



# Fillmore and Piru Basins Groundwater Sustainability Agency

## FPBGSA Board of Directors Meeting 5B Water Budgets

Hydrogeologist  
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July 16, 2020



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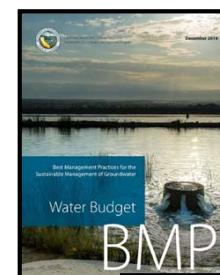
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## Water Budgets and SGMA/GSP Context

- California Code of Regulations (CCR)

[https://govt.westlaw.com/calregs/Document/186E380AB2D89470B951D8393BE80E831?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/186E380AB2D89470B951D8393BE80E831?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

23 CCR §354.18(c): *Each Plan shall quantify the current, historical, and projected water budget for the basin.*



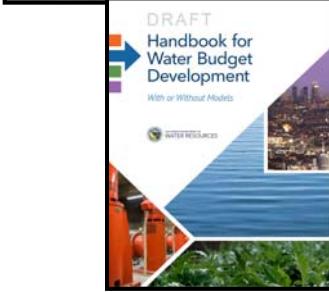
- CA Department of Water Resources (DWR)

- BMP #4 – Water Budget

<https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents>

- Water Budget Handbook

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Data-and-Tools/Files/Water-Budget-Handbook.pdf>

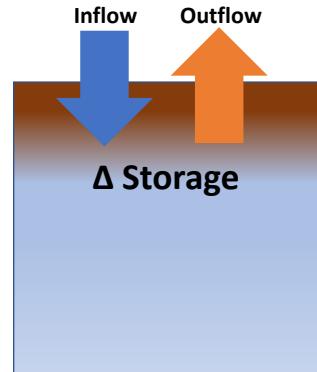


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## Water Budget Fundamentals

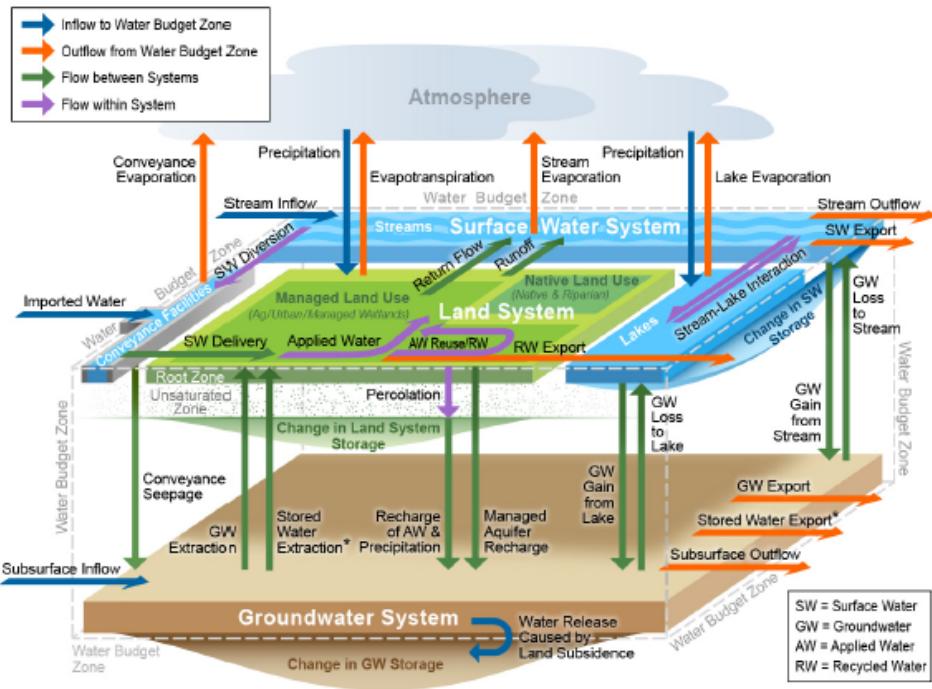
- A **water budget** is an accounting of all the water that flows into and out of the system (e.g. GSA groundwater basin boundary)



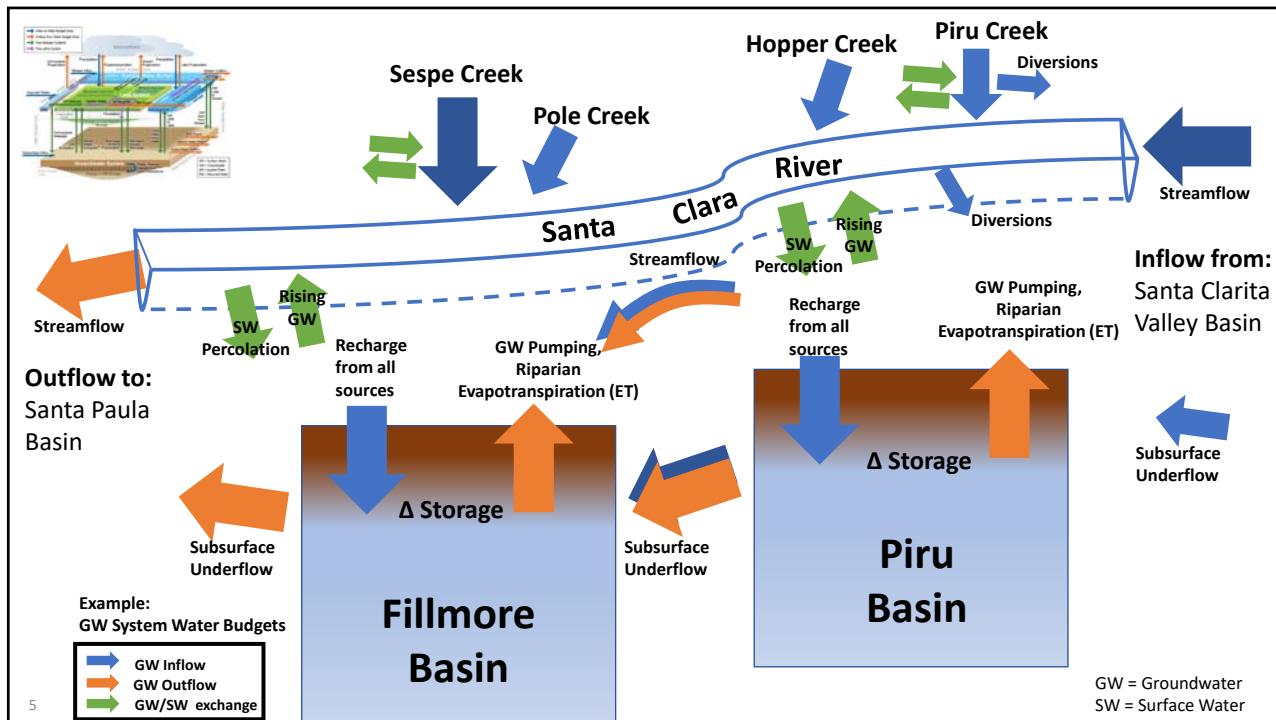
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## Water Budget Fundamentals



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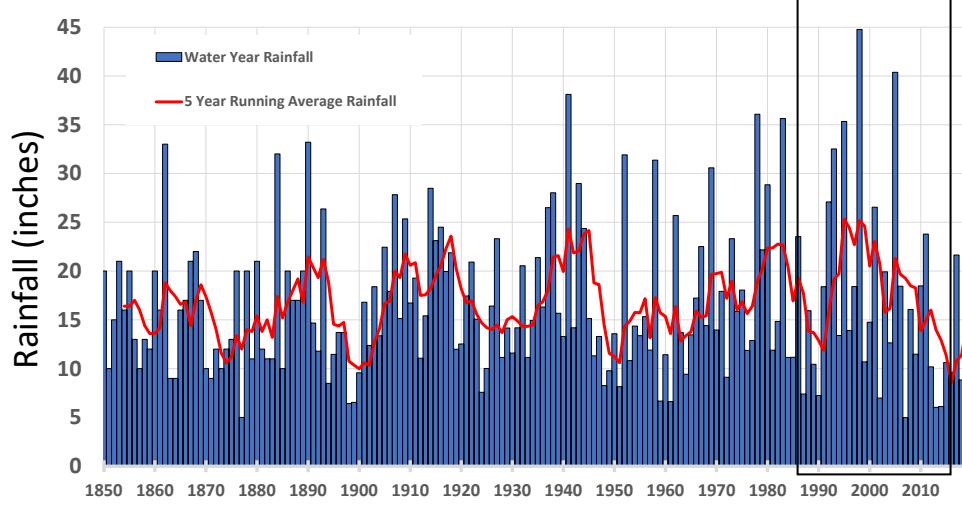


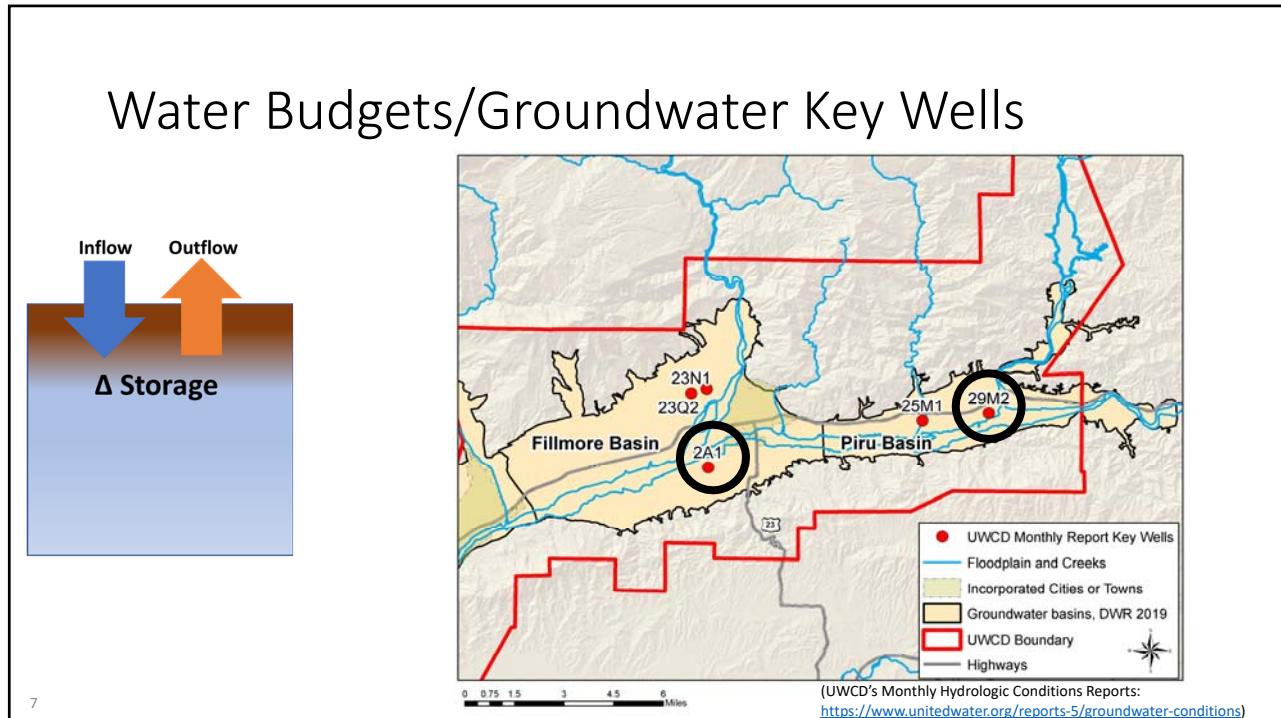
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## System Variability

Santa Paula Gage #245  
Historical Rainfall Record  
Water Years 1850 - 2019

- Wet/Dry Years
- Variability in precipitation extends to other water budget components





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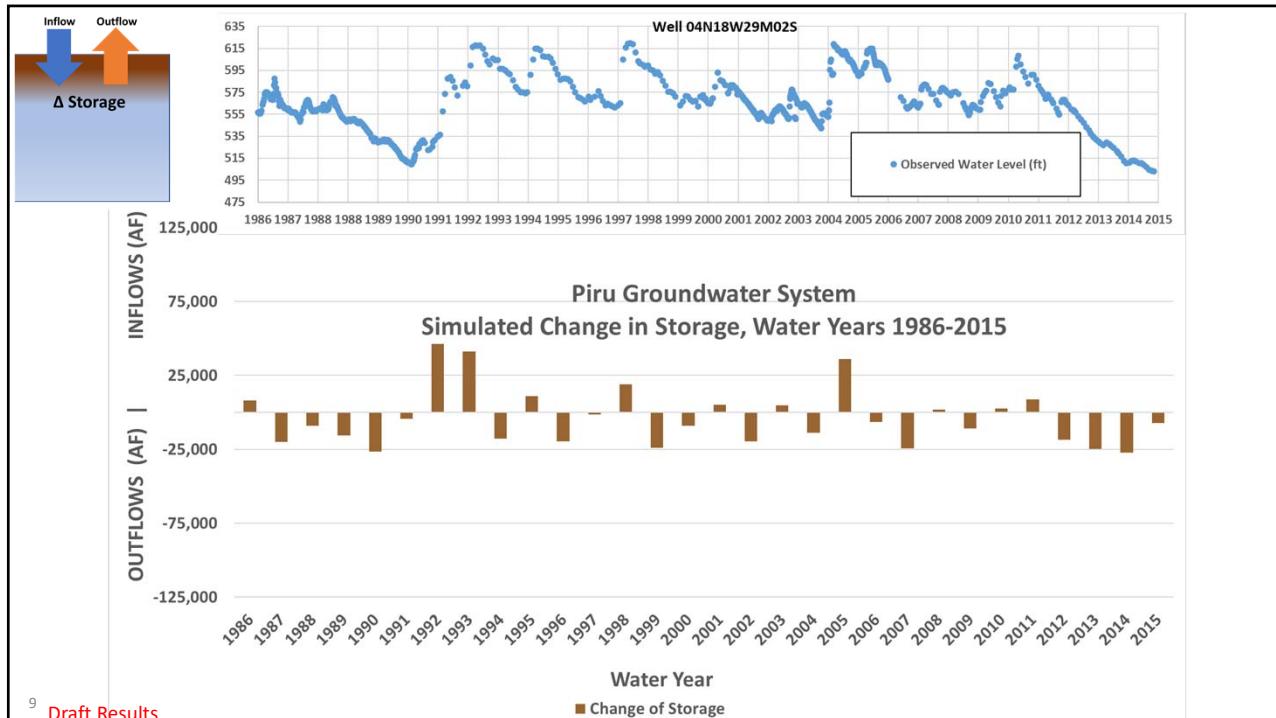
# Piru Basin Draft Water Budgets

Water Years 1986 to 2015

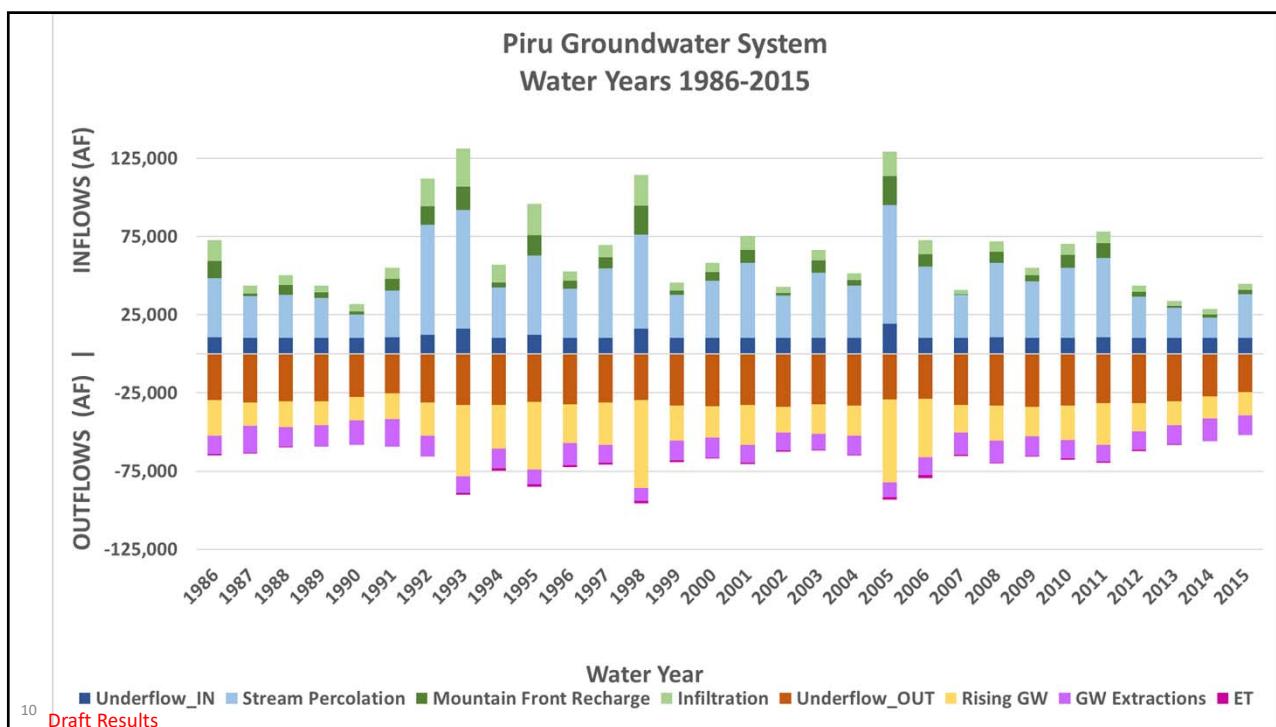
(10-1-1985 to 9-30-2015)

Representing output from monthly simulations

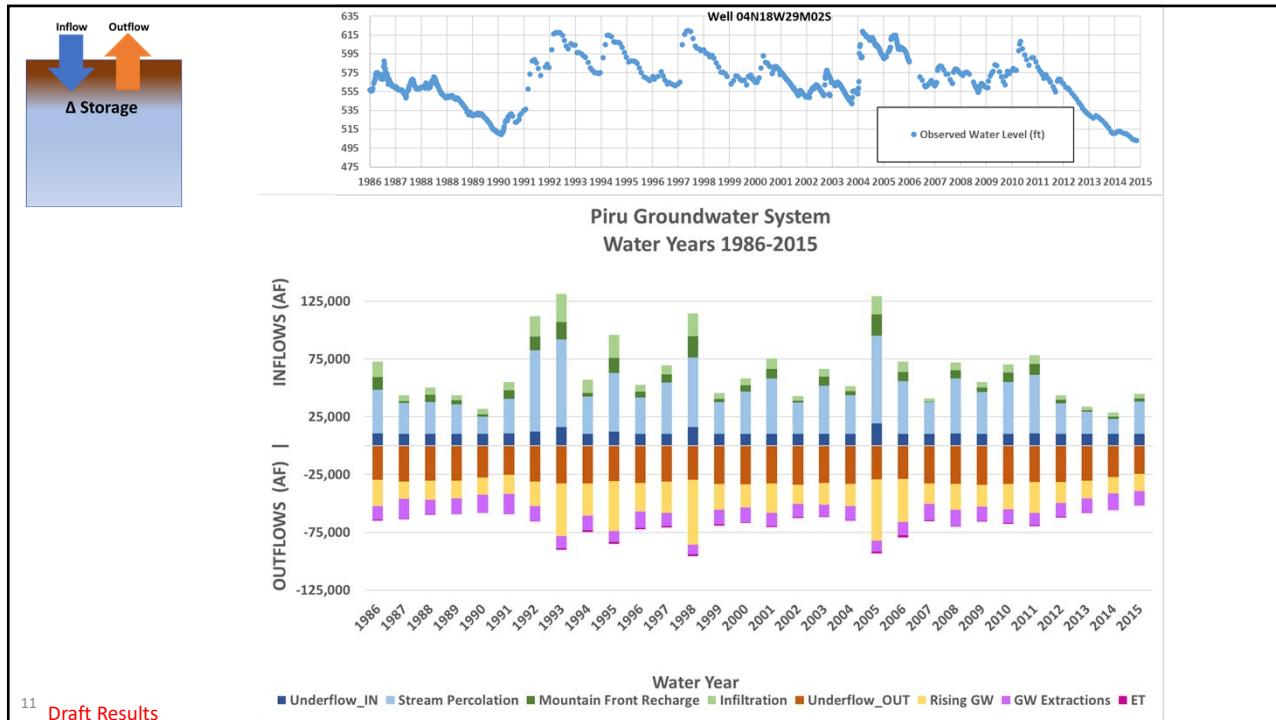
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# Fillmore Basin Draft Water Budgets

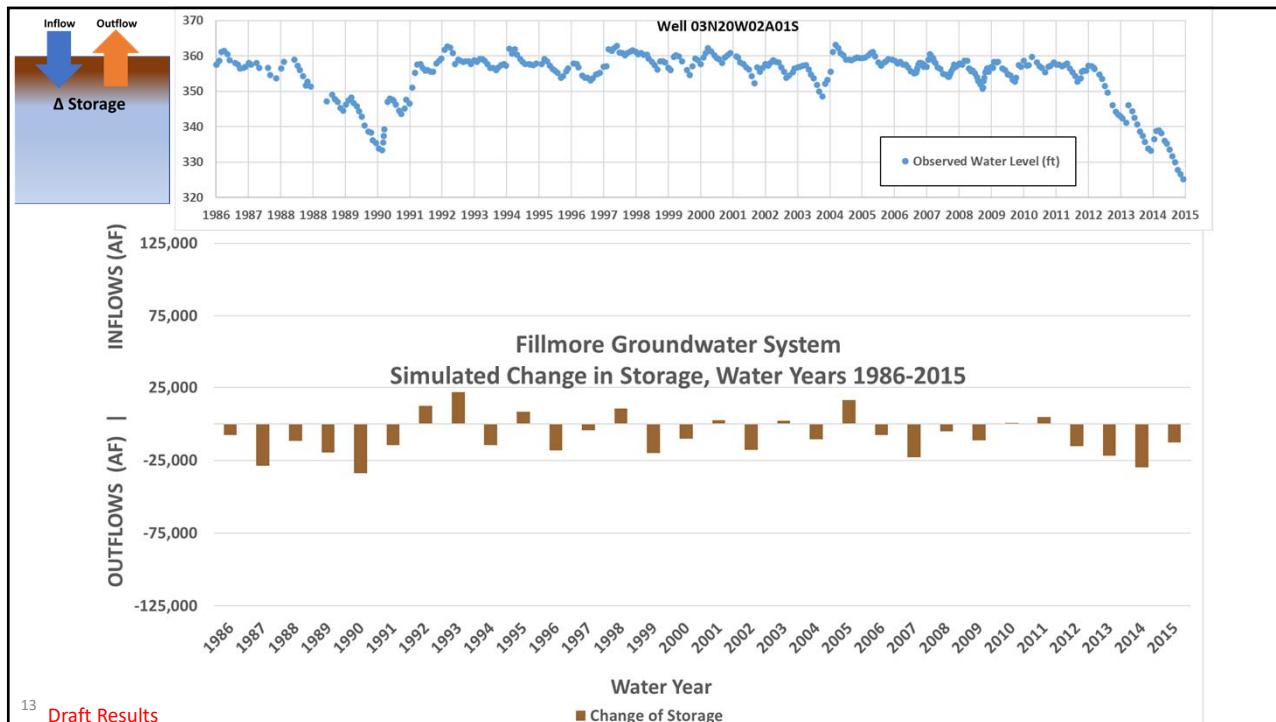
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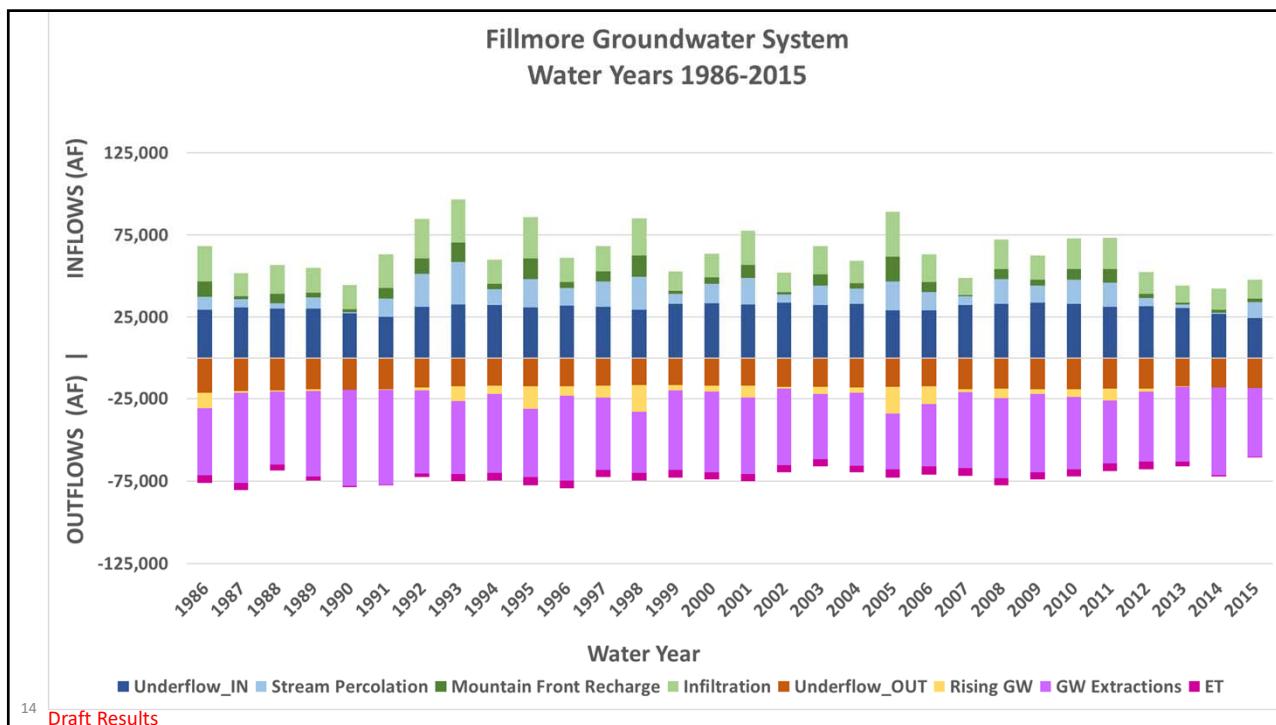
Representing output from monthly simulations

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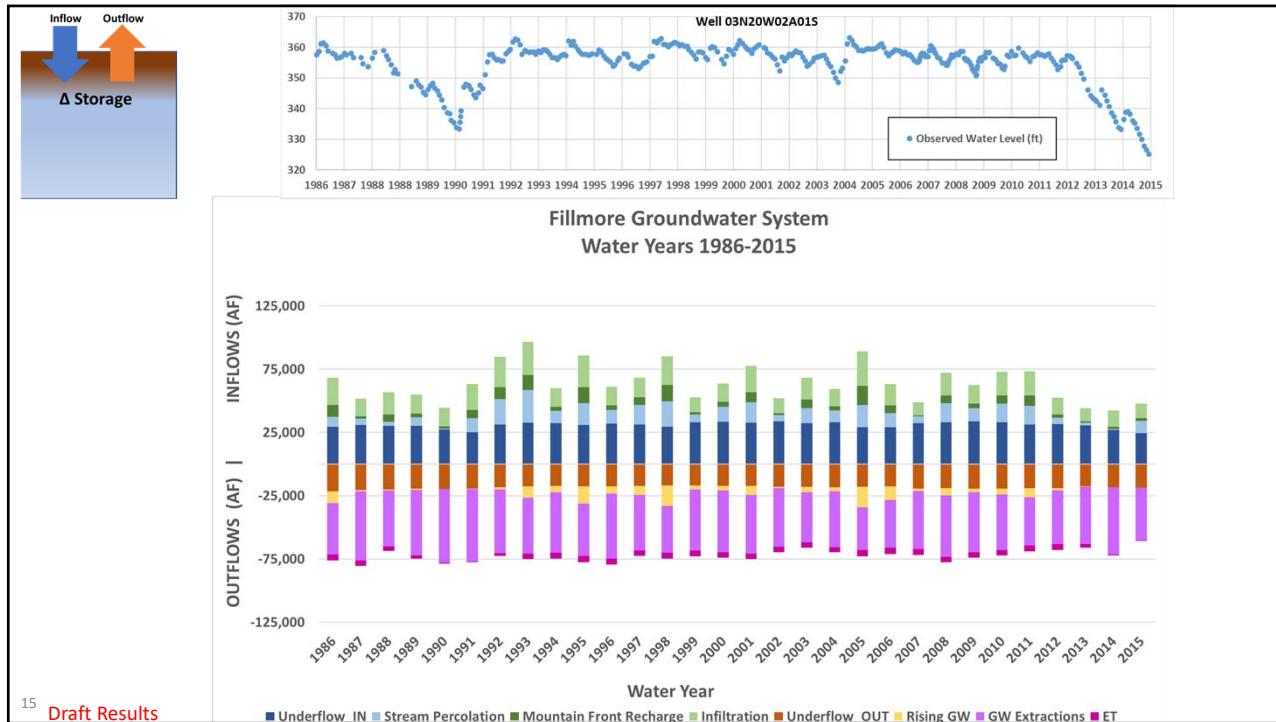
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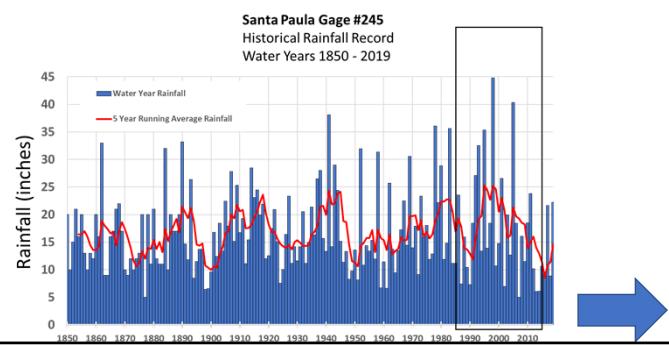
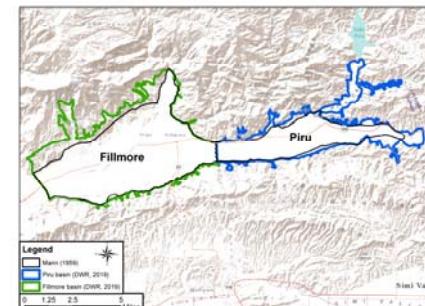
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## Groundwater model use addresses several needs for GSP development:

- Basin boundary changes
- Applicable time-period for analysis
- Ability to quantify water budgets for:
  - Historical
  - Current
  - Future conditions



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Thank You

Questions?



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