Storage Management Considerations

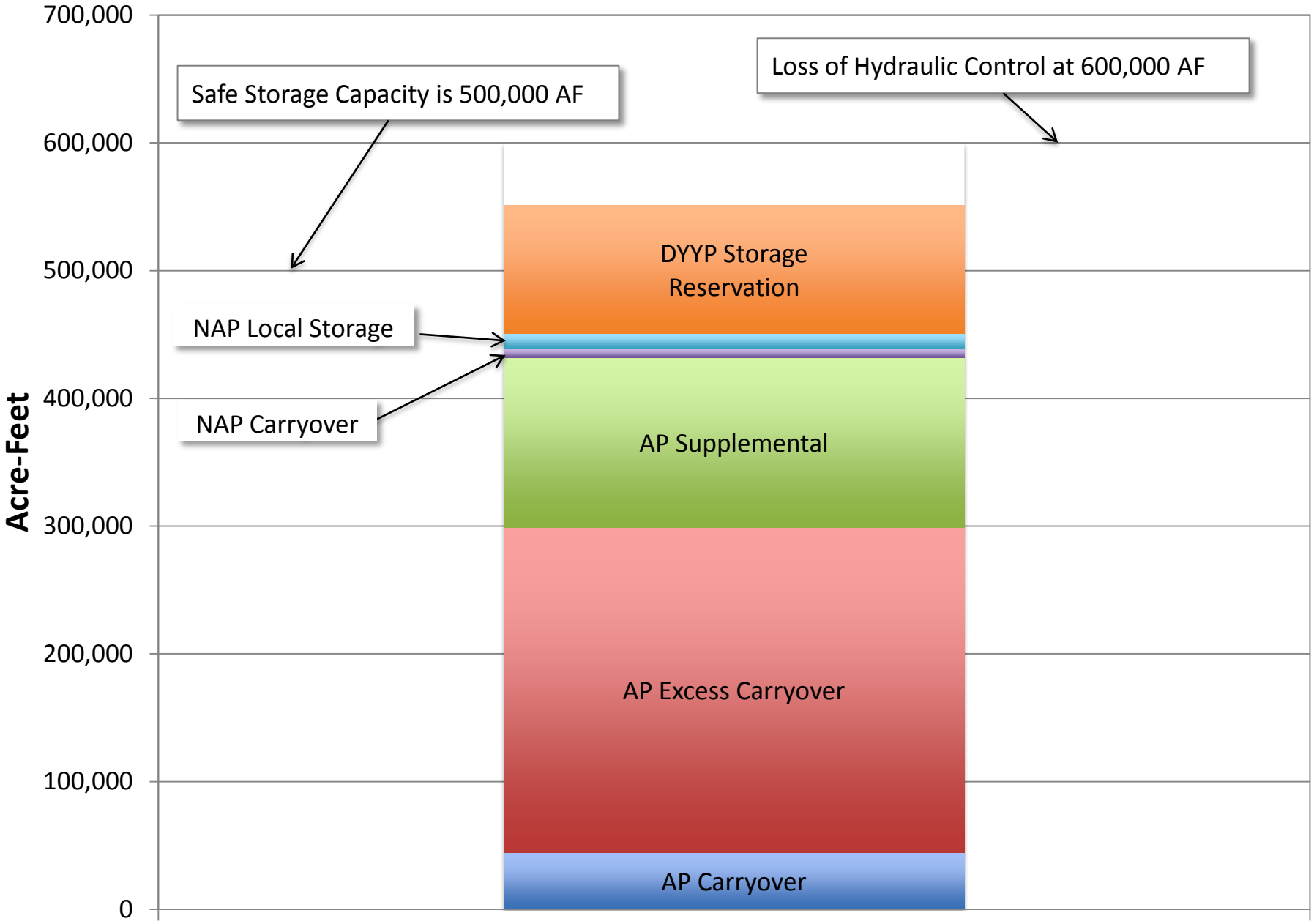
- Usable storage space is finite
- Recharge capacity is finite
- Water quality impacts
- Net recharge and Safe Yield
- Hydraulic control
- Subsidence management
- Adaptive management

Safe Storage

"Safe Storage Capacity - The safe storage capacity is the difference between safe storage and operational storage requirement and is the storage that can be safely used by Producers and Watermaster for storage programs. Based on the above, the safe storage capacity is about 500,000 acre-ft including water in the existing storage accounts. The allocation and use of storage in excess of safe storage will preemptively require mitigation, that is, mitigation must be defined and resources committed to mitigation prior to allocation and use." (OBMP Implementation Plan, p. 38.)

Safe Storage

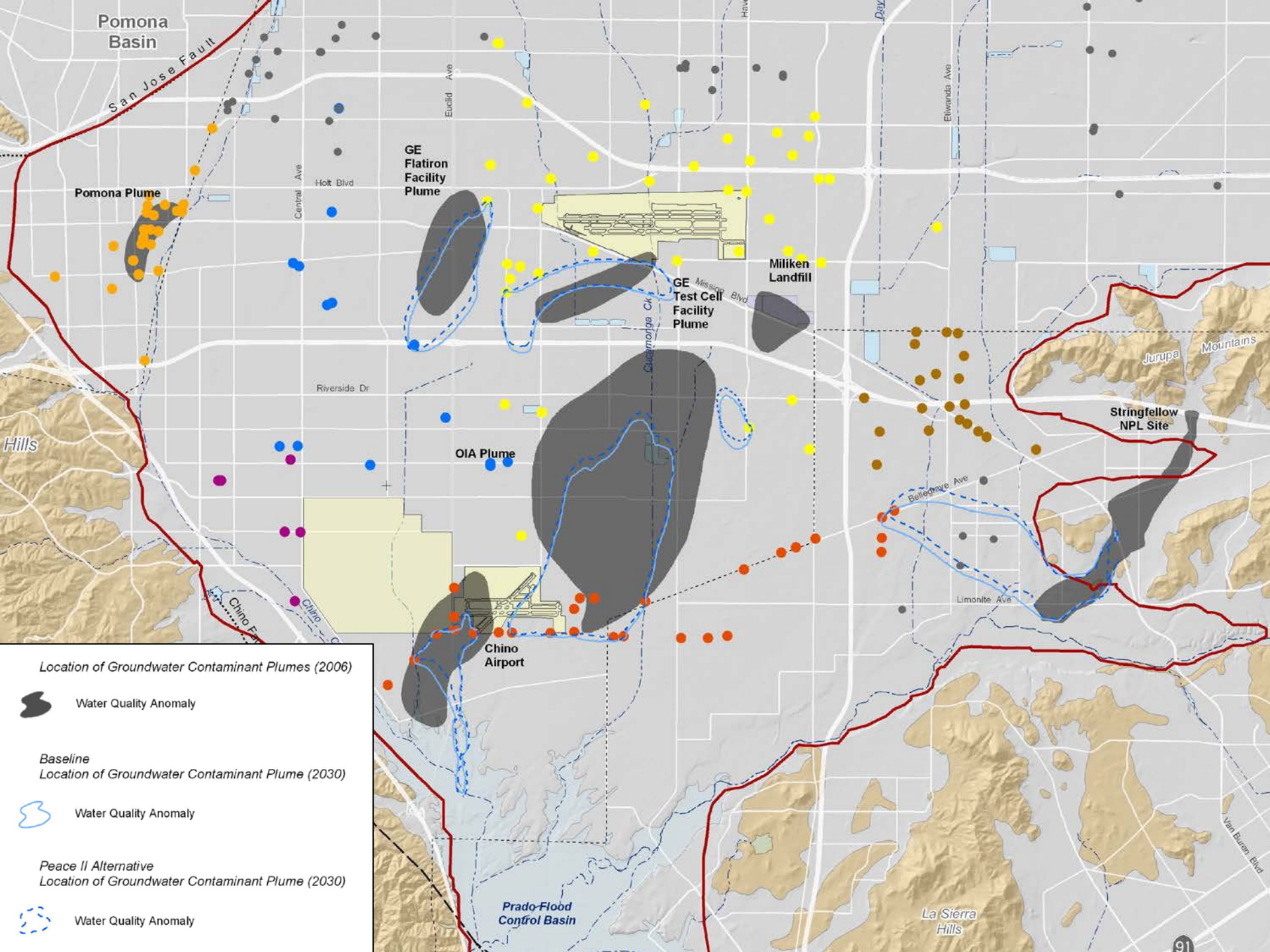
The Watermaster has had a number of workshops to discuss losses from and setting limits on storage accounts. An aggregate "safe storage" volume of 500,000 acre-ft was tentatively agreed upon. Losses would still apply to all water in storage, but little if any significant water quality impacts are anticipated if the aggregate amount of water in storage is less than 500,000 acre-ft. Watermaster discussed four possible alternative methods to establish storage limits, if necessary. It is anticipated, however, that setting storage limits will not be necessary once losses begin to be applied to the accounts. A brief discussion of several of the potential methods to set storage limits, if necessary, follows. (OBMP PEIR, p 3-28).

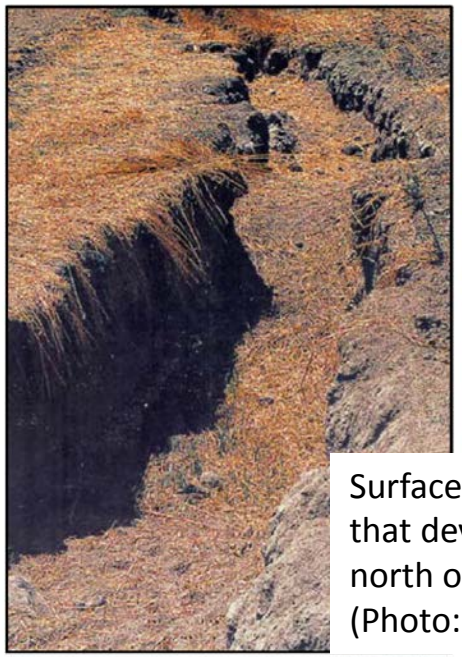

Characterization of Storage Space as of July 1, 2015
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Acre-Feet
Safe Storage Capacity is 500,000 AF
Loss of Hydraulic Control at 600,000 AF
DYYP Storage Reservation
NAP Local Storage
NAP Carryover
AP Supplemental
AP Excess Carryover
AP Carryover

Supplemental Water Recharge Capacity is finite

- Replenishment is estimated to reach ~32,000 AFY
- Recycled water recharge ~ 15,000 to 18,000 AFY

Recharge Asset	Recharge Capacity (AFY)
Spreading Basins	59,100
MVWD Injection Wells	5,600
In-Lieu	25,000 to 40,000
Total	89,700 to 104,700


Pomona Basin
San Jose Fault
Pomona Plume
GE Flatiron Facility Plume
GE Test Cell Facility Plume
Miliken Landfill
OIA Plume
Chino Airport
Stringfellow NPL Site
Jurupa Mountains
Hills
Euclid Ave
Central Ave
Holt Blvd
Riverside Dr
Etiwanda Ave
Mission Blvd
Limonite Ave
Van Buren Blvd
Prado Flood Control Basin
La Sierra Hills
Location of Groundwater Contaminant Plumes (2006)
Water Quality Anomaly
Baseline
Location of Groundwater Contaminant Plume (2030)
Water Quality Anomaly
Peace II Alternative
Location of Groundwater Contaminant Plume (2030)
Water Quality Anomaly



Surface expression of earth fissure that developed in a field north of CIM in Feb. 1991 (Photo: Geomatrix Consultants)