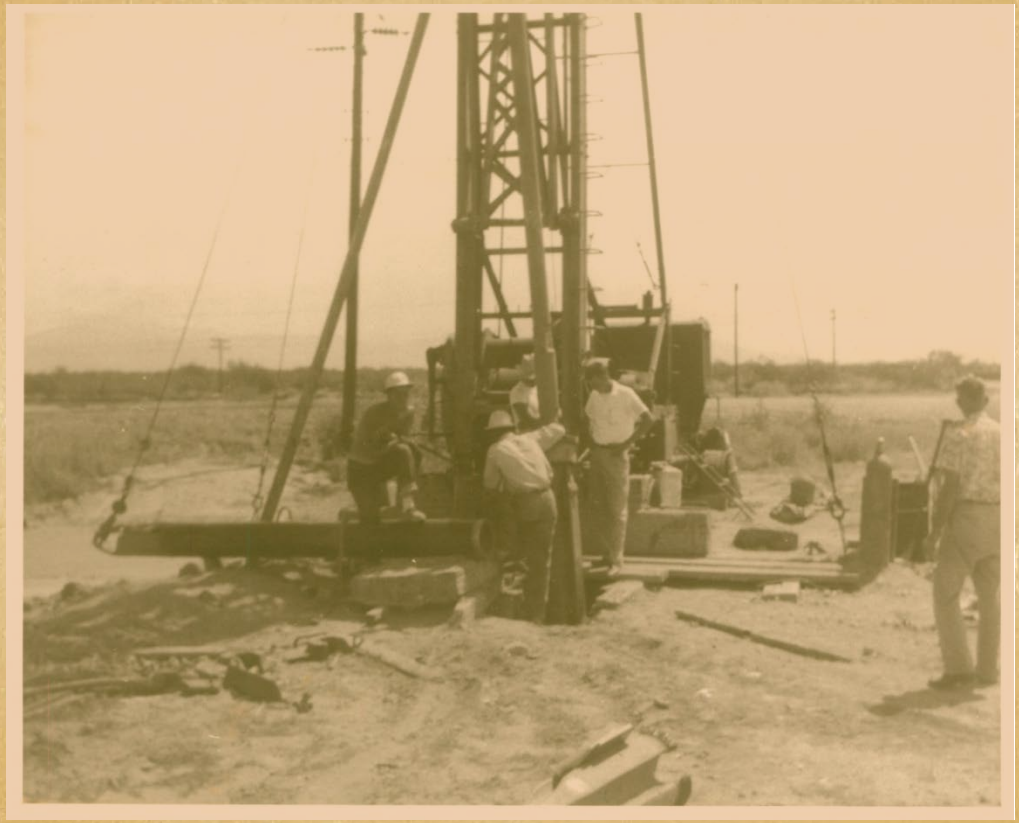
2012 Water Supply Overview



Presented by:
Peter Chipello – Lead Hydrologist
Matt Narter – Hydrologist

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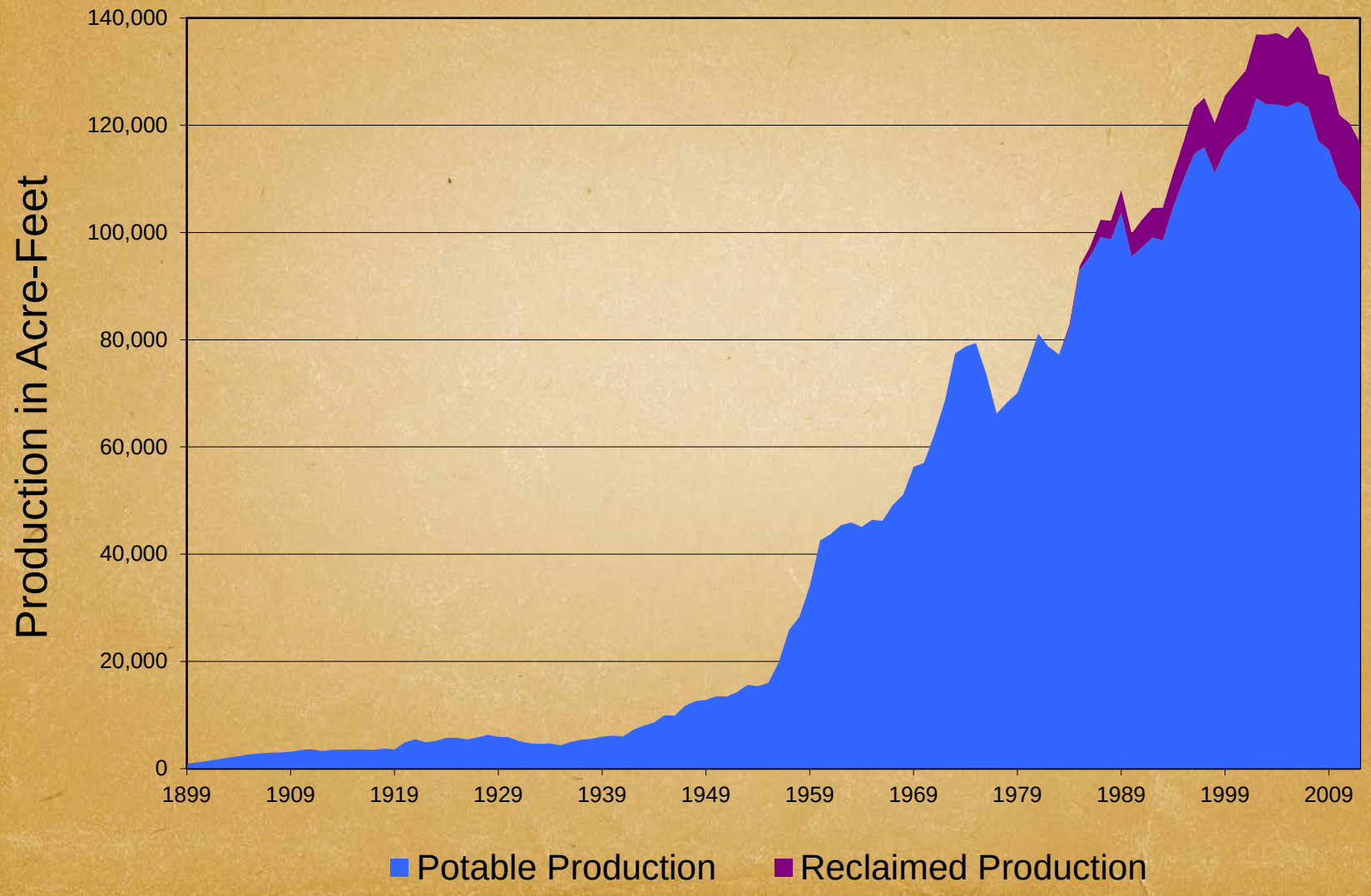
City of Tucson
Tucson Water
Planning and Engineering Division
Resources Planning Group

March 26, 2013

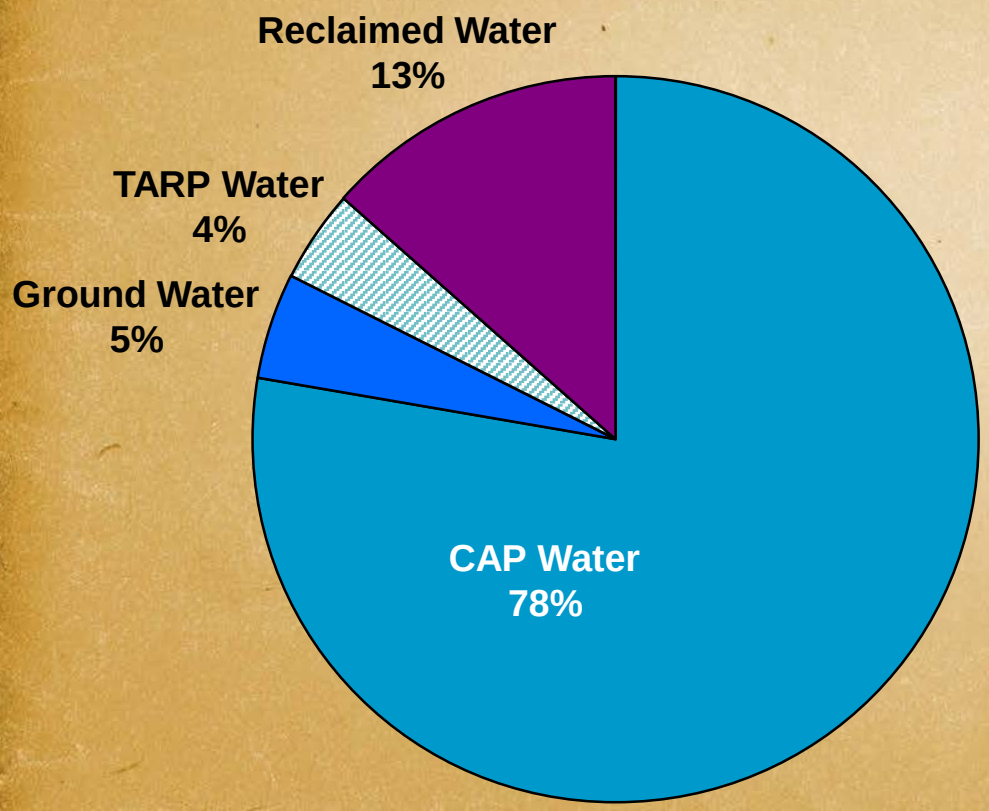
City of Tucson
Water Department
TUCSON WATER

Water Production for Tucson Water Service Area (1899-2012)

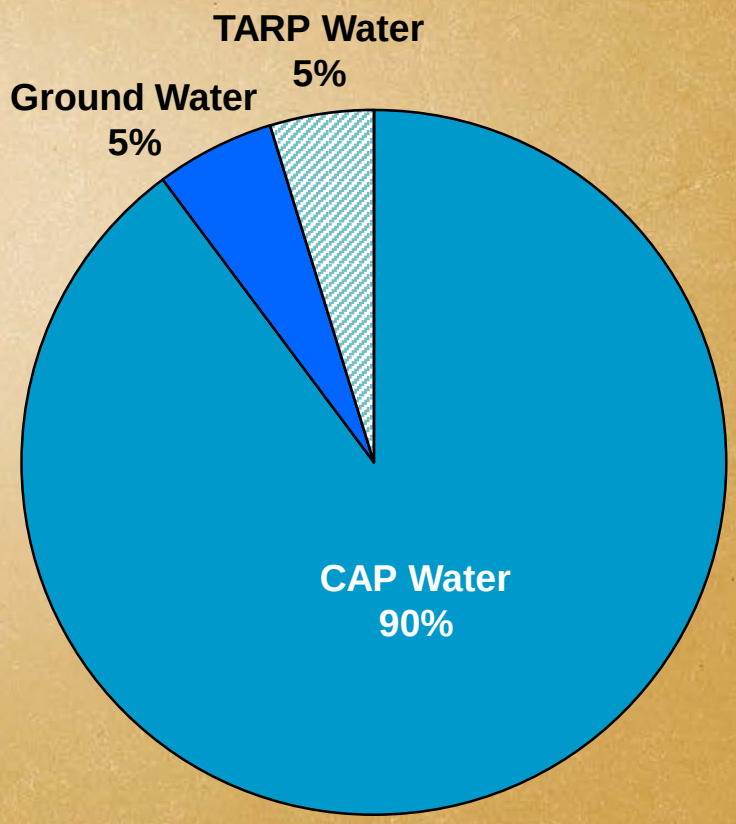


2012 Water Production by Type

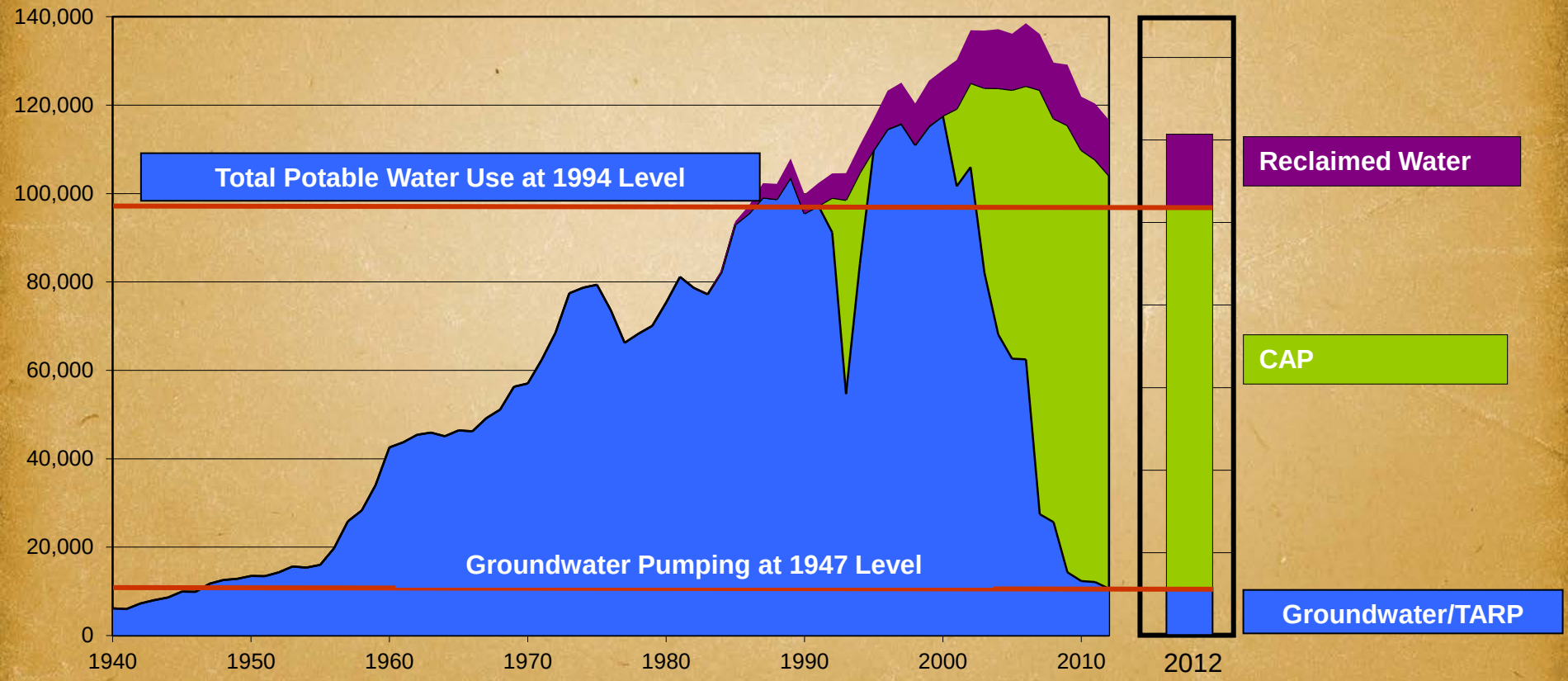
Total Water Production
116,630 AF



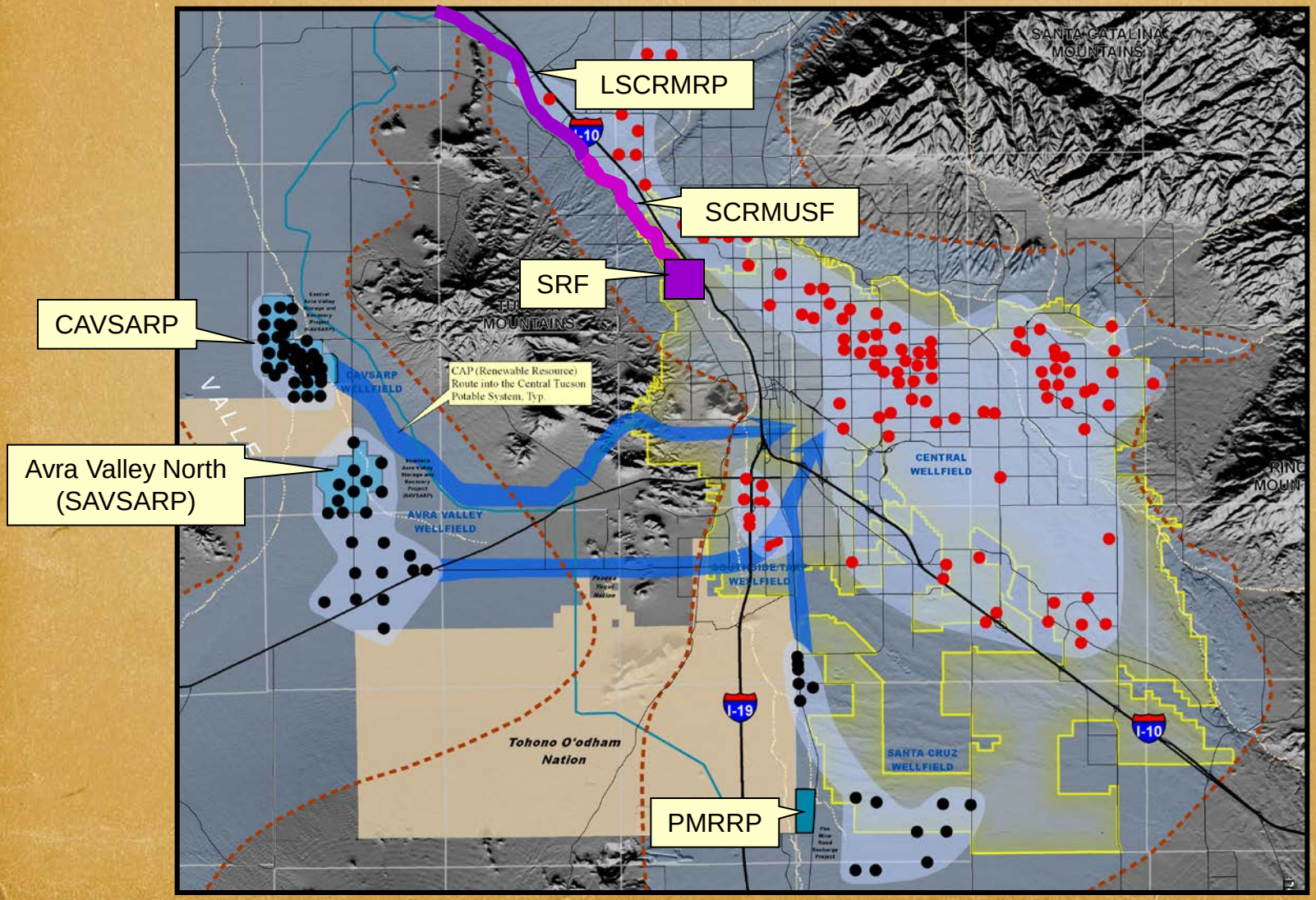
Potable Water Production
104,075 AF



Transition to Renewable Supplies (1940-2012)



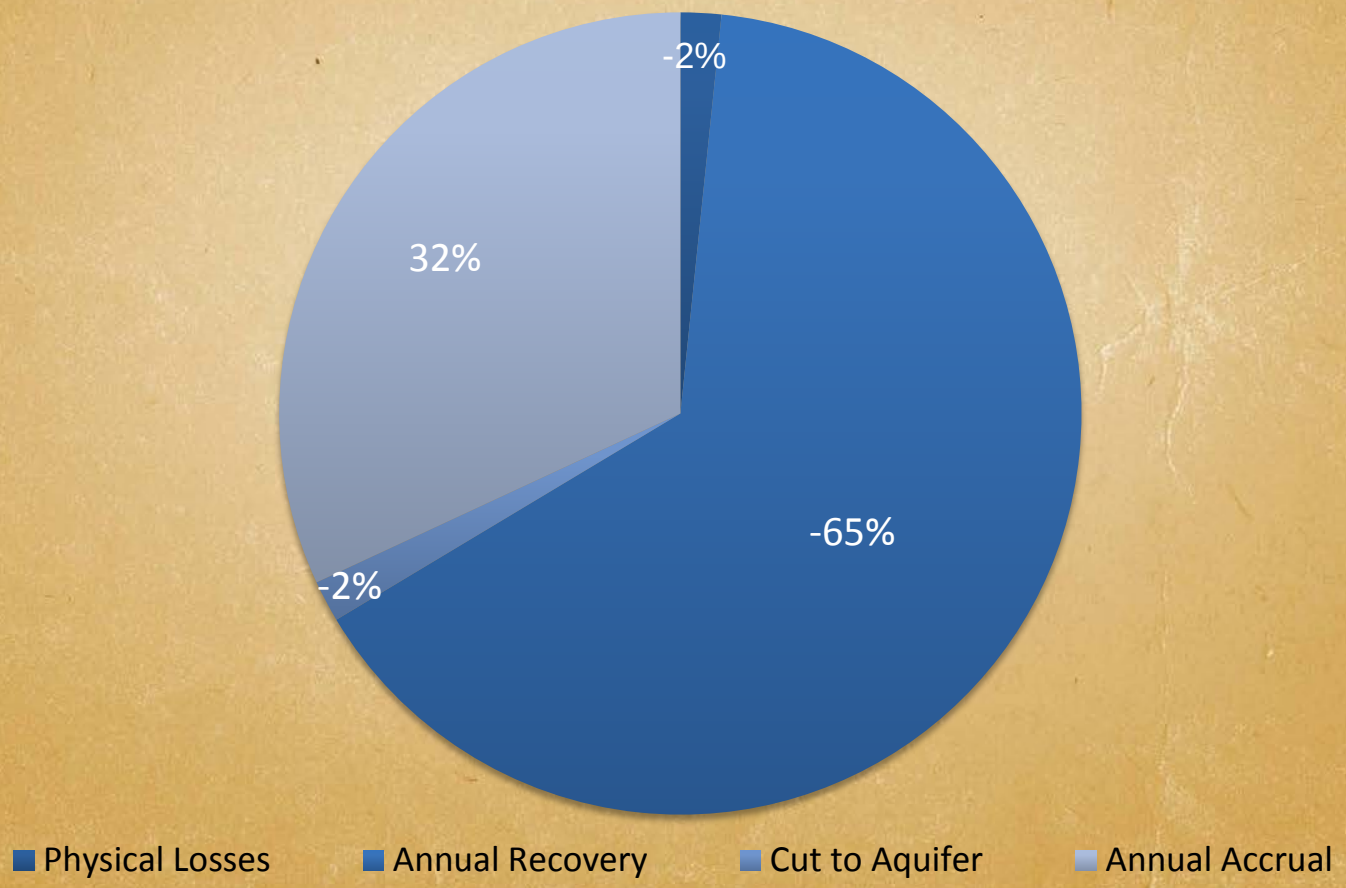
Recharge Projects



Annual Use of CAP in Storage Facilities

Total 2012 Delivery: **144,172 acre-feet*** (100% of annual entitlement)

Total Use of 2012 Delivery in Storage Facilities: 143,923 acre-feet (depicted in chart below)

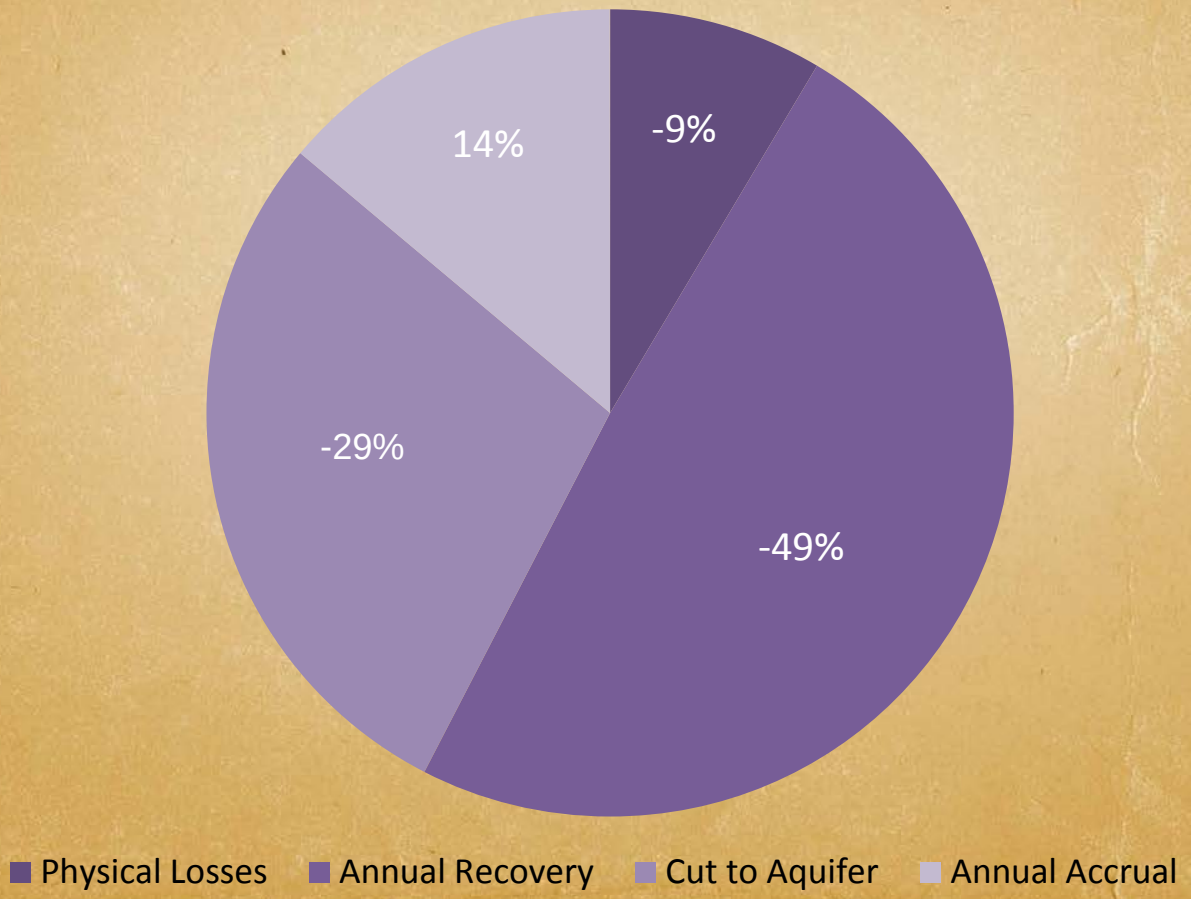


*Includes 249 acre-feet for direct use at HUWTP

Annual Use of Effluent In Storage Facilities

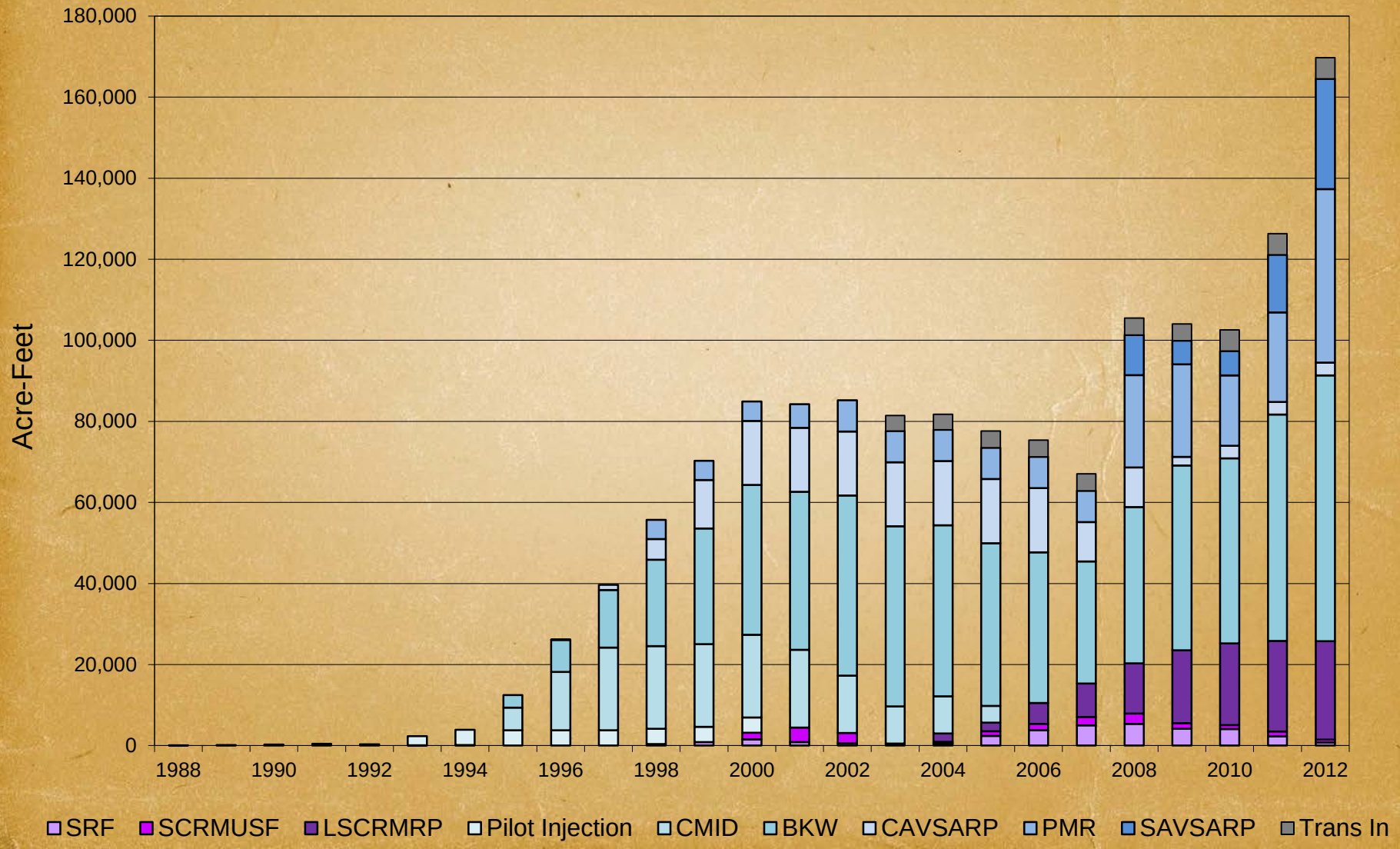
Total Use of Effluent Production in 2012: **21,353.43 acre-feet***

Total Use in Storage Facilities: 14,012.25 acre-feet (details depicted in chart below)

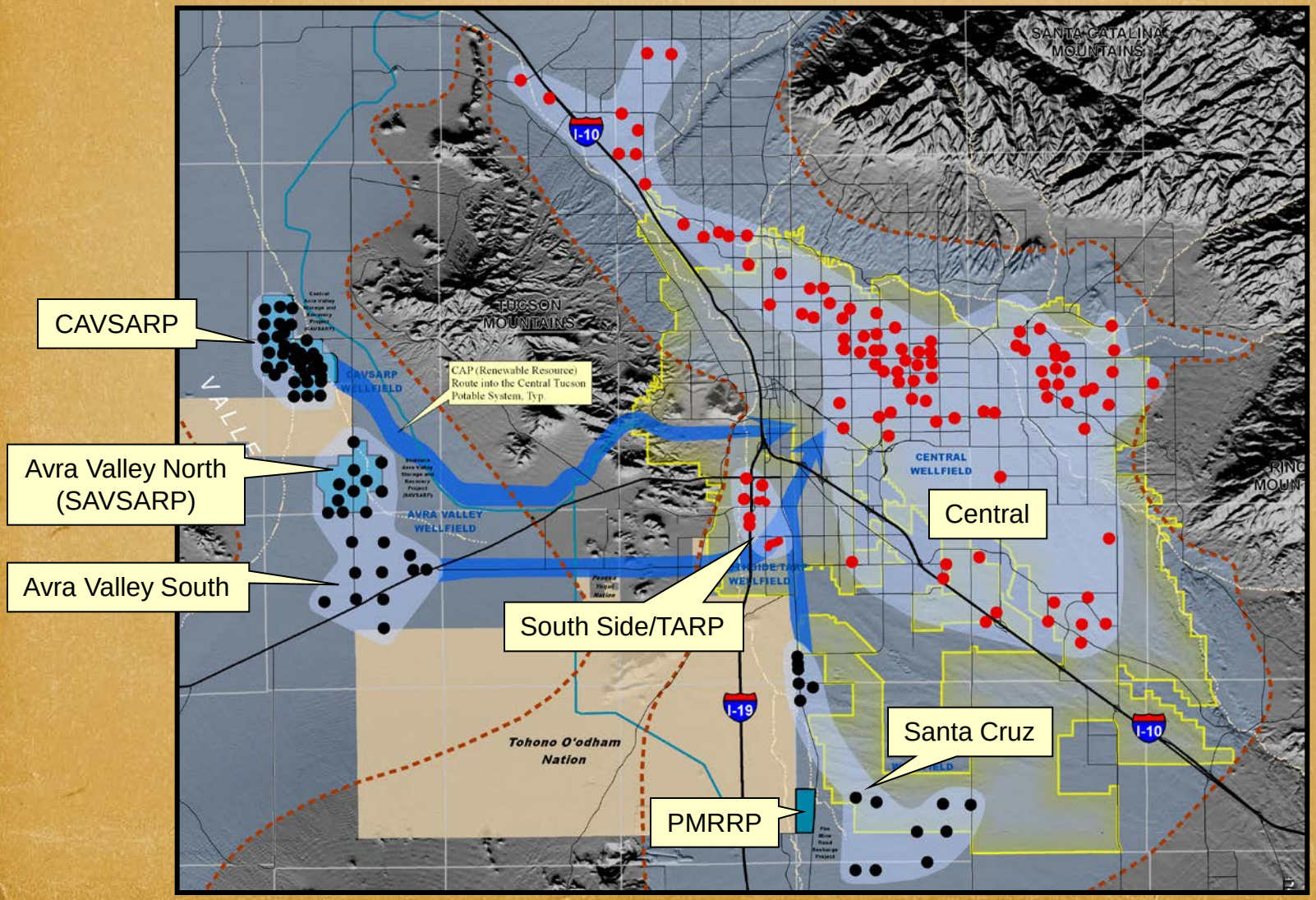


*Includes 7,341.18 acre-feet for direct use in the Reclaimed Water System and at Silverbell GC

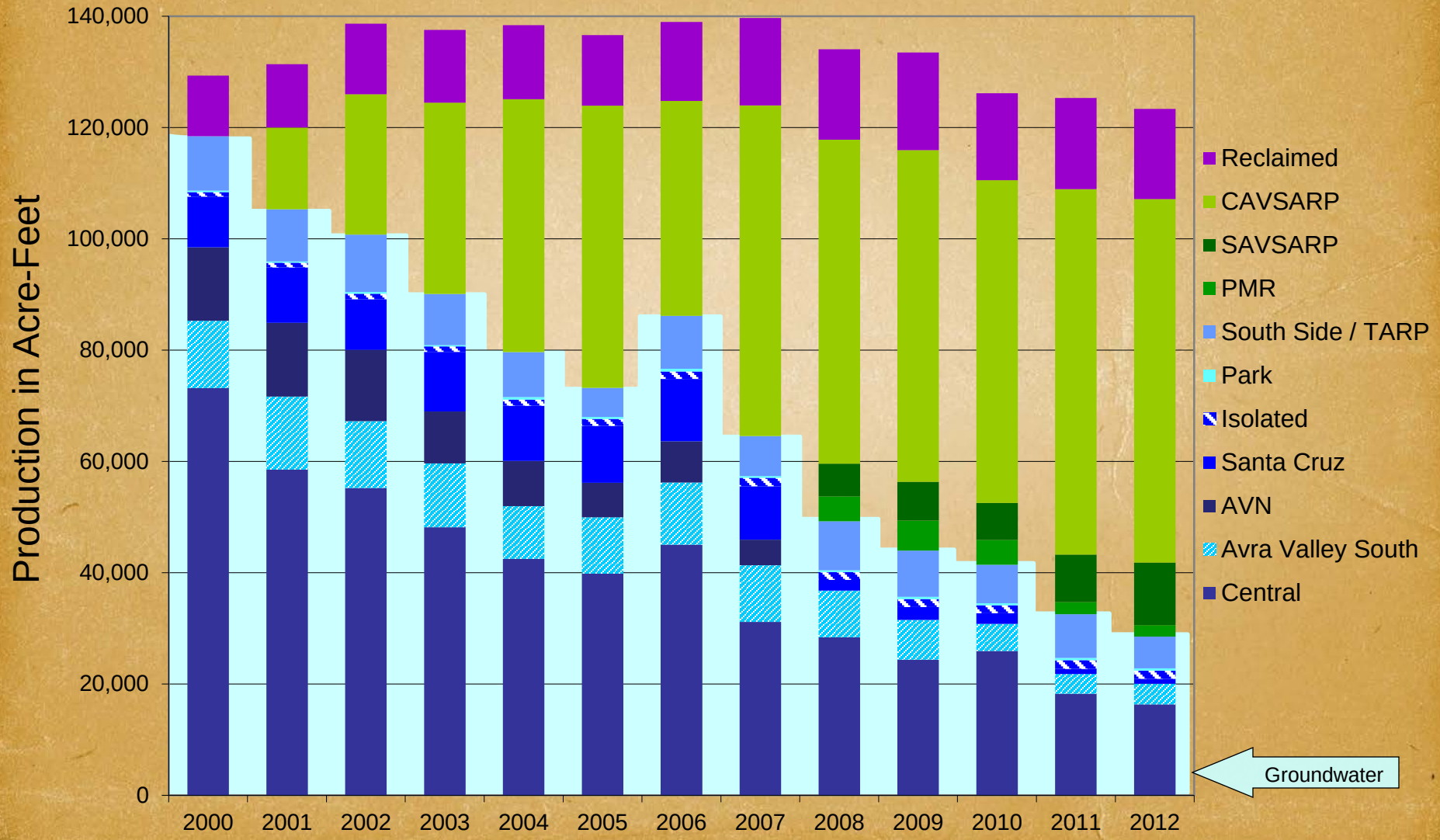
Long-Term Storage Credits



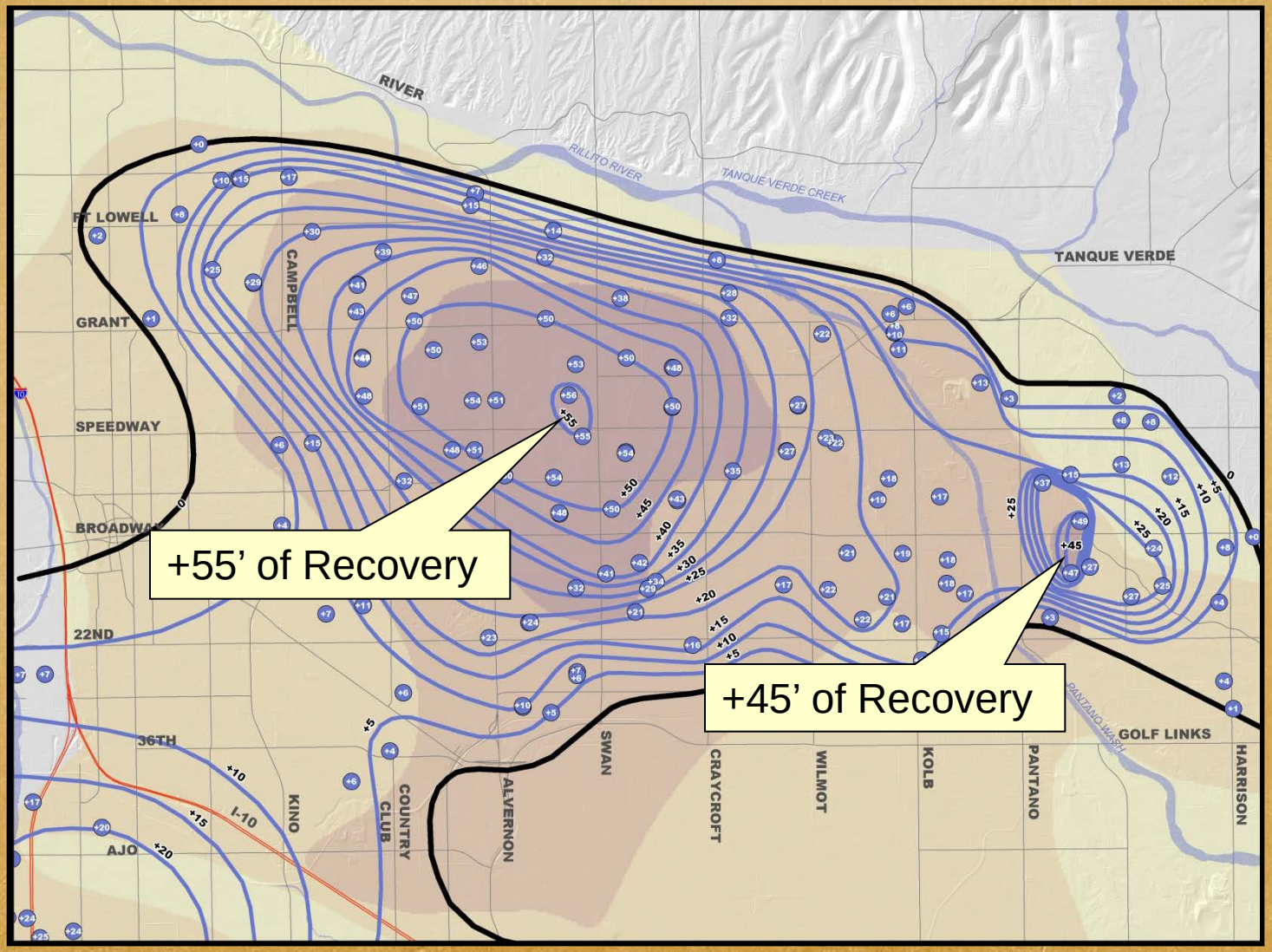
Wellfields and Production Wells



Production by Wellfield



Central Wellfield Groundwater Decline (1950-2000) & Recovery (2000-2012)



Lost and Unaccounted for Water

- L&U water consists of:
  - Real Losses (leaks, line breaks, theft)
  - Apparent Losses (measurement errors)
- $$\frac{L\&U\ Water}{Total\ Production} < 10\%$$
- 2012 L&U water = 9.4%

Five-year CIP Budget

Replace customer billing meters…….....$32.6 million

Replace production meters……..$1.3 million

Update SCADA system…….$18.4 million

Reservoir rehabilitation.……..$25.1 million

Replace water lines associated
with road projects…….……..$23.0 million

Replace leaking neighborhood mains...$15.1 million

TOTAL…….....$115.5 million