



Sonoma Water

Clean. Reliable. Essential. Every Day.

Russian River Watershed Conditions and Instream Flow Changes

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Topics

- Watershed Hydrologic Conditions
 - Rainfall
 - Reservoir Storage
- Temporary Urgency Change Petitions
 - Recent Historical Filings
 - Pending May 2022 TUCP
- Reservoir Projections

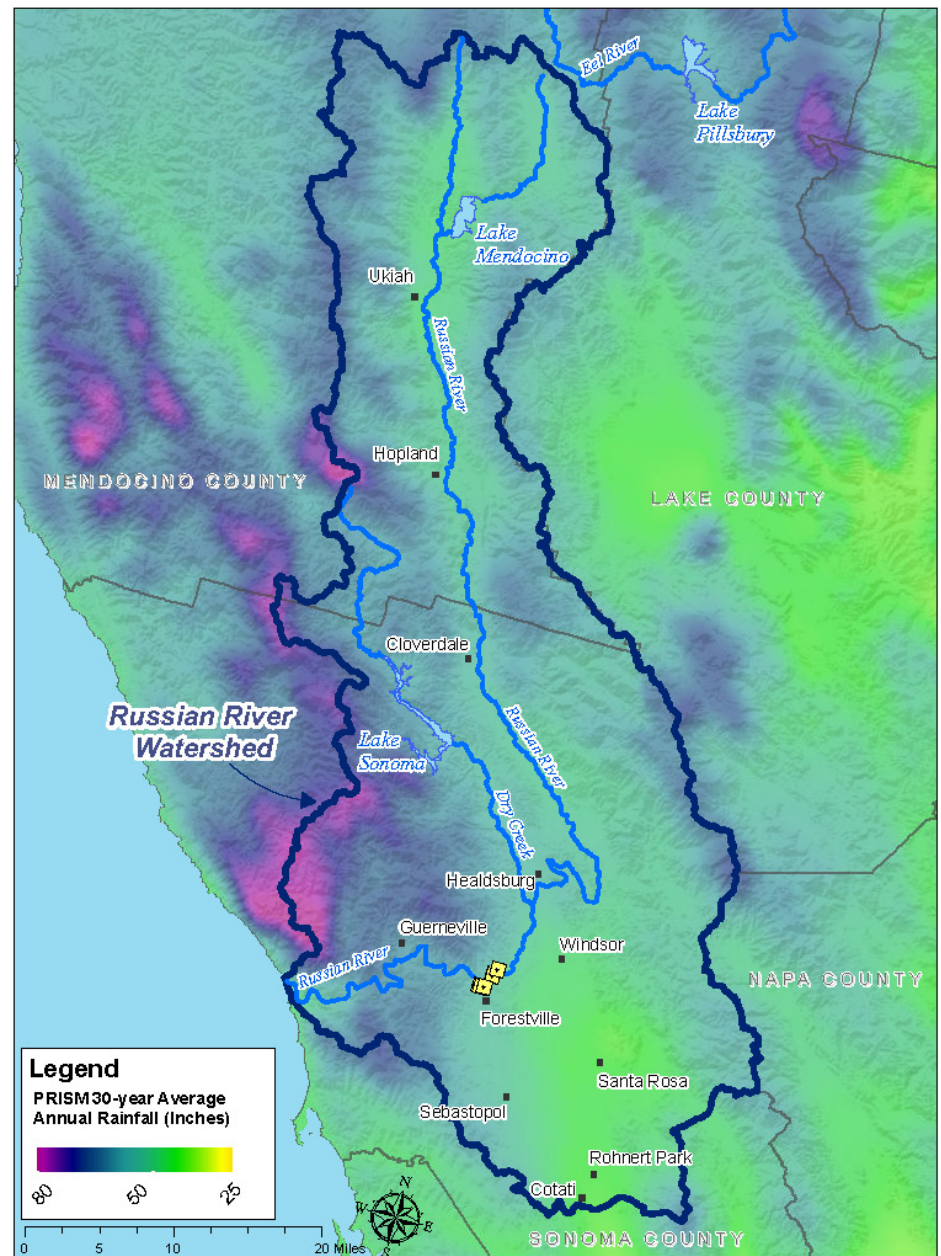
Russian River Watershed Rainfall

Atmospheric Rivers

- 3 to 4 occurrences per year
- 30-50% of annual precipitation

Annual Rainfall over Water Year (Oct 1 – Sept 30)

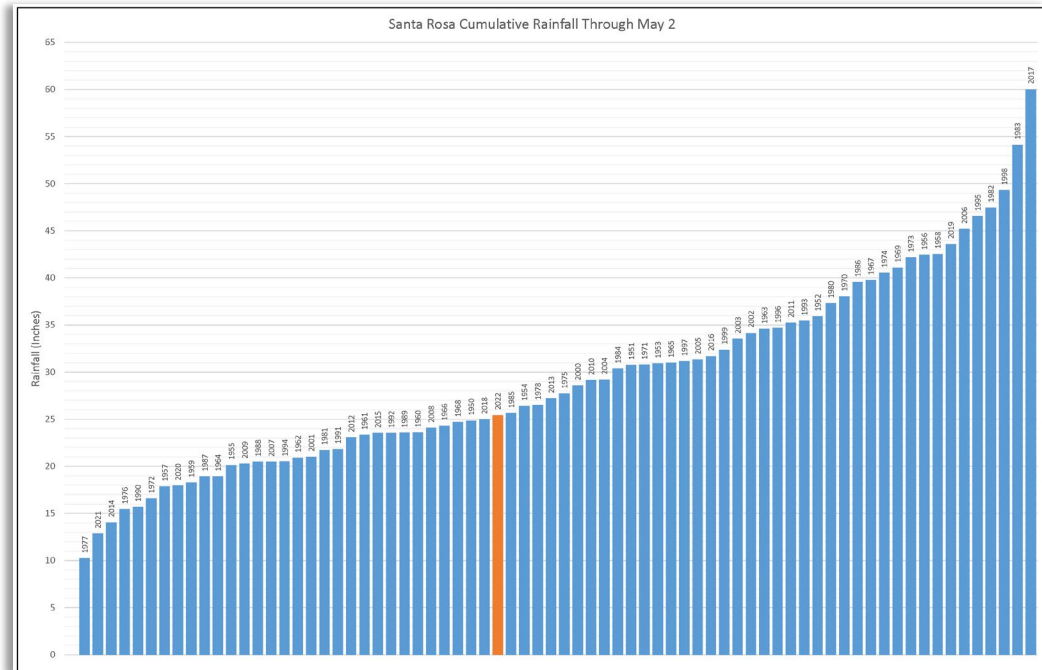
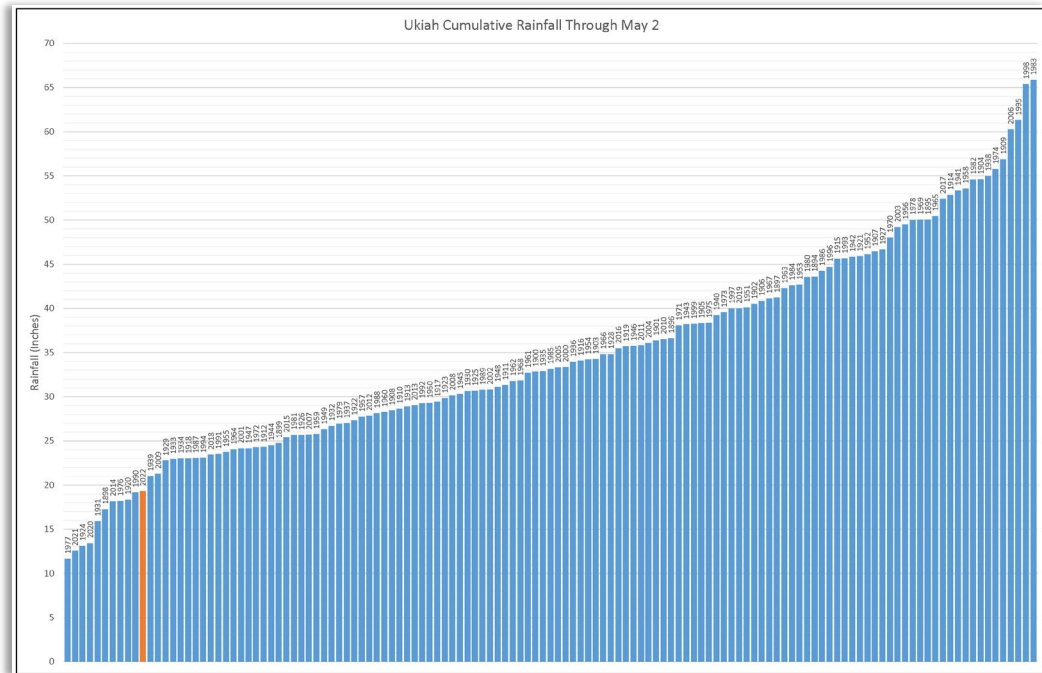
- Ukiah
 - Average (1894-2020): **36.67"**
 - ❑ WY 2020: 14.75"
 - ❑ WY 2021: 12.53"
 - ❑ WY 2022: 19.30" (to date)
- Santa Rosa
 - Average (1950-2020): **30.47"**
 - ❑ WY 2020: 19.23"
 - ❑ WY 2021: 12.86"
 - ❑ WY 2022: 25.42" (to date)



Russian River Watershed Rainfall

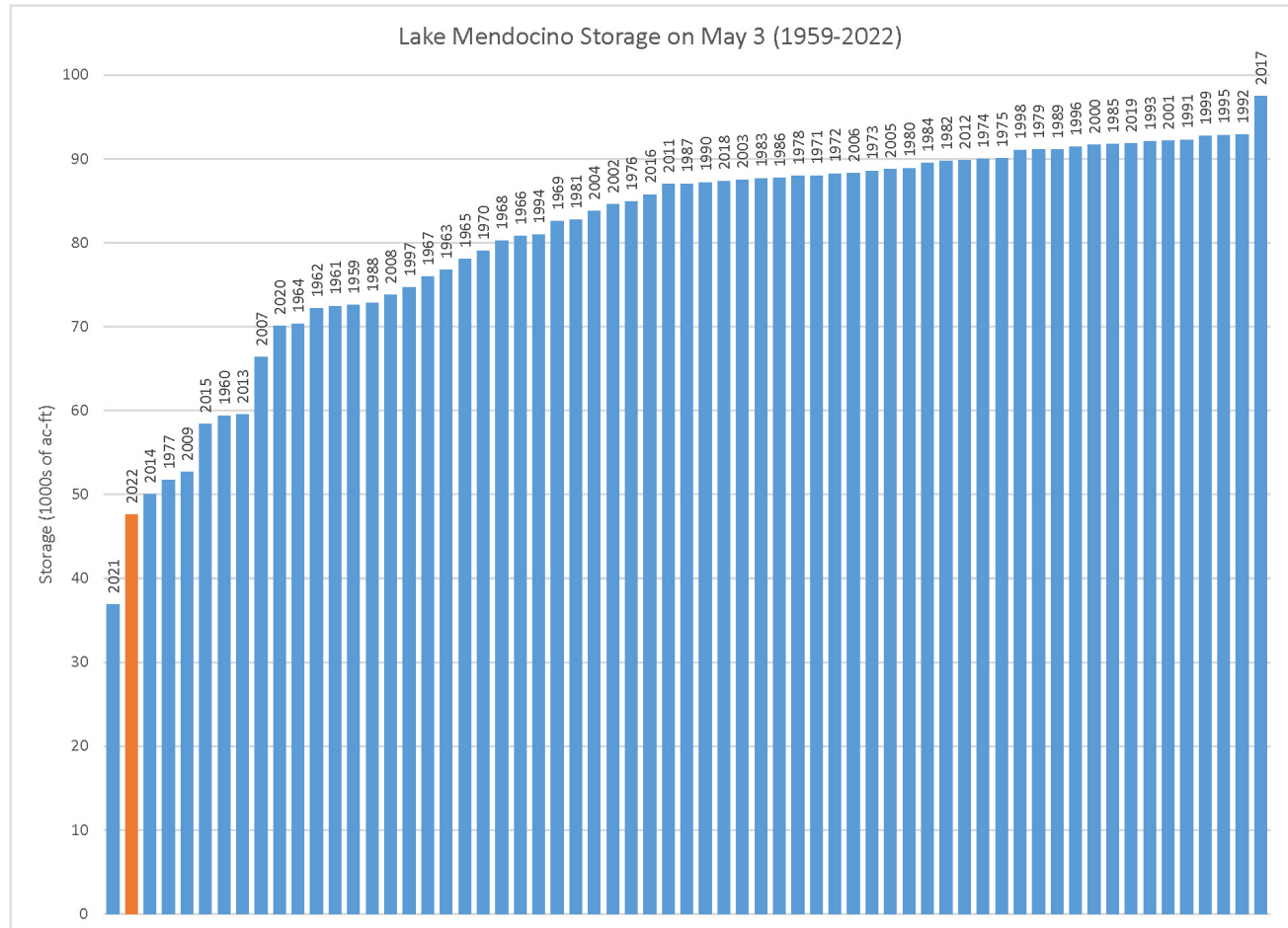
Comparative Plots Ranking Current Water with Historic Period of Record

- Ukiah Station
 - 1893 – Current
- Santa Rosa Station
 - 1903 - Current



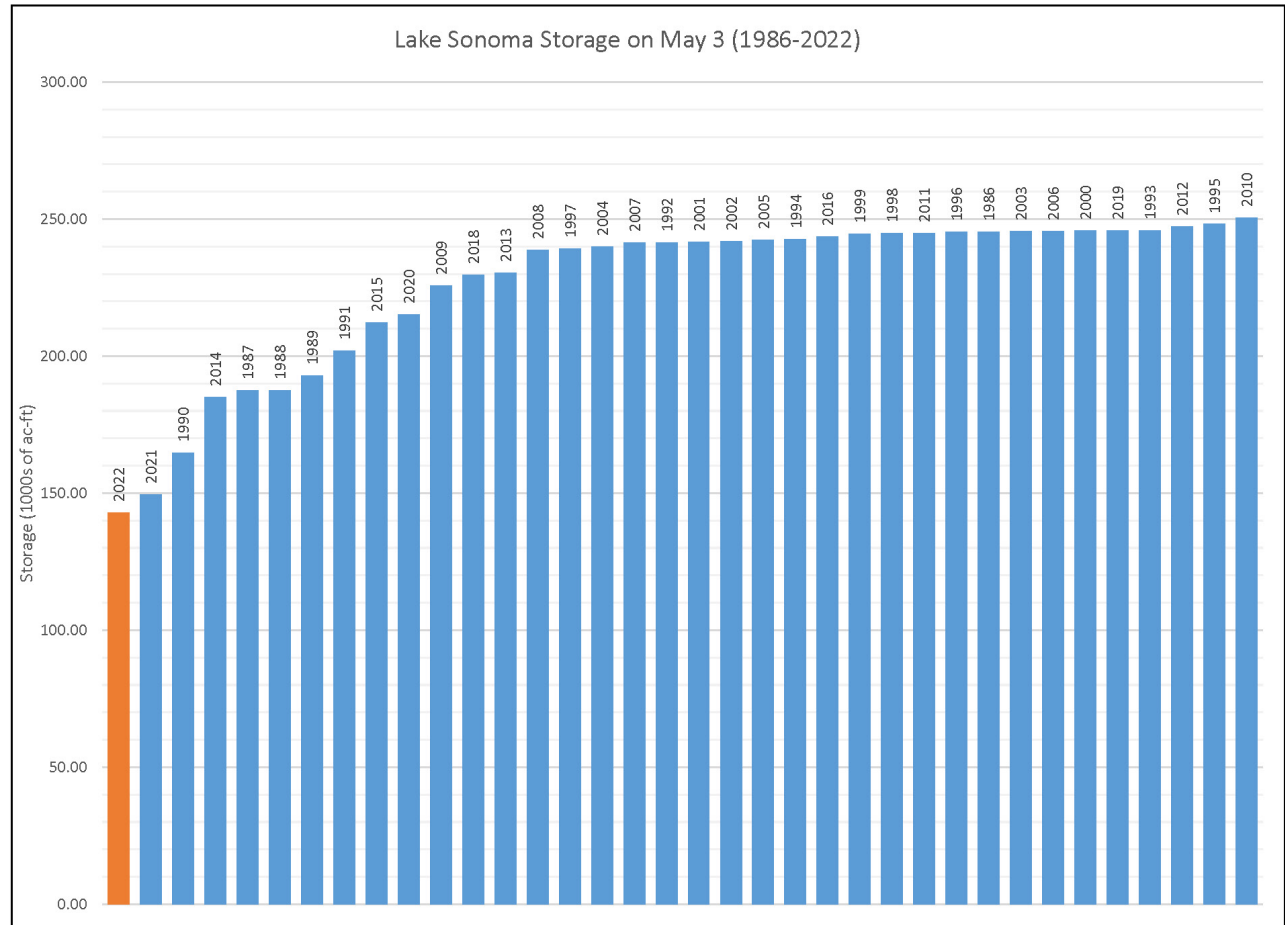
Lake Mendocino Reservoir Storage

Comparison of Current Storage to Same-Day Storage Over Historic Period



Lake Sonoma Reservoir Storage

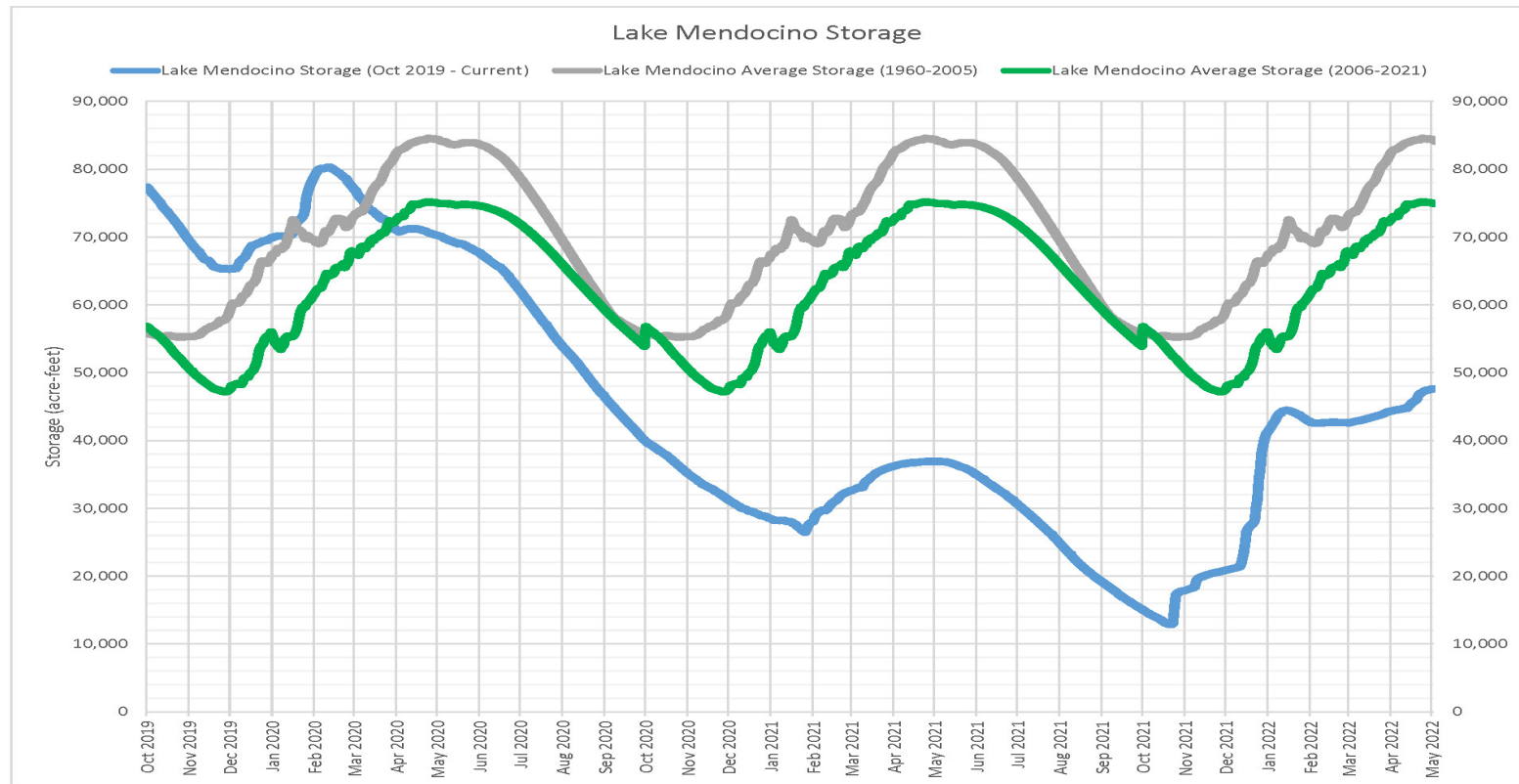
Comparison of Current Storage to Same-Day Storage Over Historic Period



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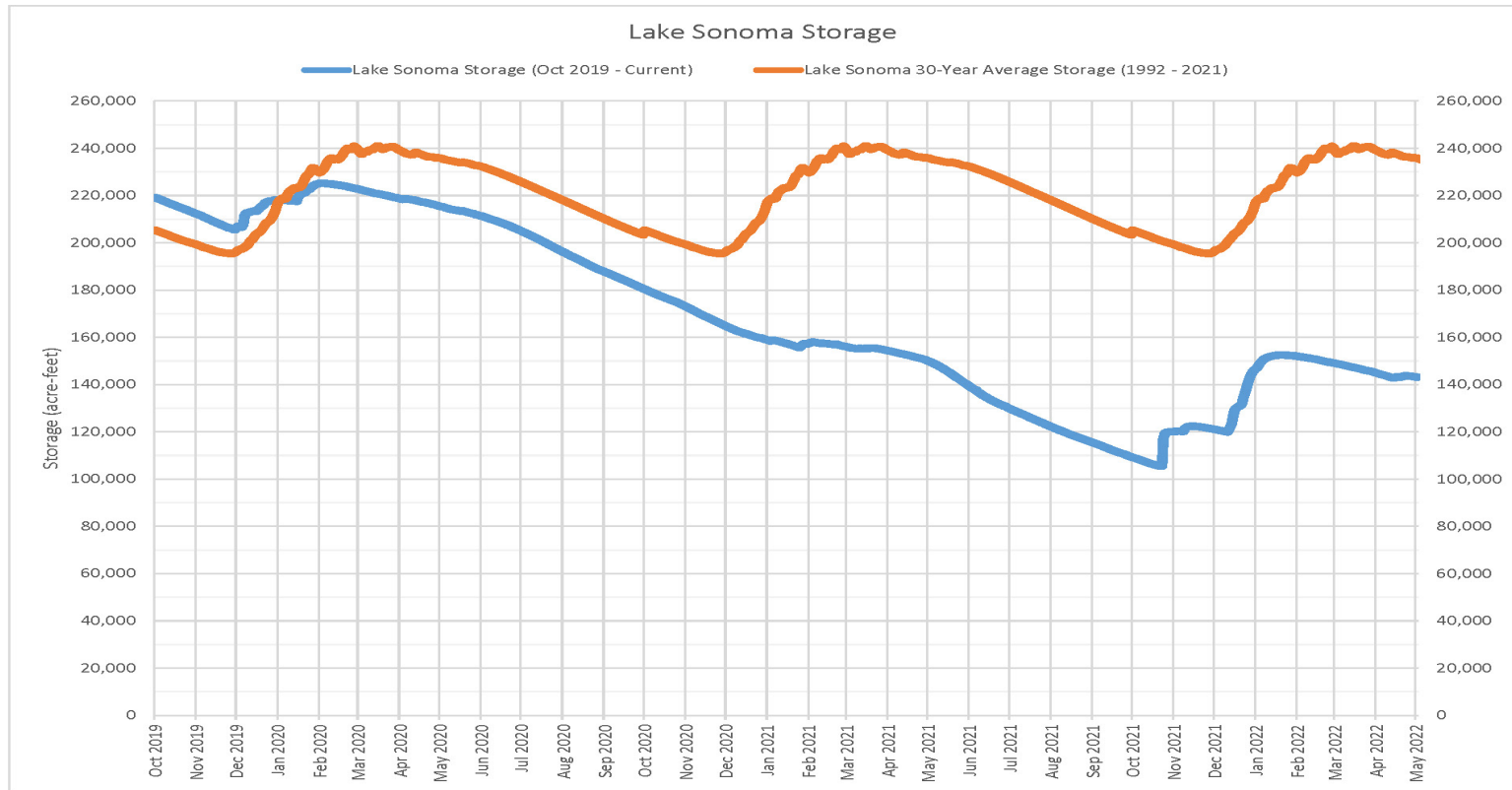
Lake Mendocino Reservoir Storage

Comparative Plots of Current Period with Historic Periods



Lake Sonoma Reservoir Storage

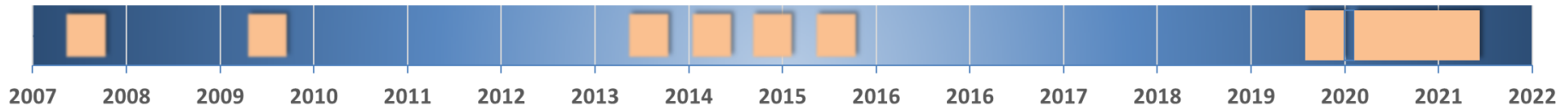
Comparative Plots of Current Period with Historic Periods



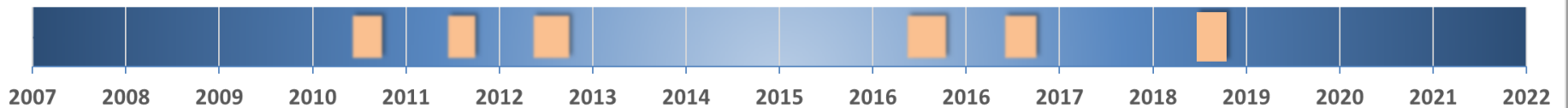
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Temporary Urgency Change Petitions

Time Periods Operating Under Temporary Urgency Change Petition Order
Due to Hydrologic Conditions



Time Periods Operating Under Temporary Urgency Change Petition Order
for Biological Opinion



Biological Opinion Minimum Instream Flows

- May 15 – Oct 15
- Upper Russian: 125 cfs
- Lower Russian: 70 cfs

Minimum Instream Flow Requirements

Current Criteria: Critical

- Upper Russian: 25 cfs
- Lower Russian: 35 cfs
- Dry Creek: 25 cfs

After TUCO on Jun 8th: Normal Dry Spring 2

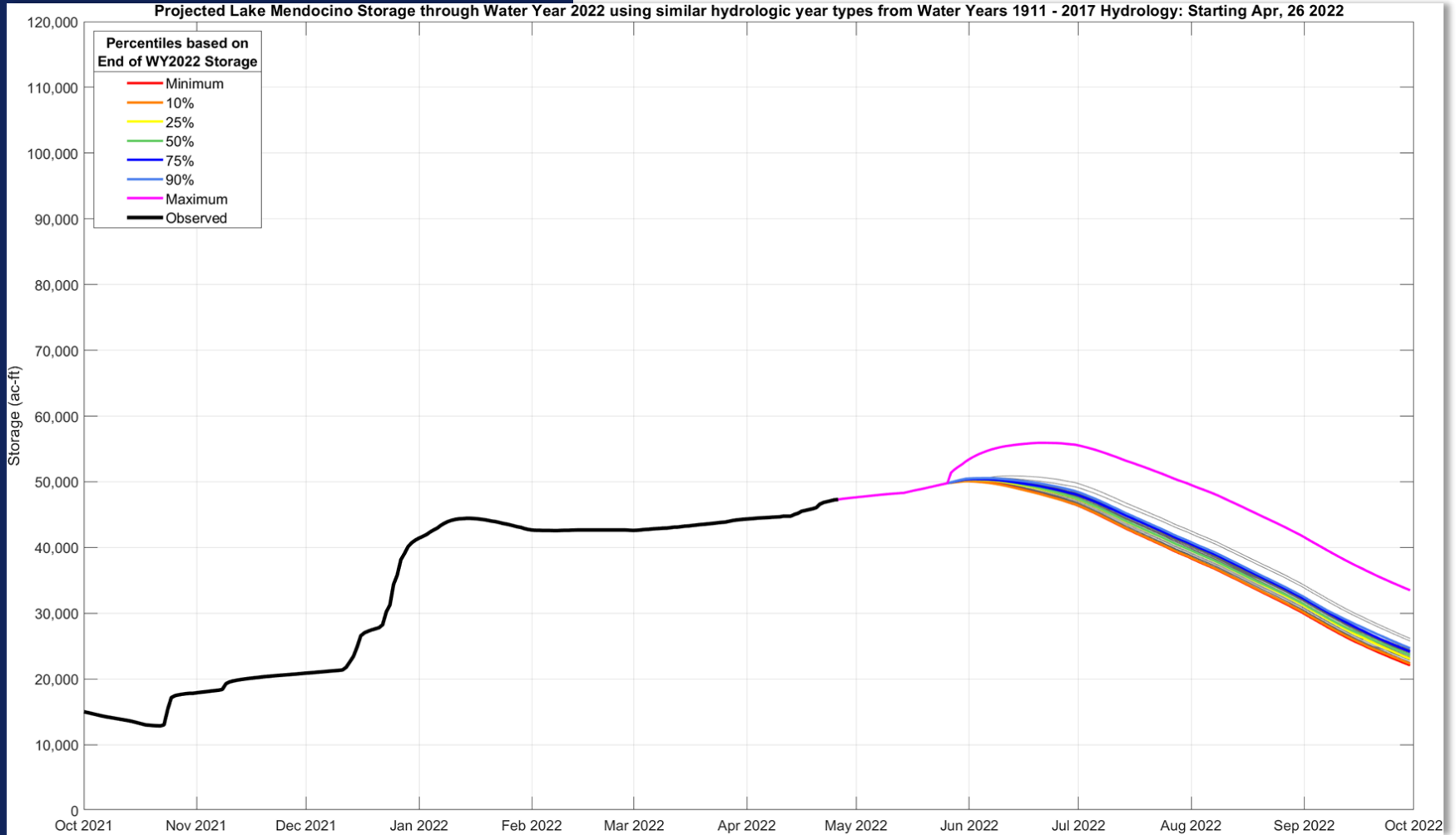
- Upper Russian: 75 cfs
- Lower Russian: 125 cfs
- Dry Creek: 80 cfs



Reservoir Storage Projections: Lake Mendocino

End of Water Year Storage

- PVP Variance to Dry: ~25k ac-ft

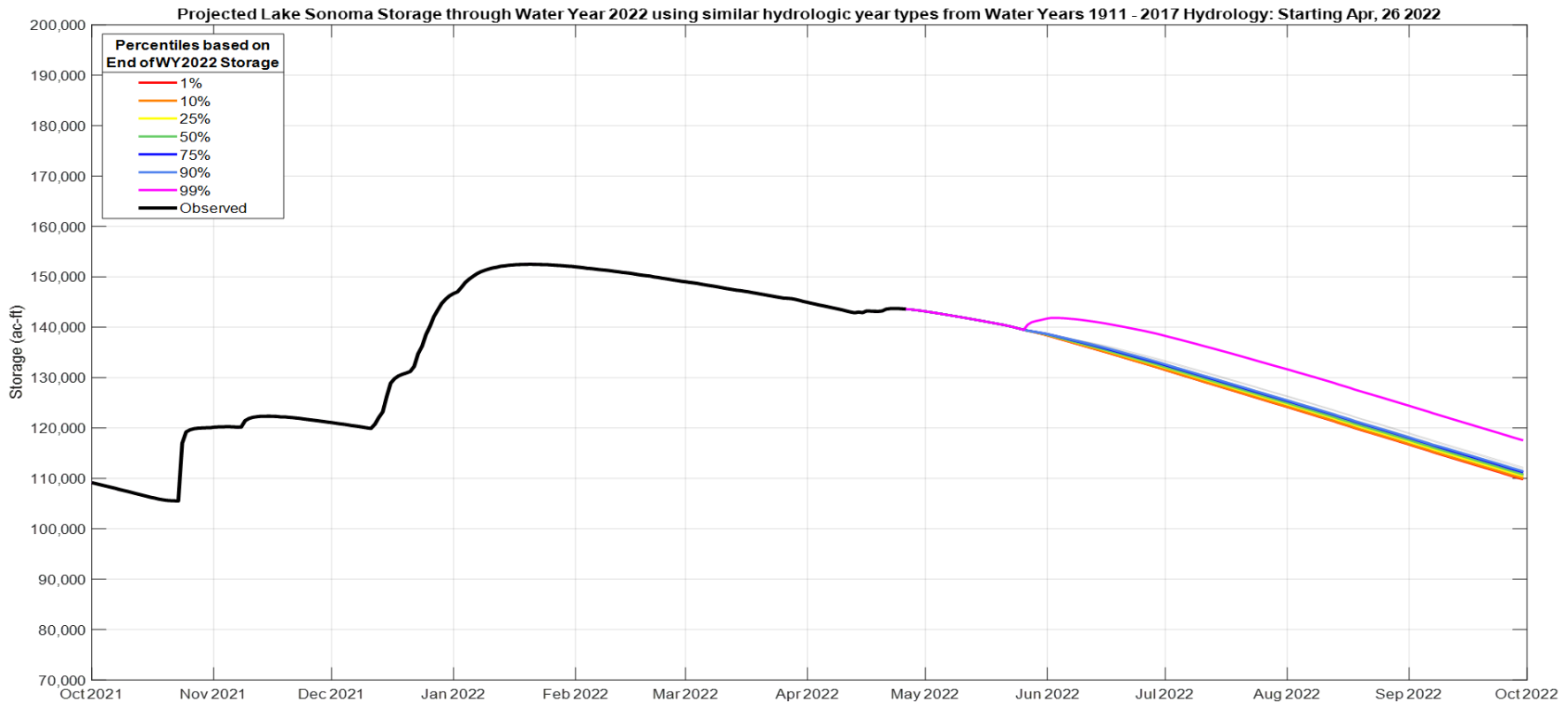


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Reservoir Storage Projections: Lake Sonoma

End of Water Year Storage

- D1610: ~110k ac-ft





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