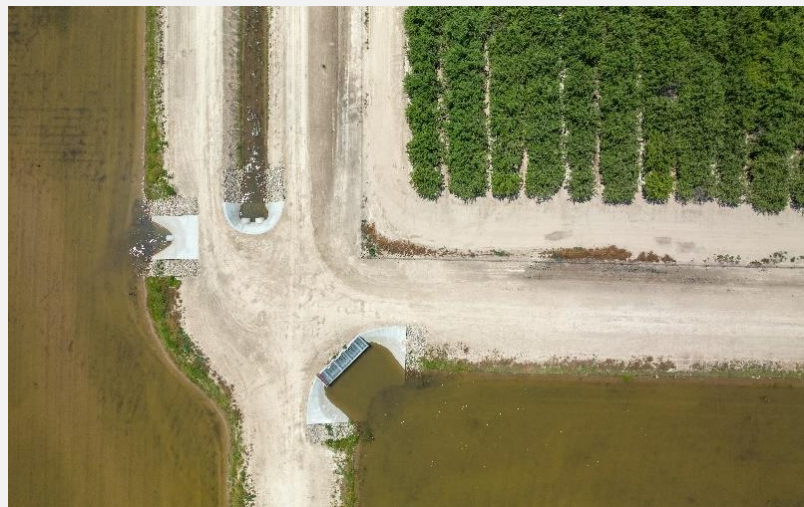


Replenishing Groundwater in the SJV: 2024 Update

June 11, 2024

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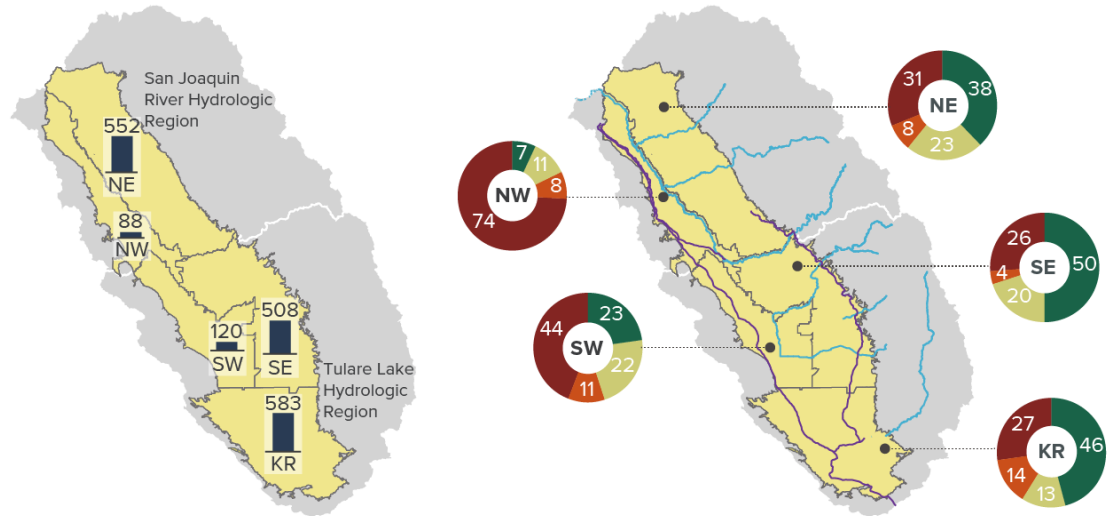
30 YEARS

PPIC WATER POLICY CENTER

We looked at groundwater recharge in two recent wet years: 2017 and 2023

- Since 2017:
 - GSAs have taken on coordination roles
 - The first GSPs are done, emphasizing recharge
 - GSPs aim for 1 maf avg increase in recharge

- SJV has big overdraft problems—but also a lot of recharge potential



Subregional groundwater overdraft, 2003–10
(thousands of acre-feet per year)

■ Amount of groundwater overdraft

Subregional recharge suitability
(% of subregion land area)

■ Excellent or good ■ Moderately poor
■ Moderately good ■ Poor or very poor

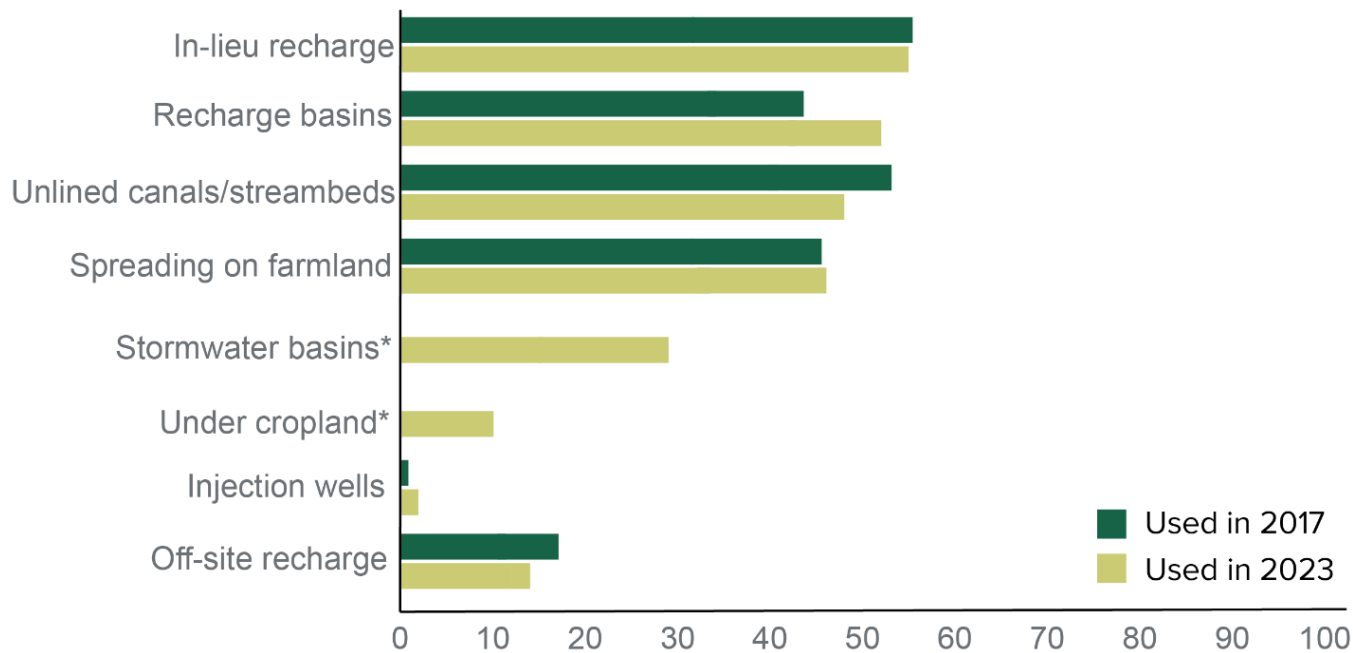
Recharge expanded in 2023

- Similar precipitation in 2017 and 2023
- More agencies recharging: 79% (up from 75%)
- Volumes up
 - Reports of **5.3 maf** stored on-site
 - **7.6 maf** estimated valley-wide
 - Increase of **1.1 maf (17% jump)** over 2017



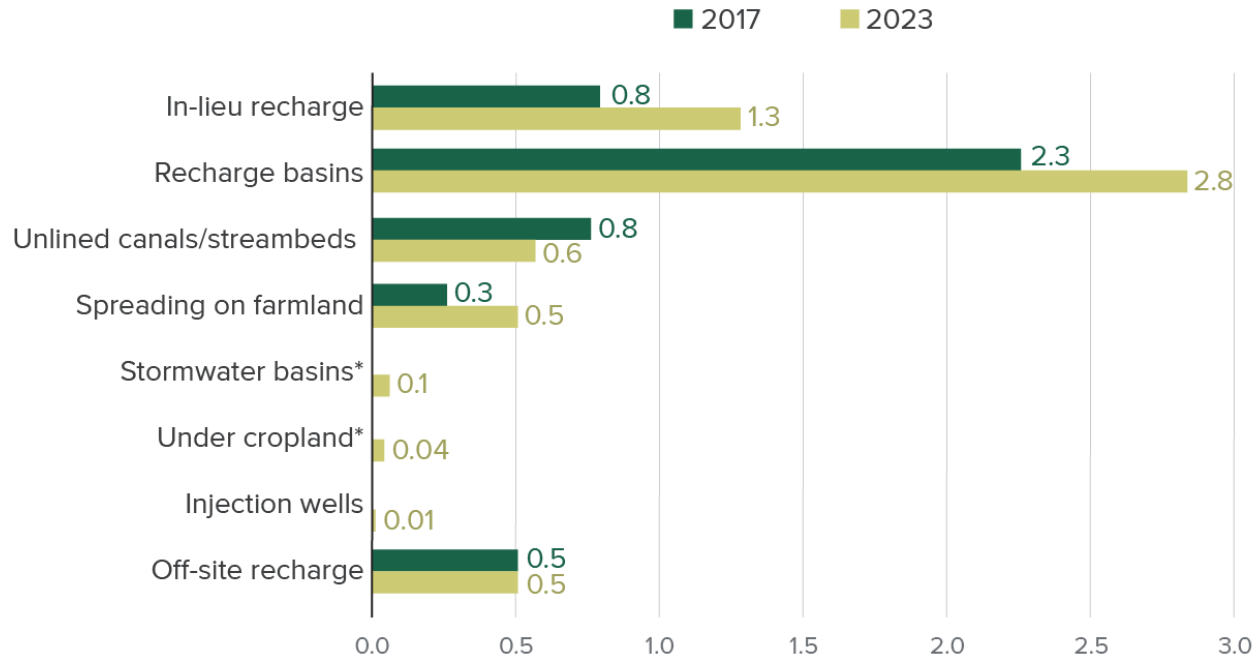
Rechargers used broadly similar methods in both years

% of respondents



More than half of all recharge still happens in dedicated basins

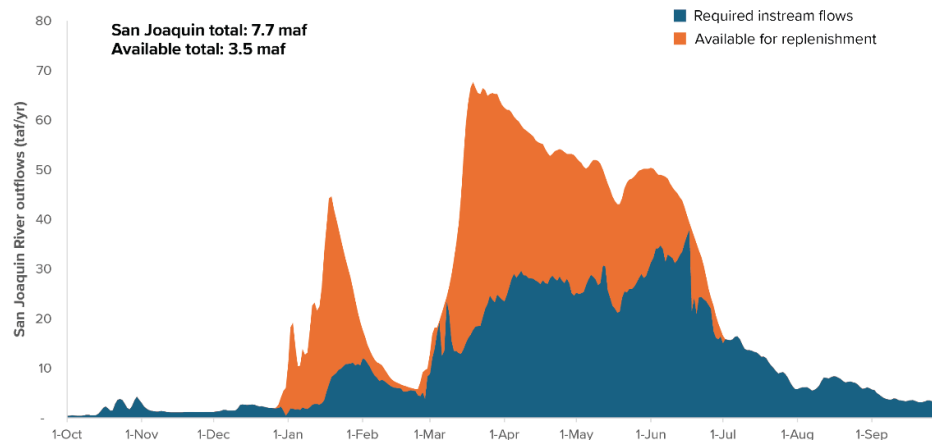
Millions of acre-feet



2023 saw good progress—but could we have done more?

- Up to **3.5 maf more** water available upstream of the Delta (eastside)
- At least **0.4 maf more** could have been exported safely (westside)
- Suggests potential to advance on GSPs' recharge goal of +1 maf per year on average

Additional water available for recharge in 2023



Considerations for policy and management



Refine rules on when/how much water can be diverted

- 2023 saw progress towards better understanding of flows, easier access to diversions
- Still work to be done: how much more could be taken?
- Promising technical and policy discussions are pointing the way forward



Address other regulatory barriers

- Permits for building and operating projects remain a major hurdle
- Conflicting policies can stymie opportunistic recharge
- Price disincentives are a challenge for CVP recharge



Ease infrastructure constraints

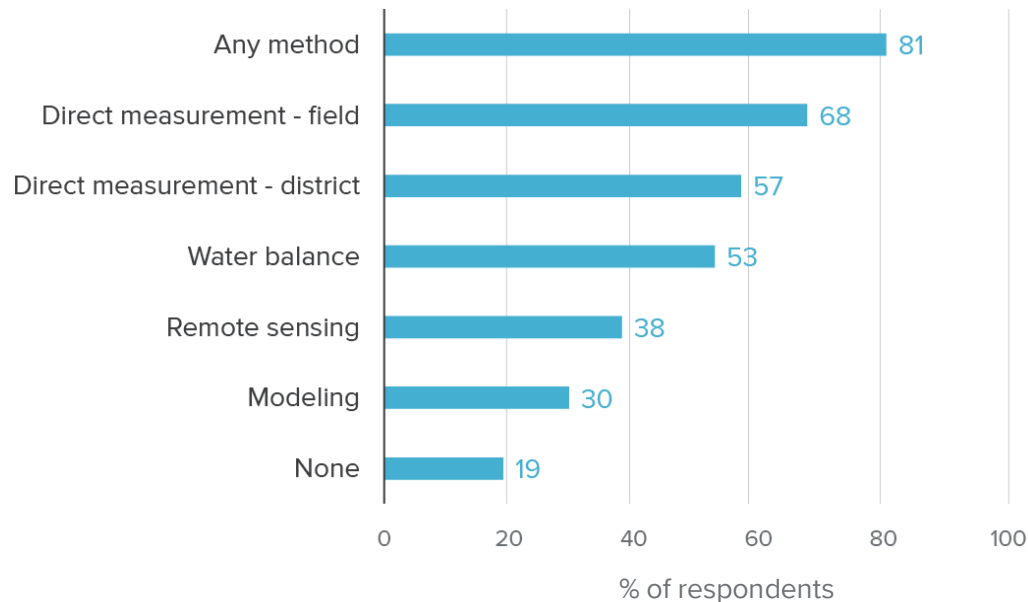
- Local agencies drive this, but the state is important partner
- Optimize surface storage
- Make smart plays on conveyance



Enhance groundwater accounting

- Major progress in 2023, but more to be done
- Most active rechargers (81%) are using at least 1 accounting method
- Early adopters of groundwater allocations did well on recharge

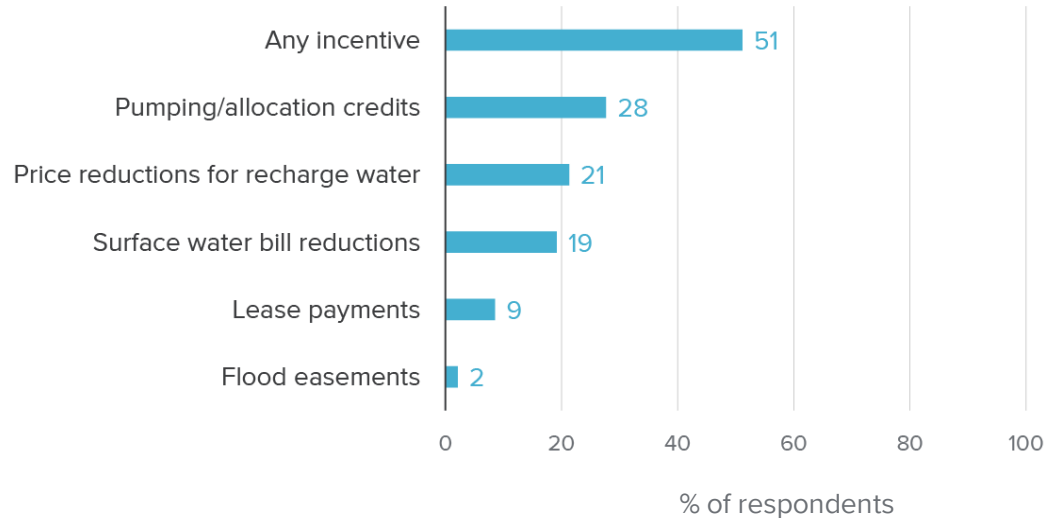
Accounting methods in use in 2023



Accelerate the rollout of recharge on farmland

- Incentive programs are in development
- Some technical difficulties have been ironed out
- More to do to improve grower familiarity, accounting, crediting

Landowner incentives in use in 2023

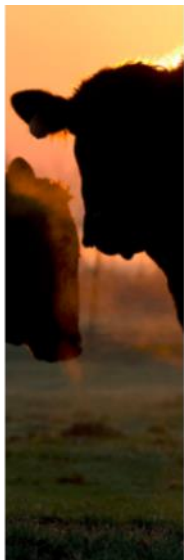
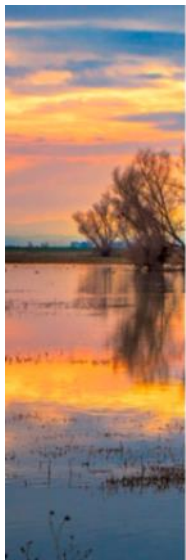


Continue building partnerships

- Many new partnerships have developed for local projects
- Future priorities include:
 - Multi-benefit projects
 - Off-site banking partnerships



Thank you!



Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.