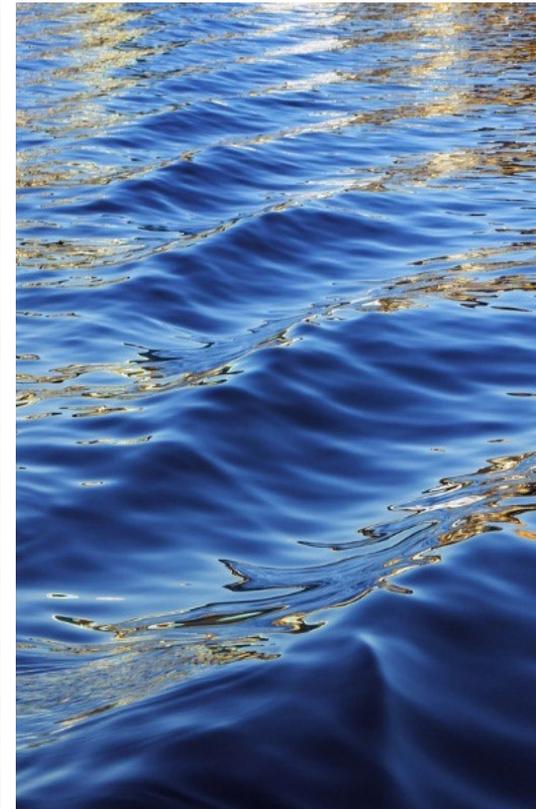


Water Supply Planning
Committee
Item 4

*Review of ASR Season
Performance*

David J. Stoldt
General Manager

July 5, 2023

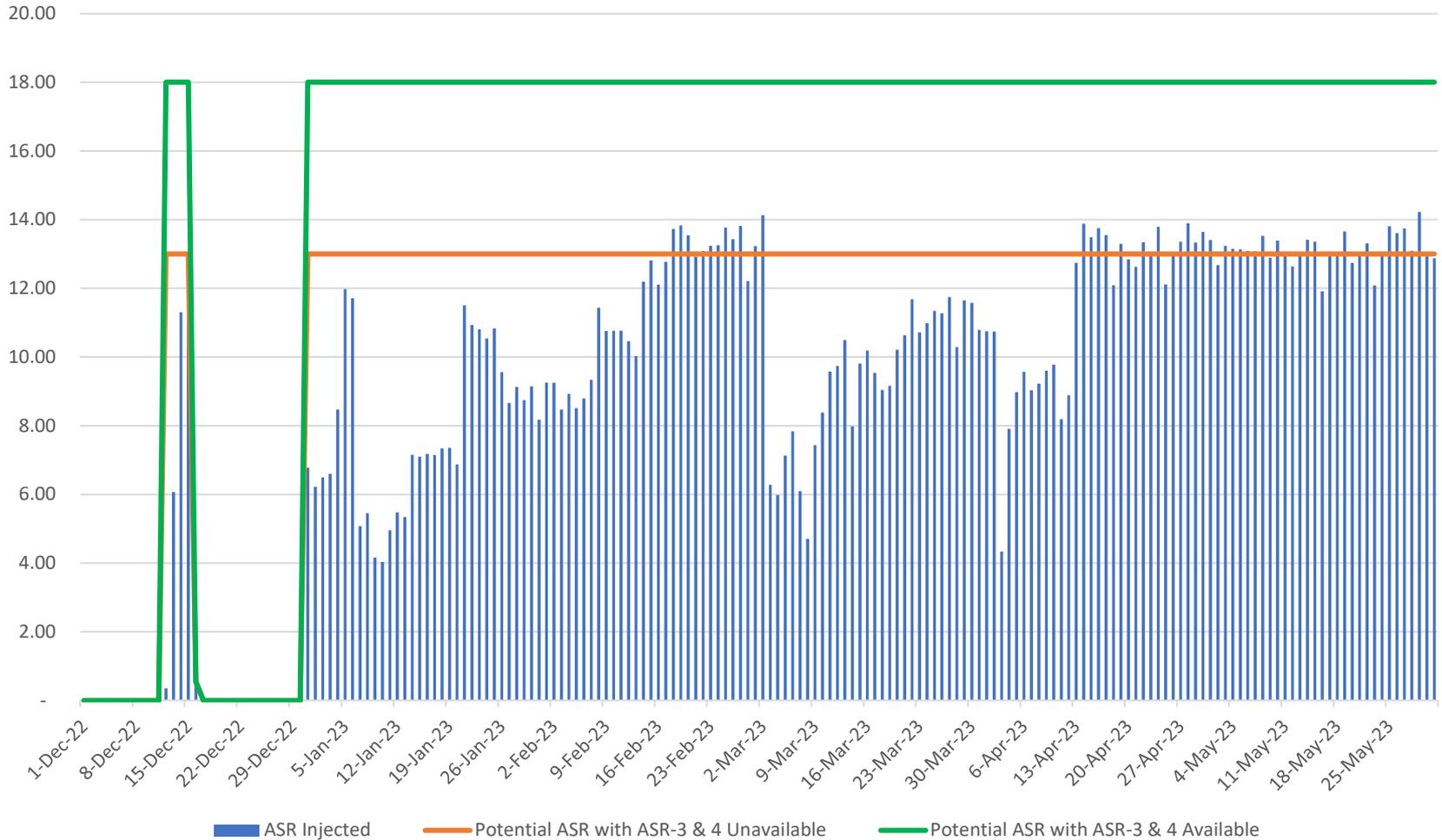


System Constraints on ASR Injection

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%

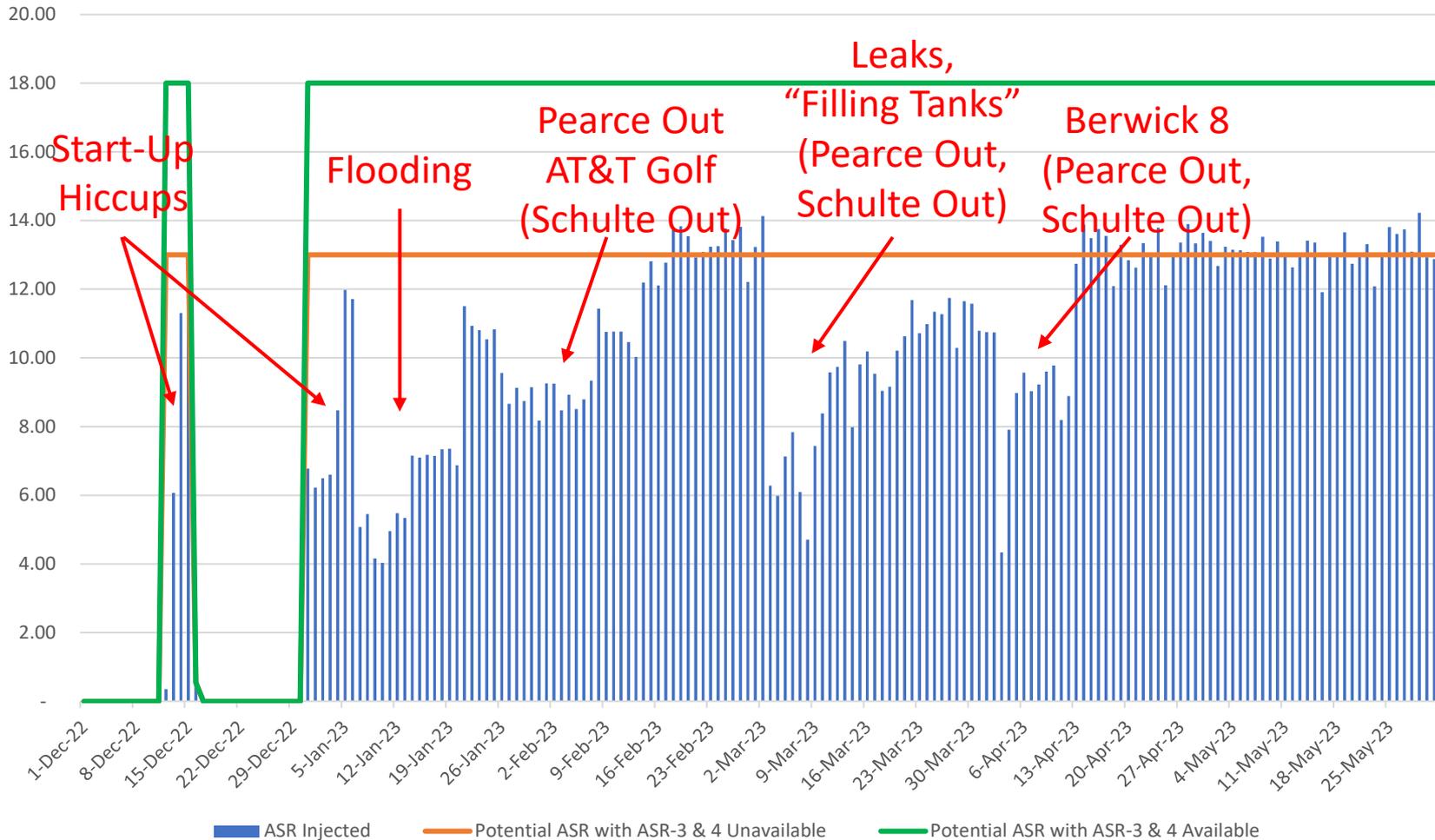
ASR Season in Review

ASR Injected Versus Potential
2022-23



ASR Season in Review

ASR Injected Versus Potential
2022-23



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