Stanislaus & Tuolumne Rivers Groundwater Basin Association
Groundwater Sustainability Agency
1231 11th Street | Modesto, CA 95354
Phone: (209) 526-7564 | Fax: (209) 526-7352
Email: John.Davids@mid.org

AGENDA

October 27, 2020 (1:00 p.m. – 2:30 p.m.)
Webinar Digital Platform or Phone Meeting
https://us02web.zoom.us/j/87846141611
By phone: 1-669-900-9128
Webinar ID: 878 4614 1611

PUBLIC PARTICIPATION
The public may participate in this meeting in the two ways described below.

Instructions for Participating in STRGBA GSA & Technical Advisory Meeting via Zoom Webinar or Phone

On your desktop/iPad or tablet/laptop:

1. To join the webinar, click the link published in the Agenda for the current meeting about 5 minutes before webinar begins.
2. Follow the on-screen instructions to install and/or launch the Zoom application.
3. If prompted, enter the Webinar ID published in the Agenda.
4. All public attendees will enter the meeting muted.
5. If you wish to speak under Business from the Public, or after the Chairman calls for Public Comment, click on the “Raise Hand” button to request to speak.

On your phone:

1. To join the meeting by phone, call the number published in the Agenda for the meeting.
2. Enter the Webinar ID published in the Agenda, then hit the # symbol.
3. All public attendees will enter the meeting muted.
4. If you wish to speak under Business from the Public, or after the Chairman calls for Public Comment, press *9 on your phone to “Raise Hand” or simply request to speak.
    a. Wait until the last four digits of your phone number is called by the Host.

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1. Call to Order/Welcome and Introductions
   (Four agencies needed for a quorum)

2. Business from the Public
   Who: Public
   Expected Outcome: Interested persons are welcome to introduce any topic within the Agency's jurisdiction. Matters presented under this heading may be discussed but no action will be taken by the Agency at this meeting.

3. Topic: Approve 8/12/20 Meeting Minutes [Action Items]
   Who: John Davids, Committee
   Expected Outcome: Approval

4. Topic: Zone Budgets
   Who: Todd Groundwater, Committee
   Expected Outcome: Discussion

5. Next Meeting
   TBD

6. Items too late for the agenda

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TECHNICAL ADVISORY COMMITTEE MEETING MINUTES

August 12, 2020 (2:00 p.m. – 3:00 p.m.)

The meeting was called to order at 2:00 p.m.

1. **Welcome and Introductions**

   The following members of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) attended via Zoom:

Modesto Irrigation District (MID):	John Davids
Oakdale Irrigation District (OID):	Eric Thorburn
City of Modesto:	Miguel Alvarez
Stanislaus County:	Walt Ward
City of Oakdale:	Michael Renfrow
City of Riverbank:	Michael Riddell

Other Attendees

Public:	Alexis Stevens, Somach, Simmons & Dunn
	Stacy Henderson, Terpstra Henderson
	Hilary Reinhard, Provost &Pritchard
	Melissa Williams, MID
	Kirsten Pringle, Stantec
	Khandriale Clark, Stantec
	Gordon Enas, MID
	Liz Elliott, Todd Groundwater
	Phyllis Stanin, Todd Groundwater
	Chase Hurley, Water and Land Solutions
	Dane Mathis
	John Brichetto
	Stacie Ann Silva

2. **Business from the Public**

   None

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3. **Approve 5/13/20 Minutes [Action item]**

   Renfrow moved, 2nd by Riddell, to approve 5/13/20 meeting minutes. Motion carried.

4. **Technical Workshop #7 – Report on Ongoing GSP Analyses and Next Steps**

   Stanin gave an update on Projected Water Budgets. The first step in preparing these future water budgets is to develop a 50-year baseline for the model. For these future projections for the Modesto Subbasin, hydrology from the period 1969-2018 will be superimposed on current land use conditions and future projections of surface water supply. The hydrology from 1969-2018 provides ample variability including numerous wet periods and drought cycles and overall average hydrologic conditions. The baseline set-up also requires additional projections for future water use. Accordingly, Stanin will be requesting various data and projections from the member agencies such as future surface water diversions, future groundwater production, population growth, per capita water usage and future projections for changes in land use, if any.

   Stanin also presented a review of sustainable management criteria and sustainability indicators. The next steps for the GSP will be to develop zone water budgets (in progress), projected future water budgets (as discussed above), and continue with discussions on sustainable management criteria including sustainability goals for the Modesto Subbasin. Davids also reminded the group that STRGBA GSA will continue to have ongoing discussions with adjacent basins, since achievement of the GSAs goals are dependent on the actions of others.

5. **Next Meeting**

   TBD

6. **Items too late for the agenda**

   N/A

Modesto Subbasin GSP

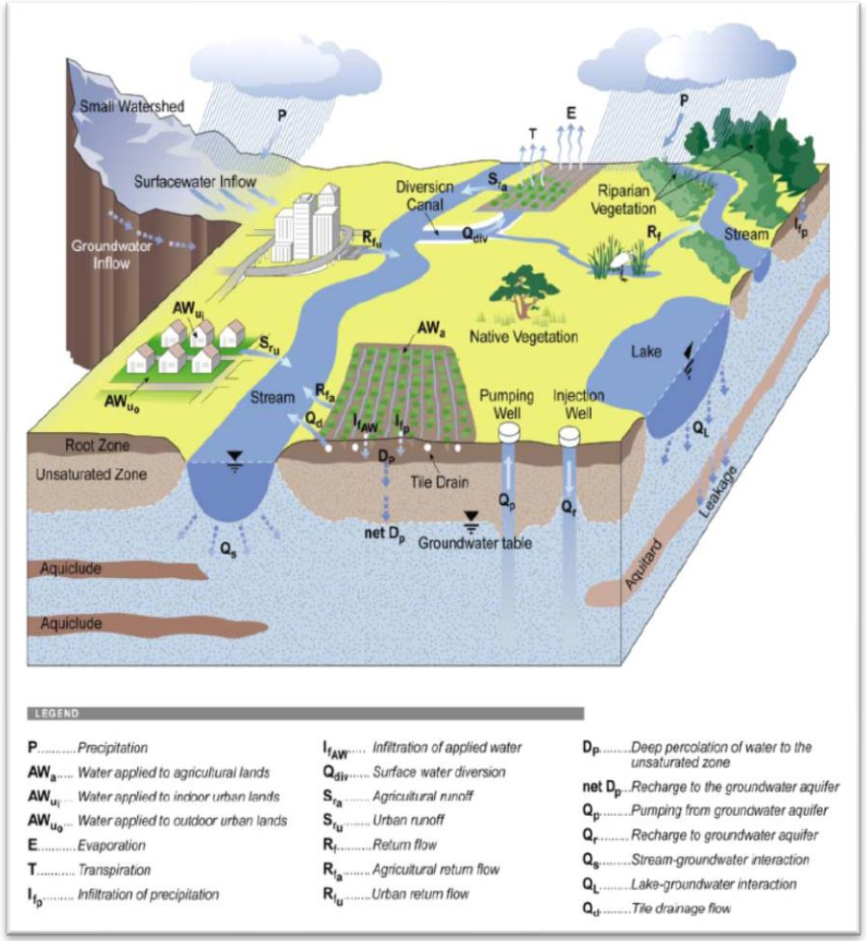
Surface Water-Groundwater Model Development

Technical Advisory committee (TAC) meeting

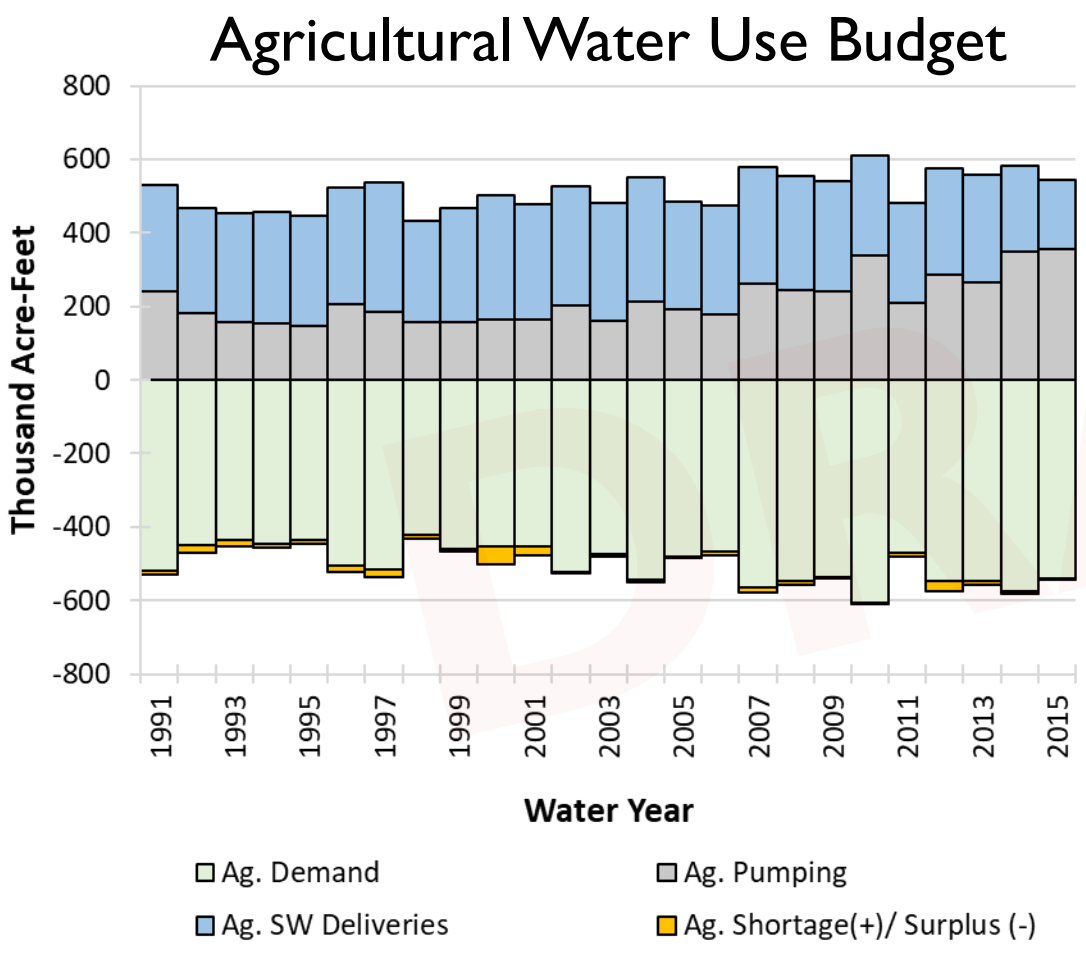
Presented on October 27, 2020

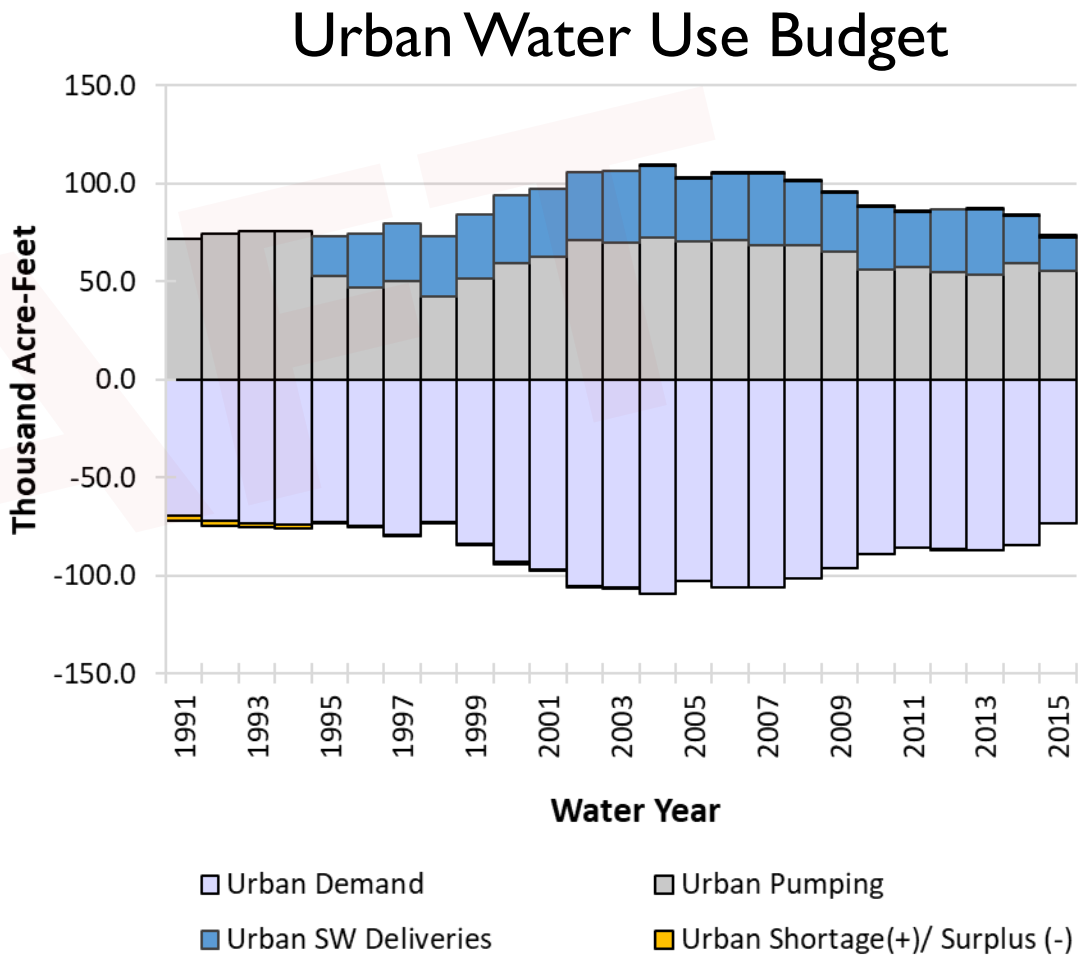
Agenda: Historical Water Budgets

- Subbasin Level Water Budgets
  - Land and Water Use Budget
  - Groundwater Budget
- Operational-Zone Water Budgets
  - Modesto Subbasin Commons
  - Modesto Irrigation District
  - Oakdale Irrigation District
  - Non-District Agriculture
  - Municipal & Private Domestic

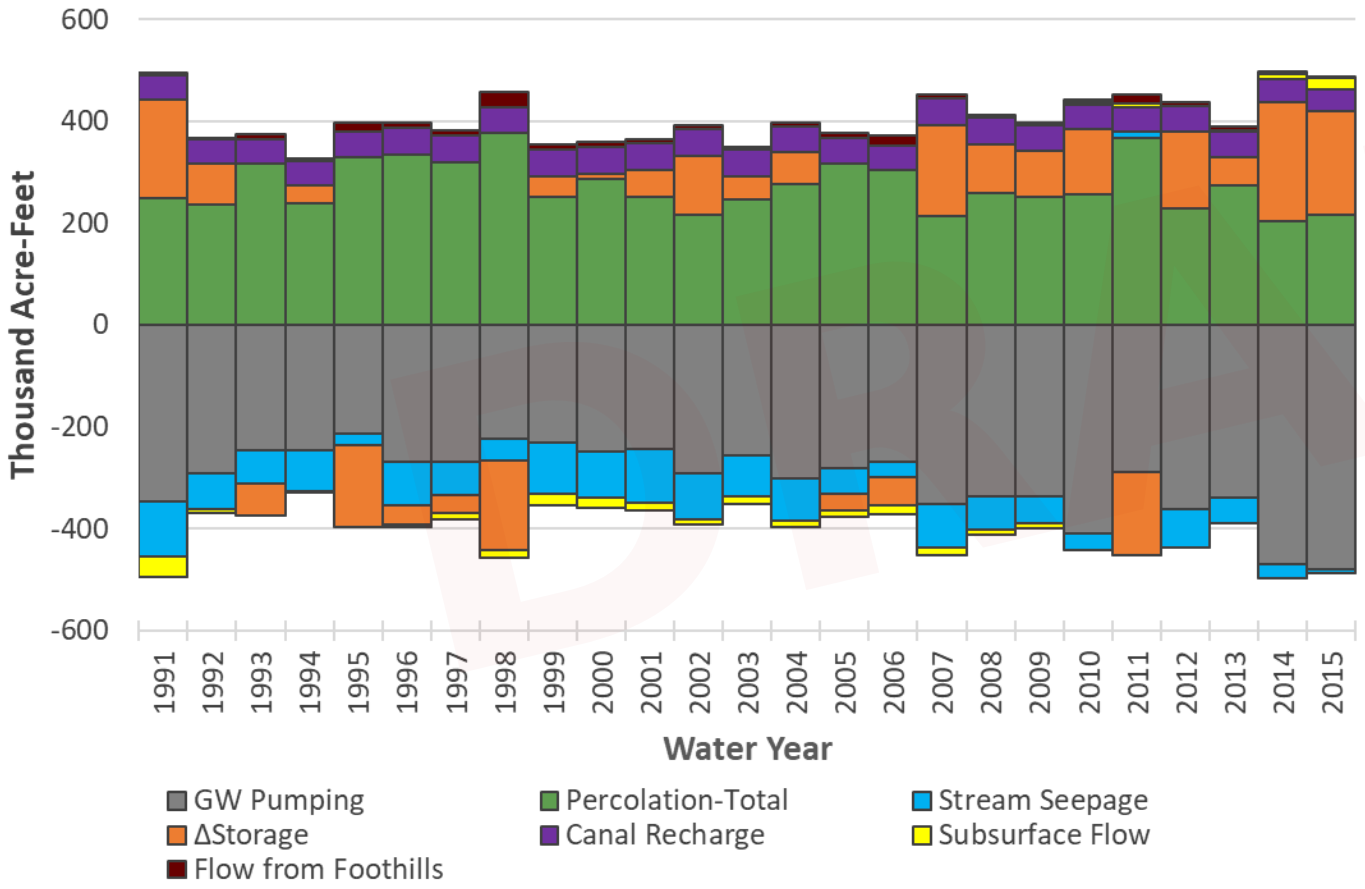


Land and Water Use Budget





Groundwater Budget

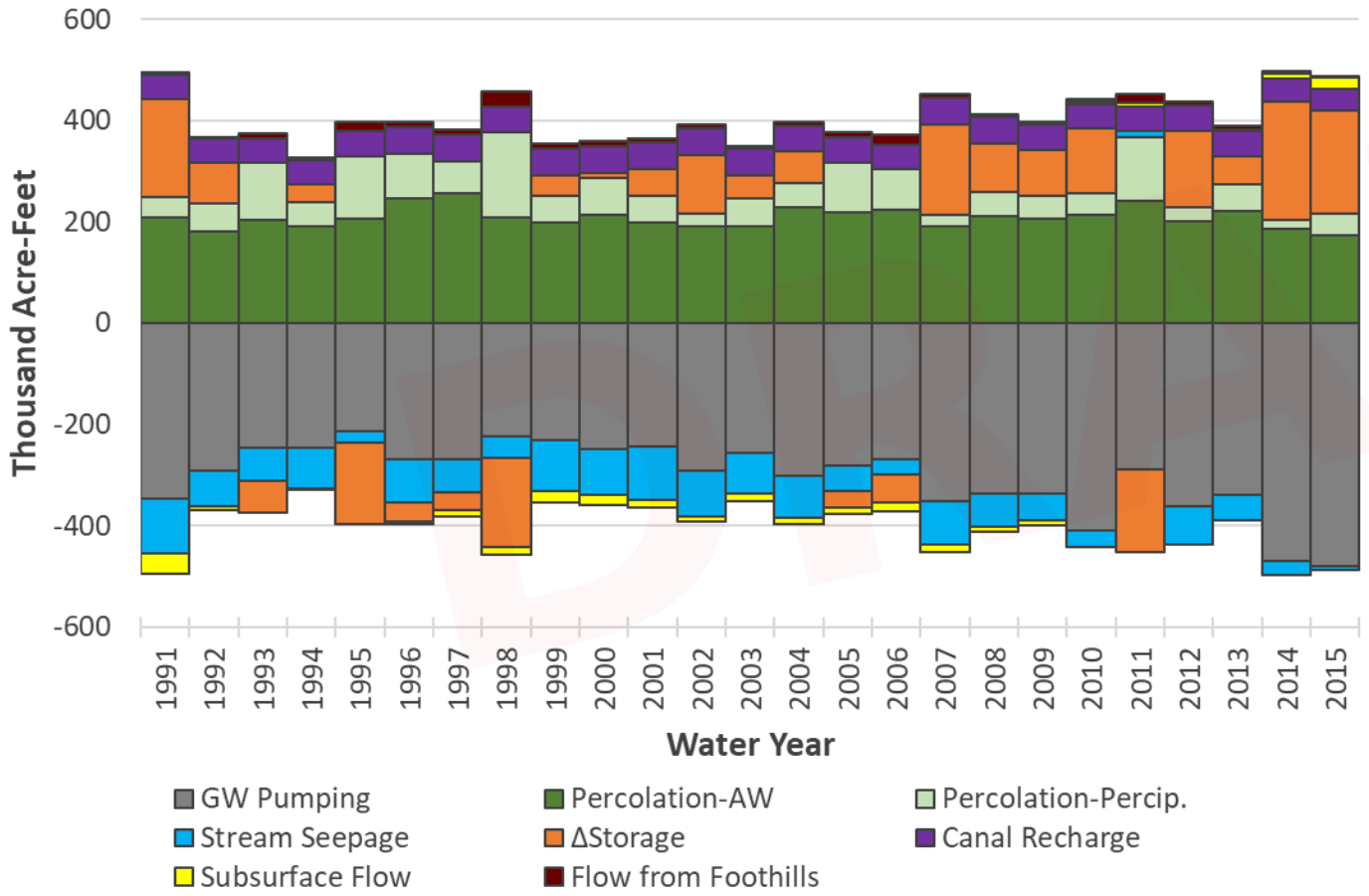


Modesto Subbasin

- Percolation-Total: 273 TAFY
- Canal Recharge: 50 TAFY
- Flow from Foothills: 9 TAFY
- Subsurface Flow: -7 TAFY
- Stream Seepage: -63 TAFY
- GW Pumping: -303 TAFY
- ΔStorage: -42 TAFY

Note: Aggregated flow components may include some rounding error

Groundwater Budget



Modesto Subbasin

- Percolation-AW: 208 TAFY
- Percolation-Precip: 65 TAFY
- Canal Recharge: 50 TAFY
- Flow from Foothills: 9 TAFY
- Subsurface Flow: -7 TAFY
- Stream Seepage: -63 TAFY
- GW Pumping: -303 TAFY
- ΔStorage: -42 TAFY

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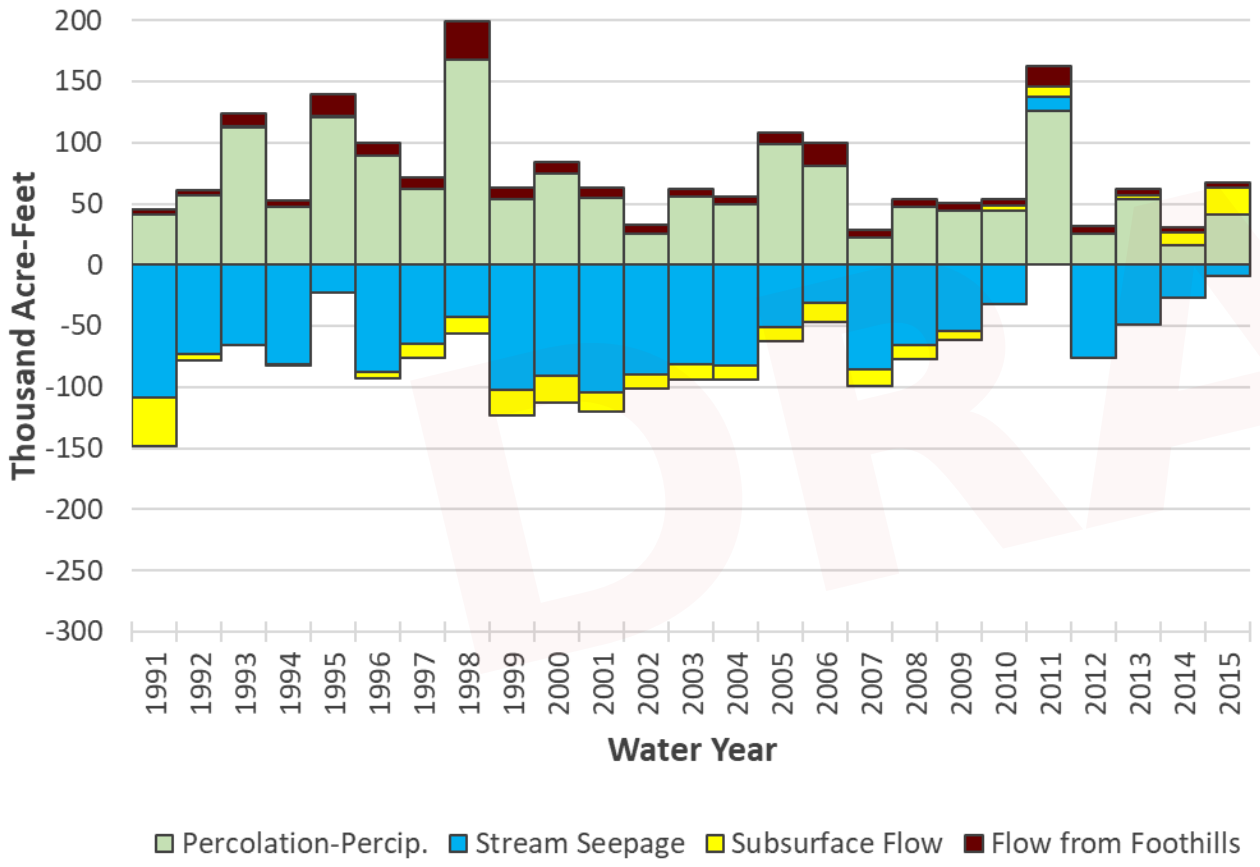
Natural Groundwater Budget



Shared Resources

- Percolation-Precip: 65 TAFY
- Flow from Foothills: 9 TAFY
- Subsurface Flow: -7 TAFY
- Stream Seepage: -63 TAFY
  - Stanislaus -25 TAFY
  - Tuolumne -31 TAFY
  - San Joaquin -7 TAFY

Note: Aggregated flow components may include some rounding error

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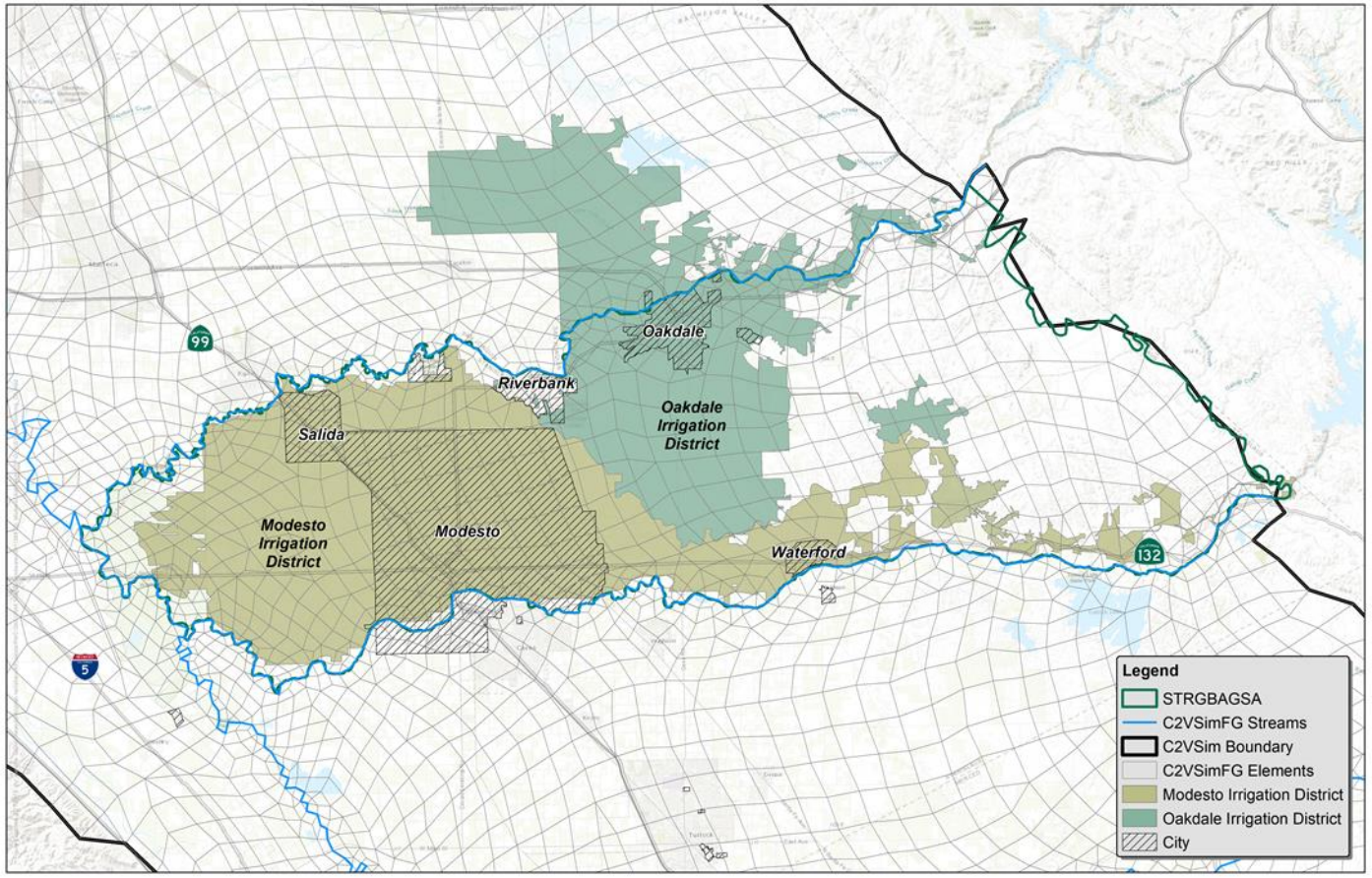
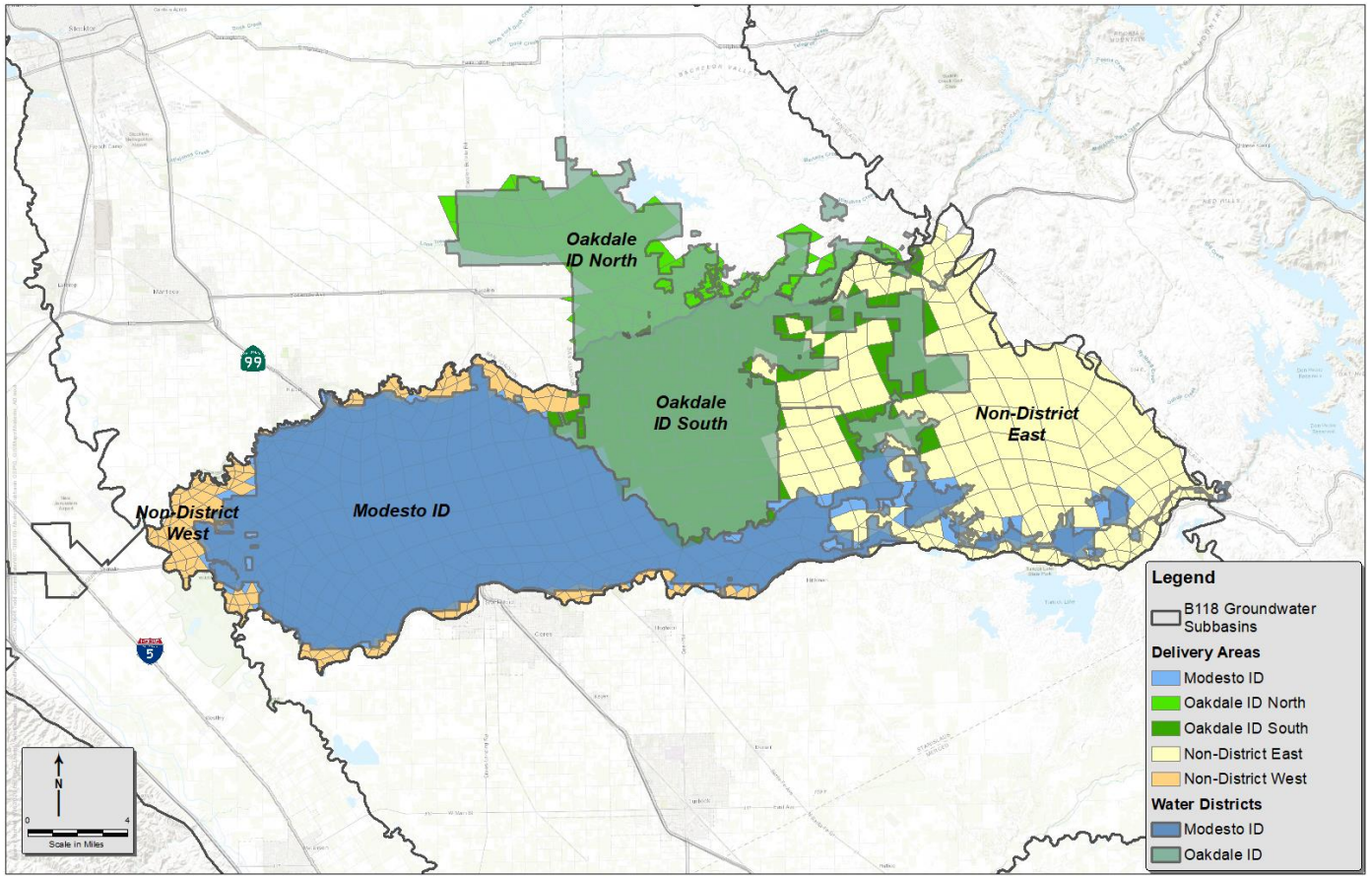
Local Water Agencies



Local Water Agencies

- Modesto ID
- Oakdale ID
- Non-District Ag
- Municipal Users
  - Modesto
  - Oakdale
  - Waterford
  - Riverbank
- Private Domestic

Local Water Agencies – Zone Budgets



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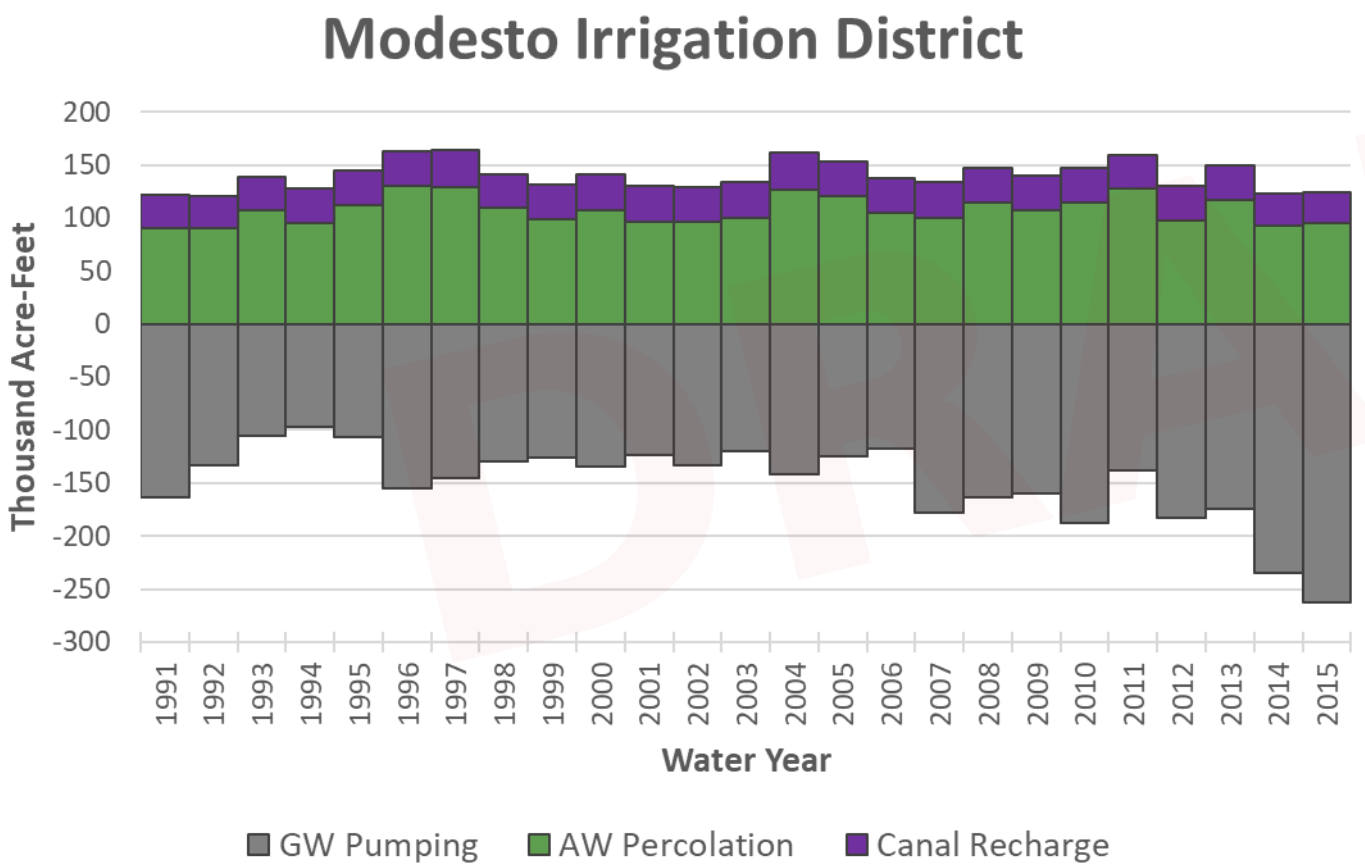
Operational Groundwater Budget



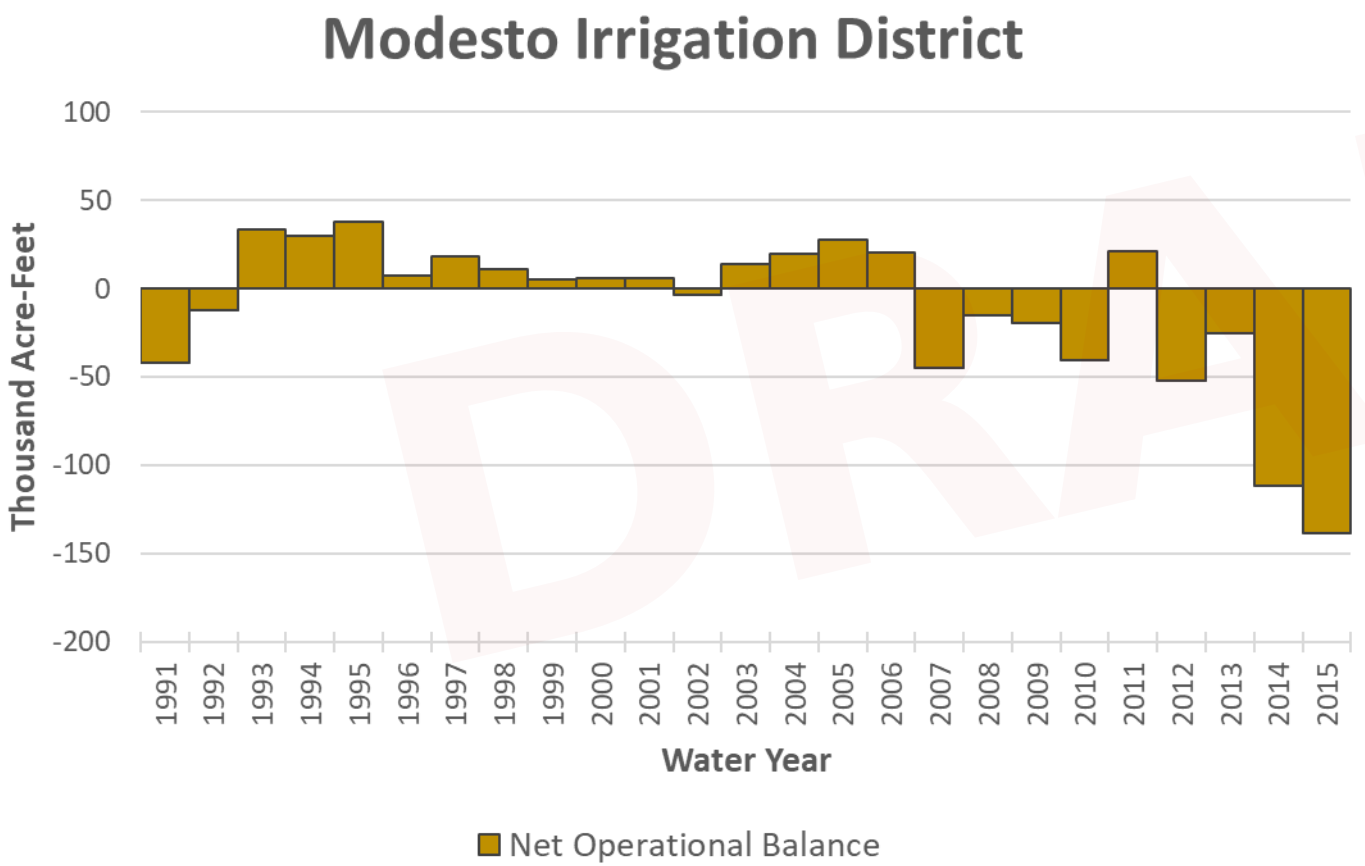
Modesto Irrigation District

- GW Pumping: -150 TAFY
- AW Percolation: 107 TAFY
- Canal Recharge: 32 TAFY

- Net Operational Balance: -10 TAFY

Note: Aggregated flow components may include some rounding error

Operational Groundwater Budget



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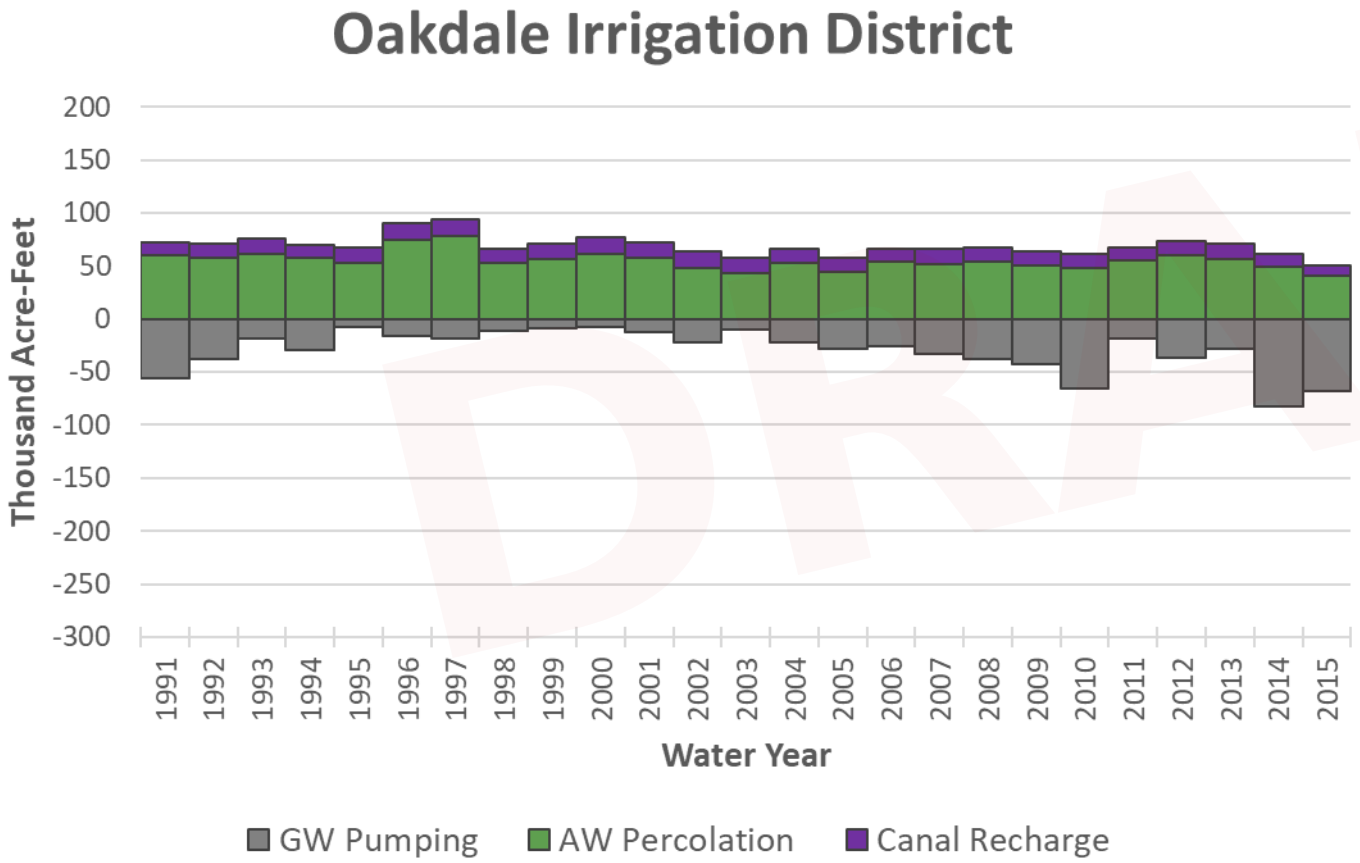

Oakdale Irrigation District

- GW Pumping: -30 TAFY
- AW Percolation: 55 TAFY
- Canal Recharge: 14 TAFY

- Net Operational Balance: 39 TAFY

Note: Aggregated flow components may include some rounding error

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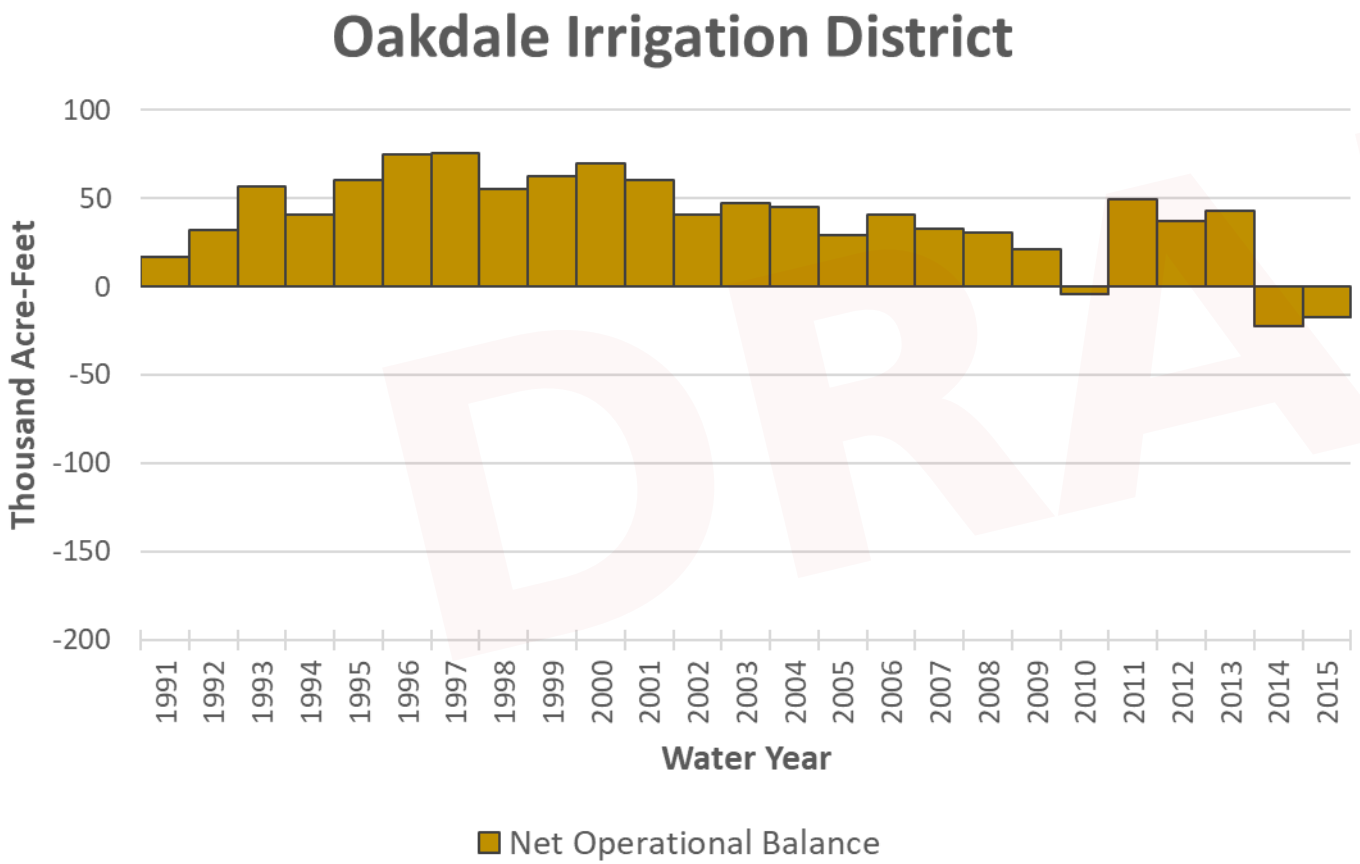
Operational Groundwater Budget



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Note: Aggregated flow components may include some rounding error

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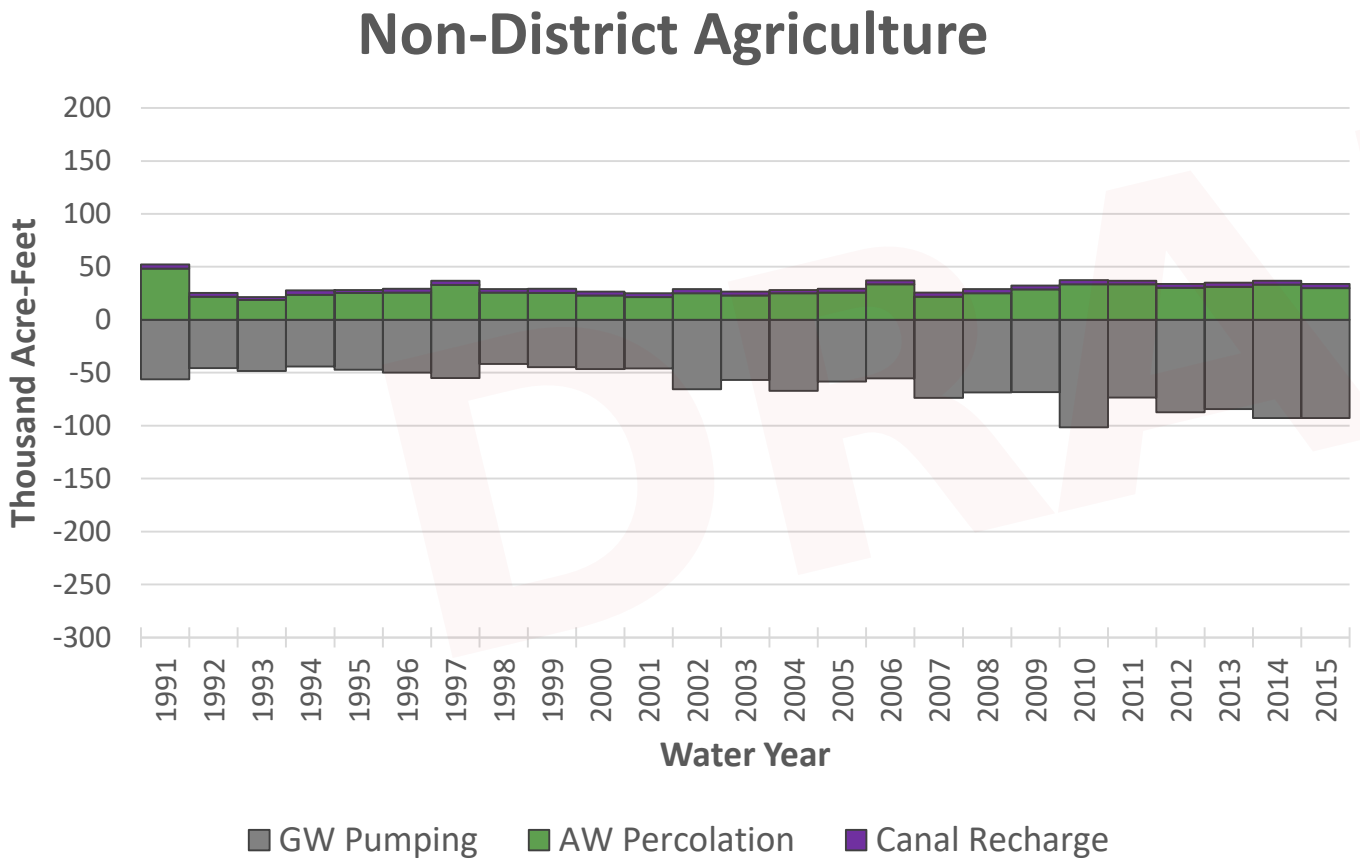


Non-District Agriculture

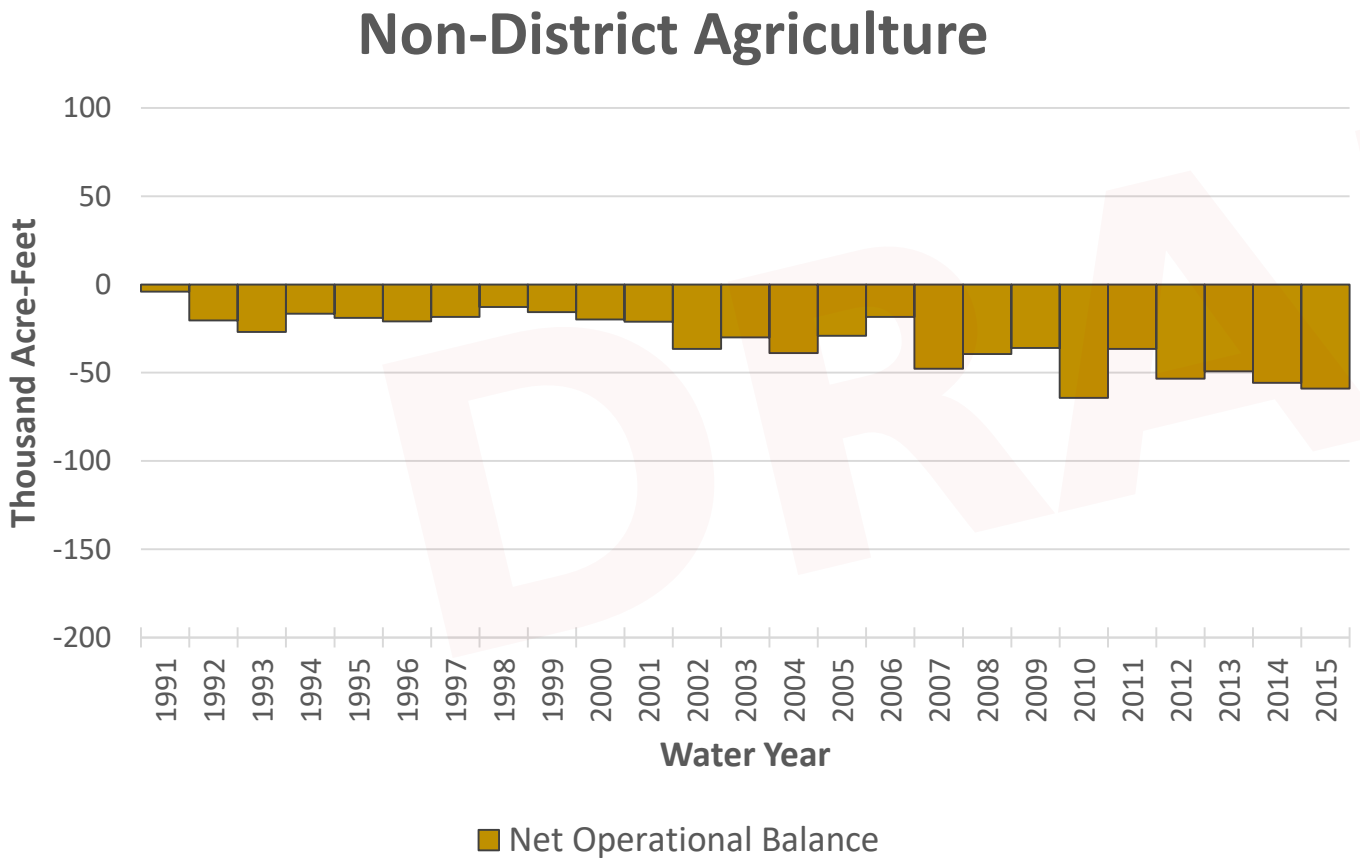
- GW Pumping: -63 TAFY
- AW Percolation: 28 TAFY
- Canal Recharge: 4 TAFY

- Net Operational Balance: -32 TAFY

Note: Aggregated flow components may include some rounding error

DRAFT

Operational Groundwater Budget



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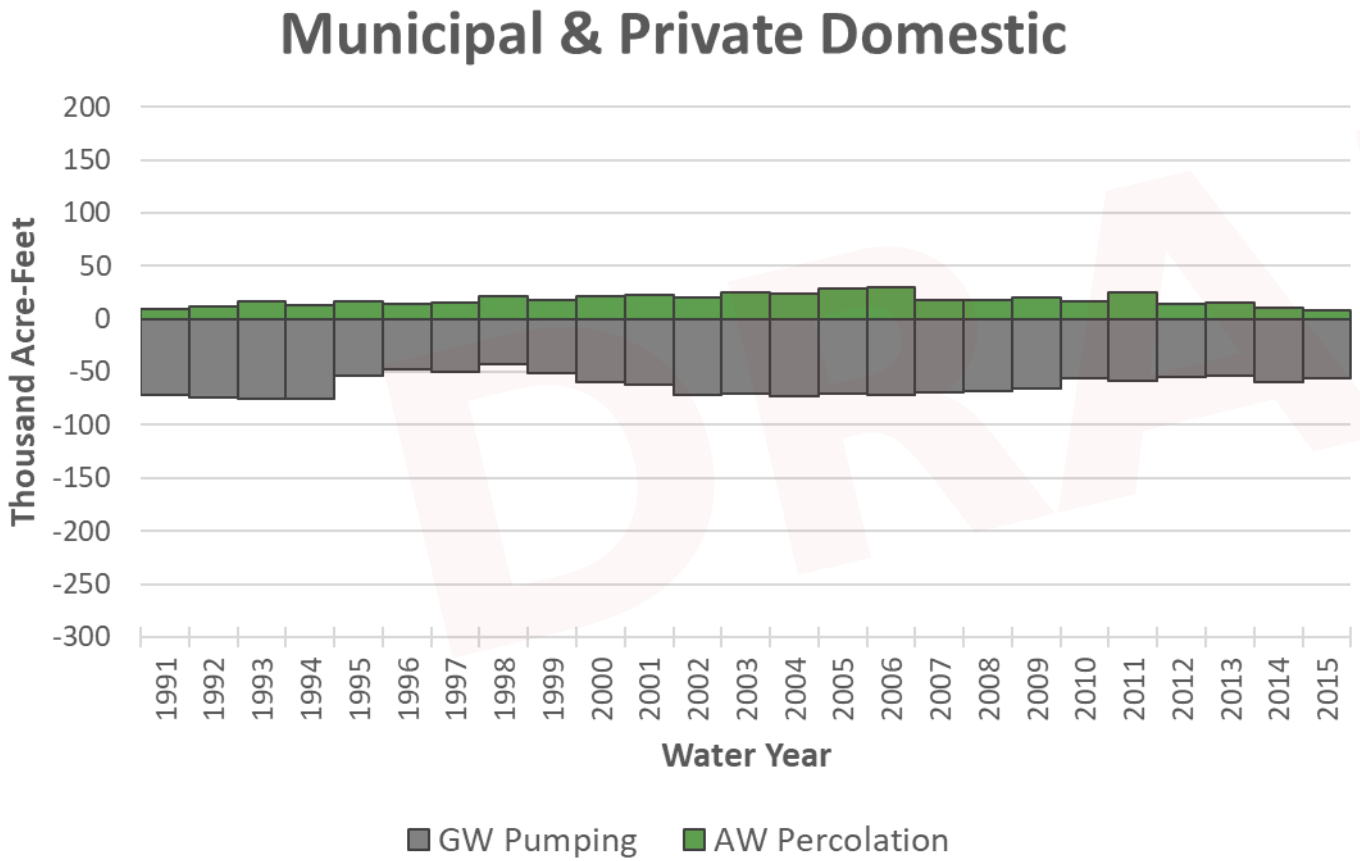

Municipal & Private Domestic

- GW Pumping: -62 TAFY
  - Municipal -41 TAFY
  - Private Domestic -21 TAFY
- AW Percolation: 18 TAFY
  - Municipal 12 TAFY
  - Private Domestic 6 TAFY

- Net Operational Balance: -44 TAFY

Note: Aggregated flow components may include some rounding error

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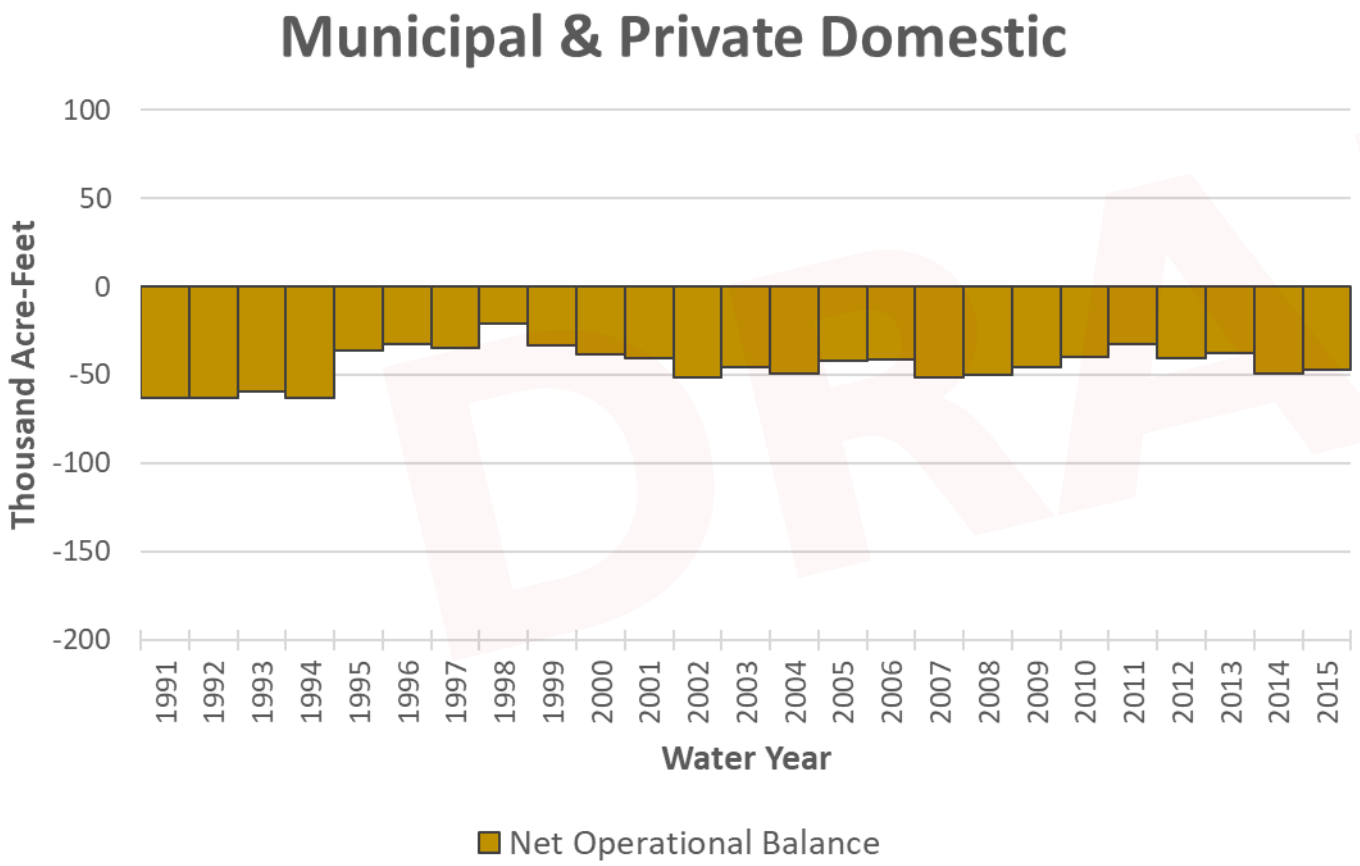
Operational Groundwater Budget



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Conclusions

- The Subbasin is in overdraft
  - Surface water agencies are usually in balance outside of drought conditions
  - The recent drought, coupled with increased demand, has stressed the aquifer
  - The future conditions baseline will give us a much better picture of the future
  - The future baseline will help us evaluate suitability goals and management actions

Next Steps – Baseline and Sustainable Yield

- Coordination on baseline conditions for future projected water budgets
- Development of future projected water budgets
  - Similar analysis and formatting as historical water budgets
  - Sustainability planning based on the projected conditions baseline
- Determination of sustainable yield
  - Continued coordination on methodology and approach
- Initiate discussion of sustainable management criteria to integrate with modeling analyses