

Results of CAP Service Area Model

Lower Santa Cruz River Basin Study
Stakeholder Advisors Meeting
February 26, 2018

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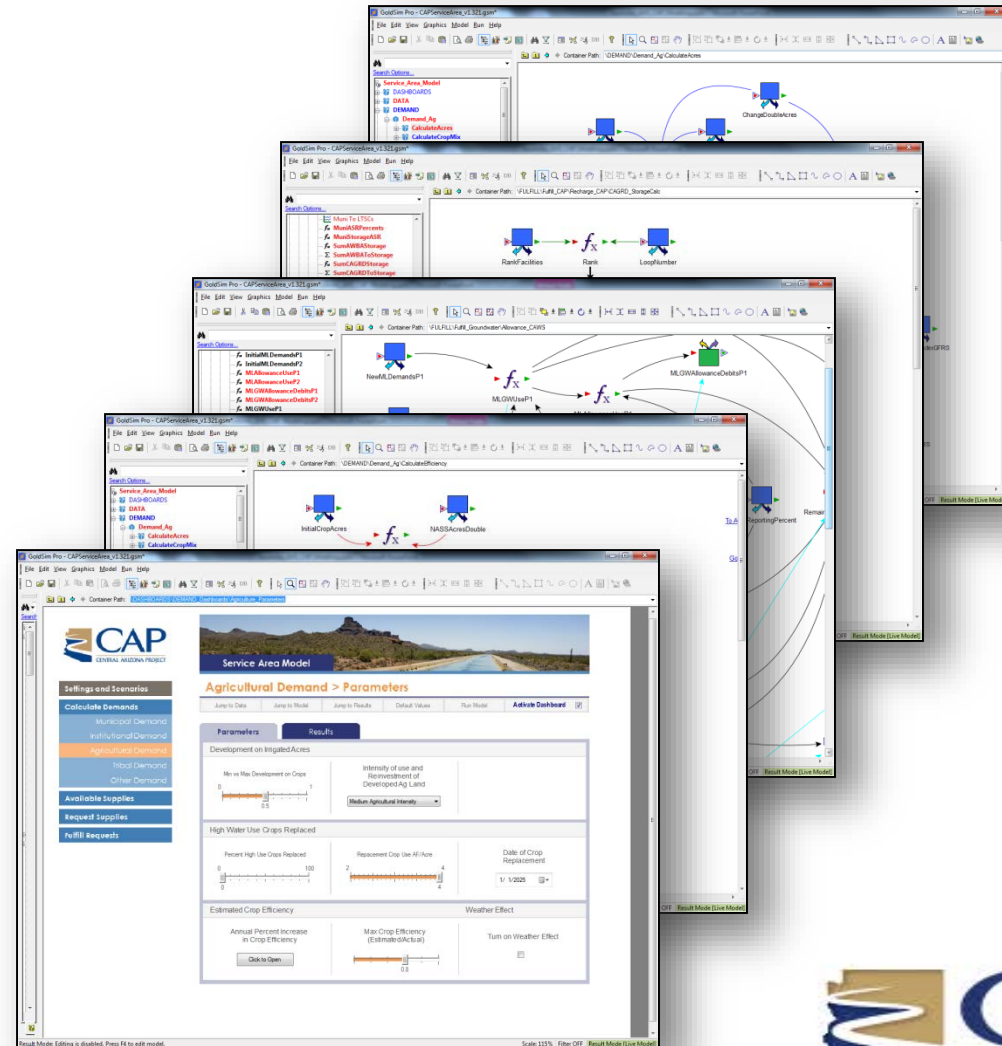


CAP Service Area Model (CAP:SAM)

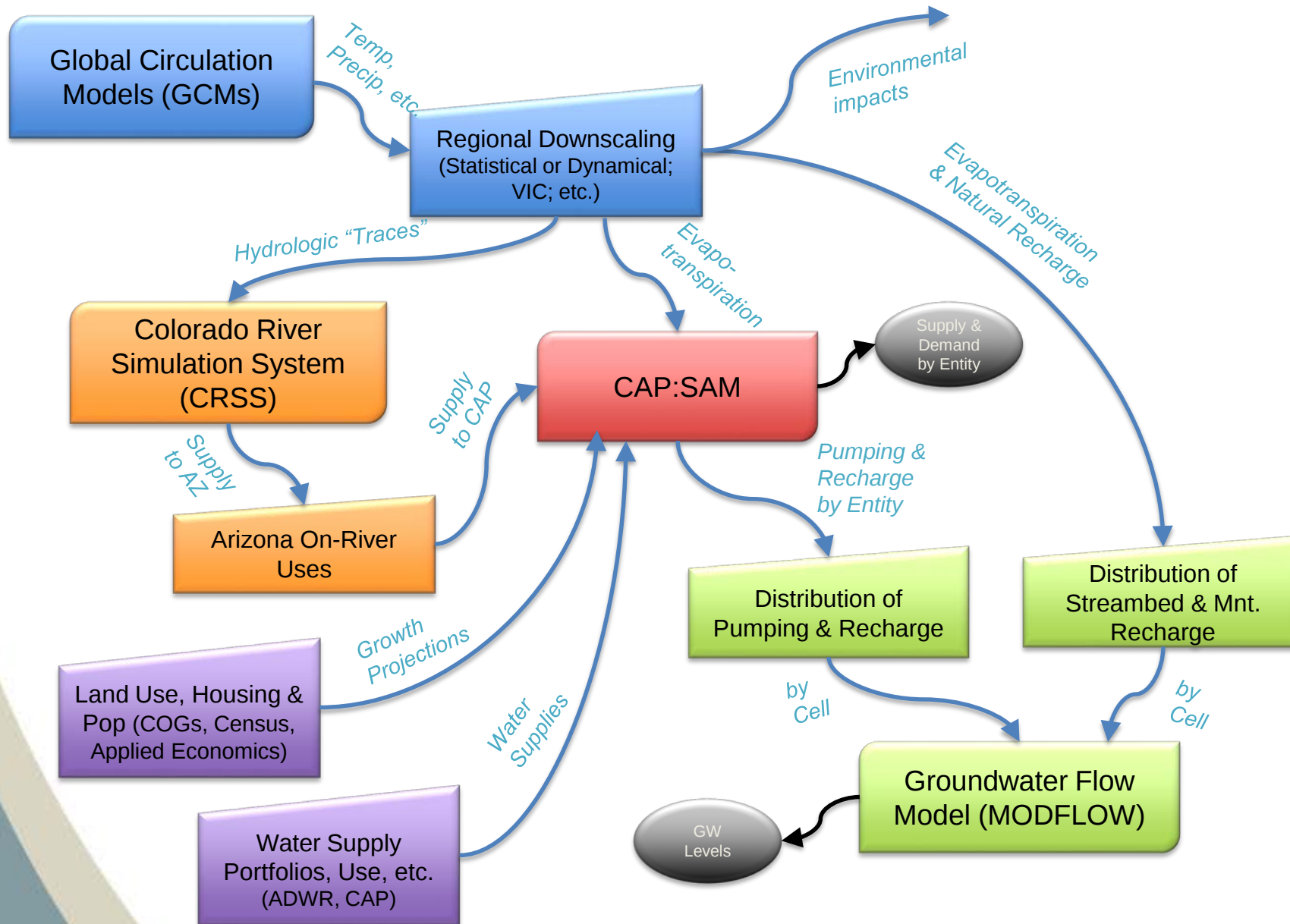
- Tool for projecting supply and demand in CAP's three county service area
- Accounts for complex legal and physical characteristics of users and supplies
- Can simulate a wide range variations of “driving forces”
- Designed to generate “what if” scenarios

CAP Service Area Model (CAP:SAM) Continued

- **130+ Entities**
 - 80 Municipal Providers
 - 23 Irrigation Districts
 - 12 Tribes and Districts
 - 20+ other user categories
- **16 Supply Types**
 - Includes Surface Water, Effluent, CAP, Recharge Credits, Groundwater, Recovered Water, etc.
 - Incorporates shortage scenarios from Colorado River Simulation mode



Model Integration



Supply, Demand & Uncertainty

Some of the major factors that affect water supply, demand and reliability:

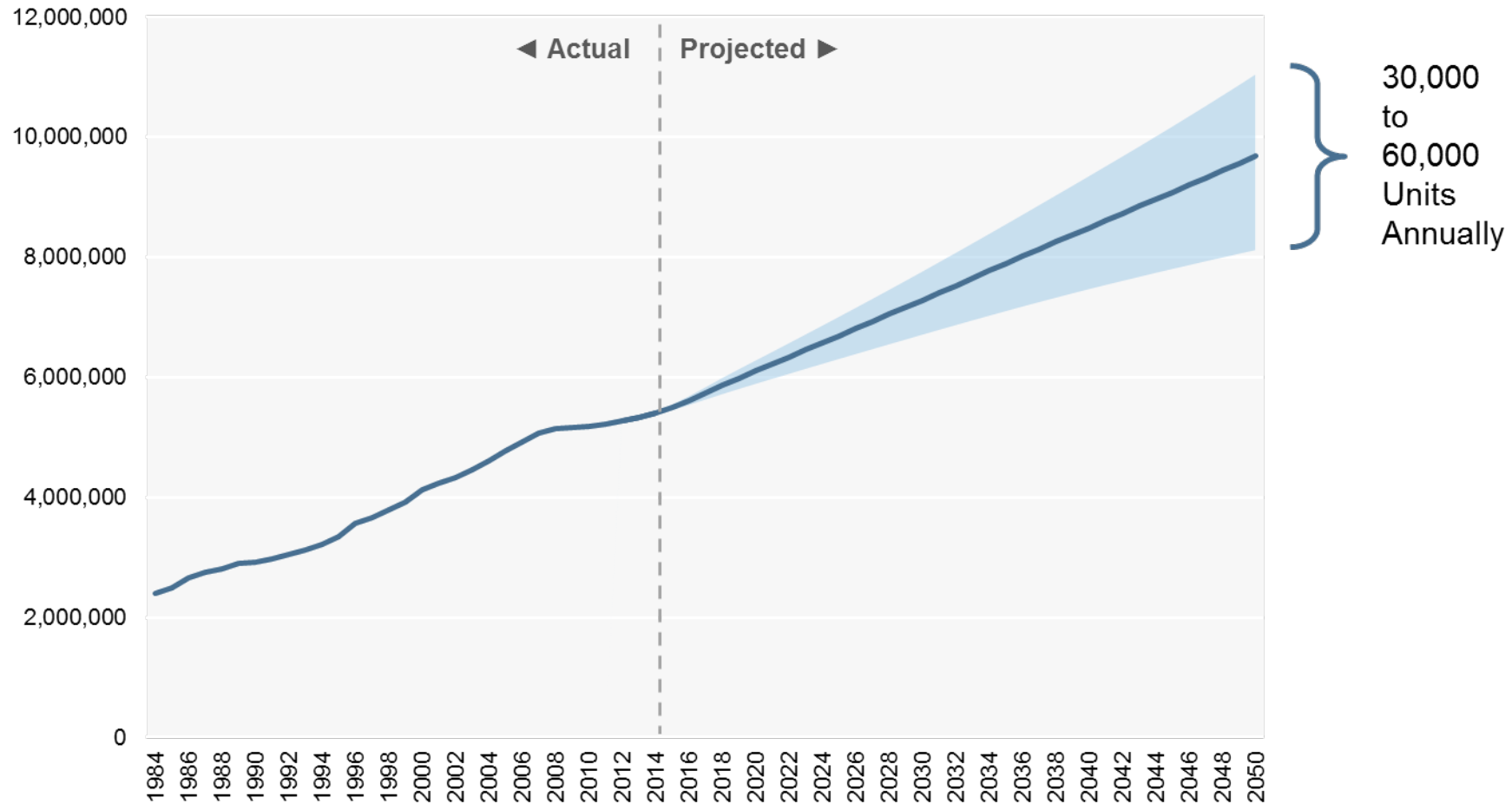
- Growth
- Shortage
- Climate
- Socioeconomics
- Sector Trends
- Policy Changes
- Behavioral Shifts
-



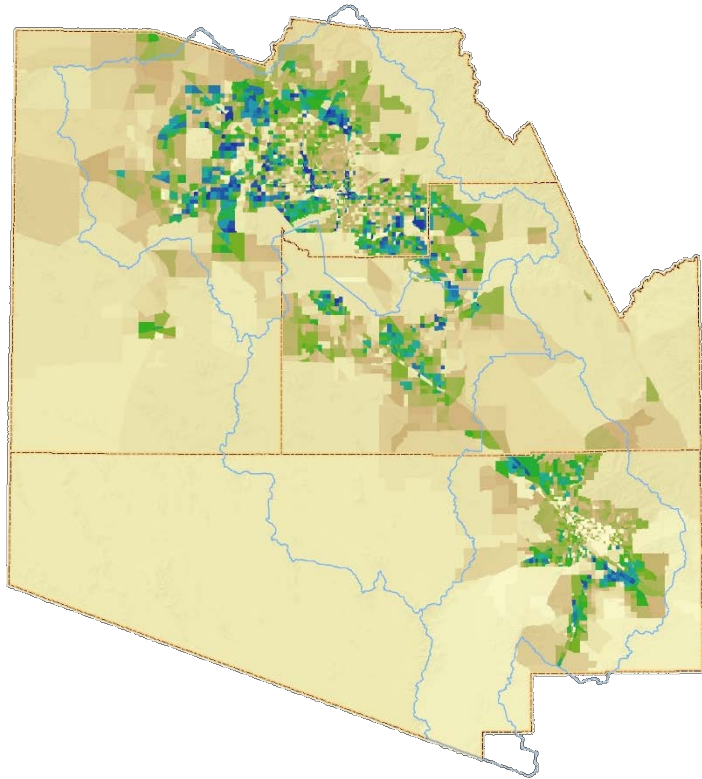
“Driving Forces”

Growth Rate

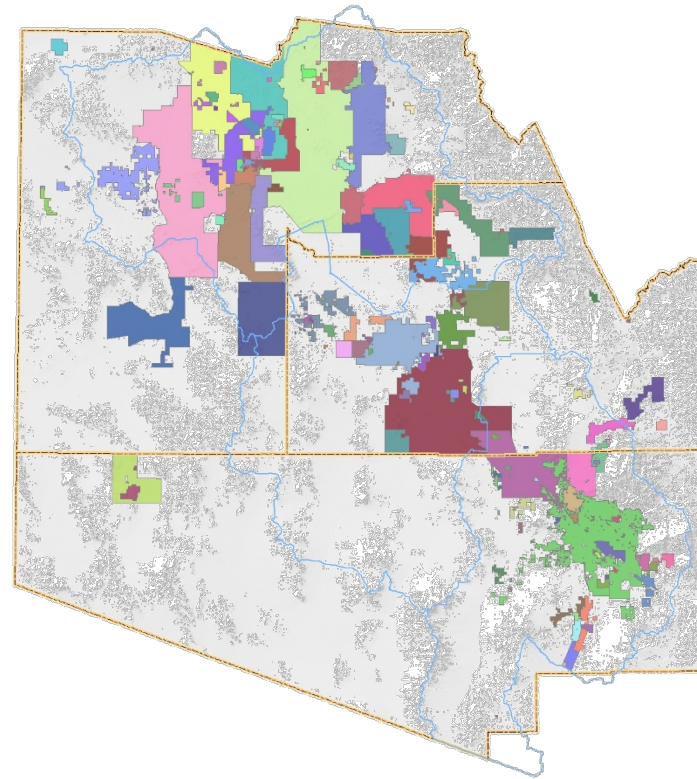
AZ Department of Administration (Low, Med, High Series)



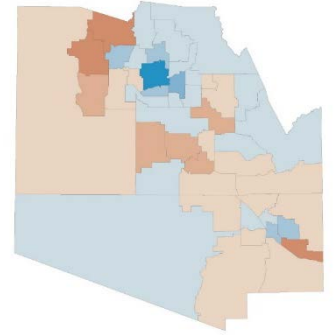
Growth Location



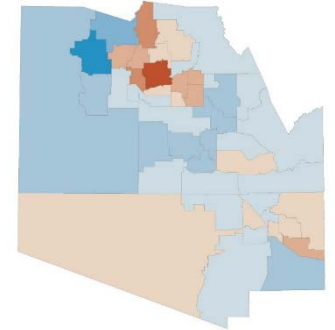
2040



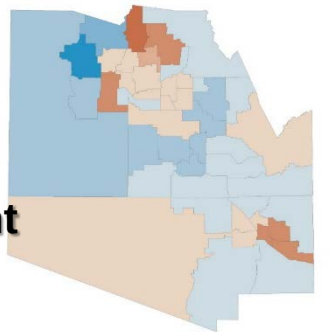
**Outward
Growth**



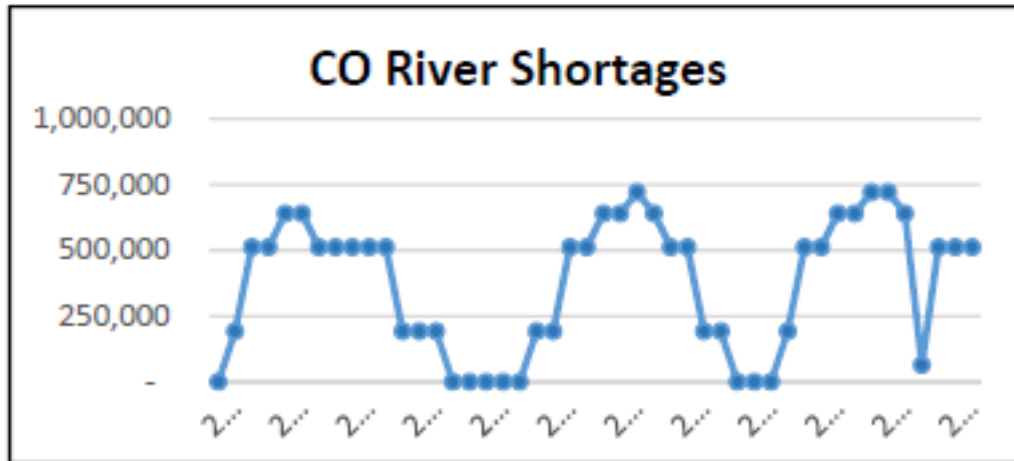
Infill



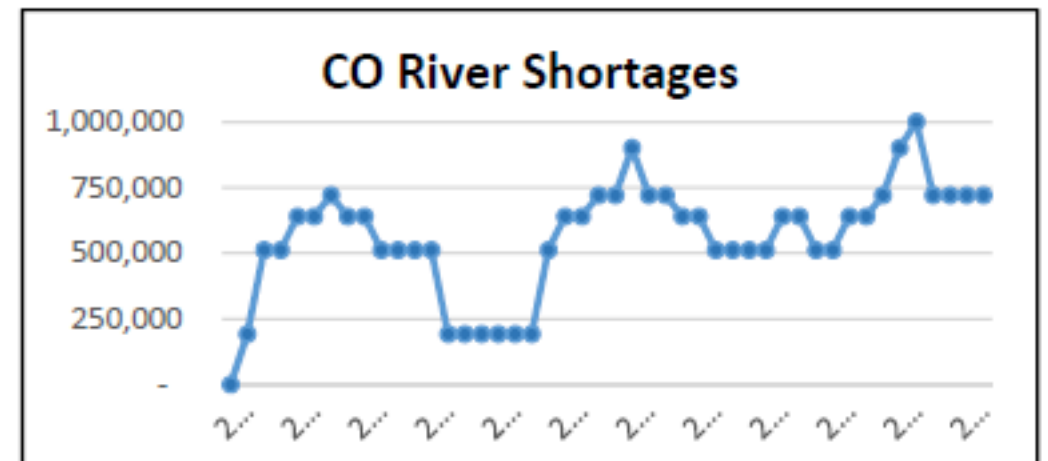
Redevelopment



Colorado River Shortages

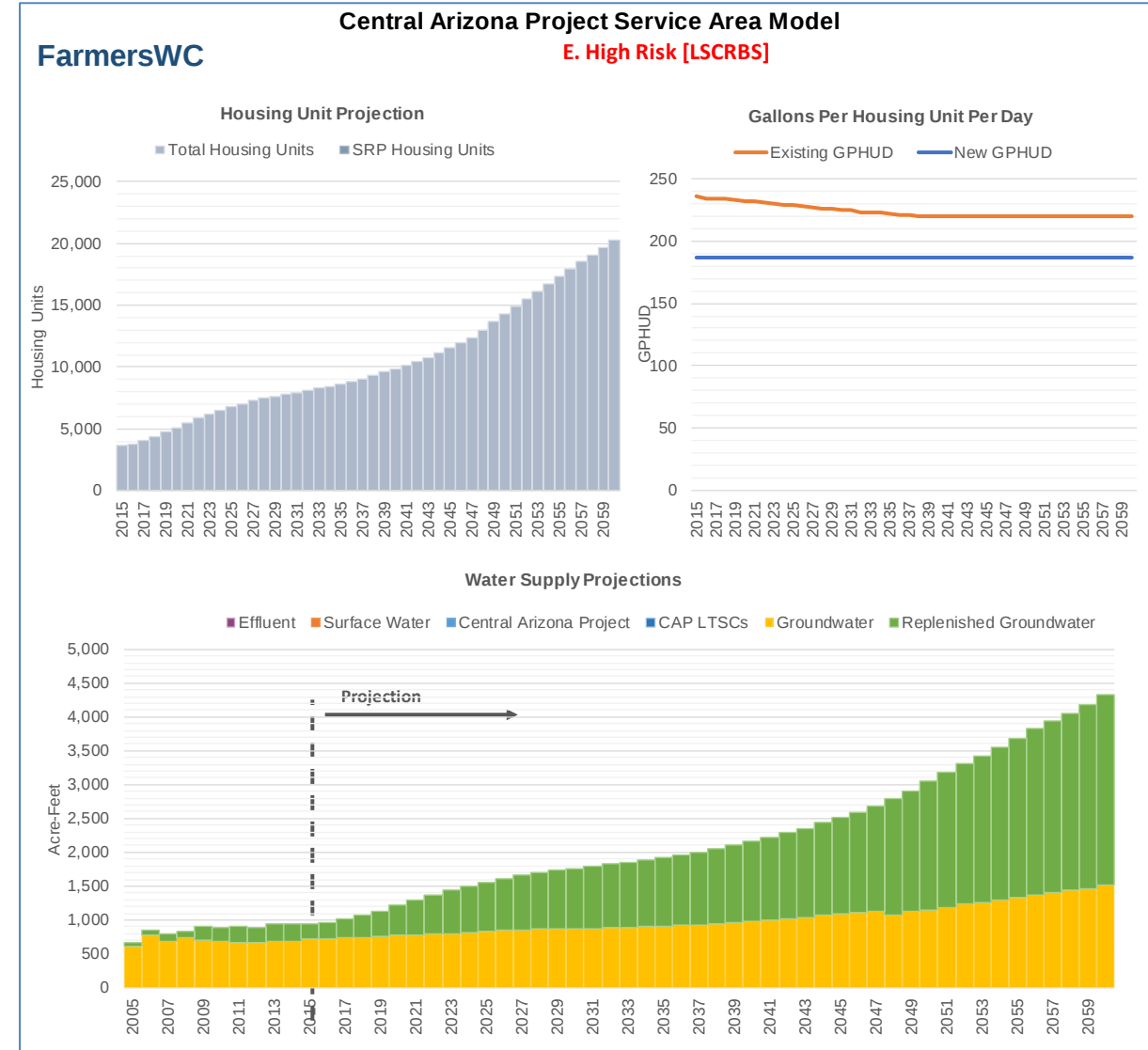
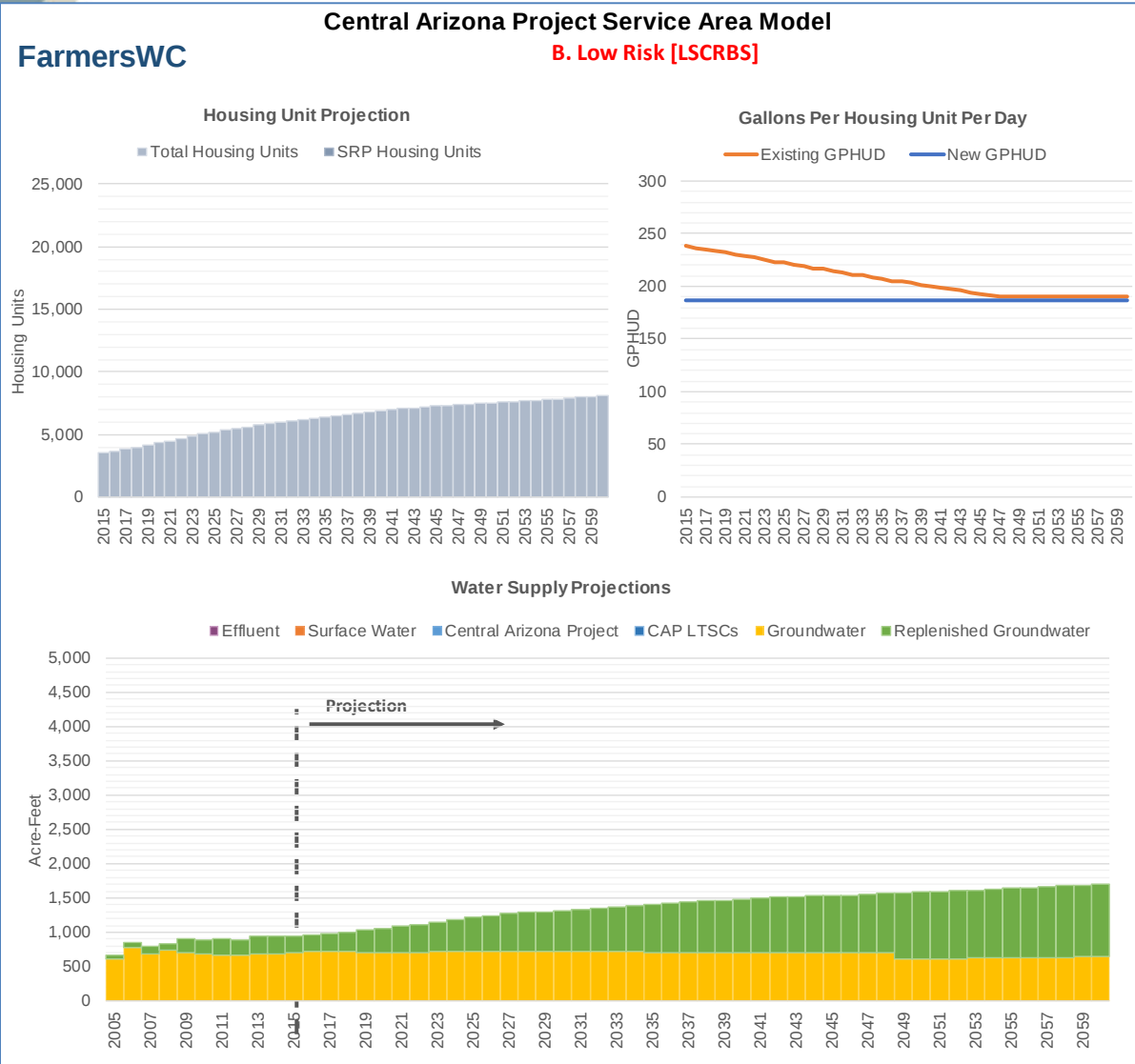


“Historic Climate”



“Dry Climate”

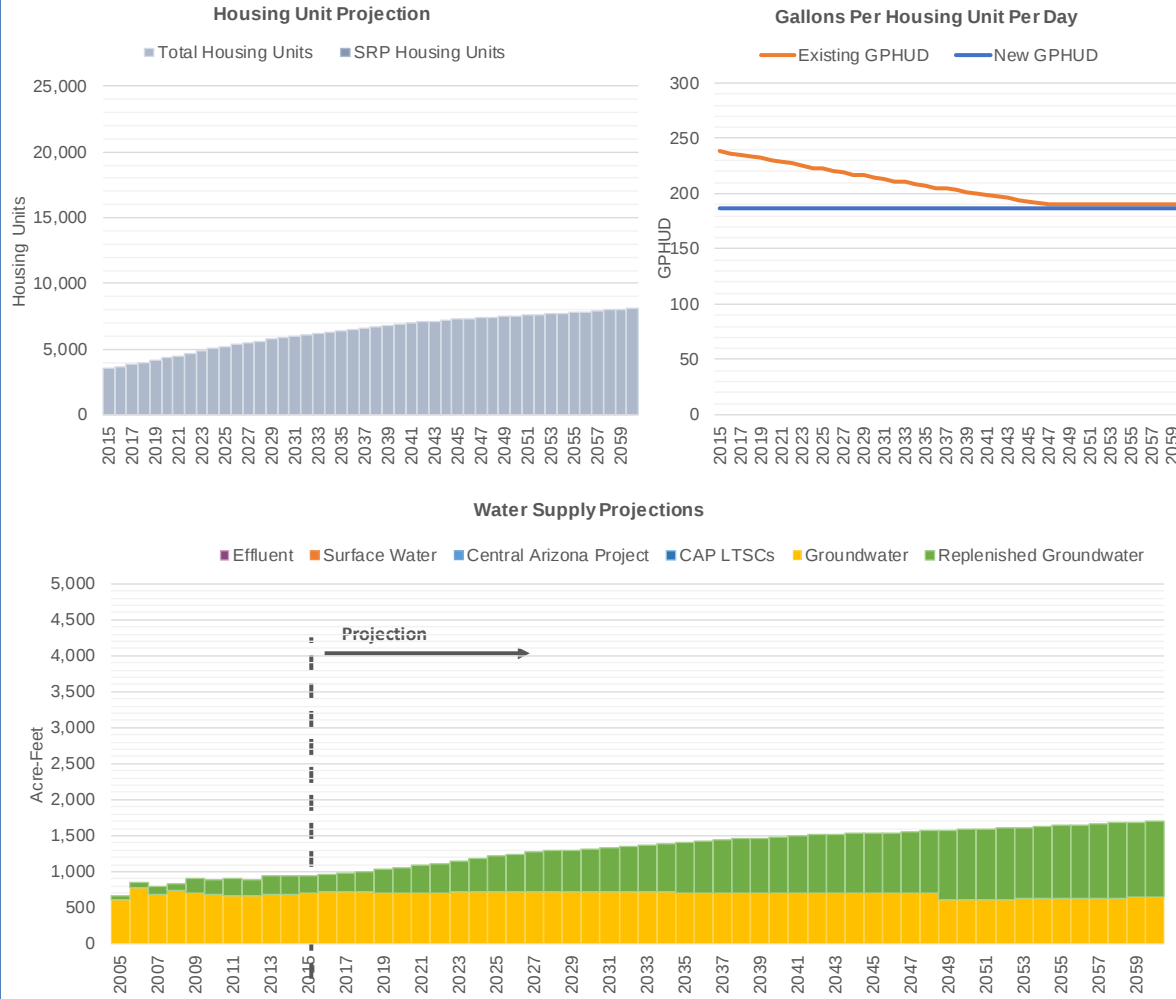
Draft Results for Farmers Water Company (FICO)



Draft Results for Lago Del Oro Water Company

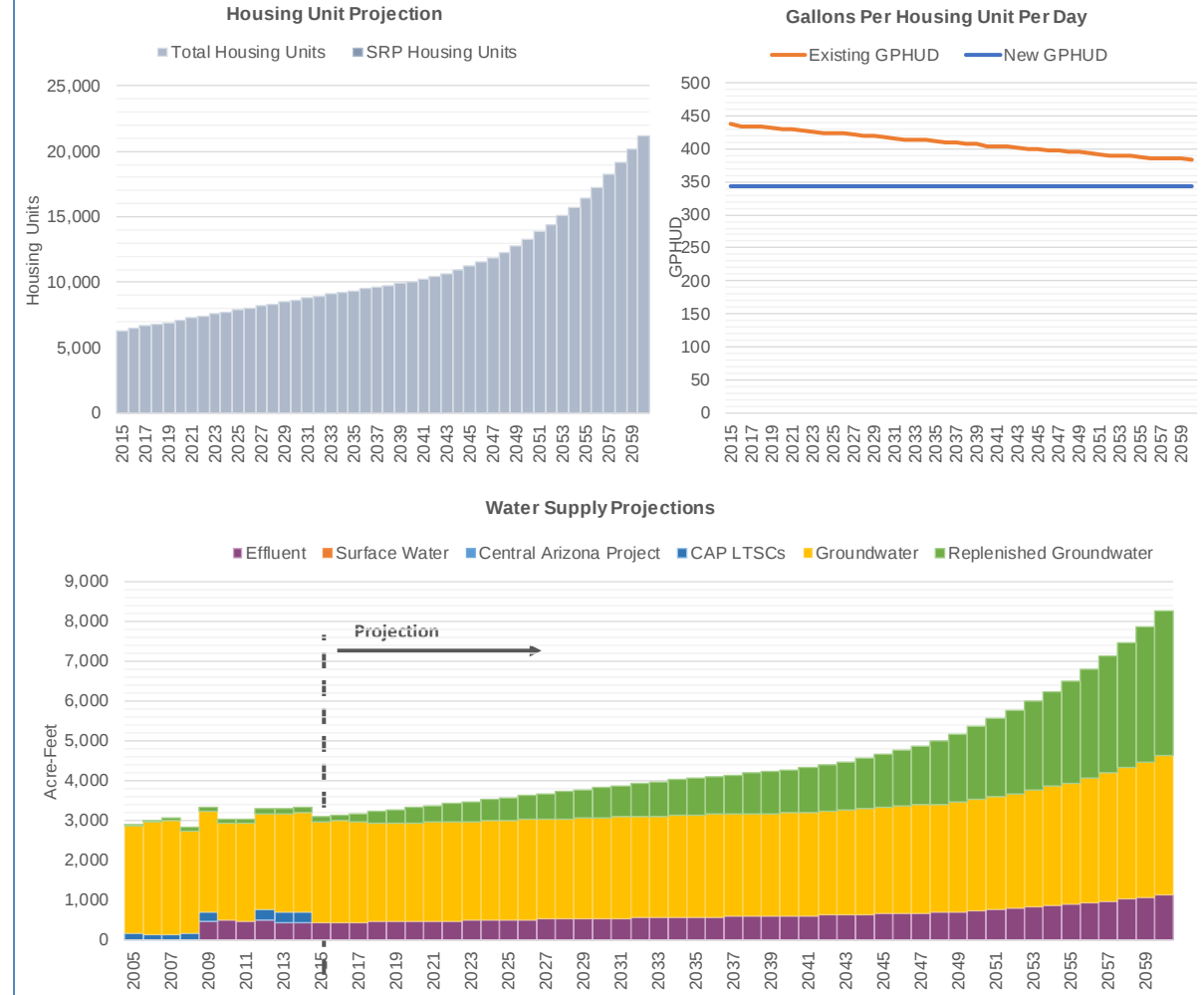
FarmersWC

Central Arizona Project Service Area Model B. Low Risk [LSCRB5]



LagoDelOro

Central Arizona Project Service Area Model E. High Risk [LSCRB5]

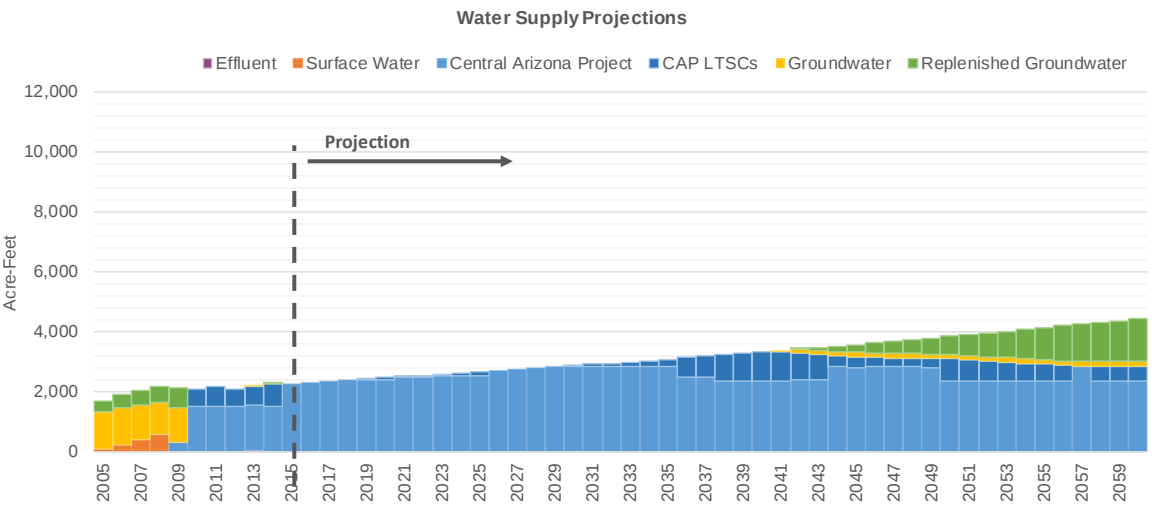
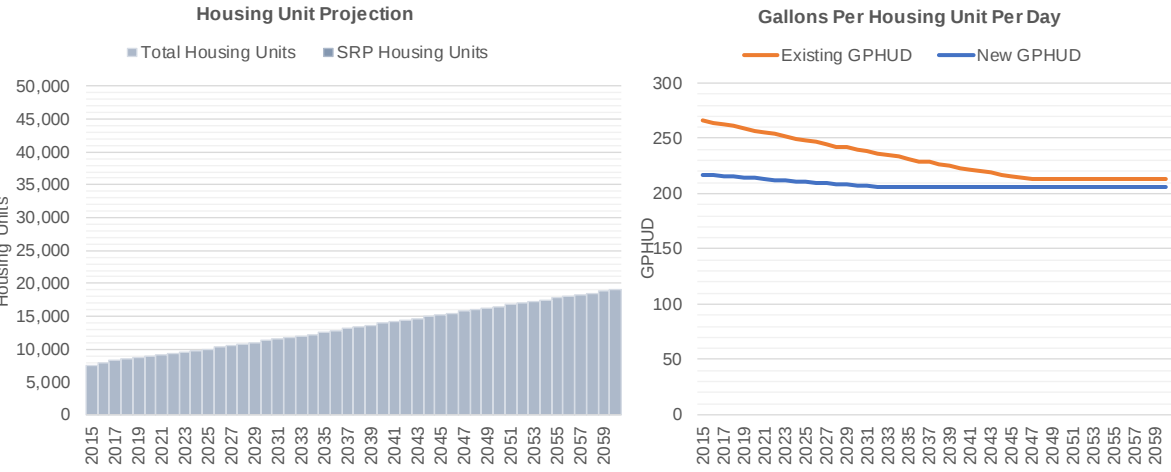


Draft Results for Marana Water

Marana

Central Arizona Project Service Area Model

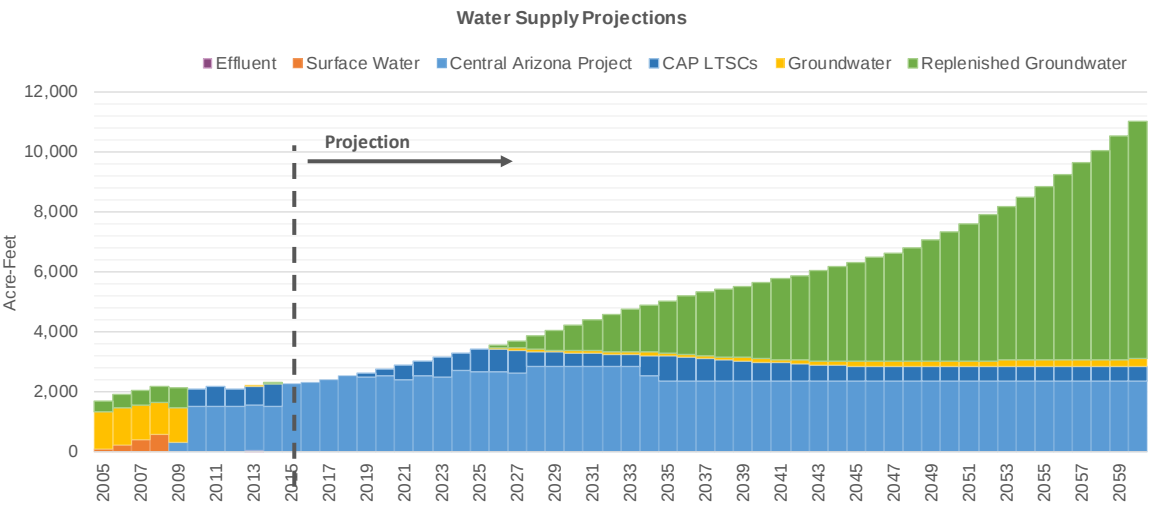
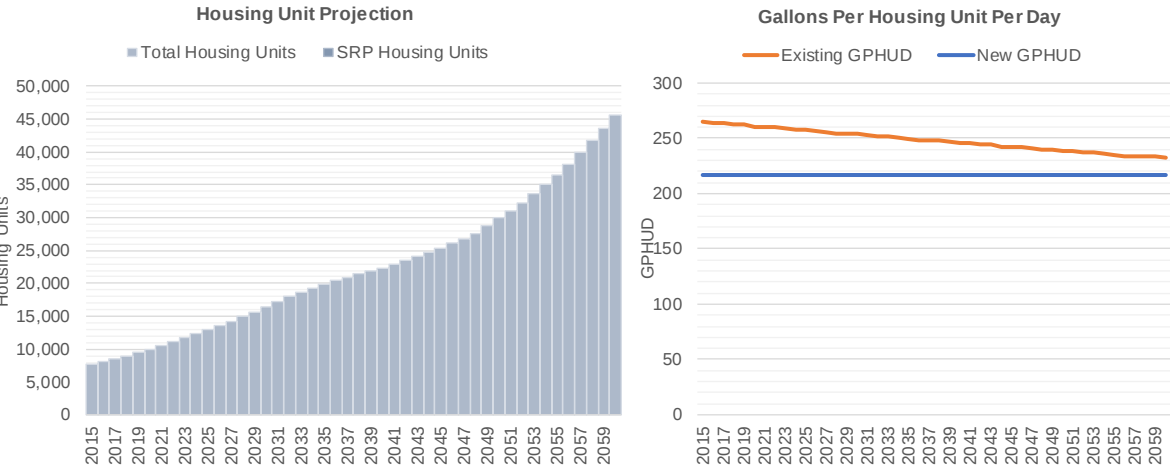
B. Low Risk [LSCRB5]



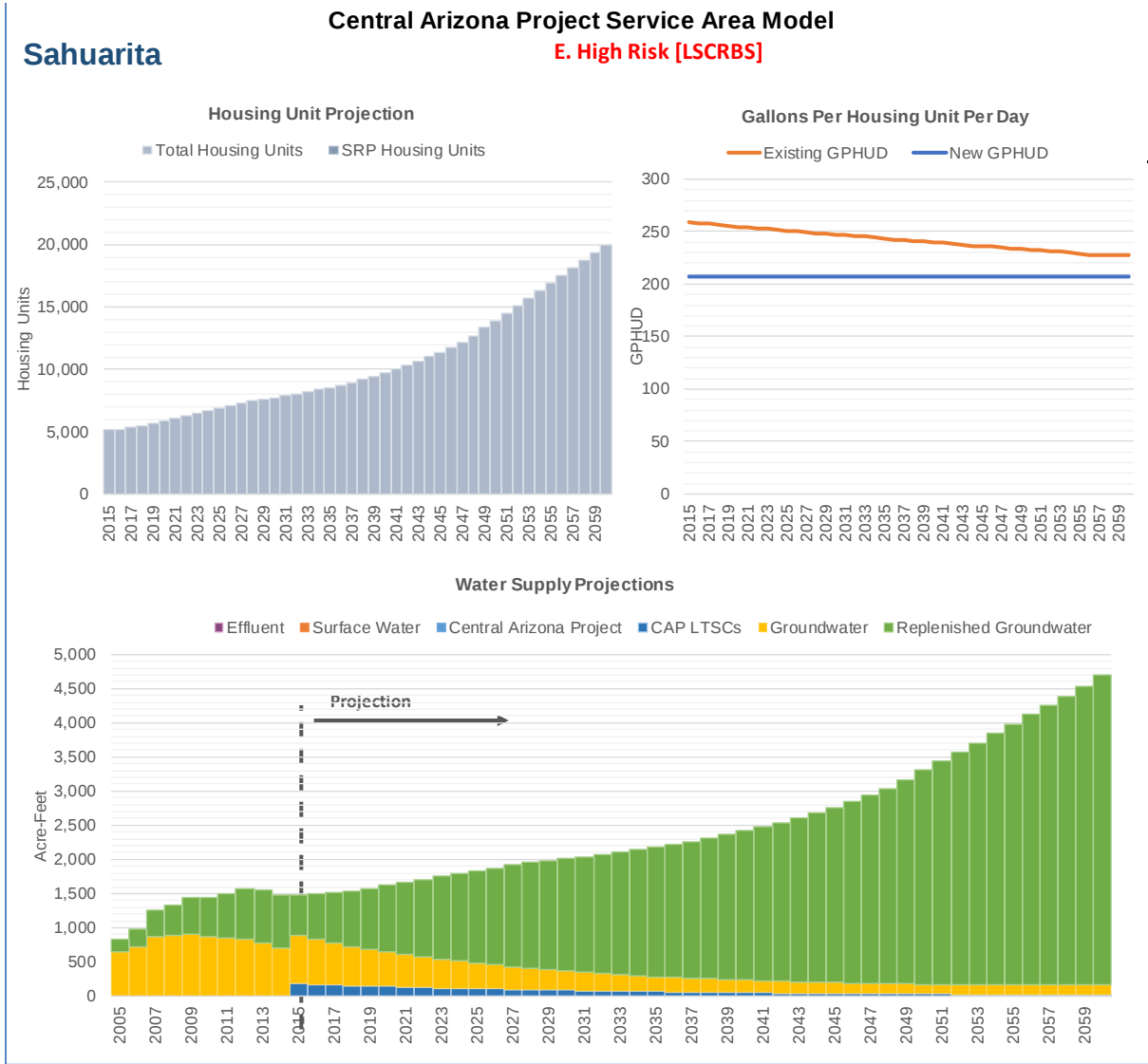
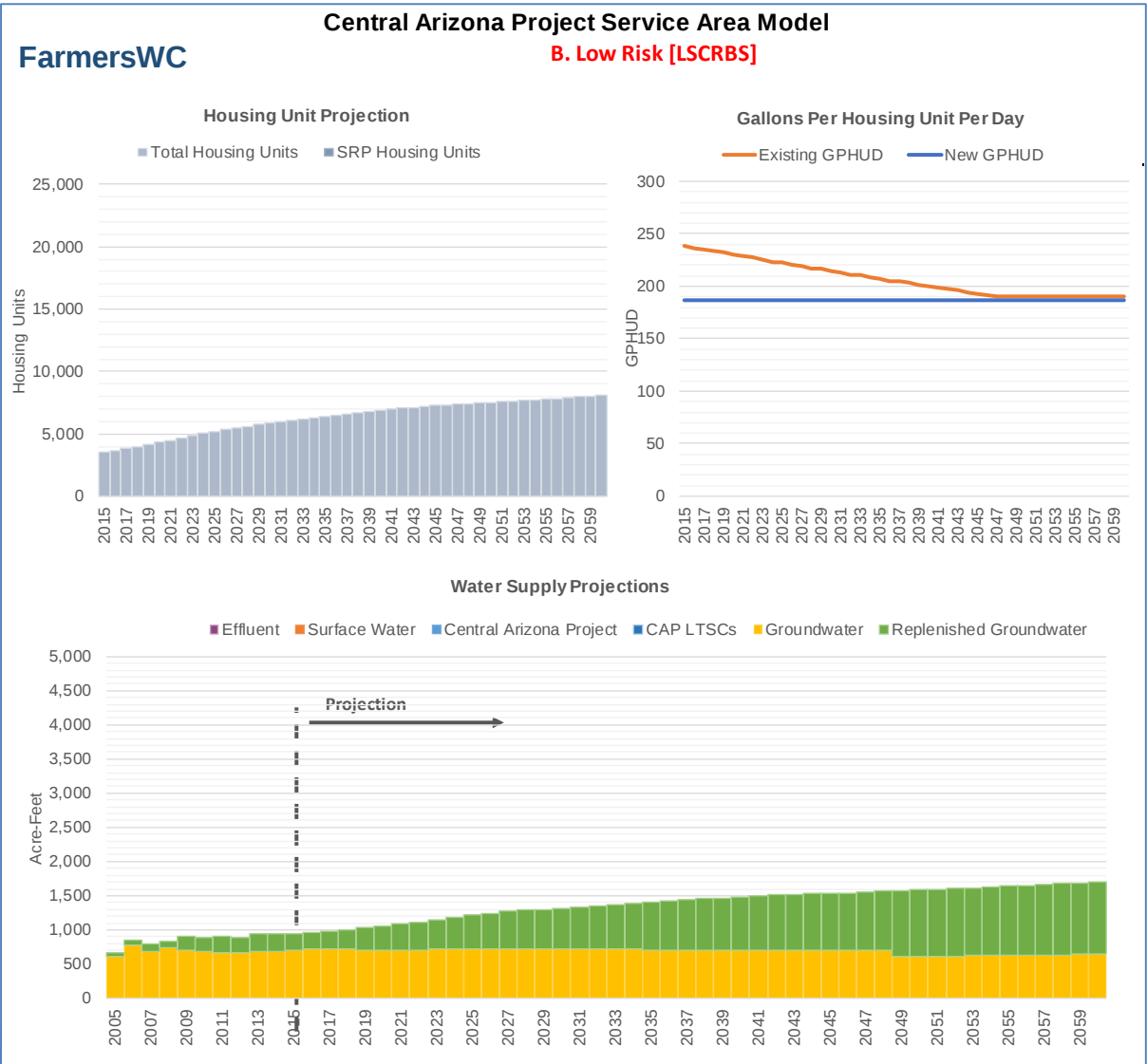
Marana

Central Arizona Project Service Area Model

E. High Risk [LSCRB5]



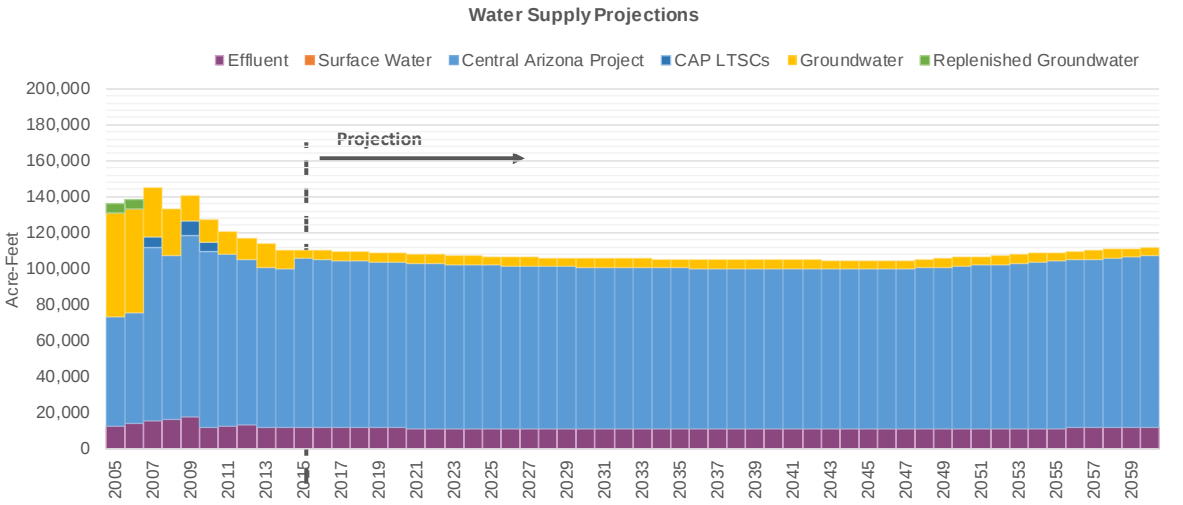
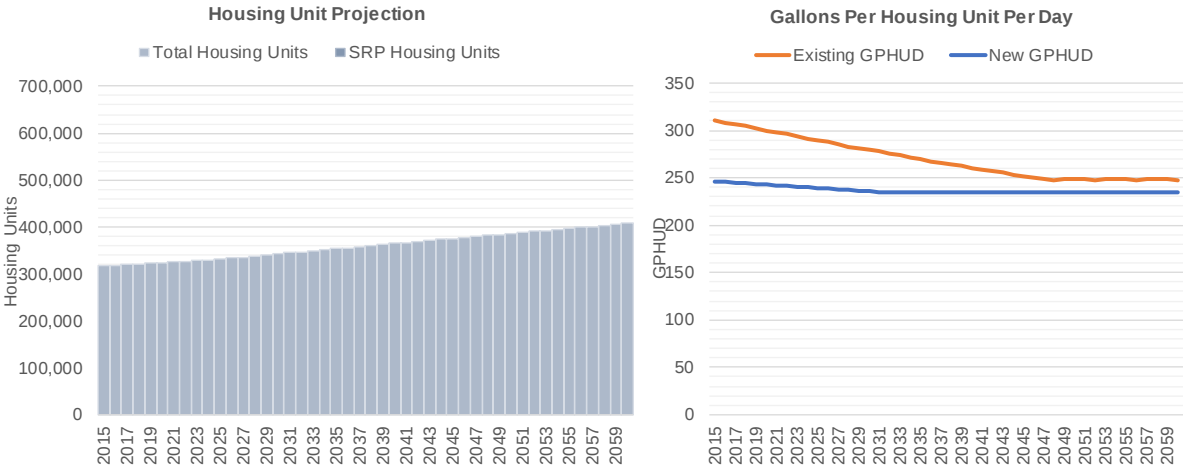
Comparison of FICO Low Risk Scenario and Sahuarita High Risk Scenario



Draft Results for Tucson Water

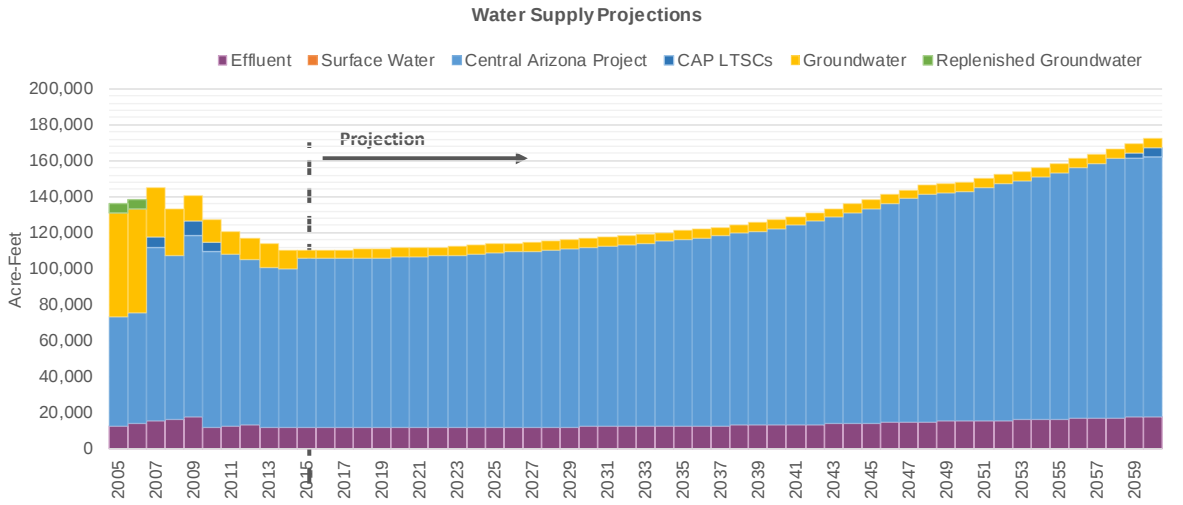
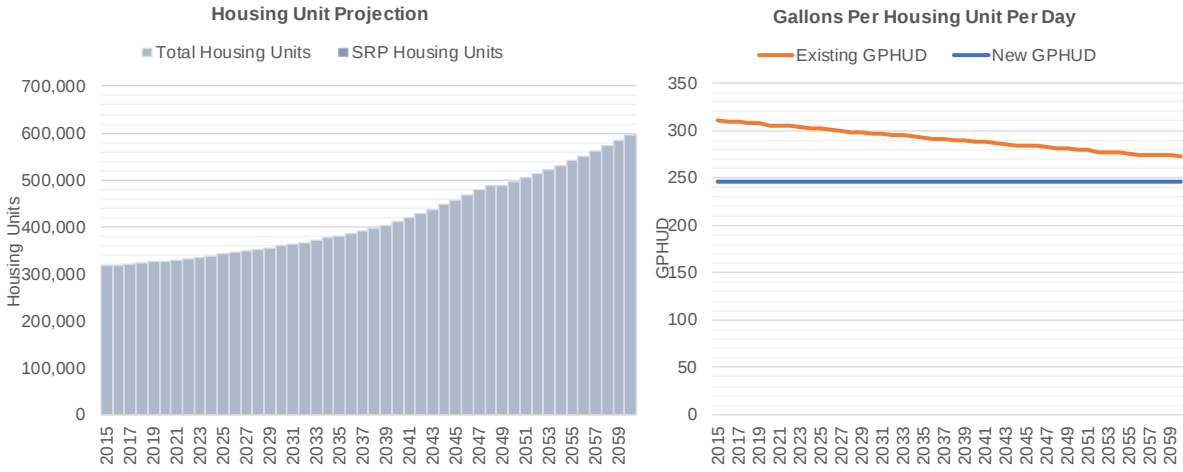
Tucson

Central Arizona Project Service Area Model
B. Low Risk [LSCRBS]



Tucson

Central Arizona Project Service Area Model
E. High Risk [LSCRBS]



Next Steps

- Refinement of housing unit assumptions
- Updating historic data
- Hand-off to pumping distribution file

