Board Meeting Item 3

Review of ASR Season Performance

David J. Stoldt General Manager

July 17, 2023





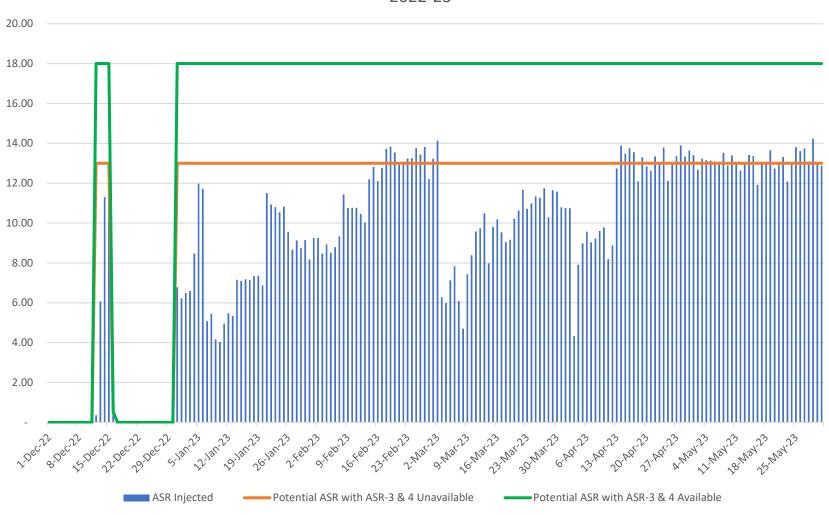


### System Constraints on ASR Injection

Conditions	Capacity	% Loss from Max
Maximum Under Permits w/ Monterey Pipeline	29 AF/Day	
Current Capacity w/ Monterey Pipeline	26 AF/Day	-10%
No Monterey Pipeline / Segunda Pipeline Only	19 AF/Day	-24%
Segunda Pipeline w/ Ryan Ranch & Bishop	18 AF/Day	-4%
ASR-3 Used for Extraction of PWM Water	13 AF/Day	-17%
Carmel Valley Wells Offline / No New Pump Station	4.5 AF/Day	-29%
% Loss from Maximum Permitted Capacity:		-84%

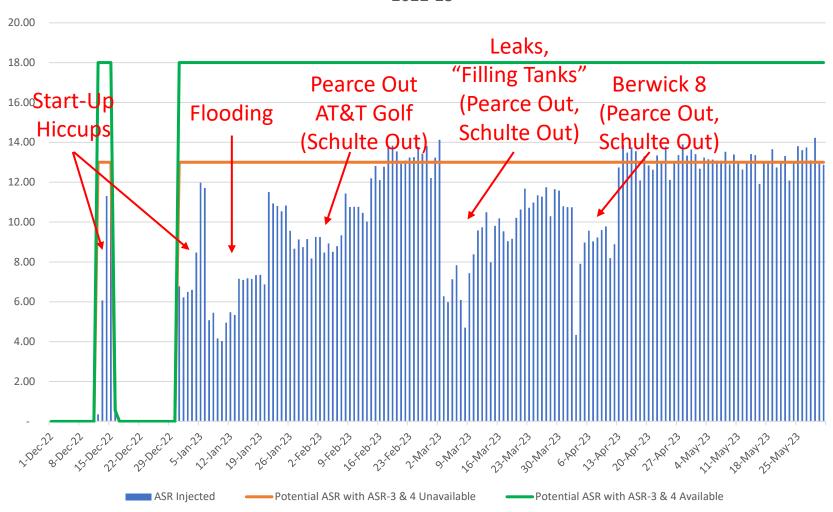
### **ASR Season in Review**





#### **ASR Season in Review**





# Actual vs. Optimized Results

Event	Additional Available Without Carmel Valley Constraints	Additional Available Without ASR 3 & 4 Constraint	Total Additional Available
Flooding of Upper CV Wells	97 AF	70 AF	167 AF
Pearce Out; AT&T Golf (Schulte Out)	53 AF	65 AF	118 AF
Leaks / Filling Tanks (Pearce & Schulte Out)	109 AF	155 AF	264 AF
Berwick #8 Issues (Pearce & Schulte Out)	45 AF	50 AF	95 AF
Other	88 AF	440 AF	528 AF
2013	392 AF	780 AF	1,172 AF

### What Could Have Prevented the Constraints?

Even with the various Carmel Valley constraints, this year could have added 330 AF if there was no ASR 3 & 4 constraint:

Days where no apparent Carmel Valley Constraints

February 14 to March 2 = 17 days

April 13 to May 31 = 49 days

66 days with no CV constraint X 5 AF = 330 AF additional

## Coulda, Woulda, Shoulda

Event	AF Injected
Actual Injected	1,656 AF
Without ASR 3 & 4 Constraint (but with Carmel Valley Constraints)	1,986 AF
Without Carmel Constraints (but with ASR 3 & 4 Constraint)	2,028 AF
With Neither Constraint	2,808 AF

### What Could Have Prevented the Constraints?

- Start-Up Hiccups: Be Ready Earlier; Ramp-Up Faster
- Flooded Upper Valley Wells: More Lower Valley Redundancy Built Earlier; New Pump Stations Online When Expected Earlier
- Pearce Well Out: Schulte Replacement Well Online Earlier;
   New Rancho Canada Well Online Earlier; Pump Stations
   Online Earlier
- Leaks/Filling Tanks: Should Have Completed New Pump Stations Testing Earlier / Off-Season
- ASR-3 & -4 Not Available: Need for Redundant Seaside Production Wells has Been Known; Expedite New PWM Expansion Extraction Wells 1 and 2