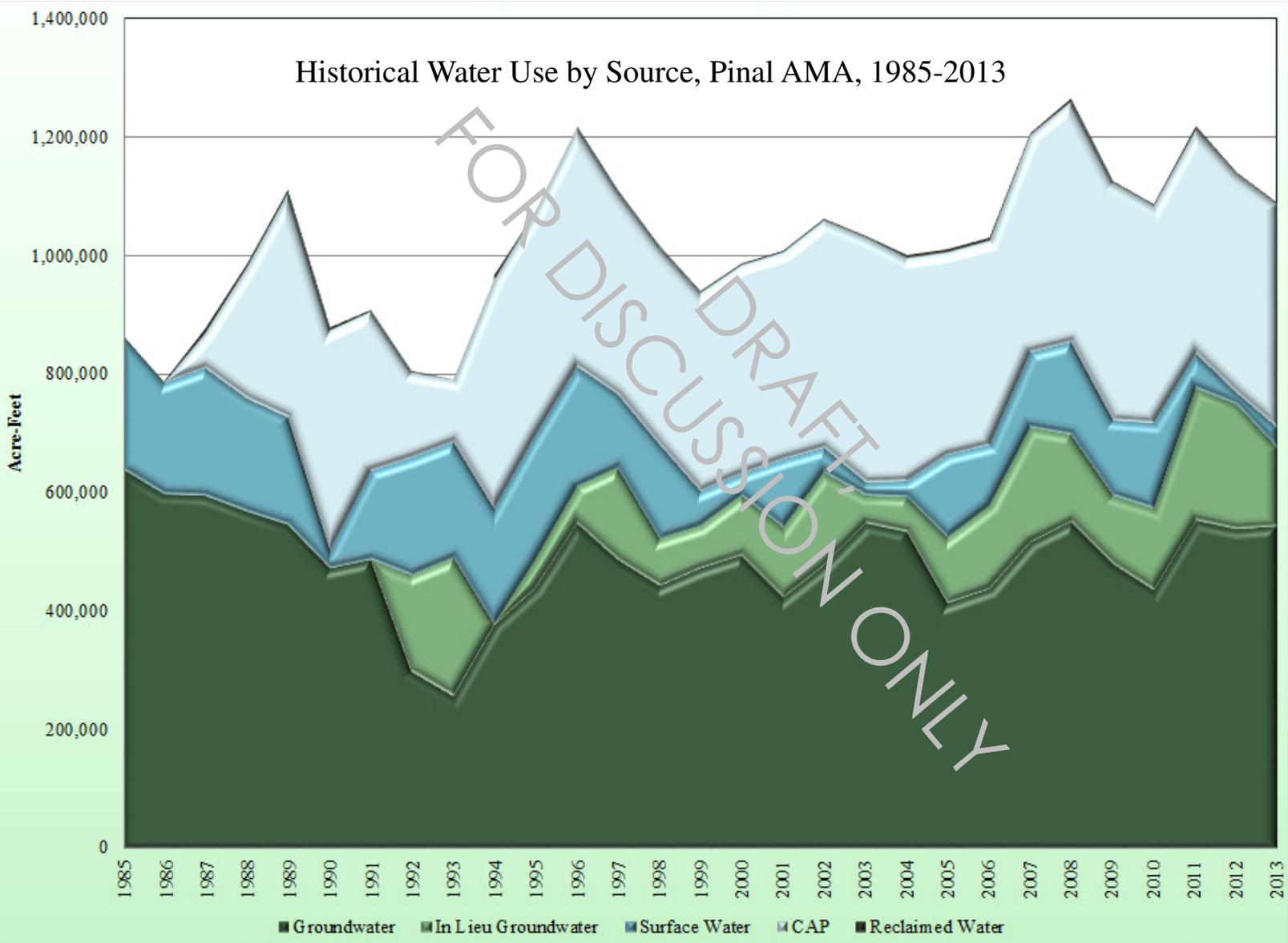
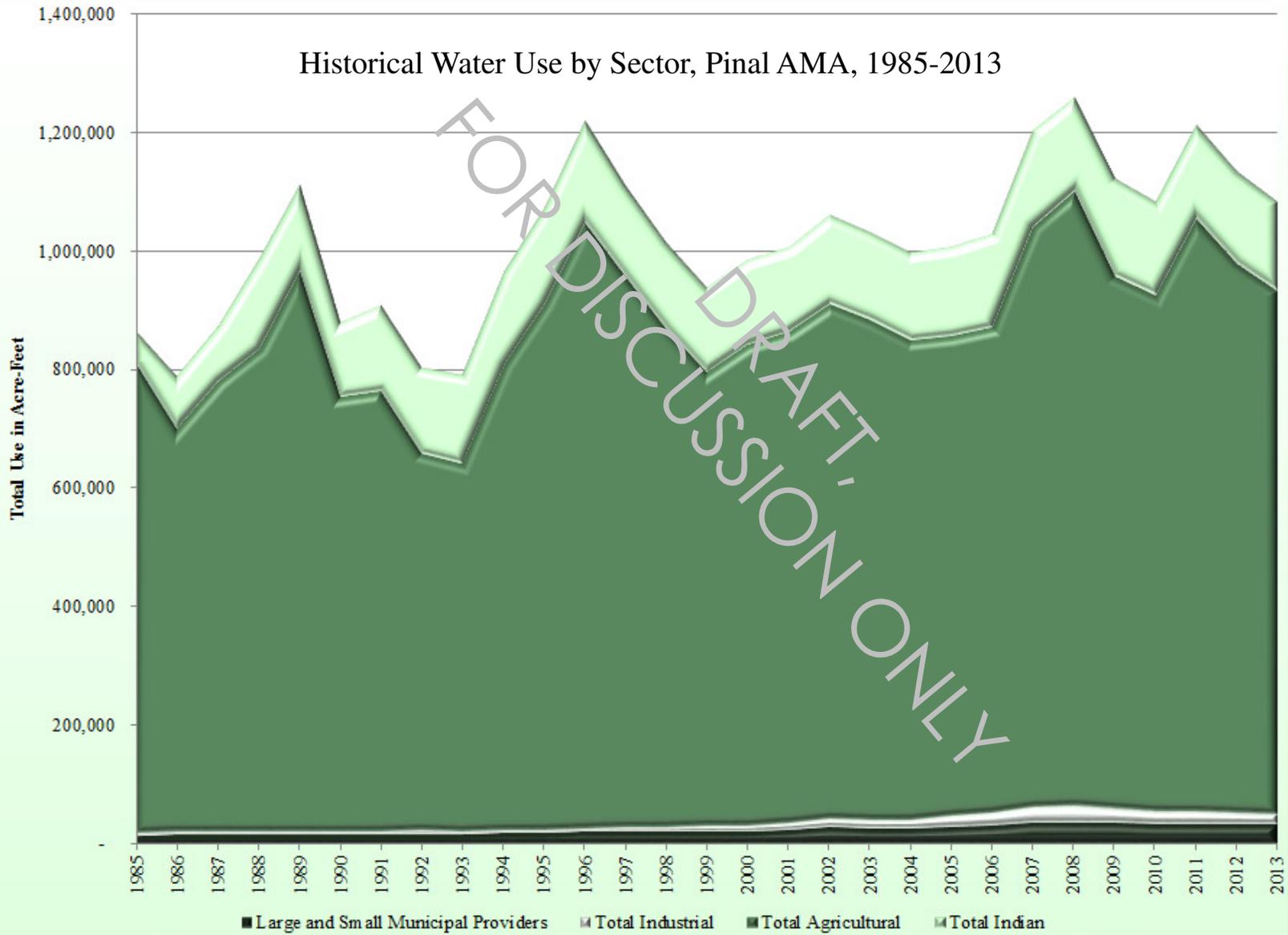
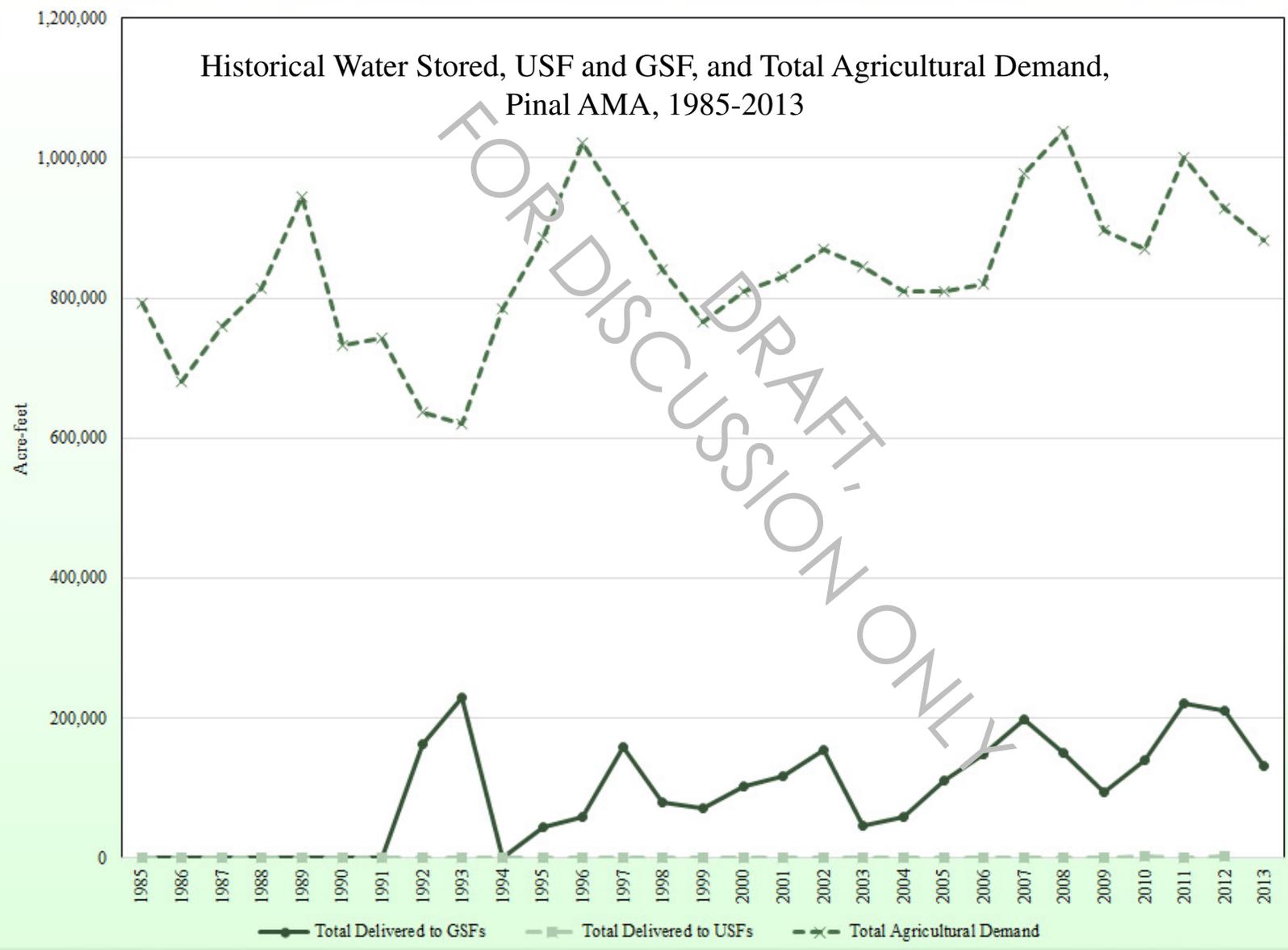
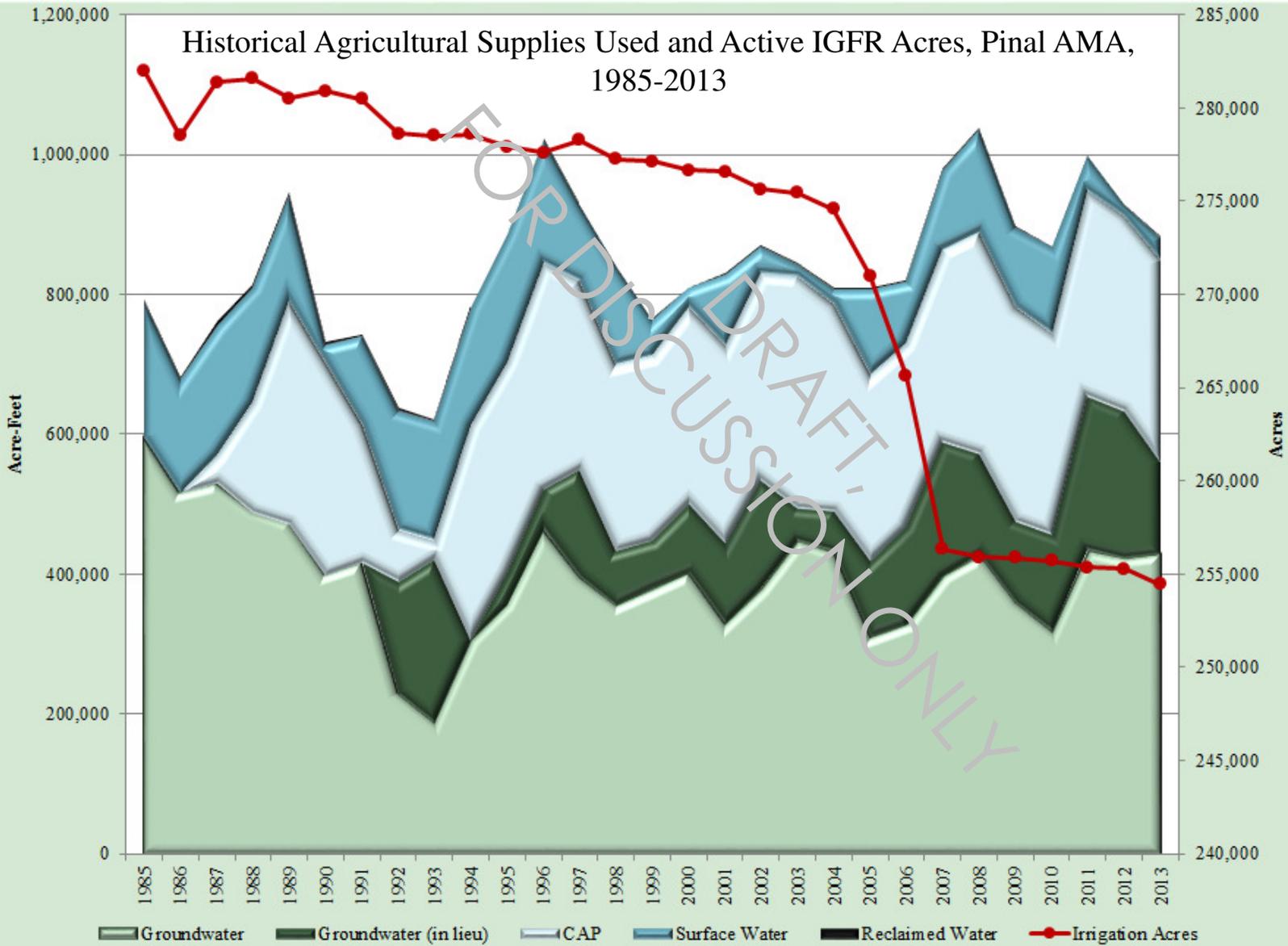


Historical Water Use by Source, Pinal AMA, 1985-2013









Status of Development of 4MP PAMA

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Pinal AMA GUAC, July 14, 2015

- ▶ Received updated stream channel recharge for 1985 – 2013 from new model from Hydrology
 - ❖ Assessment used long-term average
 - ❖ 4MP will use varying stream channel recharge each year
- ▶ Projection years will repeat a section of the historical record of stream channel recharge to mimic actual variability
- ▶ Waiting to receive other natural system components from Hydrology (groundwater inflow, outflow, incidental recharge, etc.)

Status of Development of 4MP PAMA

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Pinal AMA GUAC, July 14, 2015

- ▶ 4MP will include two scenarios
 - ❖ “Normal” CAP delivery scenario
 - ❖ Tier 1 shortage scenario (each year from 2015 - 2040)
- ▶ We have population projections and demand projections completed for large and small municipal providers
- ▶ We have agricultural, industrial and Indian demand and supply projections completed
- ▶ All chapters are drafted, but require updating to 2013 and internal legal, AMA director and director review prior to presentation to the GUAC
- ▶ Hope to be ready to present the draft 4MP for PAMA later this year

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	TOTAL
Municipal	27,693	29,110	31,422	34,912	39,668	40,086	40,083	39,277	40,067	40,241	40,167	402,725
GWTR	24,331	24,815	27,165	30,839	35,823	36,427	36,110	36,254	37,520	37,485	37,504	364,273
SWTR	109	96	511	317	475	499	496	517	266	253	181	3,749
CAP	2,992	3,368	3,134	2,951	2,991	2,685	2,991	2,312	2,047	2,192	2,174	29,846
EFOO	260	831	612	765	380	475	486	194	234	311	308	4,856
Agricultural	845,454	809,510	809,891	819,894	978,778	1,037,653	896,932	868,995	1,001,126	928,761	883,043	9,880,036
GWTR	447,705	431,700	309,657	327,702	397,313	427,462	358,918	317,971	433,649	422,489	428,597	4,303,164
SWTR	16,858	22,084	123,010	88,653	112,482	147,405	114,711	123,584	51,642	15,559	30,842	846,830
In-Lieu	46,632	58,505	109,426	139,616	191,407	144,008	116,639	138,867	221,561	210,328	130,820	1,509,809
CAP	332,470	295,613	265,672	261,598	275,919	314,613	305,785	287,837	292,204	279,595	290,834	3,202,140
EFOO	1,789	1,608	2,126	2,325	1,657	2,165	879	736	2,070	790	1,949	18,094
Industrial	14,191	15,046	18,696	20,243	25,905	28,423	25,014	21,565	20,199	17,434	15,714	222,431
GWTR	12,890	13,668	15,836	17,051	22,163	24,383	20,714	19,133	18,514	15,581	14,419	194,352
SWTR	-	-	-	15	-	13	51	-	22	7	-	108
CAP	860	937	1,558	1,462	1,742	2,236	1,420	791	-	-	-	11,006
EFOO	441	441	1,230	1,715	2,000	1,791	2,829	1,641	1,663	1,846	1,295	16,893
Indian	145,220	145,743	149,706	155,710	162,464	157,313	164,408	156,965	156,129	154,038	150,783	1,698,480
GWTR	62,780	62,503	60,746	61,390	61,902	62,934	63,302	61,136	63,728	63,496	63,187	687,106
SWTR	4,640	6,400	16,960	13,600	13,982	9,484	11,984	18,207	8,137	3,459	4,068	110,921
CAP	77,800	76,840	72,000	80,720	86,580	84,895	89,122	77,622	84,264	87,083	83,528	900,454
EFOO	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1,032,557	999,409	1,009,716	1,030,759	1,206,815	1,263,475	1,126,437	1,086,802	1,217,522	1,140,474	1,089,707	12,203,672
Total GWTR	547,707	532,686	413,405	436,981	517,202	551,207	479,044	434,495	553,411	539,051	543,708	5,548,896
Total CAP	460,754	435,263	451,790	486,357	558,639	550,436	515,957	507,429	600,076	579,198	507,356	5,653,254
Total EFOO	2,490	2,880	3,968	4,805	4,037	4,431	4,194	2,571	3,967	2,947	3,552	39,843
Total SWTR	21,606	28,580	140,481	102,615	126,939	157,401	127,242	142,308	60,068	19,277	35,091	961,607

4MP Assessment Template Data, Historical Demand and Supplies Used by Sector, 2003 – 2013, Pinal AMA

Issues for discussion

- ▶ Ag pool drops 100,000 acre-feet in 2017; another 75,000 acre-feet in 2024, and goes to zero in 2031
- ▶ At this point, the 4MP does not assume that agricultural demand will decline with the reductions in the Ag pool, but that the difference will be made up with groundwater
- ▶ With the assumptions for all sectors included in the draft 4MP at this point, a Tier 1 shortage of CAP each year from 2015 – 2040 would result in
 - ❖ 1.7 million acre-feet less CAP water in the PAMA Ag pool from 2014 through 2030
 - ❖ 2.3 million acre-feet less in-lieu CAP water in the PAMA from 2014 through 2040
- ▶ At this point, the 4MP assumes this difference will be made up with groundwater