	2013 numbers except for Tucson Water (2015 based on Water Checkbook memo) and Metro Water (based on May 9, 2016 Board of Directors Portfolio Report)
<i>Effluent Utilization</i>	Pima County 2015 Effluent Generation Report, pg 30; Column: Off Channel Recharge and Direct Use
<i>Groundwater</i>	Estimated Net Annual Recharge based on http://www.azwater.gov/azdwr/WaterManagement/AMAs/documents/ch2-tuc.pdf
<i>Effluent Generation</i>	Pima County 2015 Effluent Generation Report, pg 30; and Metro Water (based on May 9, 2016 Board of Directors Portfolio Report); Current effluent source is predominately unsustainable CAP supply. In the hydro-regional scenario the effluent source would shift to local, renewable sourcing. Current estimate is 62% of total demand is indoor use which ends up as effluent. The hydroregional estimate of effluent assumes a greater portion, 80%, of total use is indoors as rainwater provides for larger portion of outdoor use.
<i>Urban Enhanced Recharge</i>	This analysis has not yet been done but can help shift to local, renewable supply self sufficiency.
<i>Central Arizona Project water source</i>	Central Arizona Project (CAP) water is defined as unsustainable due to (A) the extractive cost on the Colorado River environment, (B) the high energy cost (~40% of Arizona's energy demand) to deliver water, and (C) the additional water cost to produce the energy required to transport CAP water. The future of sustained CAP supplies is uncertain as voluntary reductions are being taking to prevent a near-time shortage declaration at Lake Mead. By working towards self-sufficiency with local supplies we improve our community resilience and ensure water availability for future economic and environmental health.
<i>Current Total Per Capita Daily Use</i>	Total Per Capita Daily Use includes potable demand and effluent utilization
<i>Renewable Total Per Capita Daily Use</i>	Based on renewable net groundwater recharge of 51300 Acre-feet/year + Effluent Generation
<i>Current Estimated Residential Per Capita Daily Use</i>	Residential Per Capita Daily Use only includes potable demand of residential properties and is estimated at 85% of total potable demand unless estimated by the water provider directly (Tucson and Metro Water)
<i>Renewable Residential Per Capita Daily Use</i>	Based on renewable net groundwater recharge of 51300 Acre-feet/year
<i>CAP allocations</i>	http://www.cap-az.com/documents/departments/water-operations/Subcontract-Status-Report-10-01-15.pdf