City of Stockton Water Utility

Presentation to the WateReuse CVSF Chapter
Water Resources in San Joaquin County

January 26, 2017
Stockton Water Service Areas

- Stockton Metropolitan Area served by
  - City of Stockton
    - North
    - South
    - Walnut Plant
  - California Water Service Company
    - Central
  - San Joaquin County
    - Lincoln Village
    - Colonial Heights
Historically, Stockton water supplies have come from two sources:
- Groundwater
- Surface Water
  - Purchased from Stockton East Water District

Stockton East Water District (SEWD)
- Approximately 50,000 acre-feet per year
  - 38% to City of Stockton
  - 57% to Cal Water
  - 5% to County (Lincoln Village and Colonial Heights)
New Water Supply

* Delta Water Right (2006)
  * Up to 33,600 acre-feet/year
  * Based on wastewater discharge
  * Environmental permits dictate pumping restrictions

* Woodbridge Irrigation District
  * 6,500 acre-feet/year
  * 40-Year Agreement
  * Mokelumne River source
  * Option for additional supply
In-Lieu Conjunctive Use describes a coordinated balance of surface water and groundwater supplied to meet a given demand.

When surface water is abundant, maximize it to its fullest extent.

When surface water is unavailable, groundwater that has been able to be recovered naturally while demand was being met with surface supply is then available to meet demand.
Stockton Metropolitan Area
Groundwater and Surface Water Use

<1977

100%

1977-2012

60%
40%

2012-Now

89%
11%

Groundwater
Surface Water
Delta Water Supply Project

* Project Elements
  * 30 MGD Water Treatment Plant
    * Dedicated May 30, 2012
  * Intake and Pump Station on San Joaquin River
  * Mokelumne River water supply in Spring during endangered species protection period
The City’s ability to divert from the San Joaquin was granted through the water rights permitting process.

Stockton’s water right is founded in Water Code Section 1485 that states that if treated wastewater is discharged to the San Joaquin River, then a like amount can be diverted downstream from that discharge point.

Stockton’s One-for-One Recycling Project

- Unique example of indirect potable re-use
Stockton’s General Plan

* Stockton has set as policy to limit groundwater use to 2/3 of the sustainable yield of the basin (2035 General Plan Policy PFS 2.11)
  * 0.60 acre-feet/acre/year
* This has become our management tool to determine when we need to develop additional surface water supply
Drought Effects

* Stockton has seen a 28% reduction in per capita use in the last 3 years
* Overall demand is at 2001 level
* Drought (or adjusted consumer habits) will extend the current available surface water treatment capacity
* Working with our partners to find new in-lieu water supply opportunities
Stockton has been a regional leader in groundwater management for nearly four decades

- Large investments locally in conjunctive use projects
- Groundwater levels under the City have recovered in excess of 30 feet in some areas
- Planning policies will prevent an overuse of groundwater supply in the future
- Our efforts to protect groundwater could be seen as a model for the intent of the new groundwater legislation
Questions?