

NEVADA DIVISION OF  
**WATER RESOURCES**



Nevada Department of  
**CONSERVATION &  
NATURAL RESOURCES**

# Hearing on Proposed Orders for Hydrographic Basin

East Walker Area Hydrographic Basin 109

**May 8, 2025**

## **Presented by:**

James Henson, Esq., Chief ALJ;

Lauren Bartels, Walker Basin Specialist;

Jared McCrum, Supervising Technical Specialist

# INTRODUCTIONS

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- Purpose of Hearing
  - Provide notice of proposed orders
  - Discuss hydrology of the basin
  - Take testimony on proposed orders
- Hearing is being recorded for the records of the State Engineer, and will be available upon request

# HEARING DOCUMENTS

## WATER.NV.GOV



NEVADA DIVISION OF  
**WATER RESOURCES**

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Happening Now

Water Right Publications

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## Happening Now

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All Categories

01/28/25  
 Notices

### Order 1286

Order 1286 ordering all users of the Humboldt Decree to install and maintain headgates and measuring devices

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09/27/24  
 Hearings

### Upcoming Hearings

All hearings are available on our Hearings page.

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# OVERVIEW

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- Division of Water Resources
- Terminology
- Designating a basin
  - Purpose
  - Proposed vs. Final Orders
  - Procedure
  - Investigation
- Hydrology
- Proposed Orders
- Guidelines for providing testimony
- Testimony
- Public comment



# TESTIMONY

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- Oral testimony during hearing
  - Testimony will be limited to not more than 5 minutes per person
- Written testimony
  - Submitted by mail to:



State Engineer  
Nevada Division of Water Resources  
901 South Stewart Street, Suite 2002  
Carson City, Nevada 89701

# NEVADA DIVISION OF WATER RESOURCES

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*To conserve, protect, manage and enhance the State's water resources for Nevada's citizens through the appropriation and reallocation of the public waters.*

# TERMINOLOGY

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## Hydrographic Basin

- 14 Hydrographic Regions
- 256 Hydrographic Basins
- Maps on Division Website
  - <http://water.nv.gov/>

## Manner of Use

- How the water is being used
- Specifying the manner of use is up to the applicant
- Ex. IRR, MUN, COM, IND, MM



# DESIGNATING A BASIN: PURPOSE

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- Protects existing water rights holders
  - Proposed actions directed to new appropriations of groundwater in the basin
- Manage the resources in a sustainable manner
- Evaluate the management needs of a basin
- Incremental step increasing the State Engineer's proactive management of a basin
- Only pertains to groundwater



# DESIGNATING A BASIN: PURPOSE

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- Designation of a basin, or portion of, allows the State Engineer to make additional management rules as provided in NRS Chapter 534
- Water right must be acquired before a well is drilled
  - Authority provided by NRS 534.050; Well driller duties by NAC 534.300; Waivers by NAC 534.440 - 534.446
- Making Rules, Regulations, and Orders
  - Authority provided by NRS 534.120
  - Ex. meter installation, meter reporting, preferred use, mine dewatering
- Basin Assessments
  - Authority provided by NRS 534.040

# PROPOSED VS. FINAL ORDERS

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- Proposed Orders:
  - Are not effective and may be modified based on testimony provided.
  - Become effective when signed by the State Engineer.
- Final Orders:
  - Final Orders are not retroactive—they do not change the status of existing permitted rights or applications filed prior to issuance of the Final Orders.
  - Pending Applications are not subject to the Final Orders.
  - New applications can be filed with our Office and will be reviewed in accordance with NRS 533 and 534. However, as discussed, the Final Orders would curtail new appropriations in the Basin.

# DESIGNATING A BASIN: PROCEDURES

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- Administrative procedure
  - Authority is provided by NRS 534.030
- Hold a public hearing to provide notice of the intended action
- Take testimony from the public in support or opposition of the proposed actions
- Further investigate to determine if the basin is in need of additional administration
- The State Engineer issues an order to designate the area by basin, or portion therein

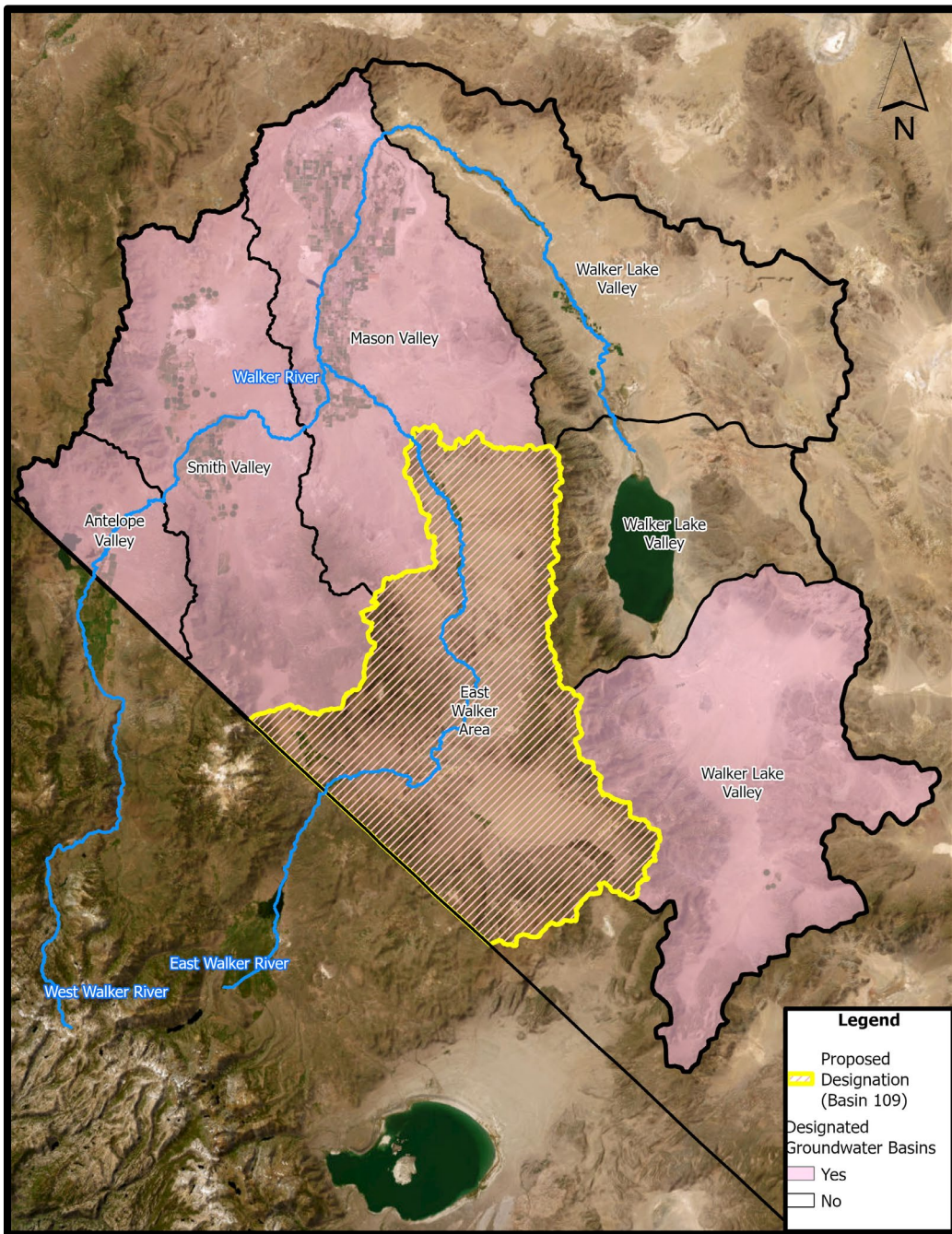
# DESIGNATING A BASIN: INVESTIGATION

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- Many factors are considered during the investigation, and these factors may not be the same for every basin
- Factors suggesting a need for further administration may include, but are not limited to:
  - available water budget of that basin
  - appropriations or committed resources
  - quantity of water pumped with respect to water availability
  - issues that could be addressed through further management
  - planned or existing development, including mineral exploration
  - the predominant manner of use
  - geography, i.e., common supply with another state, contains reserved or federal land within the basin
  - actively monitoring of the basin



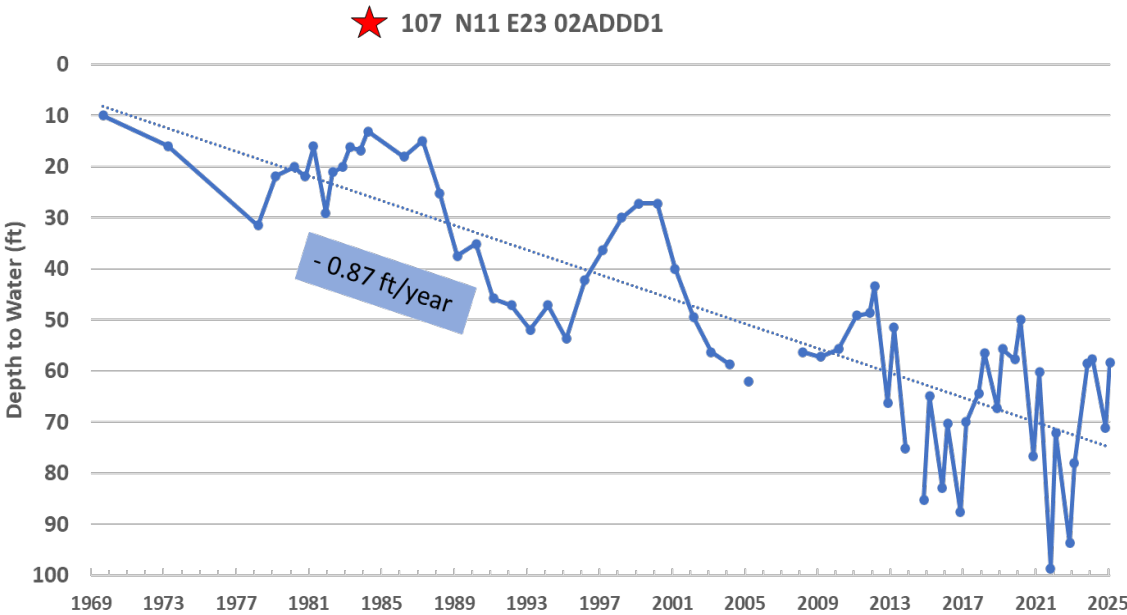
# WHY DESIGNATE THE EAST WALKER AREA?



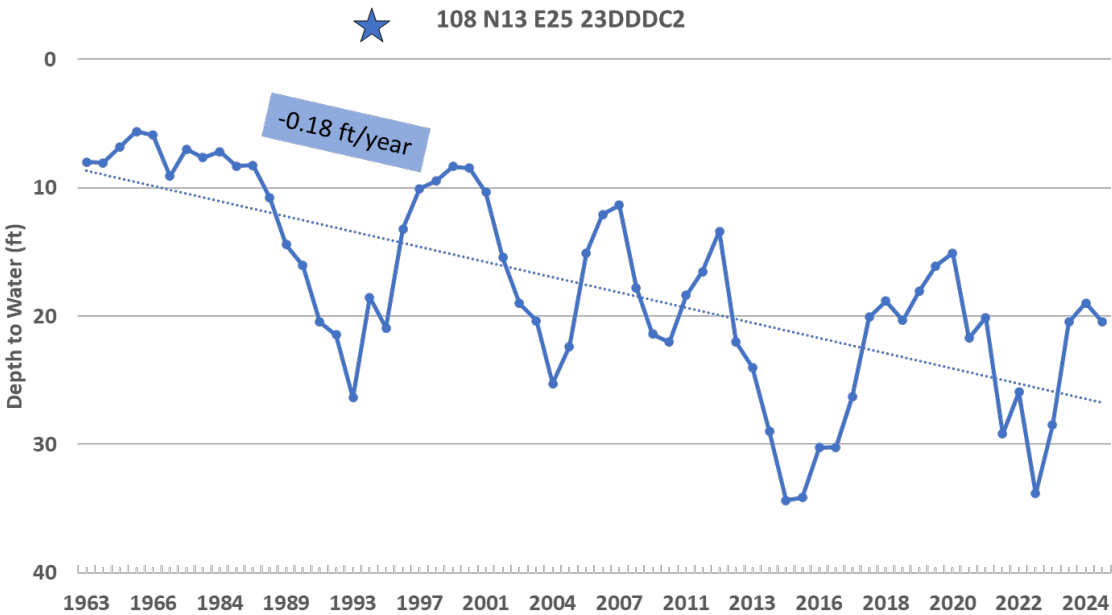
- East Walker Area is one of seven basins within the Walker River Hydrographic Region
- Administratively different groundwater basins, but all connected by the Walker River flow system
- Surface water and groundwater systems are connected, and water use in the East Walker Area affects water supply in downstream basins
- Additional management now can help ensure more sustainable water use

# SMITH AND MASON GROUNDWATER LEVEL TRENDS

Smith Valley (Basin 107)

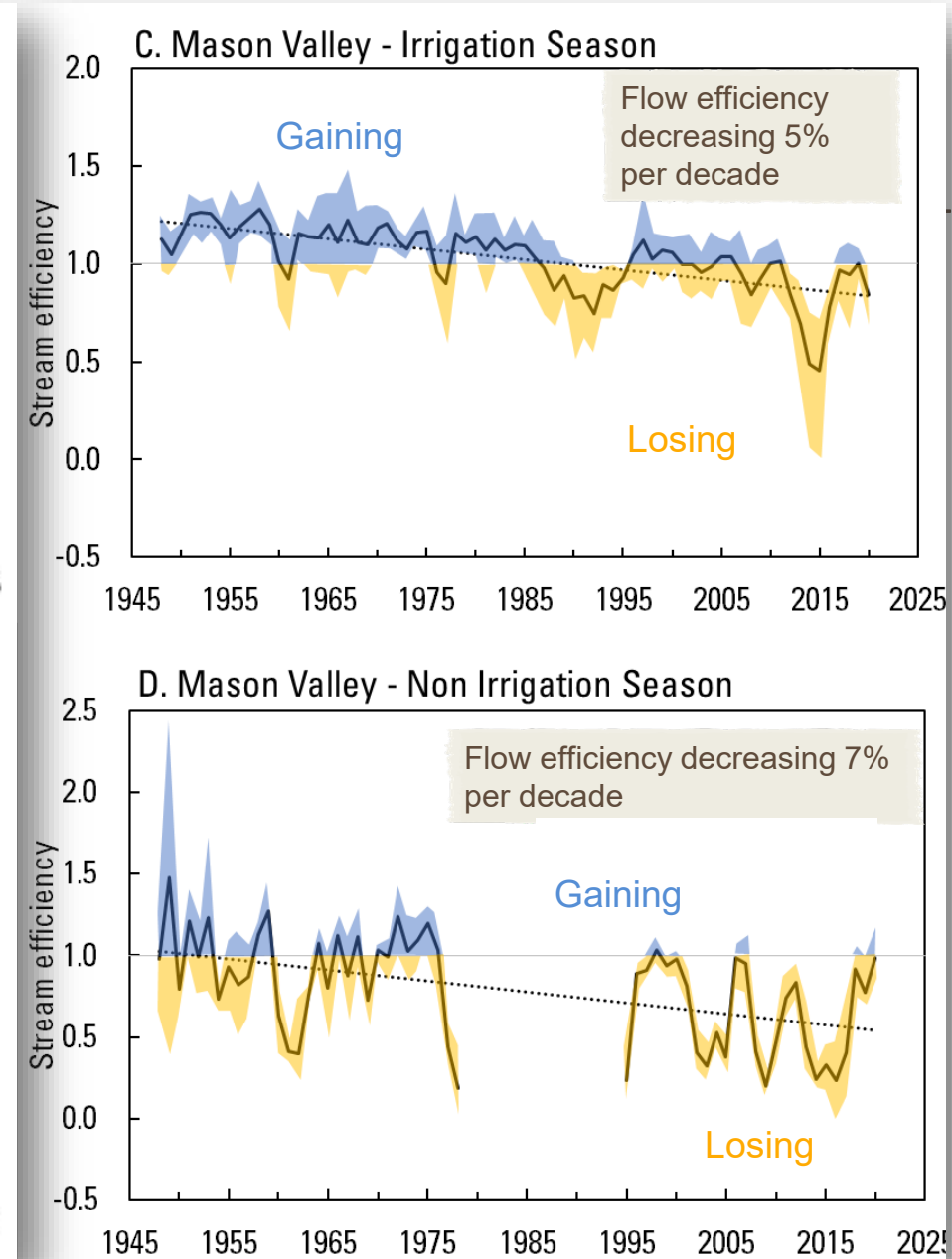
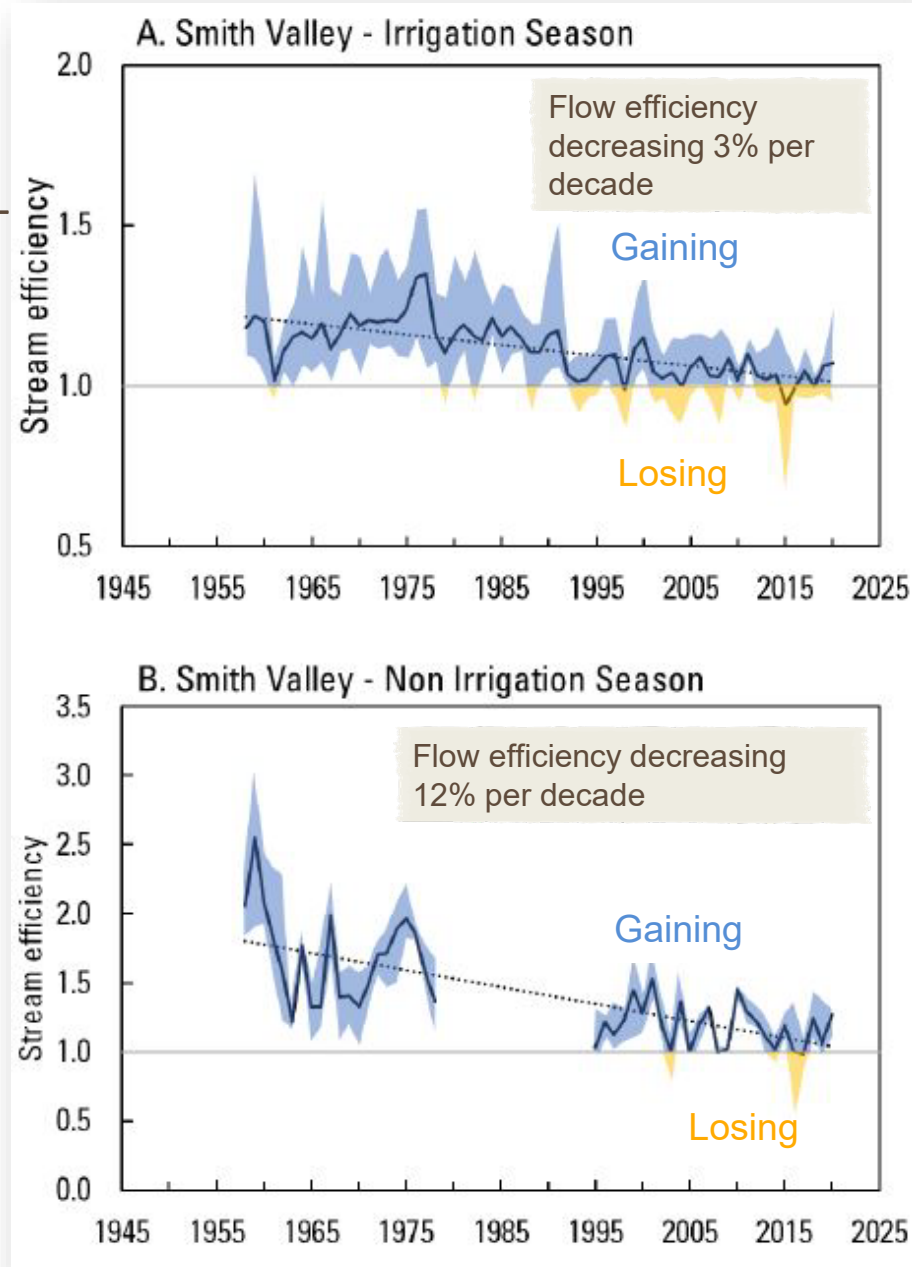


Mason Valley (Basin 108)



# WALKER RIVER STREAM EFFICIENCY

- From: Davies and Naranjo (USGS) 2022 NWRA presentation
- Decreasing Stream Efficiency (SE) with declining water table
- River loss rate is increasing

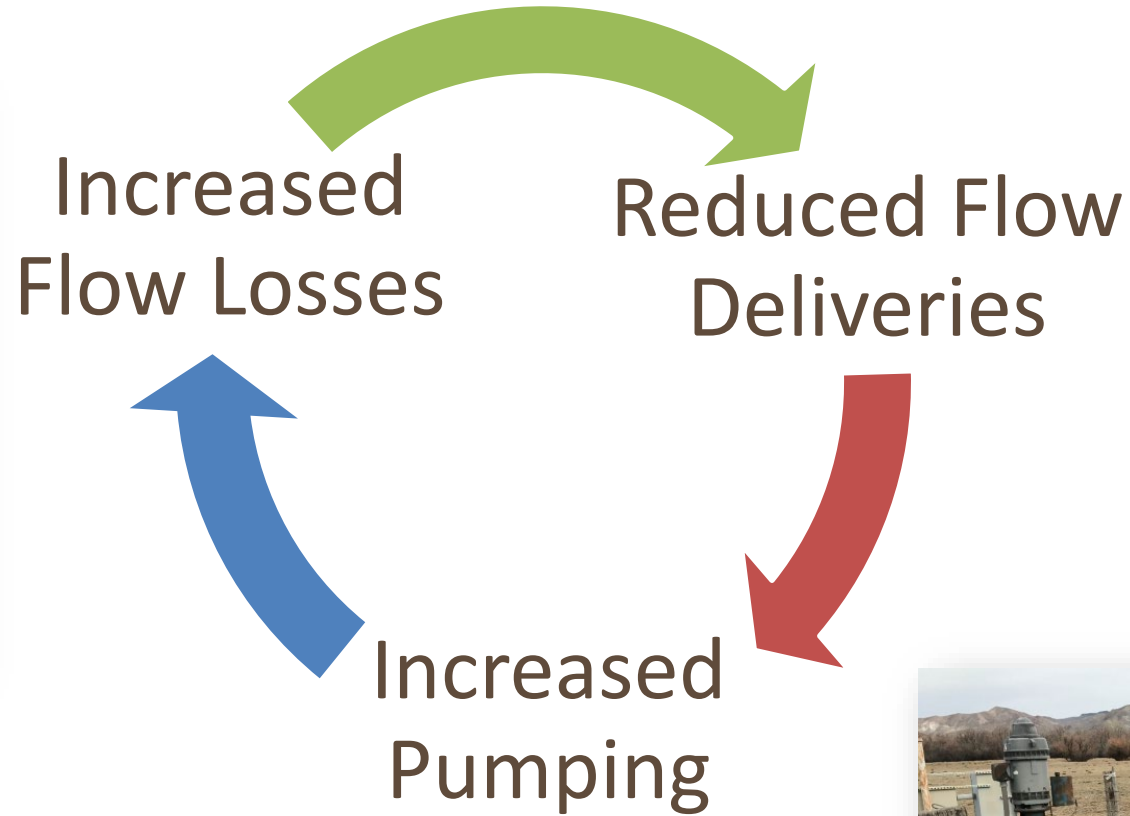




# FEEDBACK CYCLE OF EXCESSIVE PUMPING AND RIVER FLOW EFFICIENCY



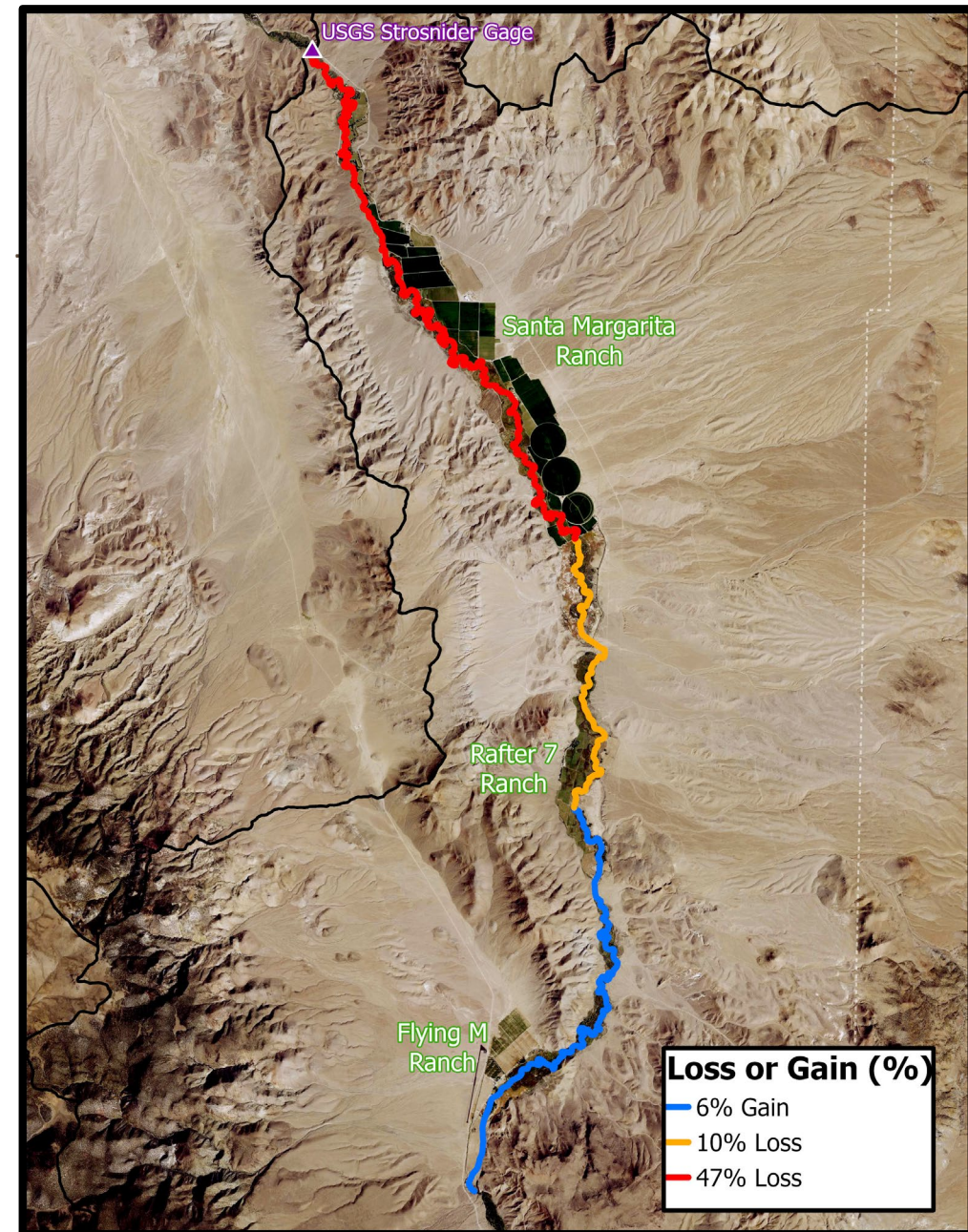
Wabuska gage





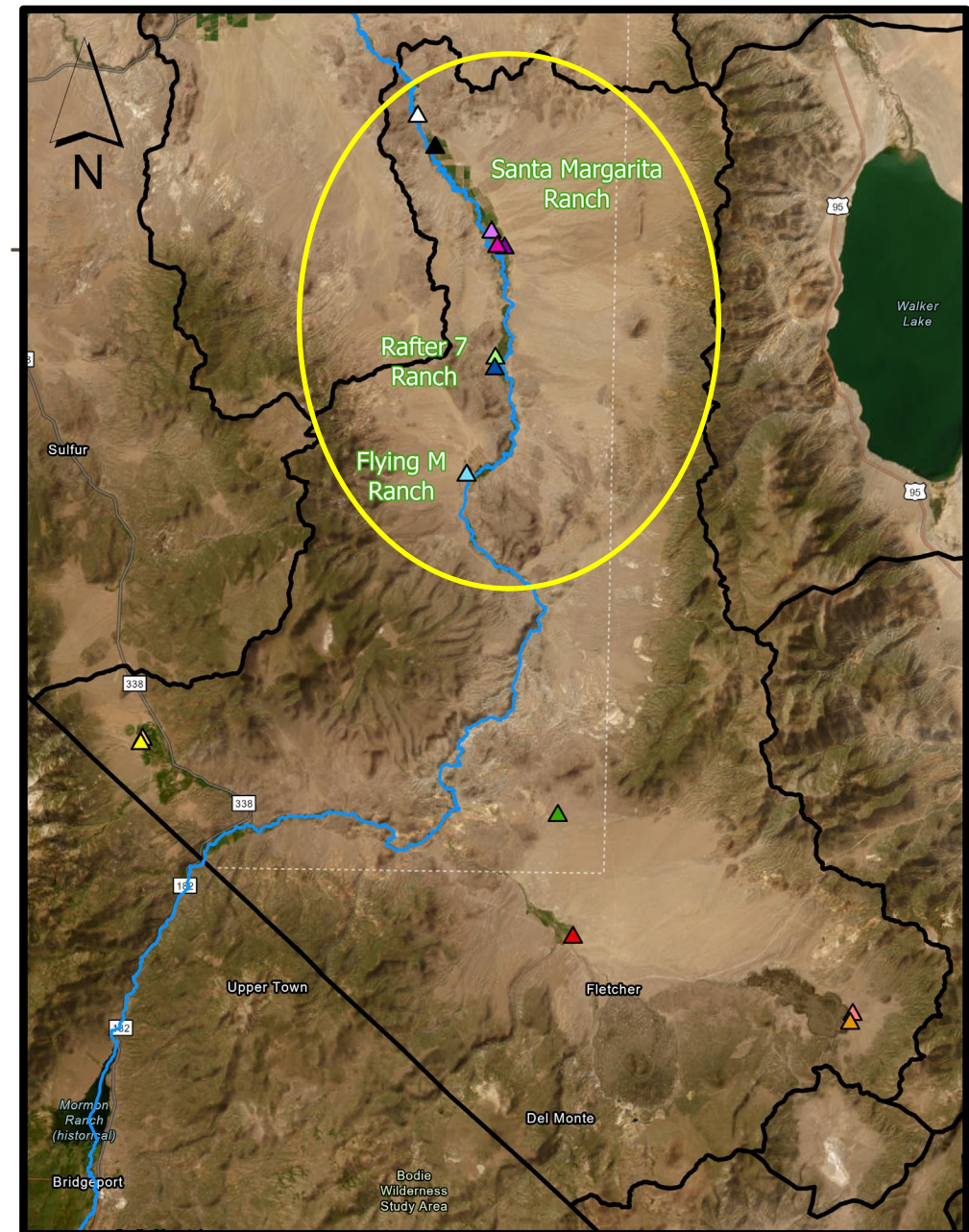
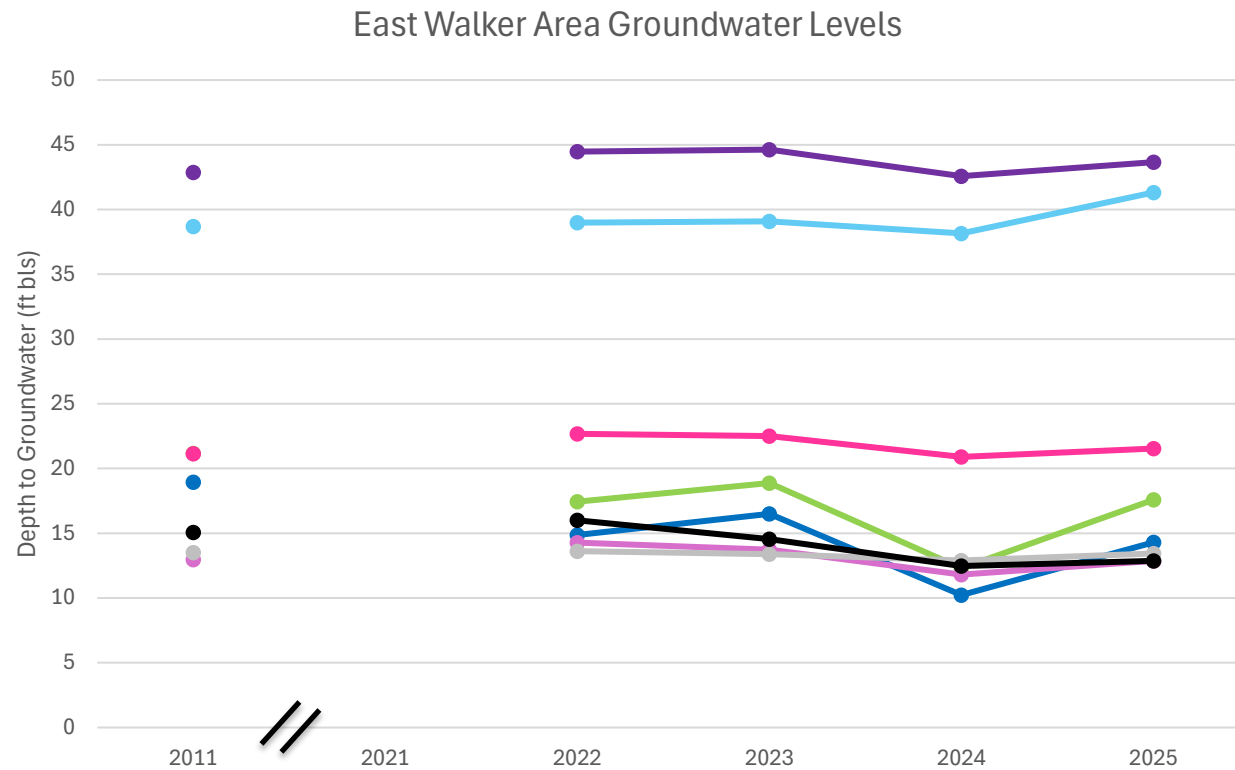
# EAST WALKER RIVER GAINS AND LOSSES

- **Losses were occurring on the East Walker between Bridgeport Reservoir and the USGS Strosnider Gage, but it was unclear where the losses were occurring**
- Stream discharge measurements (cfs) were collected by WRID on seven days **between July 1-14, 2021, and by NDWR on August 3, 2021**
- Accounting for surface water diversions, **the largest losses were occurring on the stretch between the Rafter 7 Ranch and the USGS Strosnider Gage**

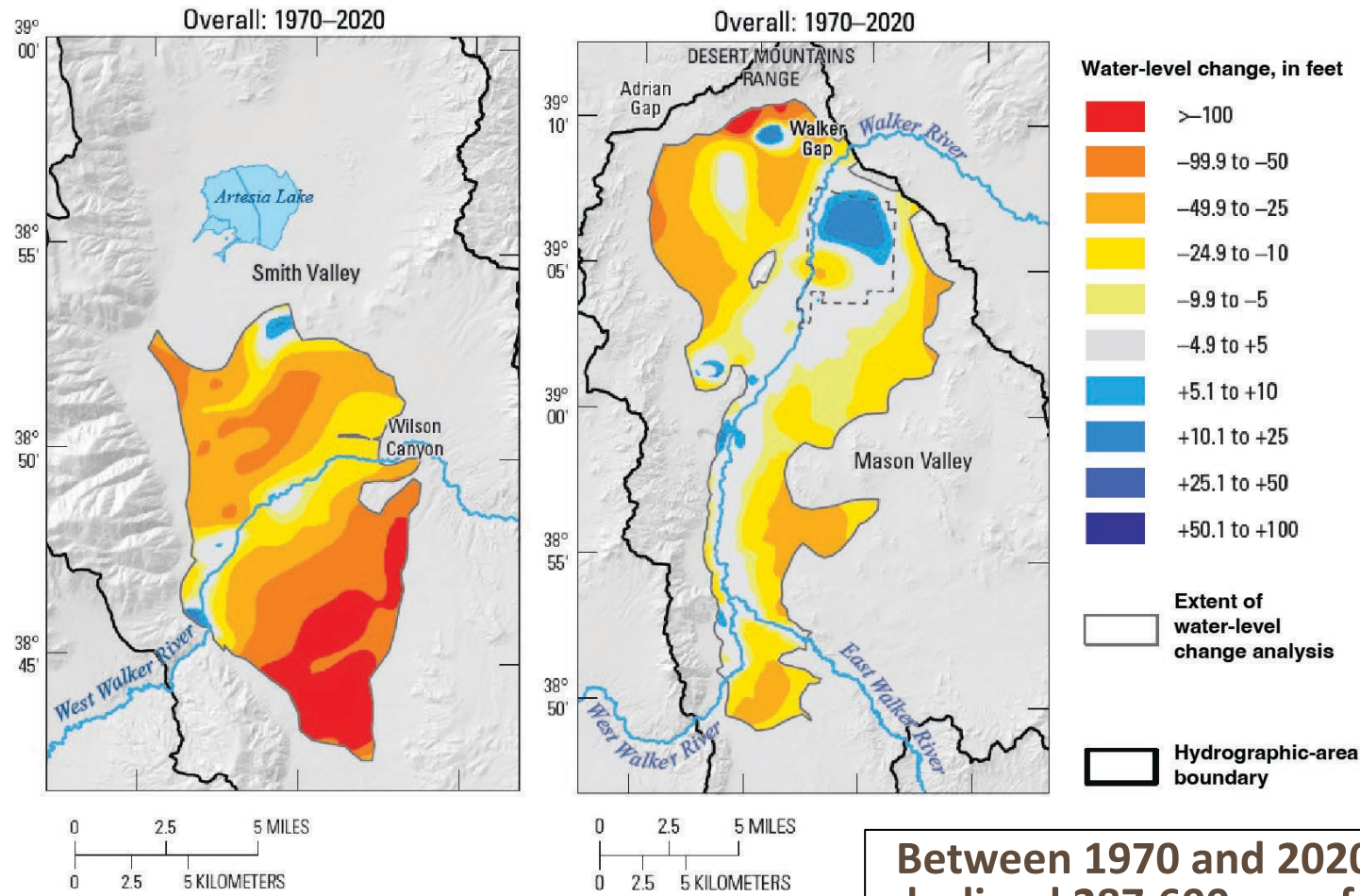




# SURFACE WATER – GROUNDWATER CONNECTION



# SMITH VALLEY AND MASON VALLEY GROUNDWATER MANAGEMENT



- As groundwater pumping increased, groundwater levels began to rapidly decline, resulting in significant reductions in aquifer storage and decreases in stream efficiency.
- NDWR meets with water users each year to discuss groundwater level trends, pumpage, and the upcoming water year.
- Water users decide how to reduce pumpage each year to meet voluntary pumpage reduction targets.

**Between 1970 and 2020, groundwater storage-volume declined 287,600 acre-feet in Smith Valley and 269,000 acre-feet in Mason Valley (Davies and Naranjo, 2022).**

## TWO PROPOSED ORDERS

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- (1) Designating, Describing, and Curtailing New Appropriations within the East Walker Area Hydrographic Basin (Proposed Designation Order)
- (2) Establishing Reporting Requirements of Meter Installation and Monthly Meter Readings within the East Walker Area Hydrographic Basin (Proposed Meter Order)



# PROPOSED ORDER: DESIGNATION ORDER

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- Curtailment of New Appropriations
  - New appropriations of groundwater within East Walker Basin will be curtailed, meaning that applications for new appropriations will be denied.
- Limited Exceptions
  - Except for:
    - Applications filed for environmental use;
    - Temporary applications filed for establishing fire-resistant vegetative cover;
    - Applications filed for temporary stockwater use and that seek appropriations of less than 2 acre-feet annually (afa);
    - Applications filed for diversion rate only with no corresponding increase in duty of water; and
    - Applications filed for non-consumptive uses.

## PROPOSED ORDER: METER ORDER

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- All owners of underground rights must submit a report of installation of a totalizing meter, with the following exceptions:
  - Wells drilled for domestic purposes;
  - Wells drilled for stockwater purposes, unless required by permit terms; and
  - Wells with a total authorized withdrawal that does not exceed 5.0 afa, unless required by permit terms.
- Monthly records must be kept of the amount of water pumped from each well and submitted to DWR within 7 days after the beginning of each month.
- Other meter-related requirements, such as meter accuracy, installation requirements, meter failure, repair, and new meter requirements, access to DWR staff for inspection, and prohibition on meter tampering.

# METERS DATABASE DEMONSTRATION

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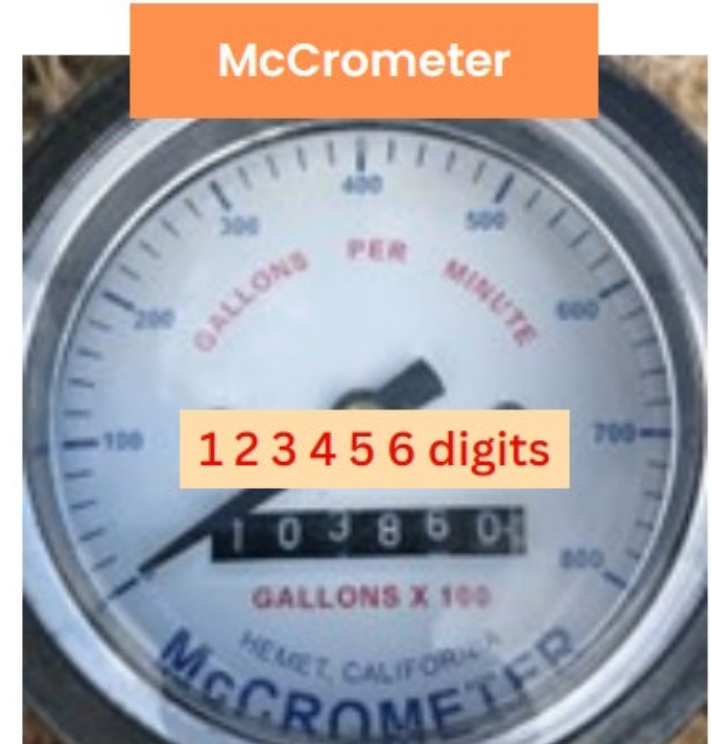
**NDWR Website:** <https://water.nv.gov/>

**Meter Forms and Meters Database FAQs:**  
<https://water.nv.gov/data/meters-database>

**NDWR Meters Database:**  
<https://meters.water.nv.gov/Login.aspx?ReturnUrl=%2f>

**Meters Database Support:**  
[metersupport@water.nv.gov](mailto:metersupport@water.nv.gov)

775-684-2800



6 digit meter, multiplier: x 100  
Reads: 103860 (submit this)  
x 100 gallons = 10,386,000  
gallons\*

# TESTIMONY AND QUESTIONS

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- If providing testimony
  - State your name
  - Specify if you are an owner of a well or groundwater right within the basin, or representing one
  - Indicate if you are for or against the proposed order
  - Provide brief statement
  - Testimony will be limited to not more than 5 minutes per person
- If asking questions
  - State your name before asking your question



# PUBLIC COMMENT

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- If providing public comment on any other topic
  - State your name
  - Specify which issue, other than the proposed order, you wish to speak on
  - Provide brief statement
  - Public comment will be limited to not more than 3 minutes per person
- If asking questions on any other topic
  - State your name before asking your question

## ADDITIONAL INFORMATION

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- Written Testimony
  - Submitted by mail to  
State Engineer  
Nevada Division of Water Resources  
901 South Stewart Street, Suite 2002  
Carson City, Nevada 89701
- Recording will be available on the website:  
**[water.nv.gov](http://water.nv.gov)**
- Digital Copies of Recording
  - Contact the Division at (775)684-2800 for  
fee information and a copy request form

# GUIDELINES FOR WRITTEN TESTIMONY

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- Any written document -handwritten or typed-
- Does not need to be notarized or prepared by an attorney or other professional
- Provide
  - Your name and address
  - Basin of interest
  - Specify if you are an owner of a well or groundwater right within the basin, or representing one
  - Indicate if you are for or against the proposed order
  - Statement on your position
  - Signature

# Questions?



## Contacts

**James Henson, Esq., Chief Administrative Law Judge;**

**Lauren Bartels, Walker Basin Specialist;**

**Jared McCrum, Supervising Technical Specialist  
Hearing Section**

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