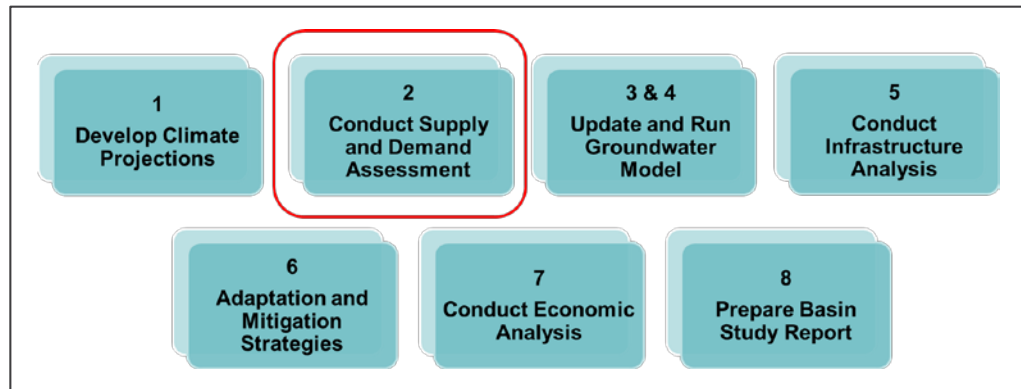
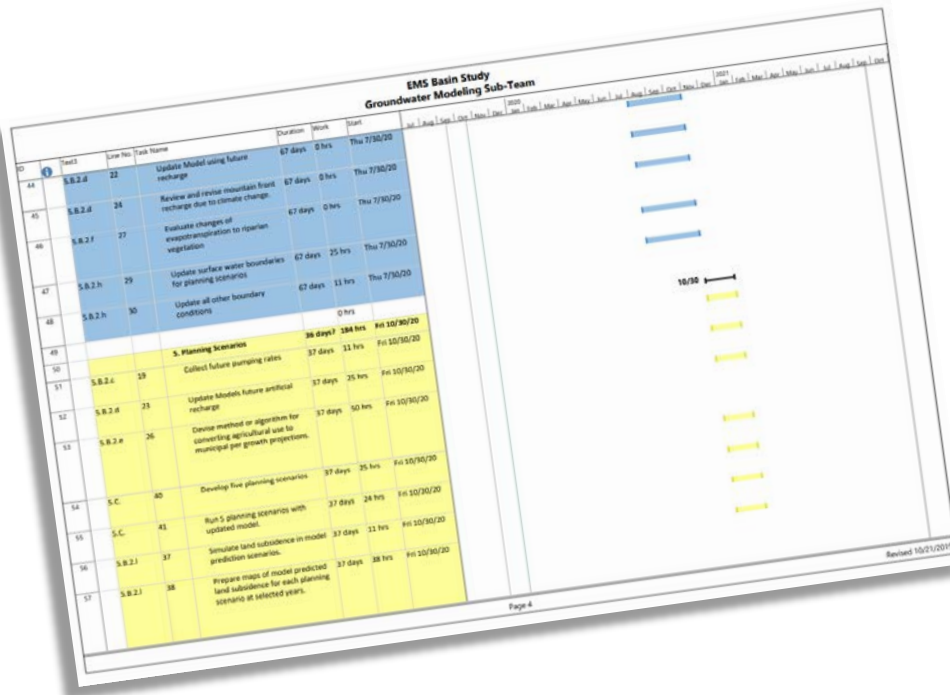


Goals of Today's Supply and Demand Meeting

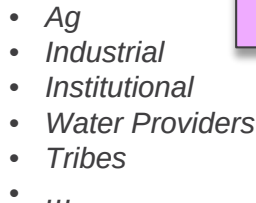
- CAP:SAM and MODFLOW
 - Results “handoff” and integration of the two models
- Group discussion about CAP:SAM results
 - Do the results look realistic?



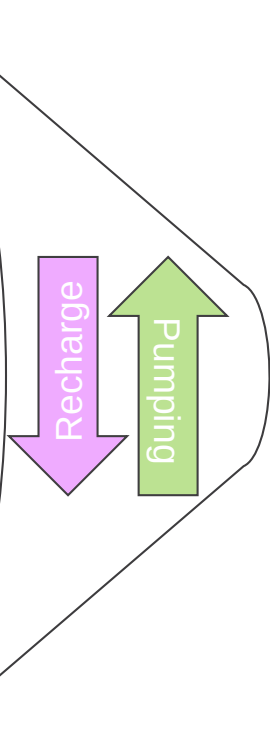
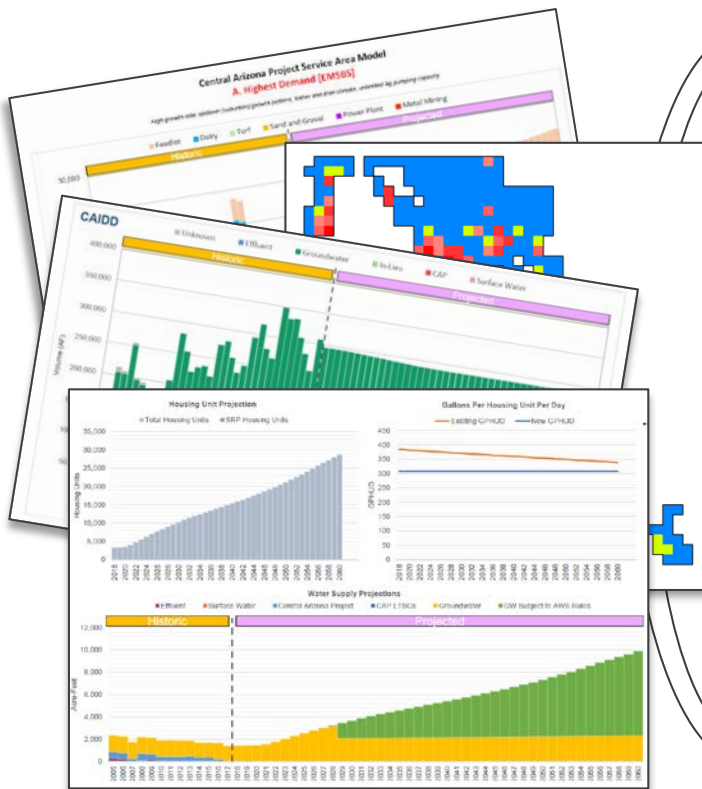
Groundwater Modeling Task



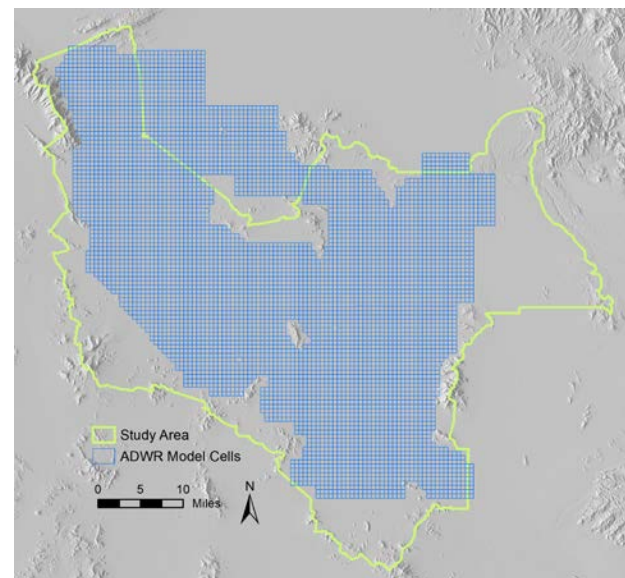
- Contract awarded to Montgomery & Associates
- Currently compiling data and reviewing ADWR model
- “Hand-off” from CAP:SAM to occur after model calibration period



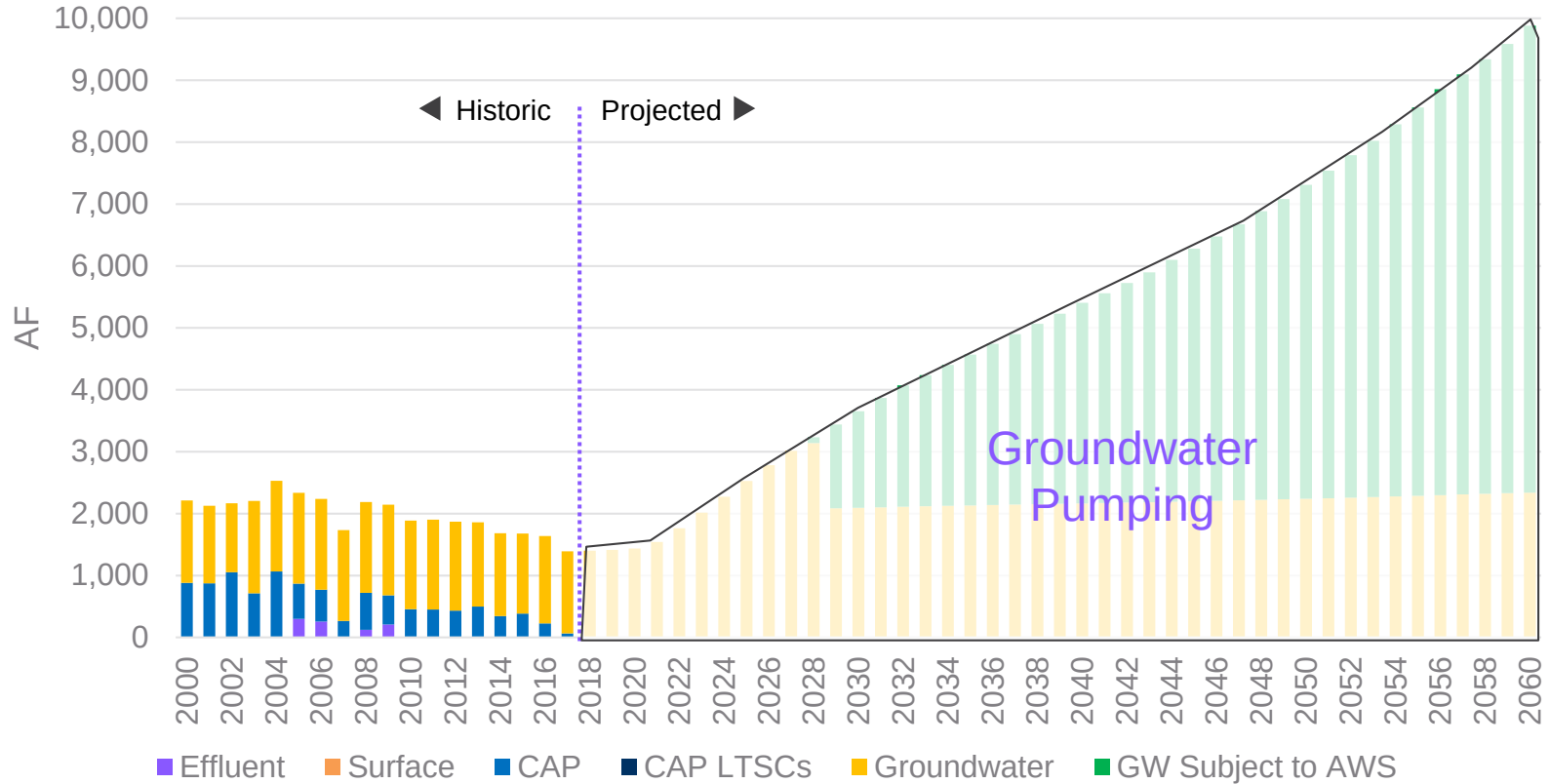
CAP:SAM Outputs



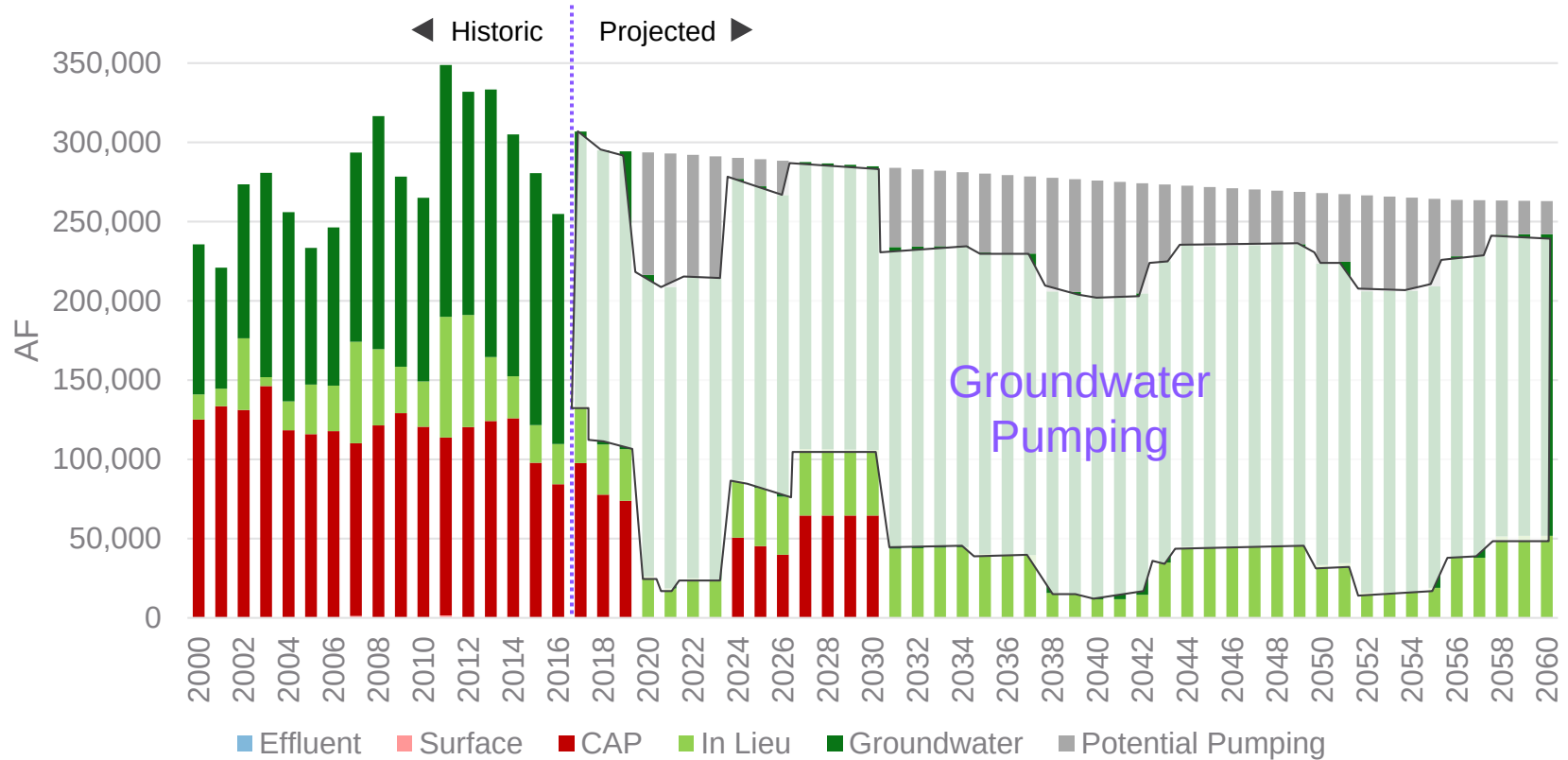
MODFLOW Inputs



Water Provider Pumping

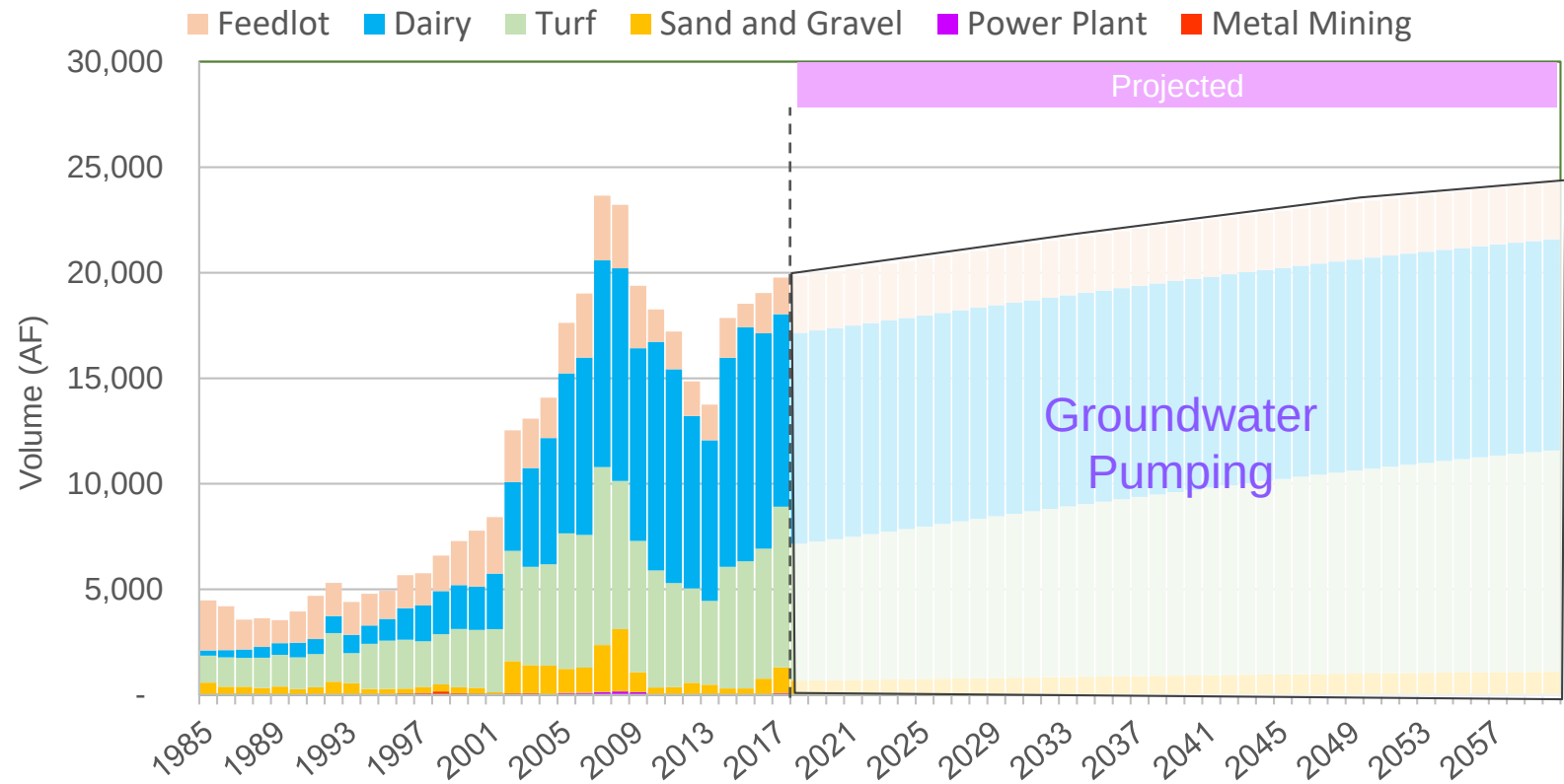


Ag Pumping





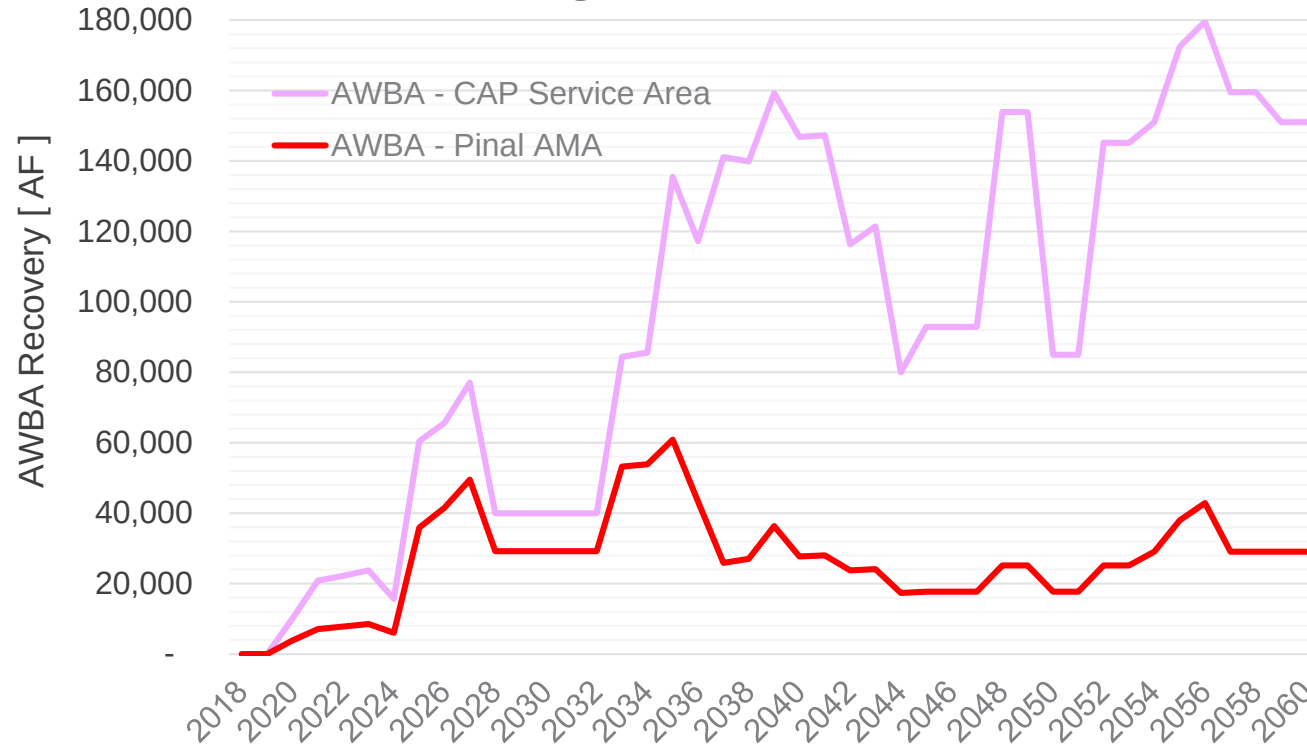
Industrial Pumping





Institutional Pumping

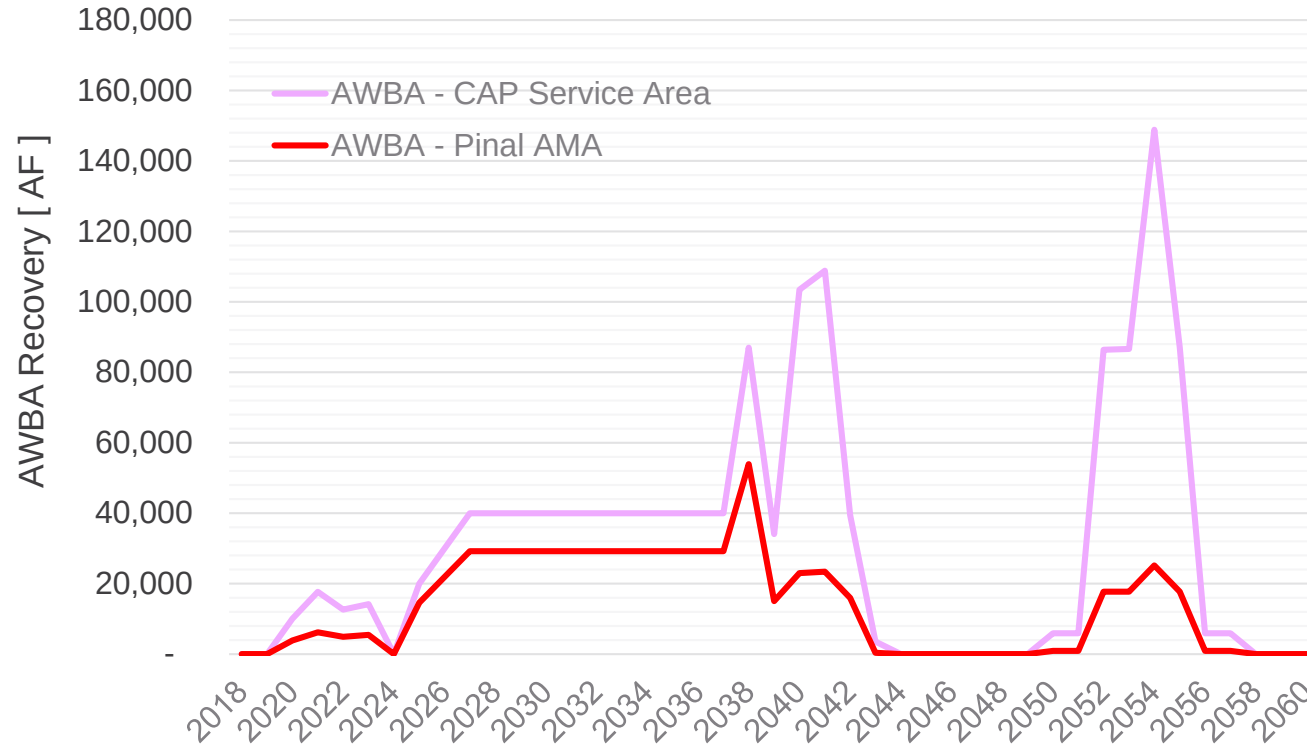
A. Highest Demand

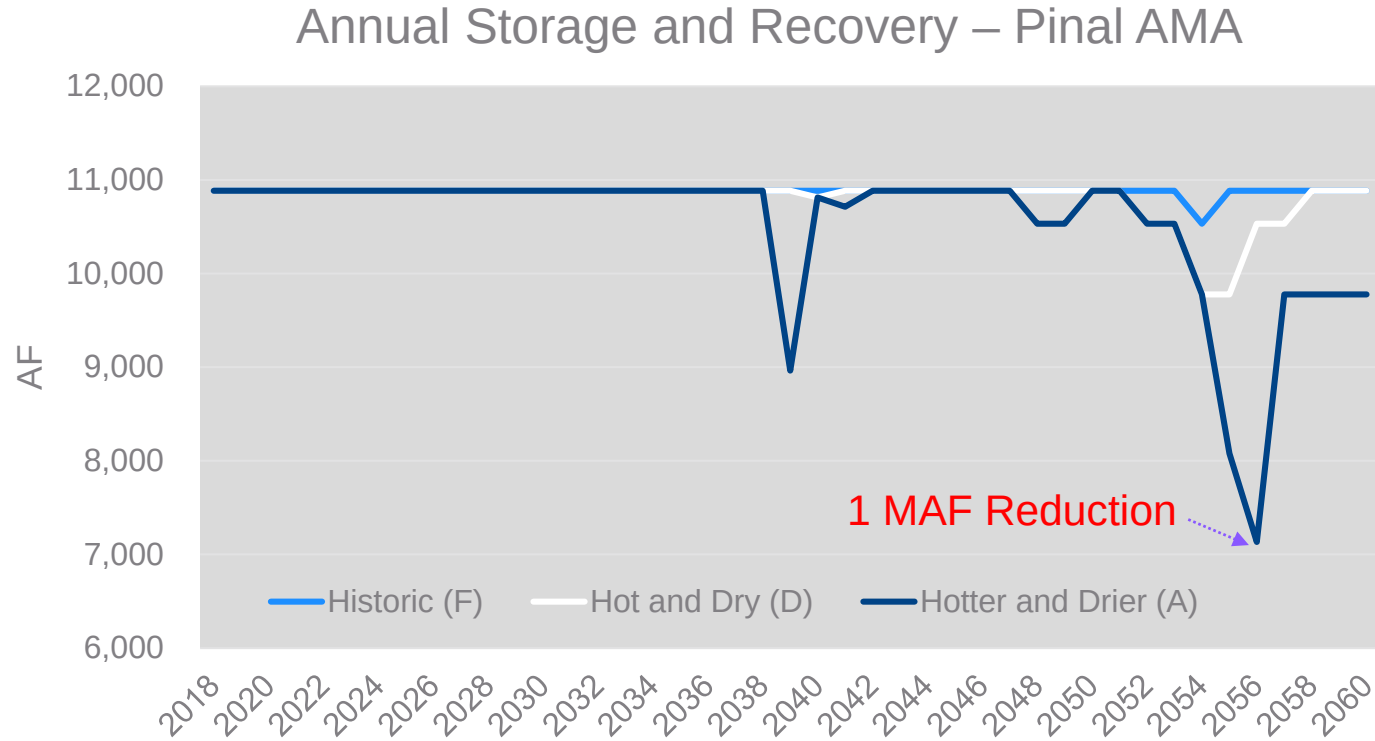




Institutional Pumping

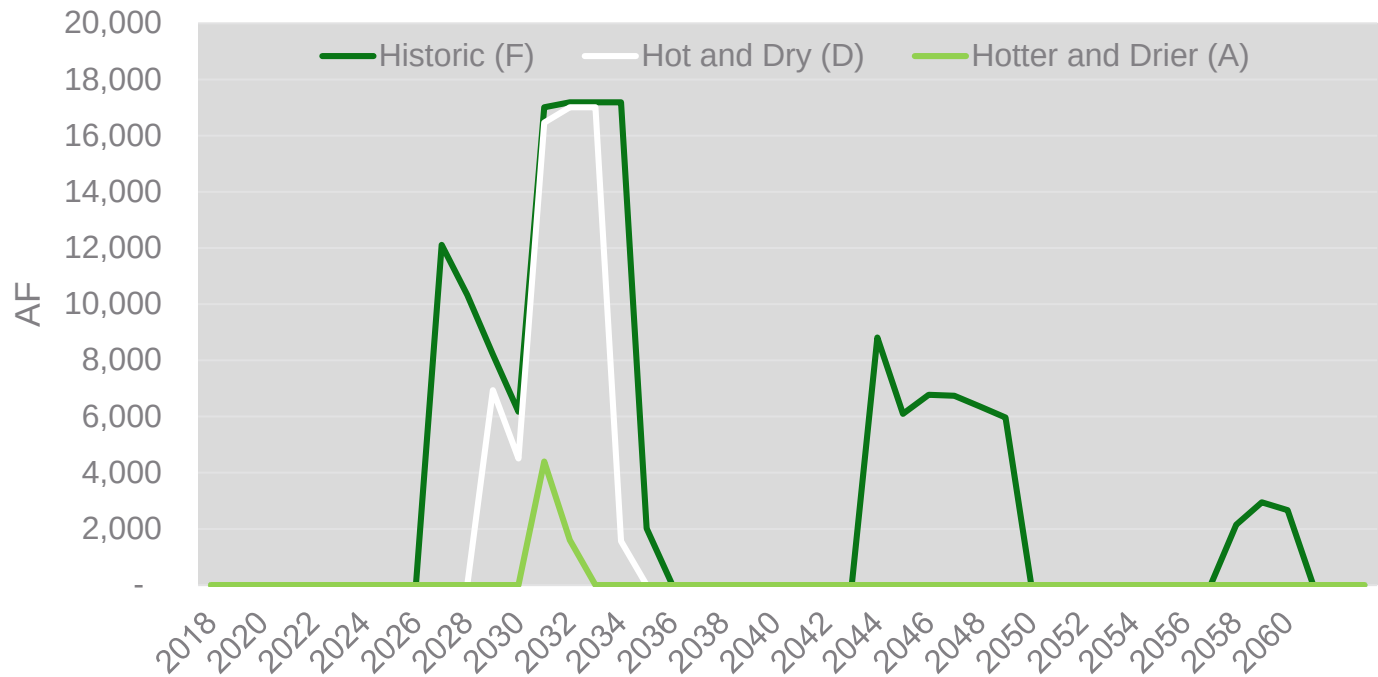
F. Lowest Demand



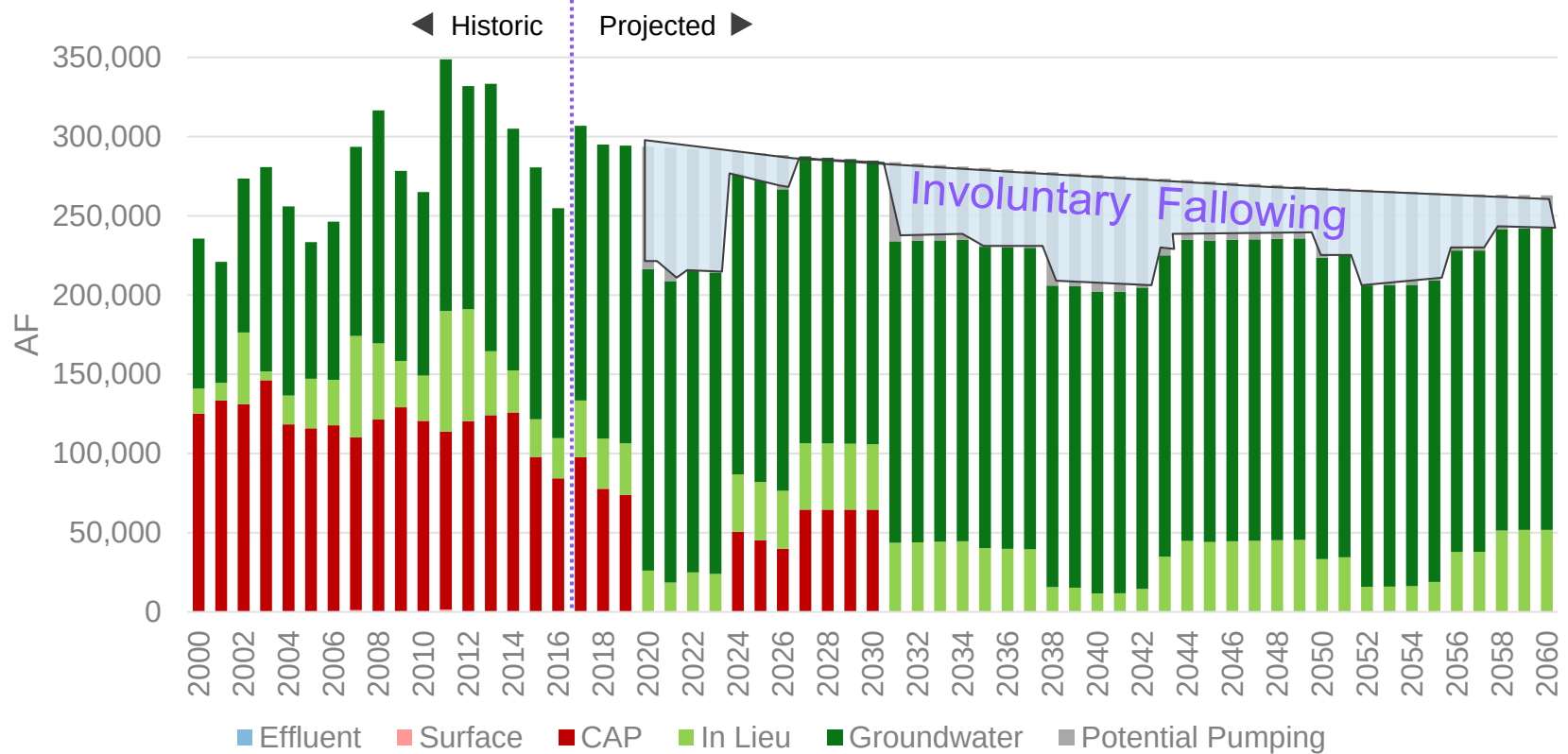


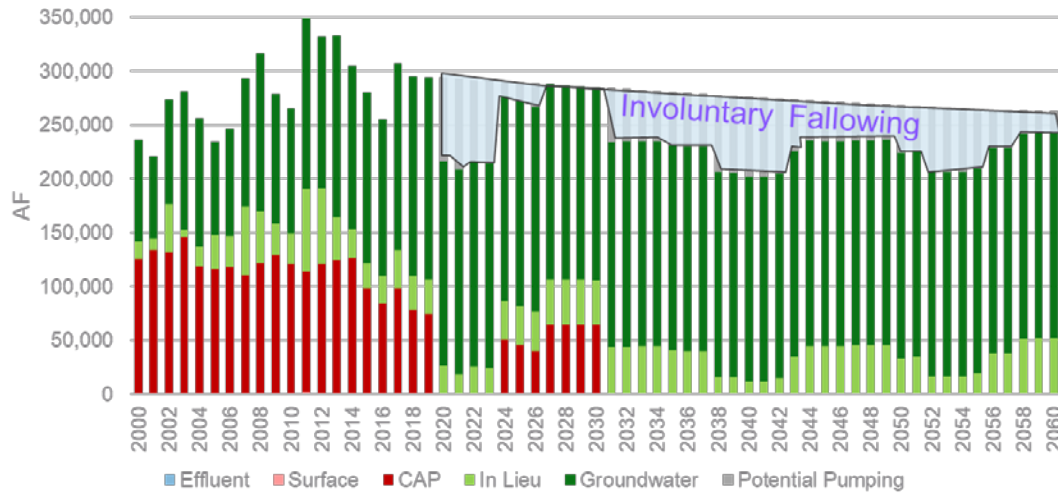


AWBA Accrual of LTSCs - Pinal AMA

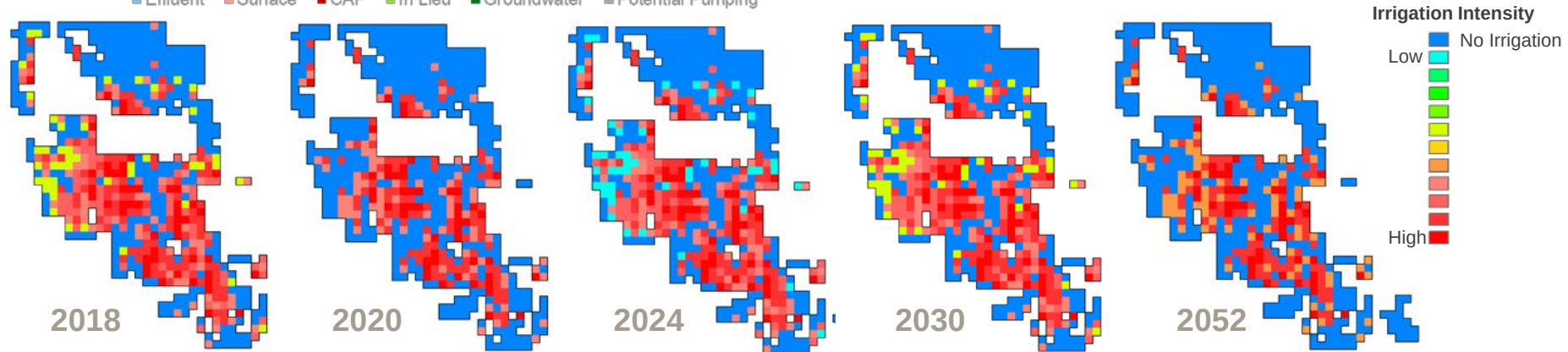


Ag Incidental Recharge





- Dynamic simulation of incidental recharge
 - Volume
 - Distribution



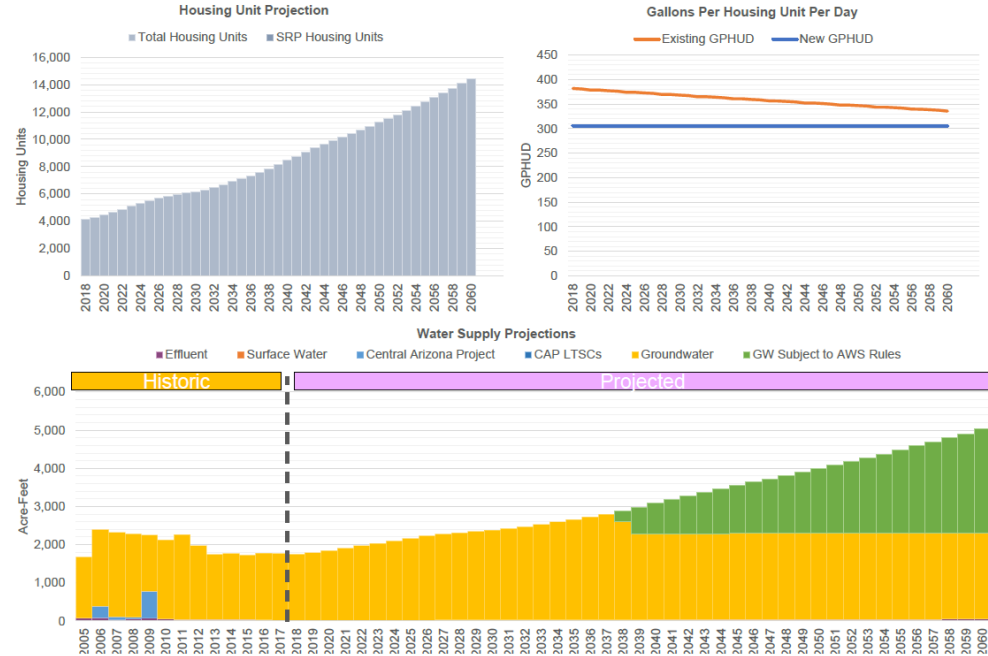
Draft Results

- September 24th – presented draft supply and demand results to the group
- October 25th – results sent to study participants and posted to the Pinal Partnership website

Central Arizona Project Service Area Model

A. Highest Demand [EMSBS]

High growth rate, spillover (suburban) growth pattern, hotter and drier climate, unlimited Ag pumping capacity

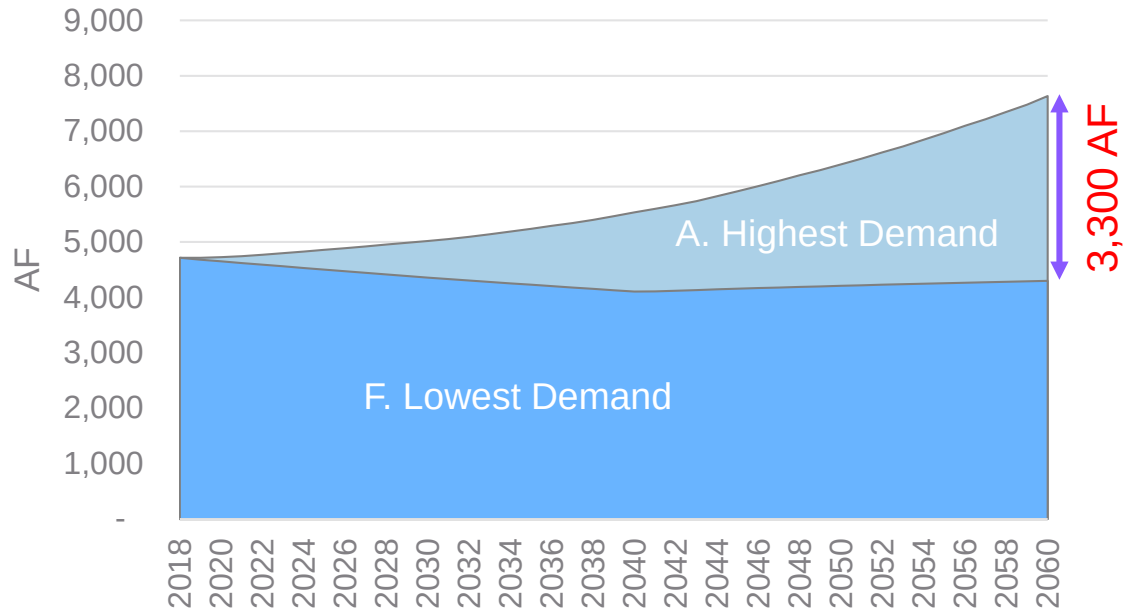


Small Water Provider Demand

2017 Portfolios for Municipal Water Providers in the Pinal AMA

	Entity	Effluent (ac-ft)	CAP (ac-ft)	Groundwater (ac-ft)	Total Demand (ac-ft)
Large Providers (Modeled in CAP-SAM)	AZ Water Company		6,689	9,180	15,869
	Global Water - SC	167		6,405	6,572
	Town of Florence	18		1,751	1,769
	City of Eloy		65	1,325	1,390
	Johnson Utilities - Pinal	402		860	1,262
	Picacho Water Company	68		1,034	1,102
	City of Casa Grande			178	178
	Total:	655	6,754	20,733	28,142
Small Providers (Not Modeled in CAP-SAM)	AZ Dept. of Corrections - Eyman			990	990
	AZ Dept. of Corrections - Florence			990	990
	Woodruff Water Company			669	669
	Thunderbird Farms Improvement District			470	470
	AZ Water Company - Tierra Grande		63	150	213
	Maricopa DWID			196	196
	St. Anthony's Greek Orthodox Monastery			190	190
	City of Casa Grande			178	178
	AZ Water Company - Stanfield			176	176
	United Utilities/ Cactus Forest			83	83
	Casa Grande West Water Co.			82	82
	Evergreen Irrigation District			58	58
	Picacho Water Improvement			56	56
	Seven Ranches DWID			54	54
	Villa Grande DWID			53	53
	Papago Butte DWID			44	44
	South Mountain Water Company			40	40
	Park Water Co.			39	39
	Valle Escondido DWID			36	36
	Ranches at Maricopa			30	30
	Silverbell Irrigation and Drainage District			26	26
	AZ Water Company (Formerly Golden Corridor)			23	23
	Maricopa Mountain DWID			23	23
	New Saddleback Vista DWID			20	20
	AZ Water Company - Coolidge Airport System		6	14	20
	Sunland Water Company			12	12
	Southwest Environmental Utilities			5	5
	Global Water Co.			4	4
	Total:	0	69	4,711	4,780
	Grand Total:	655	6,823	25,444	32,922

Small Water Providers - Pinal AMA

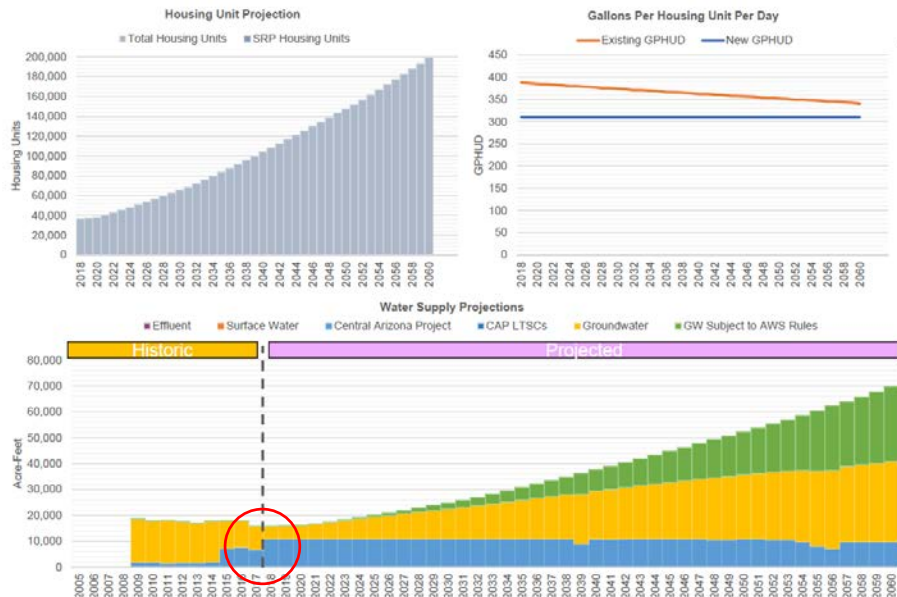


AZWC Pinal Valley

Central Arizona Project Service Area Model

A. Highest Demand (EMSBS)

High growth rate, spillover (suburban) growth pattern, hotter and drier climate, unlimited Ag pumping capacity



AZWC Pinal Vall

Central Arizona Project Service Area Model

A. Highest Demand (EMSBS)

10/21/19 1:30 PM

Date	Demand Assumptions				Water Supply Projections (Acre-Feet)											Groundwater	Unknown
	Housing Units		GPHUD		Effluent	Surface Water		Non-SRP	Direct	Central Arizona Project	ASR	Storage	Recovery	Non-Rip	Replenished		
	Total	SRP	Existing	New		SRP	Non-SRP										
2018	36,624	0	388	310	0	0	0	0	10,884	0	0	0	0	4,945	8	0	0
2019	37,368	0	387	310	0	0	0	0	10,884	0	0	0	0	5,069	14	0	0
2020	38,202	0	384	310	0	0	0	0	10,884	0	0	0	0	5,274	37	0	0
2021	40,356	0	384	310	0	0	0	0	10,884	0	0	0	0	5,716	66	0	0
2022	42,974	0	383	310	0	0	0	0	10,884	0	0	0	0	6,392	173	0	0
2023	45,642	0	382	310	0	0	0	0	10,884	0	0	0	0	7,118	319	0	0
2024	48,331	0	380	310	0	0	0	0	10,884	0	0	0	0	7,818	513	0	0
2025	51,037	0	380	310	0	0	0	0	10,884	0	0	0	0	8,485	727	0	0
2026	53,788	0	379	310	0	0	0	0	10,884	0	0	0	0	9,120	994	0	0
2027	56,742	0	377	310	0	0	0	0	10,884	0	0	0	0	9,774	1,284	0	0
2028	59,697	0	375	310	0	0	0	0	10,884	0	0	0	0	10,425	1,635	0	0
2029	62,653	0	375	310	0	0	0	0	10,884	0	0	0	0	11,019	2,001	0	0
2030	65,609	0	374	310	0	0	0	0	10,884	0	0	0	0	11,610	2,392	0	0
2031	68,568	0	373	310	0	0	0	0	10,884	0	0	0	0	12,186	2,797	0	0
2032	72,180	0	371	310	0	0	0	0	10,884	0	0	0	0	12,685	3,227	0	0
2033	76,061	0	371	310	0	0	0	0	10,884	0	0	0	0	13,579	3,757	0	0
2034	79,947	0	370	310	0	0	0	0	10,884	0	0	0	0	14,300	4,340	0	0
2035	83,838	0	368	310	0	0	0	0	10,884	0	0	0	0	15,007	4,939	0	0
2036	87,734	0	366	310	0	0	0	0	10,884	0	0	0	0	15,745	5,556	0	0
2037	91,670	0	365	310	0	0	0	0	10,884	0	0	0	0	16,391	6,180	0	0
2038	95,627	0	365	310	0	0	0	0	10,884	0	0	0	0	17,107	6,825	0	0
2039	99,992	0	364	310	0	0	0	0	8,964	0	0	0	0	19,170	8,083	0	0
2040	104,165	0	362	310	0	0	0	0	10,813	0	0	0	0	18,631	8,241	0	0
2041	108,349	0	362	310	0	0	0	0	10,714	0	0	0	0	19,338	8,978	0	0
2042	112,543	0	361	310	0	0	0	0	10,884	0	0	0	0	19,915	9,642	0	0
2043	116,818	0	360	310	0	0	0	0	10,884	0	0	0	0	20,548	10,437	0	0
2044	121,183	0	358	310	0	0	0	0	10,884	0	0	0	0	21,252	11,269	0	0
2045	125,561	0	358	310	0	0	0	0	10,884	0	0	0	0	21,804	12,114	0	0
2046	129,953	0	357	310	0	0	0	0	10,884	0	0	0	0	22,425	12,972	0	0
2047	134,360	0	356	310	0	0	0	0	10,884	0	0	0	0	23,043	13,841	0	0
2048	138,783	0	353	310	0	0	0	0	10,532	0	0	0	0	23,961	14,060	0	0
2049	143,212	0	353	310	0	0	0	0	10,532	0	0	0	0	24,478	15,742	0	0
2050	147,657	0	352	310	0	0	0	0	10,884	0	0	0	0	24,799	16,569	0	0
2051	152,121	0	351	310	0	0	0	0	10,884	0	0	0	0	25,295	17,578	0	0
2052	156,604	0	349	310	0	0	0	0	10,532	0	0	0	0	26,095	18,753	0	0
2053	161,695	0	349	310	0	0	0	0	10,532	0	0	0	0	26,570	19,787	0	0
2054	166,901	0	348	310	0	0	0	0	9,777	0	0	0	0	27,564	21,295	0	0
2055	172,131	0	347	310	0	0	0	0	8,078	0	0	0	0	29,061	23,267	0	0
2056	177,388	0	345	310	0	0	0	0	7,134	0	0	0	0	30,241	24,943	0	0
2057	182,663	0	345	310	0	0	0	0	9,777	0	0	0	0	29,217	24,980	0	0
2058	187,967	0	344	310	0	0	0	0	9,777	0	0	0	0	29,766	26,227	0	0
2059	193,299	0	343	310	0	0	0	0	9,777	0	0	0	0	30,315	27,484	0	0
2060	199,572	0	341	310	0	0	0	0	9,777	0	0	0	0	31,153	28,773	0	0

Group Discussion