

NEVADA DIVISION OF
WATER RESOURCES



Nevada Department of
**CONSERVATION &
NATURAL RESOURCES**

Summary of Draft Water Resources Section

Stakeholder Advisory Group Meeting
January 16, 2024

Nevada Division of Water Resources (NDWR)
Water Planning and Drought Resiliency
Section (WP&DR)



GOALS OF THE WATER RESOURCES SECTION

Provide a descriptive overview Nevada's surface water and groundwater resources

Communicate data with visual representations

Acknowledge how water quality impacts water availability

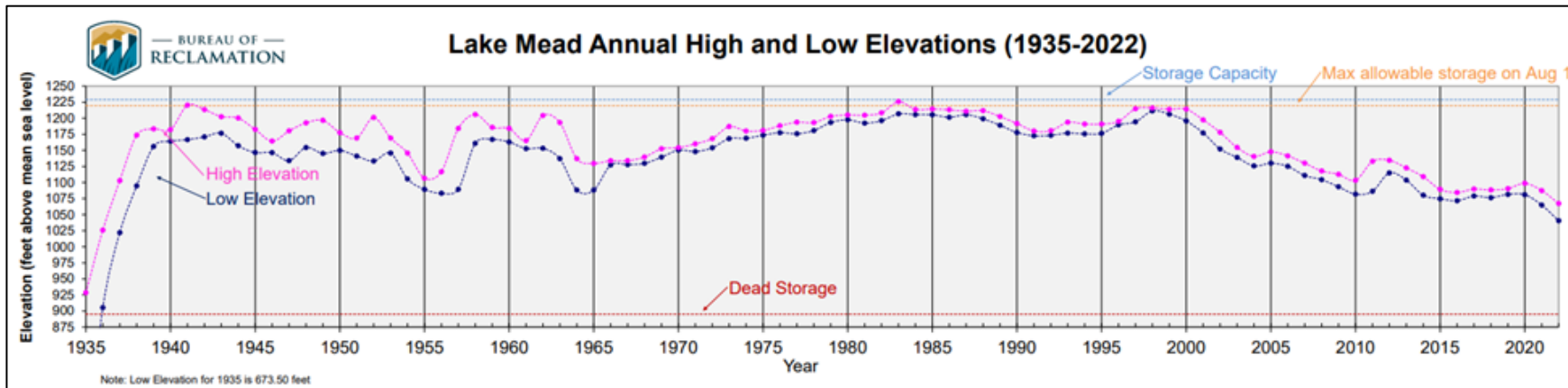
Provide links to additional resources for entities to obtain more localized data

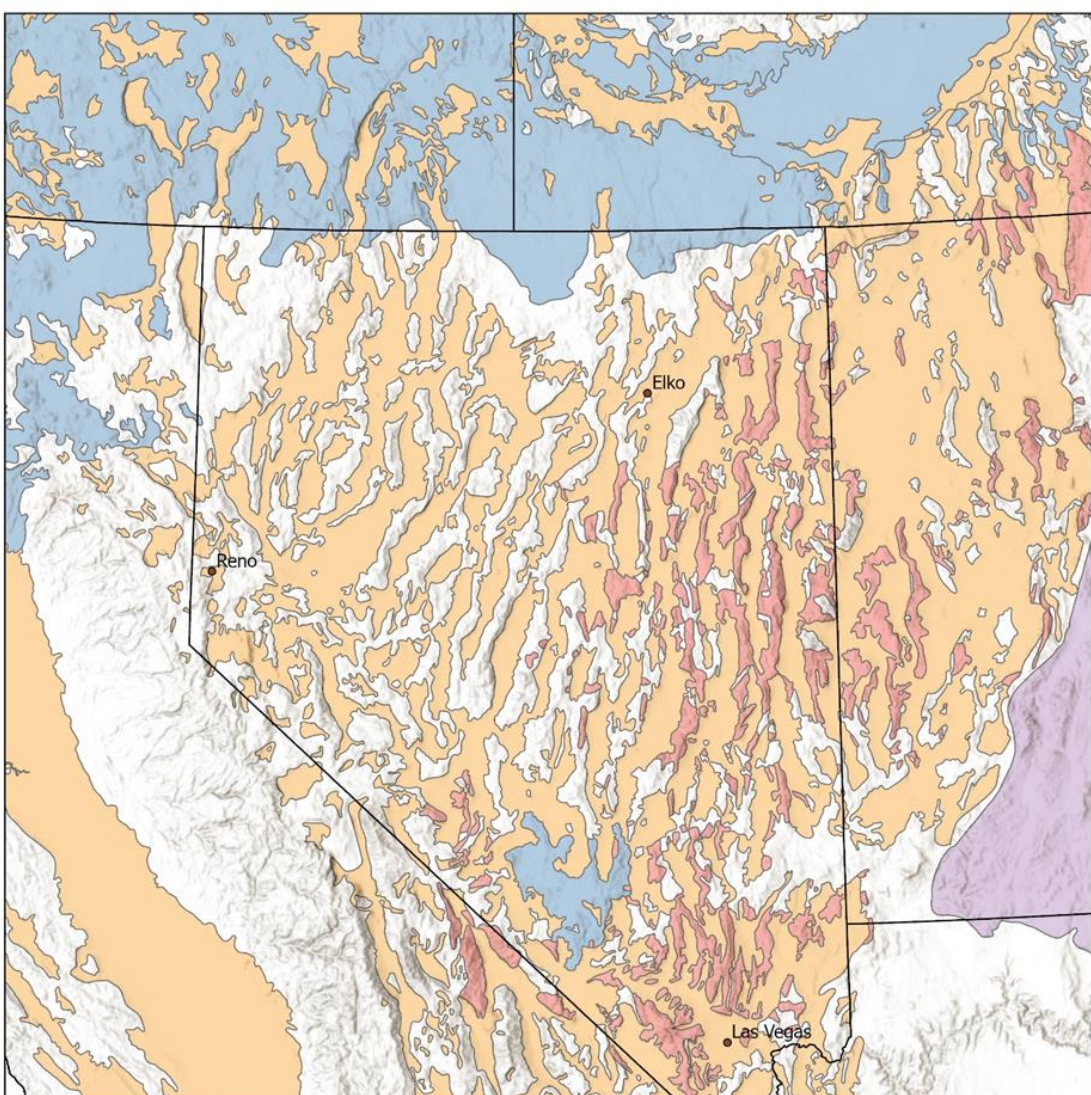
PREVIEW OF CONTENTS

Hydrographic Region	Gaging Station Location (Number)	Period of Record, Water Year	Annual Streamflow Statistics, acre-feet		
			Average Annual	Lowest Annual	Highest Annual
Carson River	Carson River near Carson City (10311000)	1940-2022	286,451	42,354	935,408
Colorado River	Virgin River at Littlefield, AZ (9415000)	1930-2022	169,731	72,617	597,155
	Colorado River below Hoover Dam (9421500)	1935-2020	9,919,734	5,555,976	22,147,160
Humboldt River	Humboldt River at Palisade (10322500)	1903-2022	282,335	25,195	1,336,504
Snake River	Owyhee River near Mountain City (13175100)	1992-2022	69,267	15,711	158,628
Truckee River	Truckee River at Farad (10346000)	1910-2022	544,344	133,506	1,768,732
Walker River	Walker River at Wabuska (10301500)	1903-2023	120,965	9,340	602,513

Estimated average annual surface water runoff volume (excluding the Colorado River):

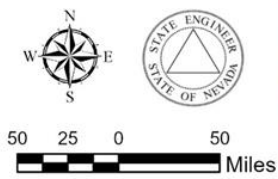
- 3.2 million acre-feet within Nevada
- 1.3 million acre-feet flowing into Nevada
- 700,000 acre-feet leaving Nevada
- **Net surface water supply: 3.8 million acre-feet**





Principal Aquifers In and Around Nevada

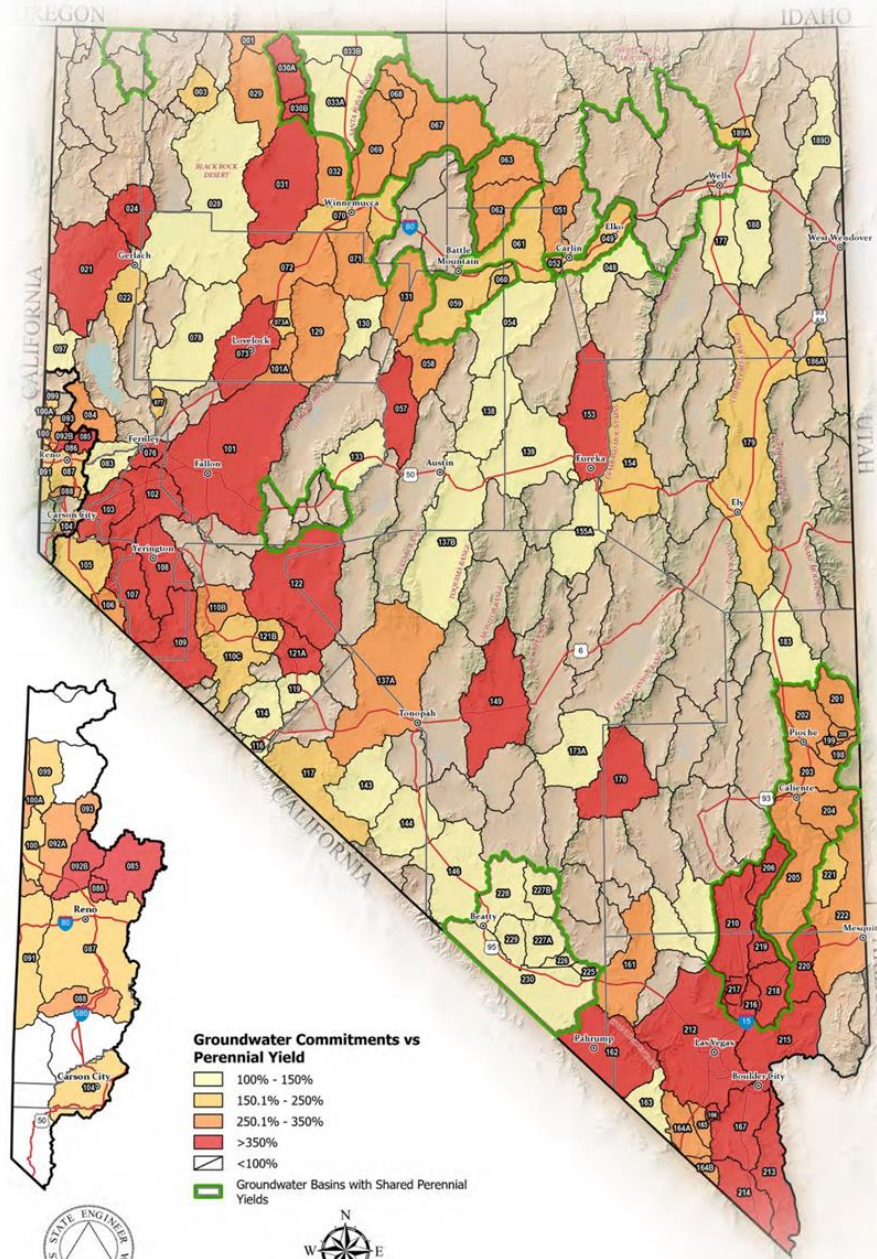
- Carbonate-rock aquifers
- Igneous and metamorphic-rock aquifers
- Sandstone and carbonate-rock aquifers
- Sandstone aquifers
- Unconsolidated sand and gravel aquifers



Source:
USGS, based on Ground Water Atlas of the United States, 2000

Estimated perennial yield of Nevada's groundwater: 1.9 million acre-feet

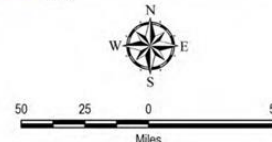
GROUNDWATER COMMITMENTS VS. PERENNIAL YIELD
NEVADA DIVISION OF WATER RESOURCES - 2023 BASIN STATUS ASSESSMENT



- Groundwater Commitments vs Perennial Yield**
- 100% - 150%
 - 150.1% - 250%
 - 250.1% - 350%
 - >350%
 - <100%
 - Groundwater Basins with Shared Perennial Yields



Adam Sullivan, P.E.
State Engineer
November 2023



FOOD FOR THOUGHT: REGIONAL OVERVIEWS

A 4 to 8 page at-a-glance summary for each region that may include:

- Area description
- Climate and land use
- Population and economy
- Primary water sources
- Water use summary
- Regional issues and priorities

Marais des Cygnes Region

Regional Description

Marais des Cygnes Regional Planning Area

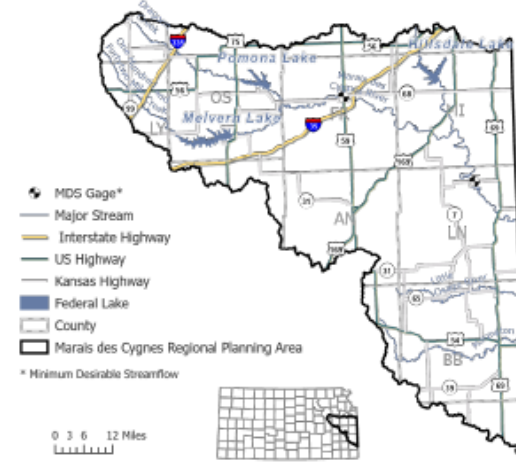


Figure 1. Marais des Cygnes Regional Planning Area

the southern part of the region in Kansas and join in Missouri just above the confluence with the Marais des Cygnes to become the Osage River. Major cities in the region include Osage City, Ottawa, Garnett, Paola, Osawatomie, Louisburg, and Fort Scott.

The Marais des Cygnes Region covers 4,255 square miles of east-central and southeast Kansas and includes all or parts of 13 counties (Figure 1). The region contains the headwater tributaries of the Osage River that forms in western Missouri. The Marais des Cygnes River, a major tributary to this system, begins near Eskridge in Wabaunsee County, Kansas, and flows east and south to join the Little Osage River in Bates County, Missouri. Dagoon Creek, Bull Creek, Pottawatomie Creek, and Sugar Creek are major tributaries to the Marais des Cygnes River in Kansas.

The Marmaton and Little Osage Rivers originate as headwater tributaries to the Osage River in

Marais des Cygnes Regional Planning Area

CLIMATE & LAND USE

The climate of the region is classified as humid continental with cold winters and hot summers. Normal mean temperature generally increases from northwest to southeast across the region. The average mean temperature of the region is 54° F. Most of the precipitation falls in the summer and spring, with June typically being the wettest month (Figure 2). A major flood event in 2007 and the drought experienced from 1952-1956 underscore the variability in precipitation.

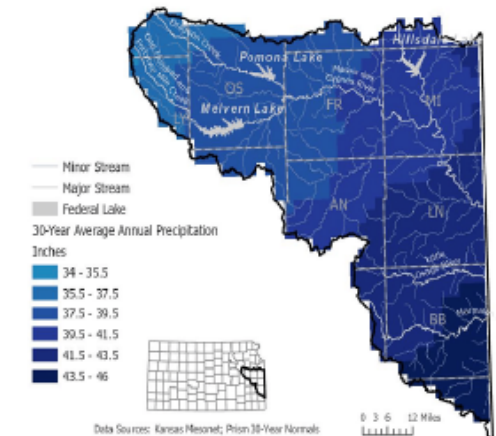


Figure 2. 30-year average annual precipitation in the Marais des Cygnes Region

FOOD FOR THOUGHT: REGIONAL OVERVIEWS

- Could be a supplemental publication
- By county would be most practical data-wise
- Would draw from local water resource plans

Could this be useful without being duplicative?

- Consistent format across all counties

Which pieces of information would be most useful?

NEXT STEPS

SAG Review

- Is the material relevant?
- Is the material useful?
- Are any key topics missing?
- Were any flags raised?
- What, if any, additional water resource data, information, resources, etc. would you want to see?

Timing

- To SAG members: late February
- Back to NDWR staff: late March





QUESTIONS?

Nicole Goehring, Water Resource Specialist
Water Planning and Drought Resiliency Section
Nevada Division of Water Resources

Phone: 775-684-2847

Email: ngoehring@water.nv.gov