



JAMES EKLUND

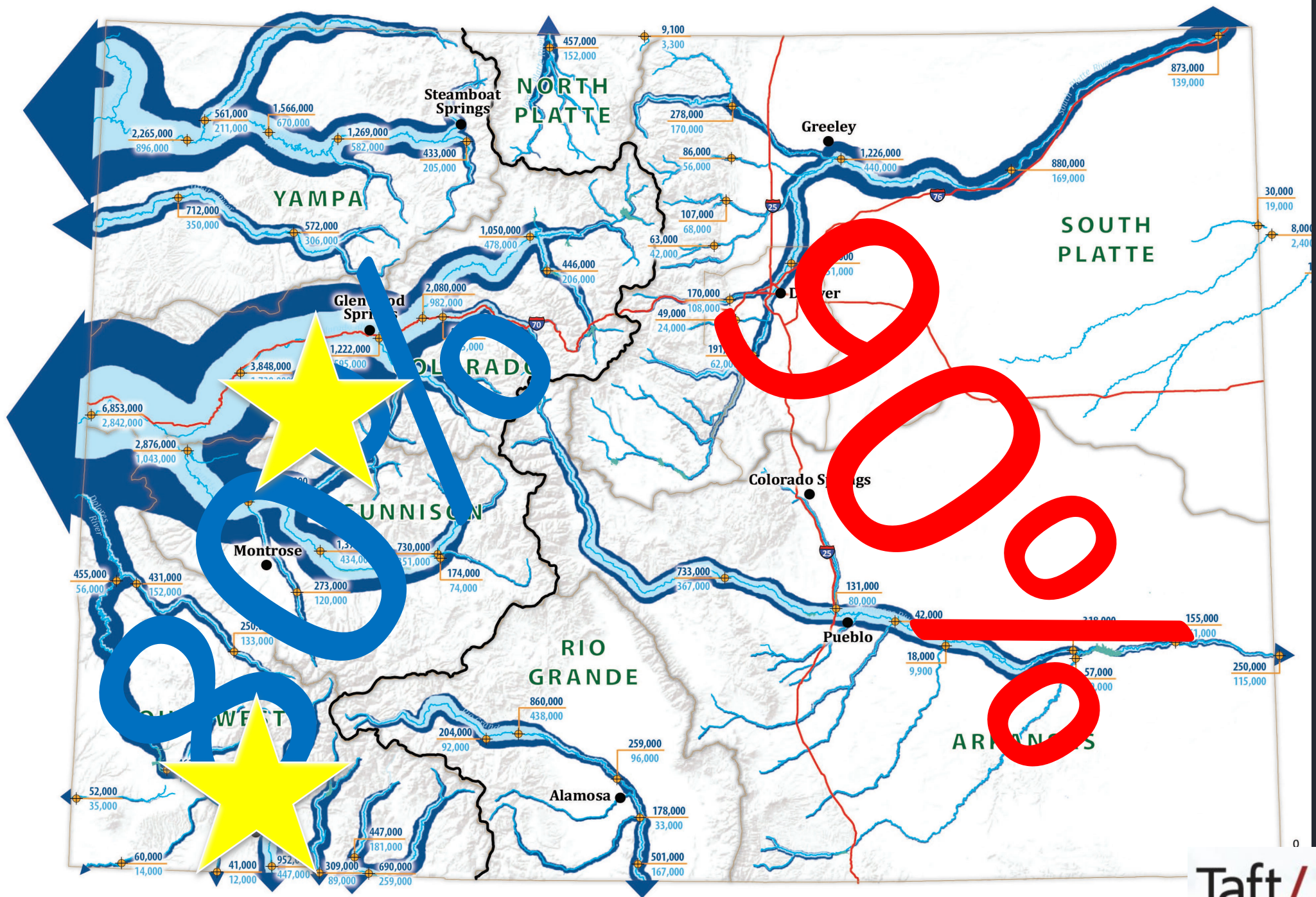
**Taft/**

**Sherman  
& Howard**

**TICK FREAKING TOCK**

# **E Norse Sky Ranch**

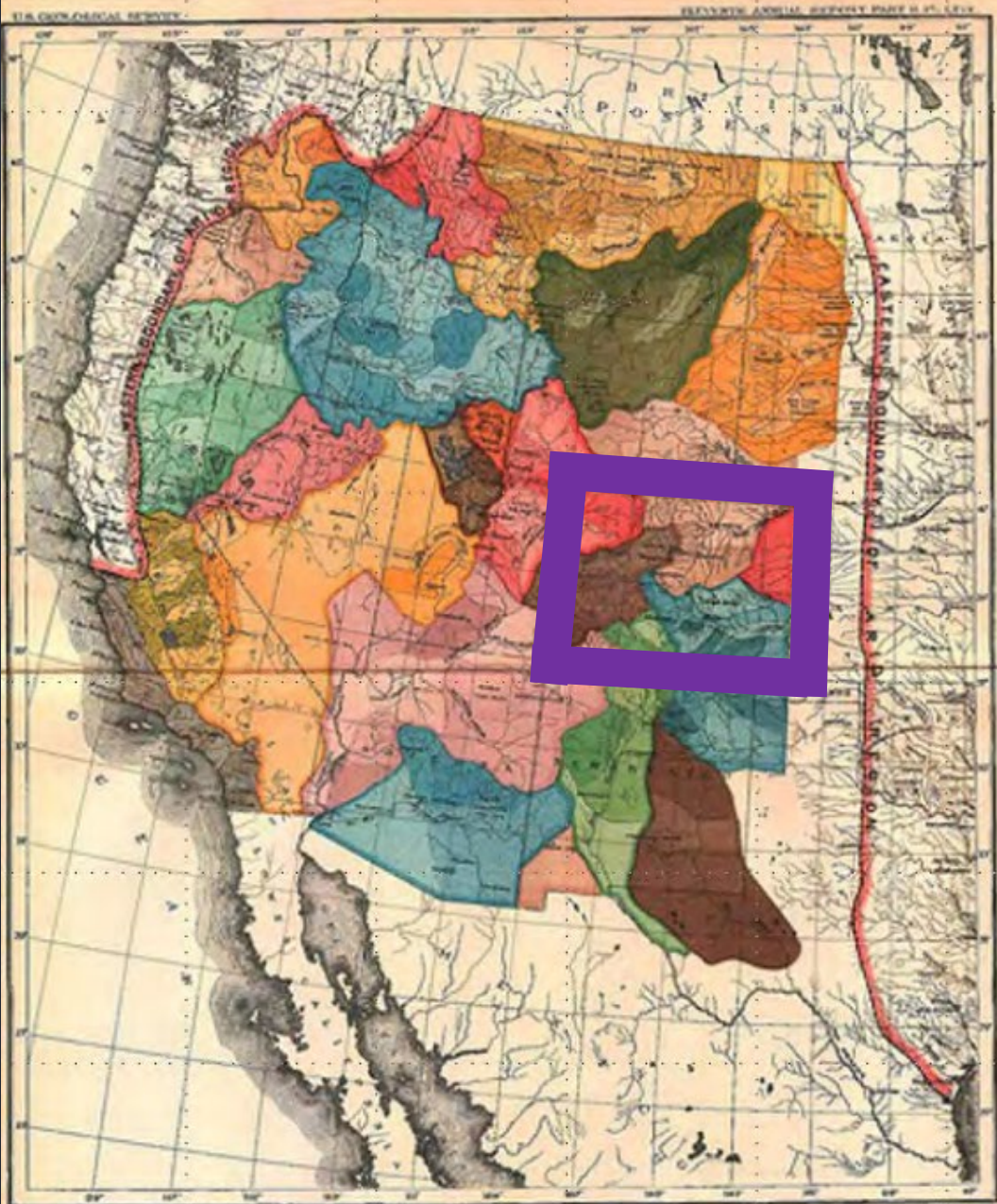




A man in a blue plaid shirt is walking away from a woman in a red top. He is looking back over his shoulder at her. The woman is smiling and walking away. The background is a busy city street with other people and buildings.

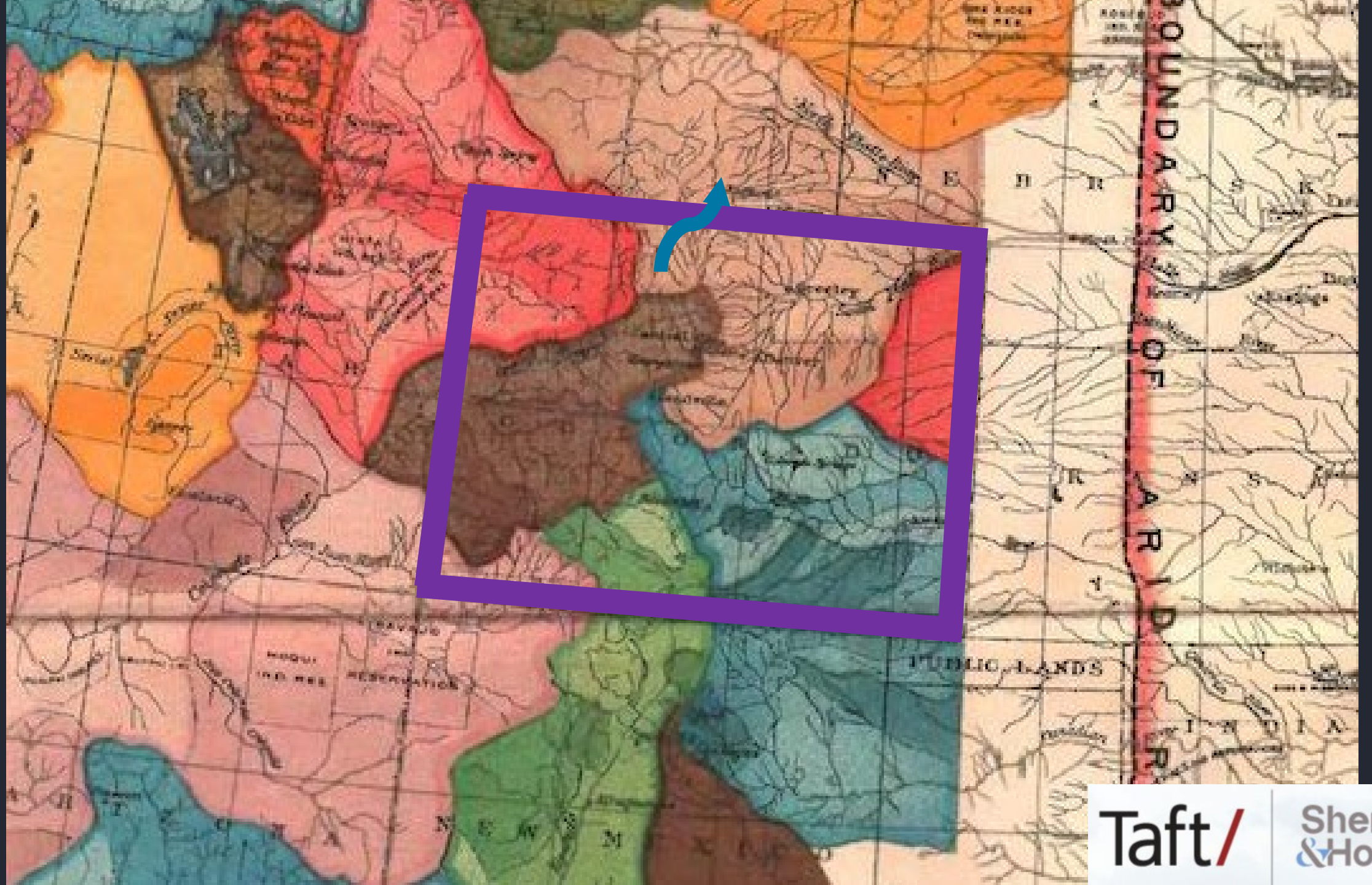
**SHOVEL**

**LAWYER**



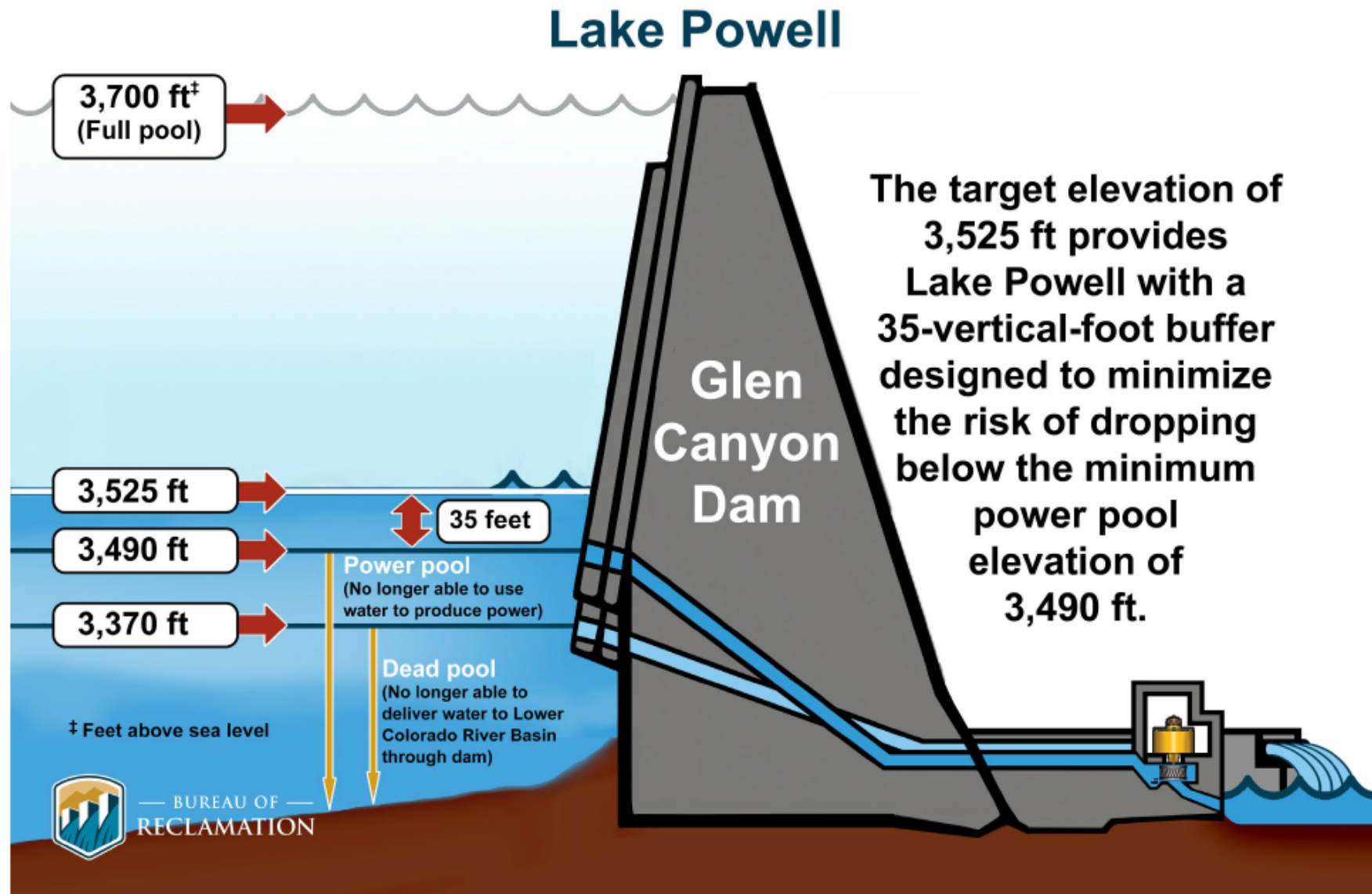
ARID REGION  
OF THE  
UNITED STATES  
Showing Drainage Districts.

Scale 1:1,000,000





# Lake Powell Key Elevations



8 - June 16, 2022

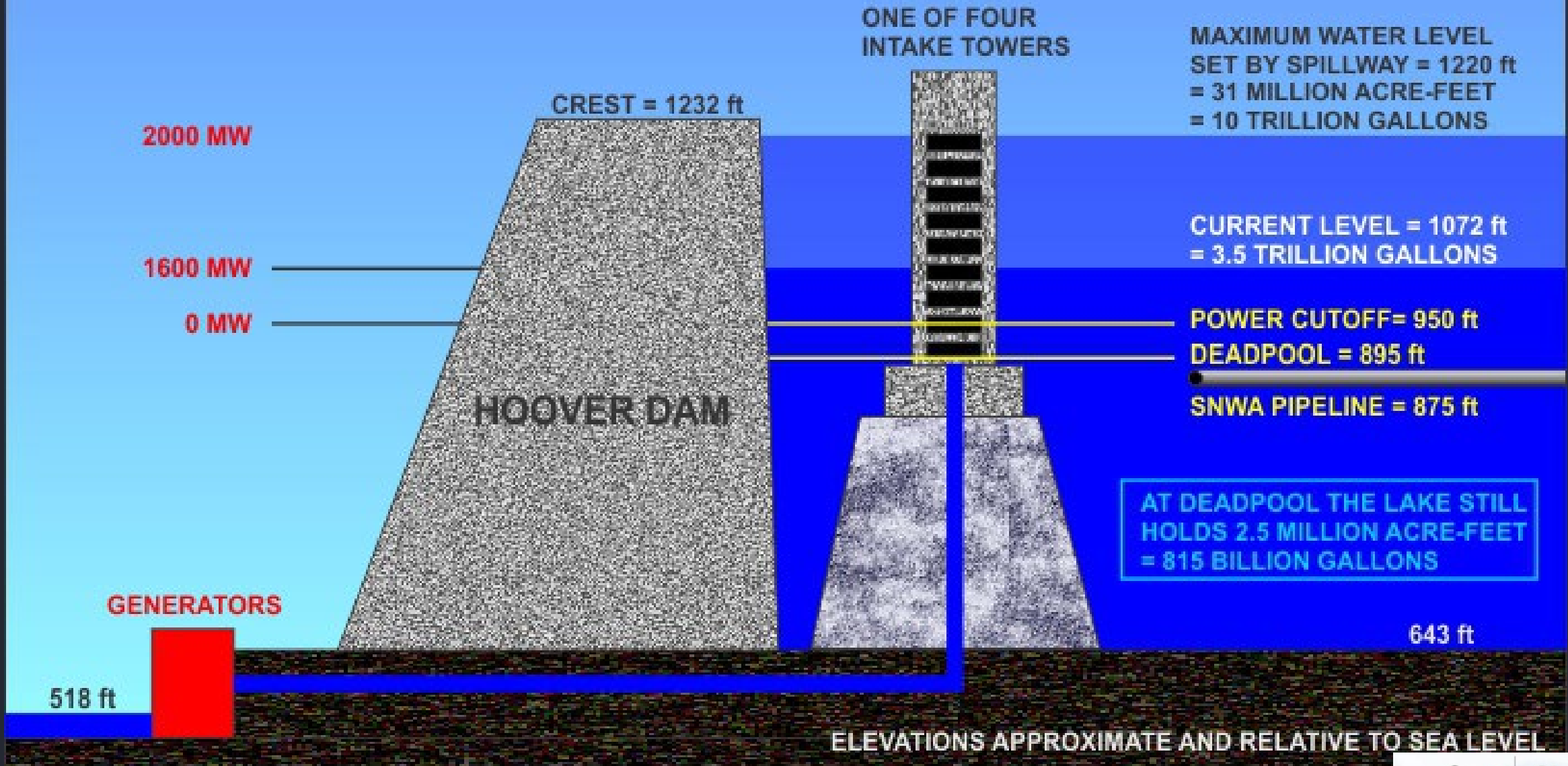
Source: Jim Prairie



Taft/

Sherman  
& Howard

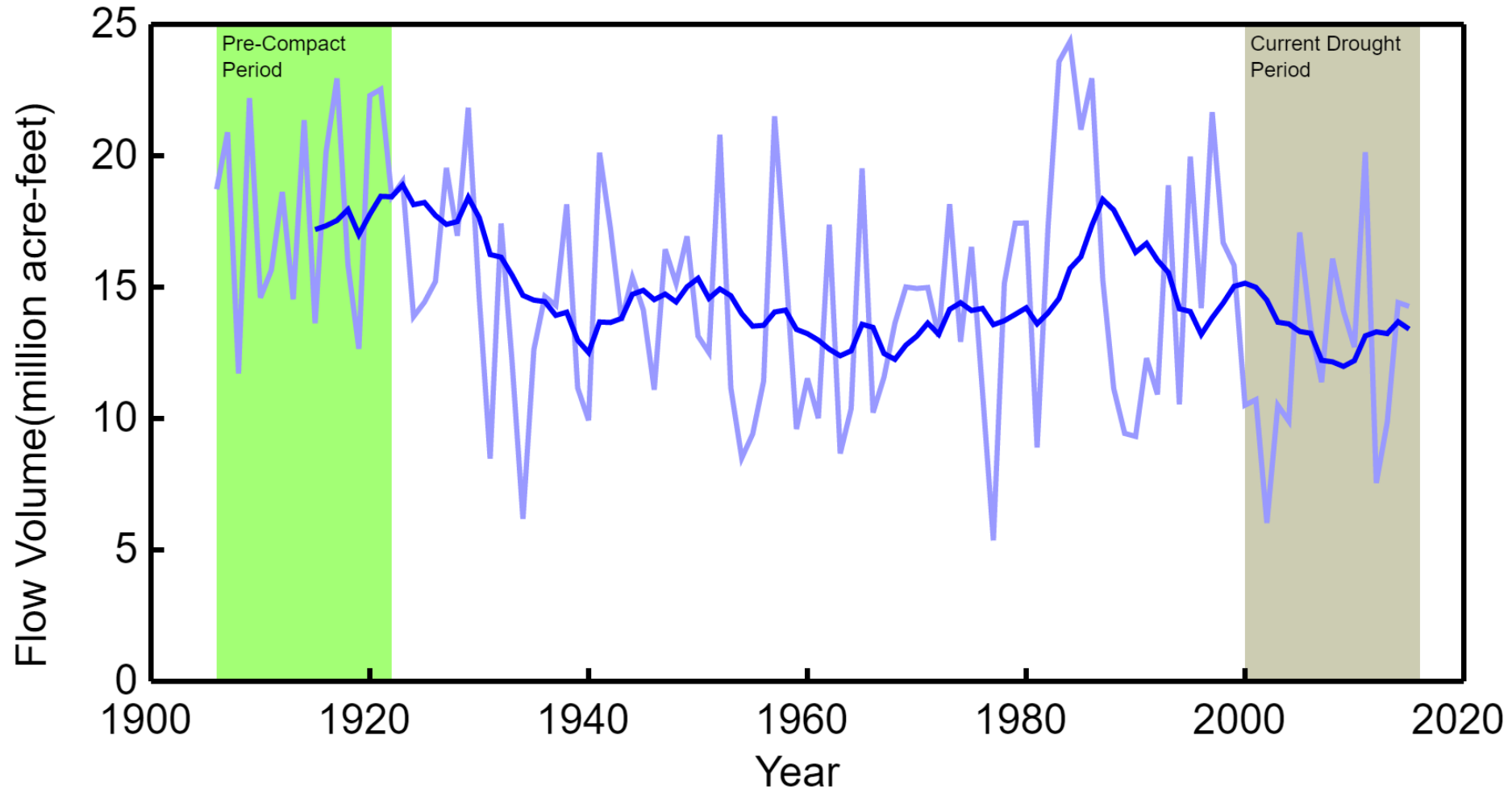
# CROSS SECTION OF HOOVER DAM AND LAKE MEAD

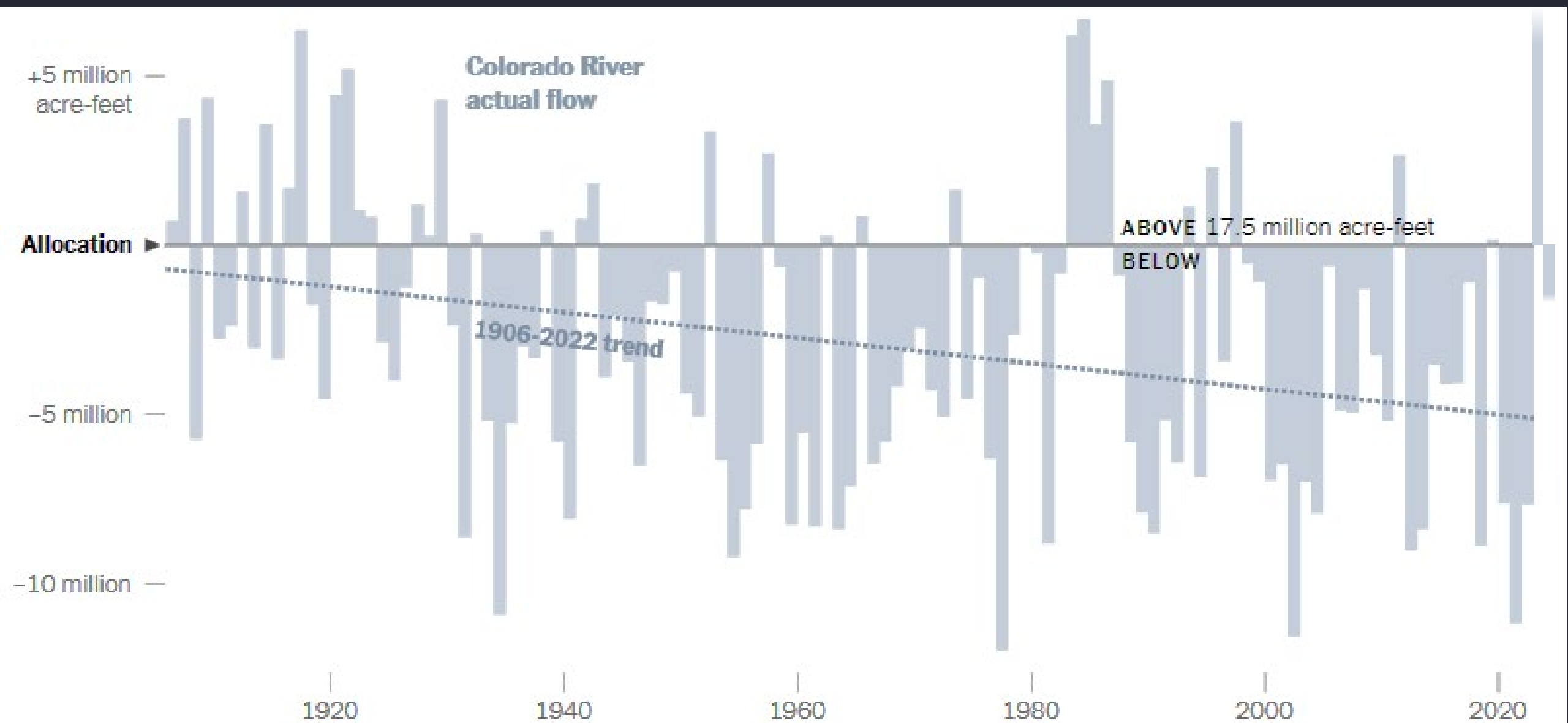




20

10?





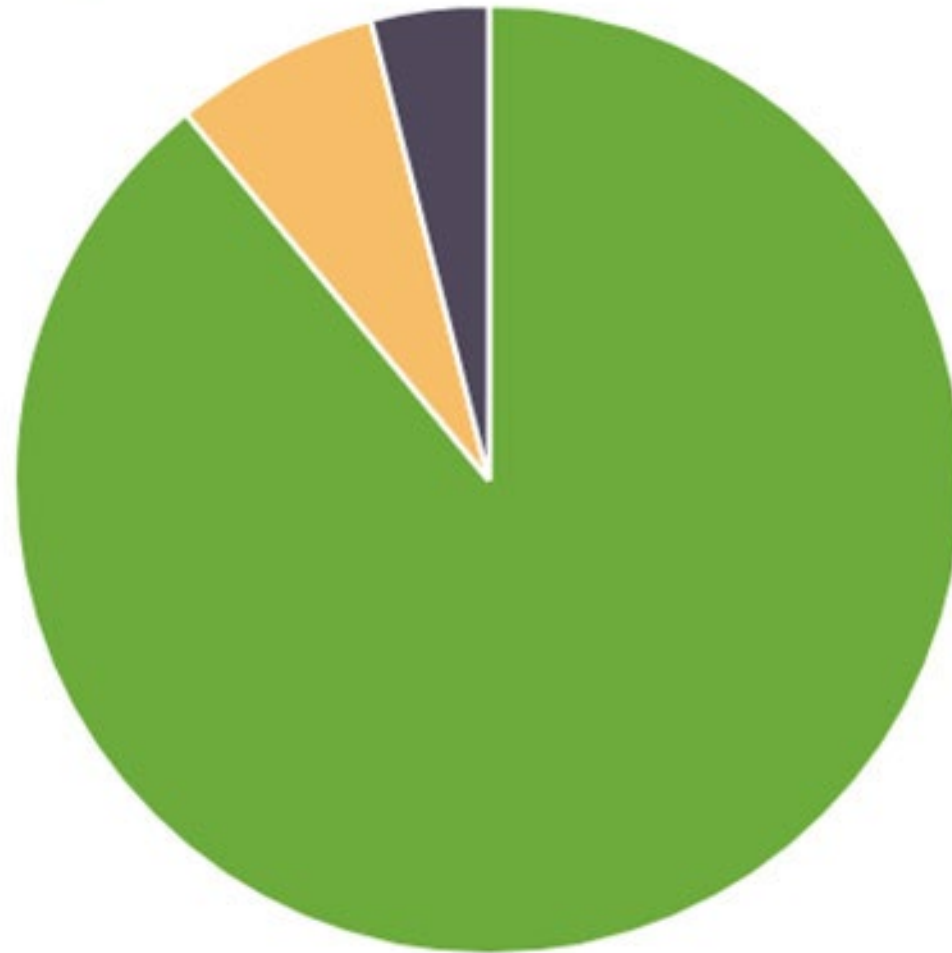
Note: Colorado River natural flows are estimated from measurements at Lee's Ferry, Ariz. Values for 2021 and 2022 are provisional. • Source: U.S. Bureau of Reclamation

# Colorado Consumptive Water Use

 Agricultural Water Use, 4,700,000 AF

 Municipal & Industrial Water Use, 400,000 AF

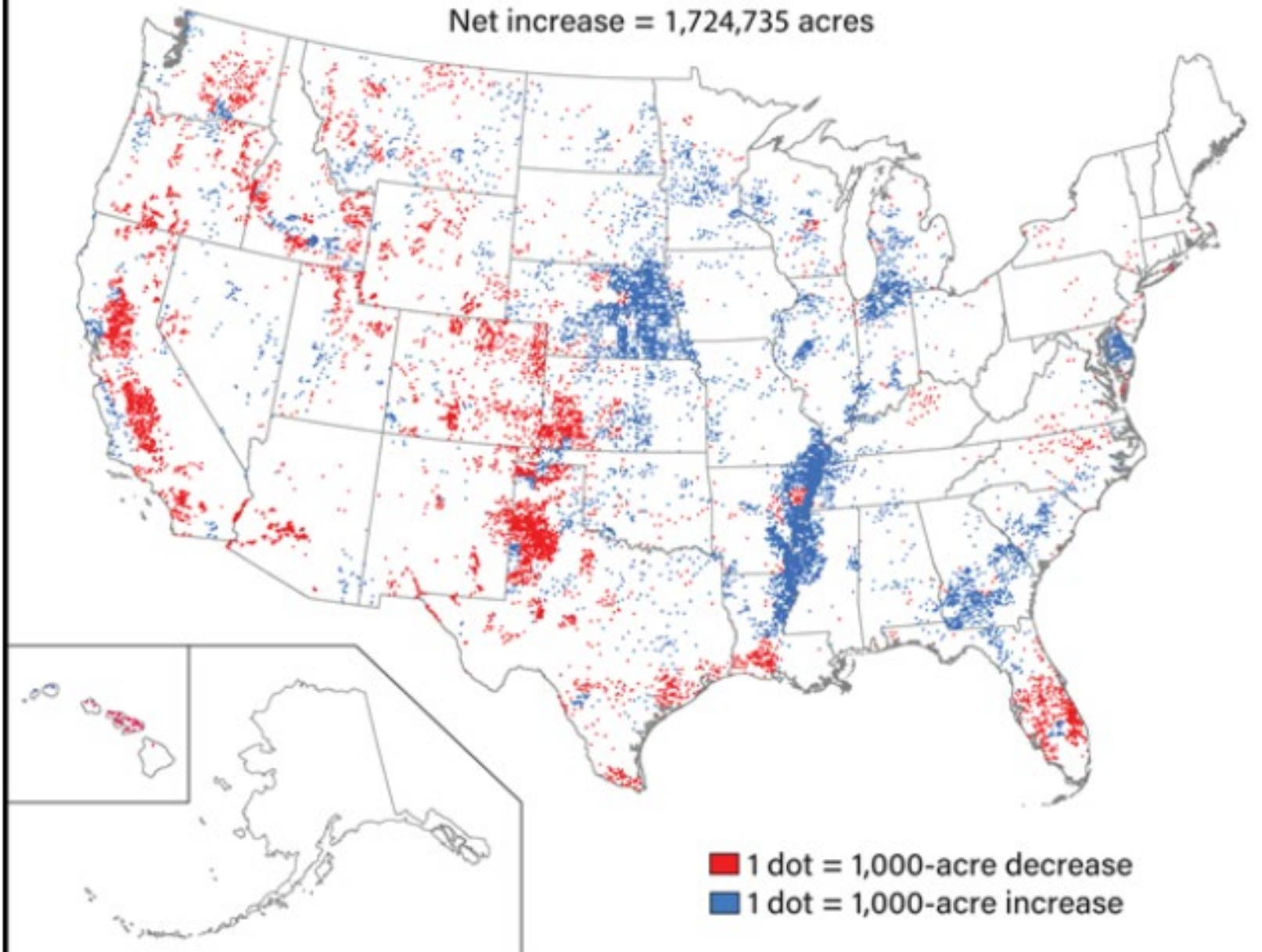
 Self-Supplied Industrial Water Use, 200,000 AF



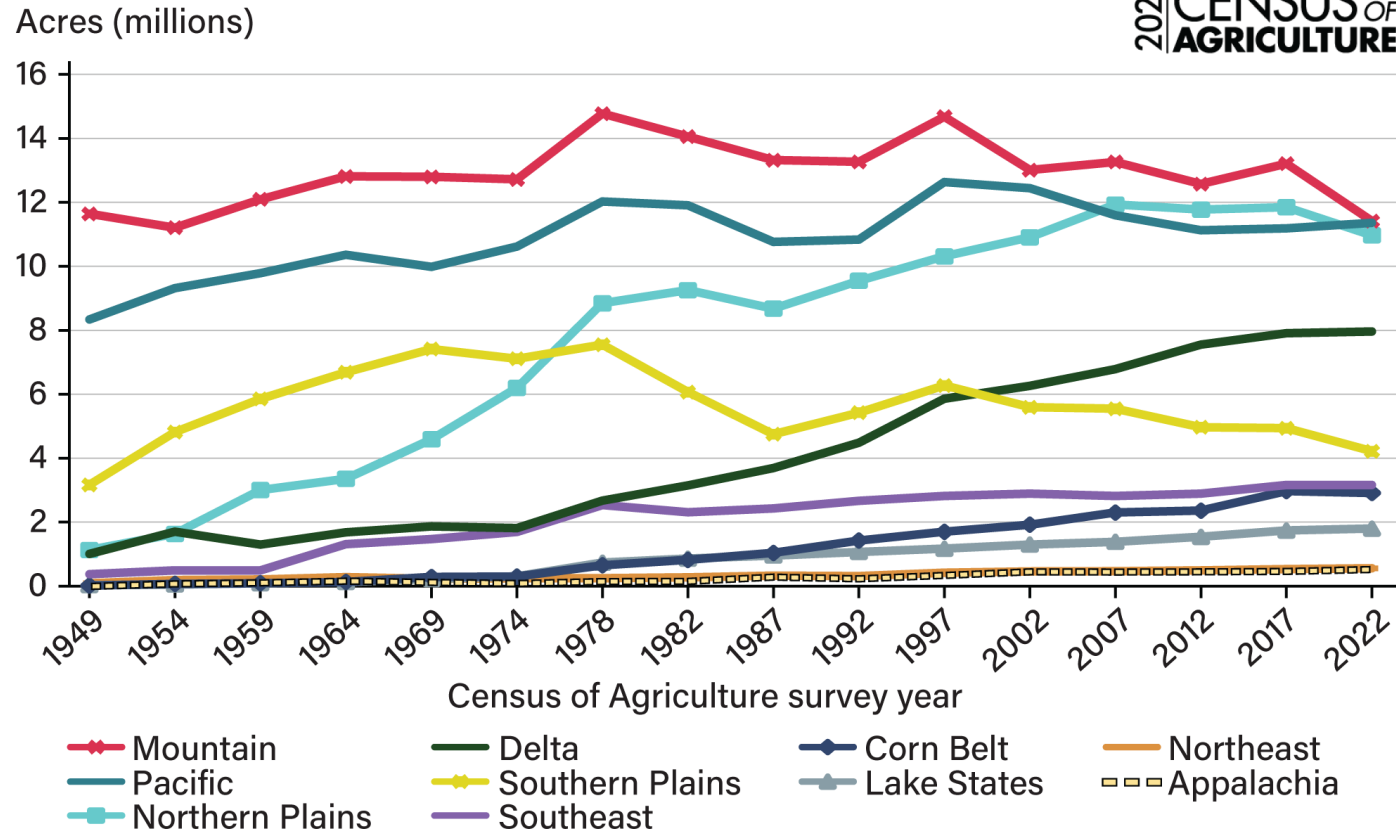
**Total Consumptive Use: 5,300,000 AF**

# Distribution of change in U.S. irrigated acreage, 1997-2017

Net increase = 1,724,735 acres

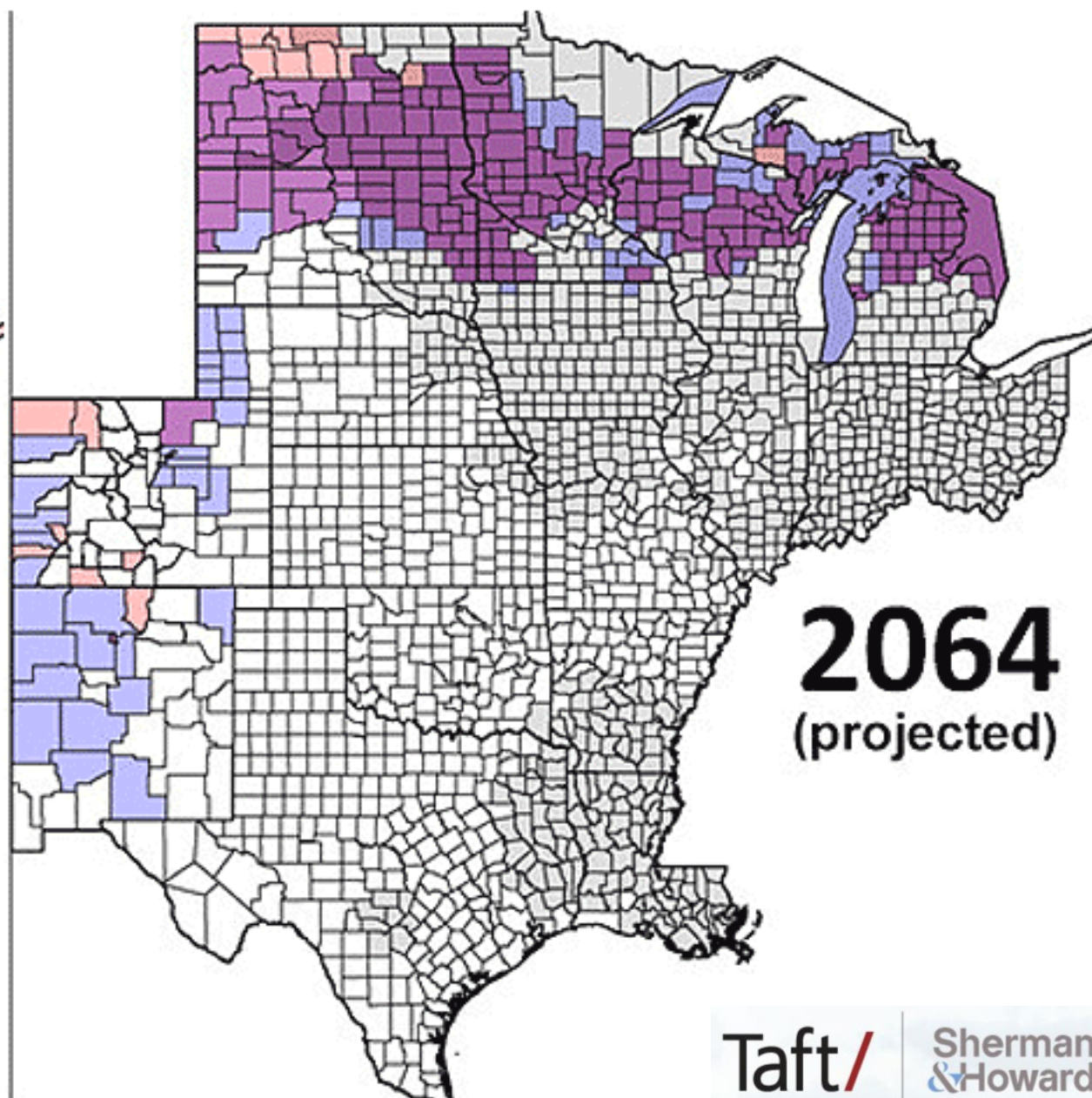
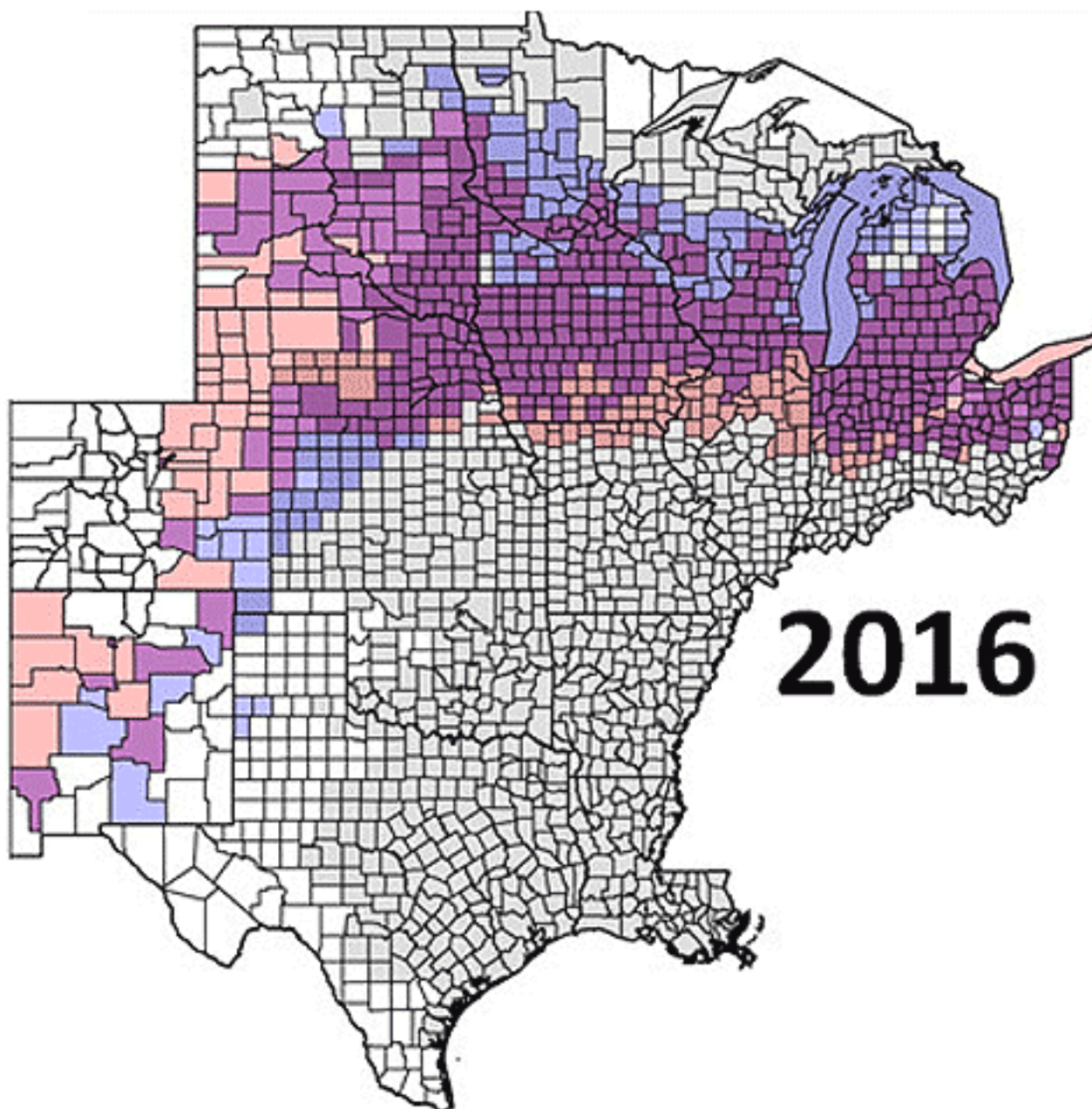


# Irrigated U.S. cropland acres by region, 1949–2022



Note: USDA, Economic Research Service (ERS), Major land use regions correspond with historic USDA production regions. This chart does not show irrigated areas in Hawaii and Alaska. **Appalachia:** Kentucky, North Carolina, Tennessee, Virginia, West Virginia. **Corn Belt:** Illinois, Indiana, Iowa, Missouri, Ohio. **Delta:** Arkansas, Louisiana, Mississippi. **Lake States:** Michigan, Minnesota, Wisconsin. **Mountain:** Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming. **Northeast:** Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont. **Northern Plains:** Kansas, Nebraska, North Dakota, South Dakota. **Pacific:** California, Oregon, Washington. **Southeast:** Alabama, Florida, Georgia, South Carolina. **Southern Plains:** Oklahoma, Texas. Plotted data points correspond to years in which the Census of Agriculture is conducted.

Source: USDA Economic Research Service using USDA, National Agricultural Statistics Service 1949-2022 Census of Agriculture data.



# STALEMATE!!

Upper Basin: Reluctant to cut use, want to preserve allocations (unused water)

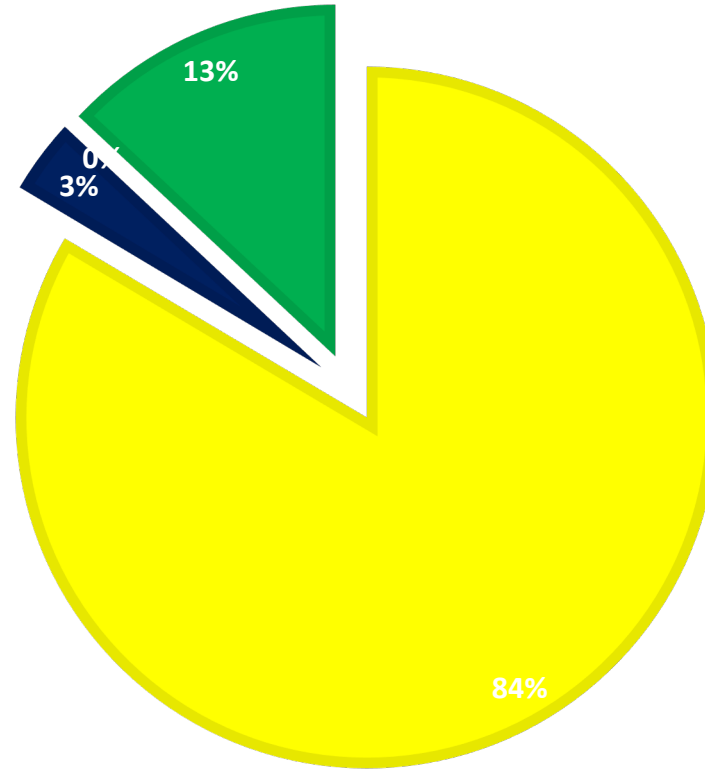
Lower Basin: Facing acute shortages, pressure for deeper cuts (overappropriated)



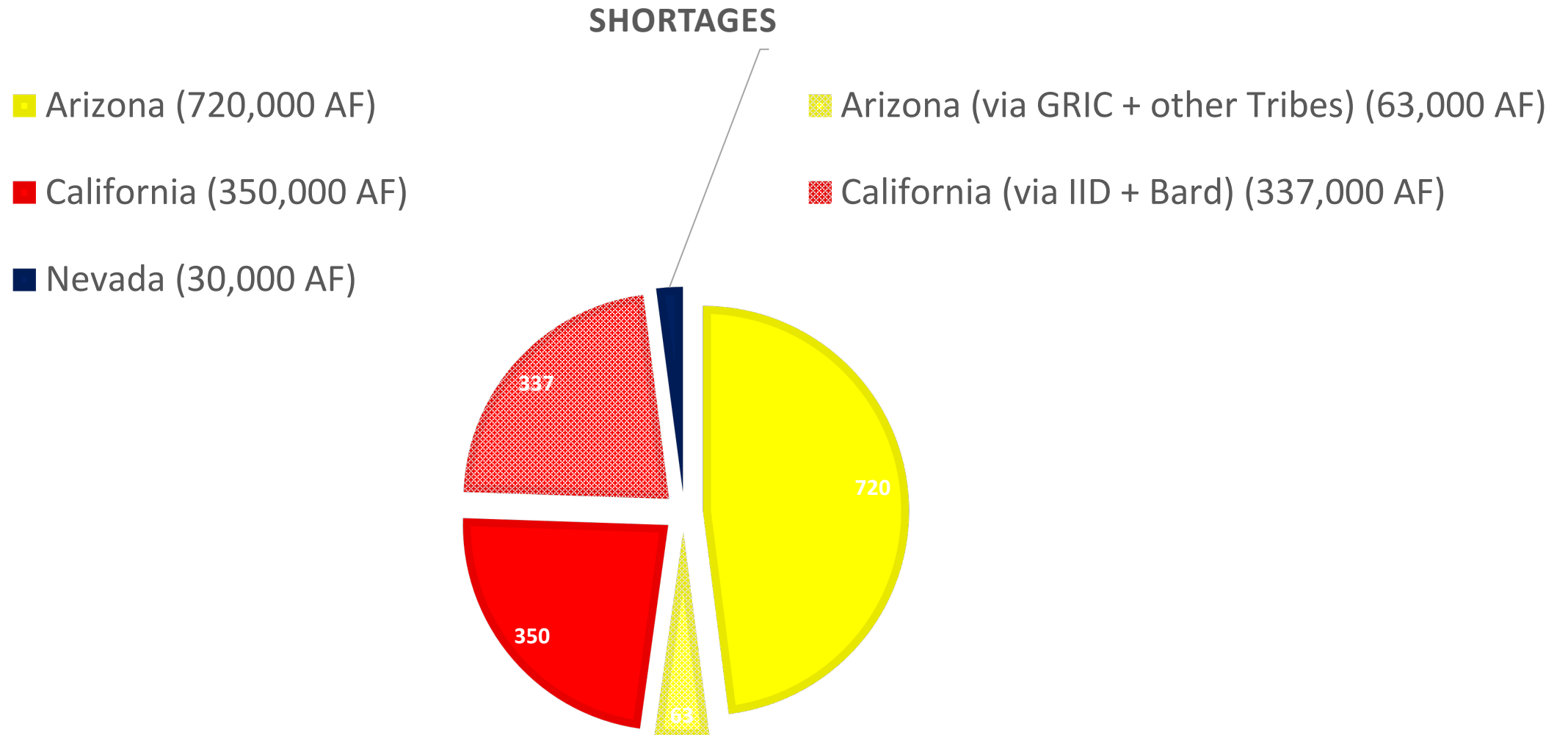
# Mandatory Shortages – Tier 1

SHORTAGES

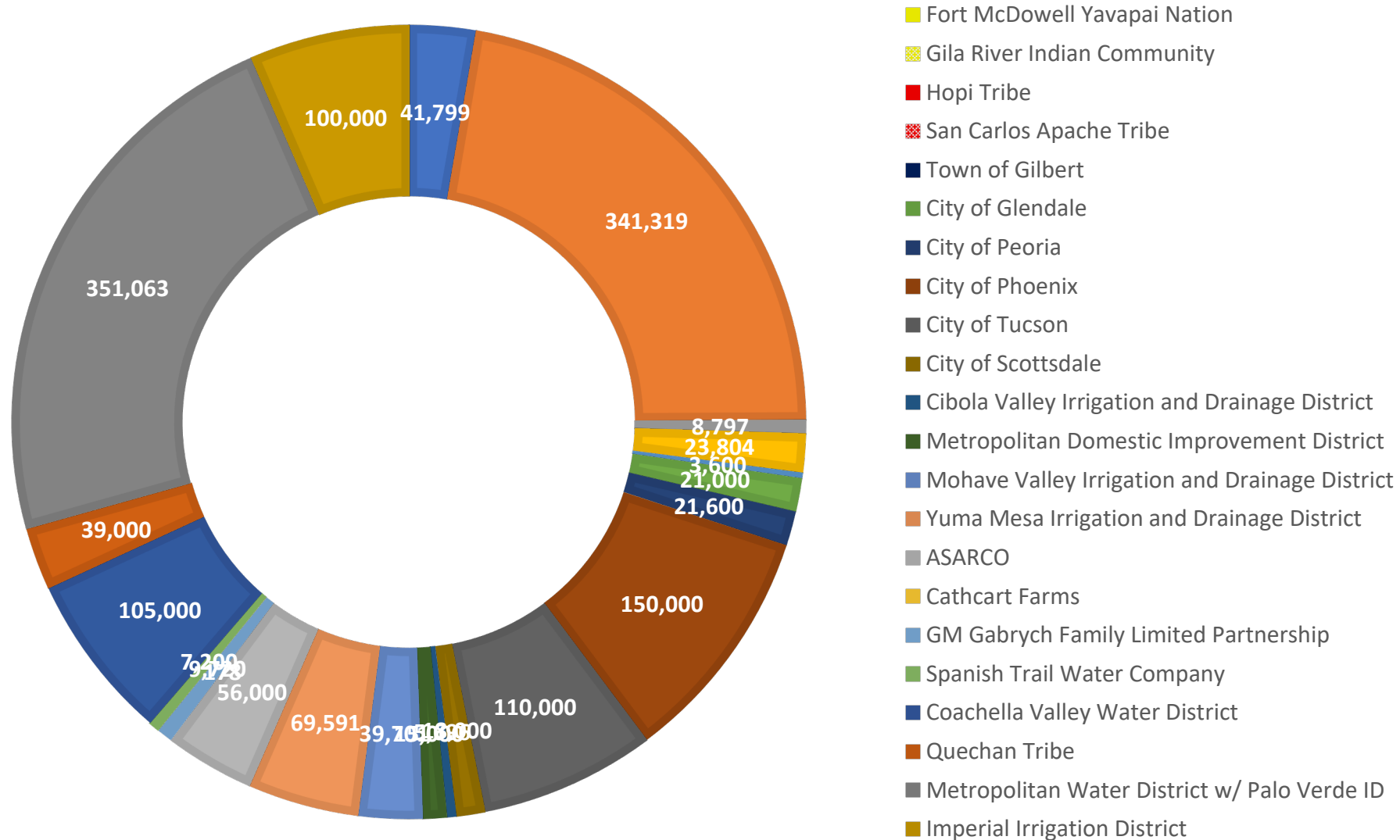
- Arizona (512,000 AF)
- Nevada (21,000 AF)
- California (0 AF)
- Mexico (80,000 AF)



# Estimated Distribution of 1.5 MAF/YR Shortages



# Distribution of ~1.6 MAF Shortages (2023-2026)



Do not despair.

Hope remains!



# The Good



Western water rights are designed for market operations



# The Bad

Our rivers are smaller/more inconsistent than needed

# The Ugly



Poor/inefficient governance and mismanagement

*Markets are only as flexible  
as the law allows*

Water court  
approval

Historic  
consumptive  
use analysis

Return flow  
protection

Infrastructure  
access

Ditch  
company  
consent

Anti-  
speculation  
compliance

# From Buy-&-Dry to Creative Supply



Permanent ag-to-muni transfers still dominate (WestWater graphic)

But ATMs offer a middle path:

Need legal certainty + shared incentives

Lease-fallowing

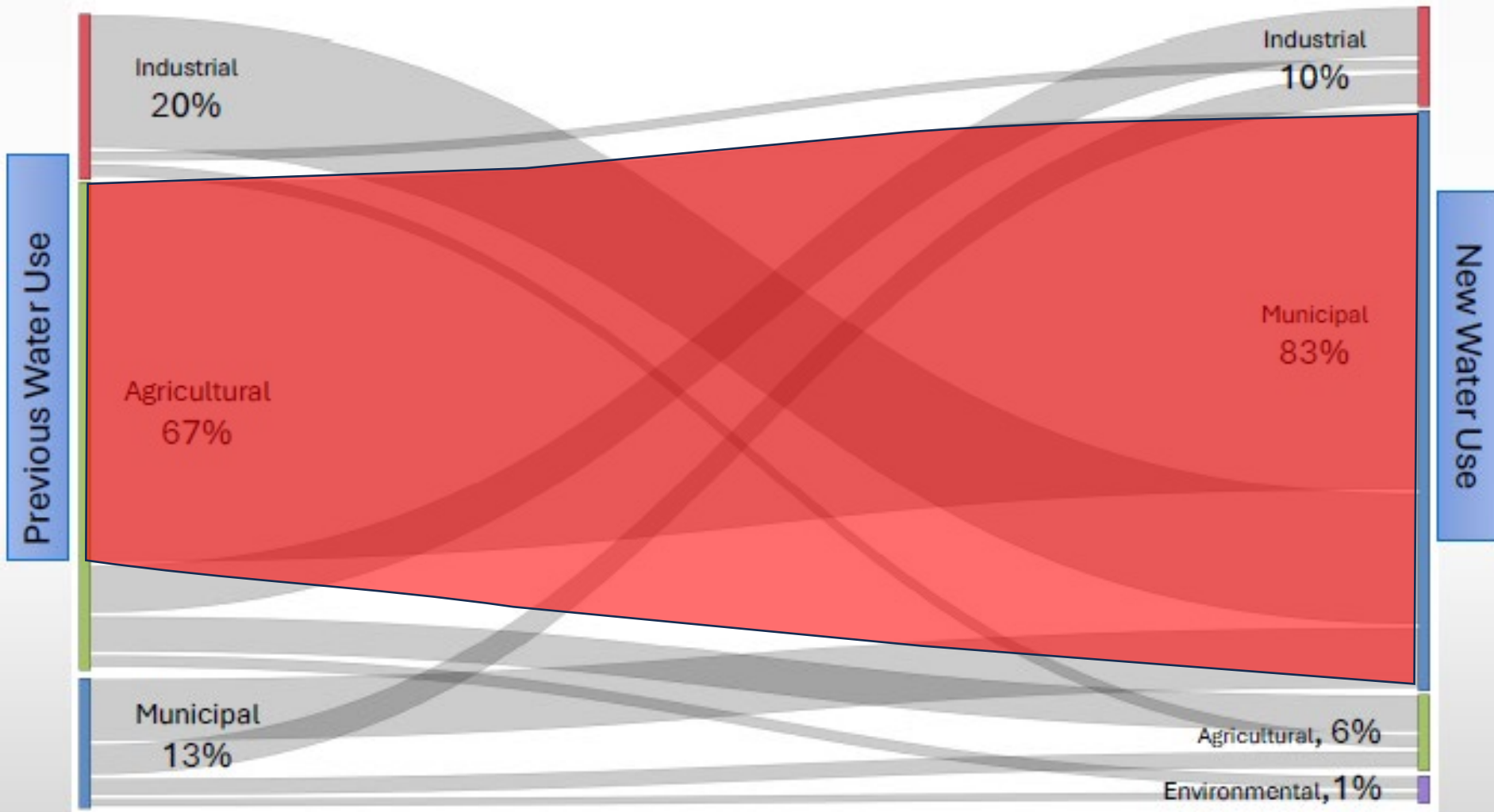
Deficit irrigation

Crop-switching

Interruptible supply agreements



# Colorado Water Market Transfers



**Agricultural to Municipal** transfers are the dominant type of water transaction

# From Buy-&-Dry to Creative Supply



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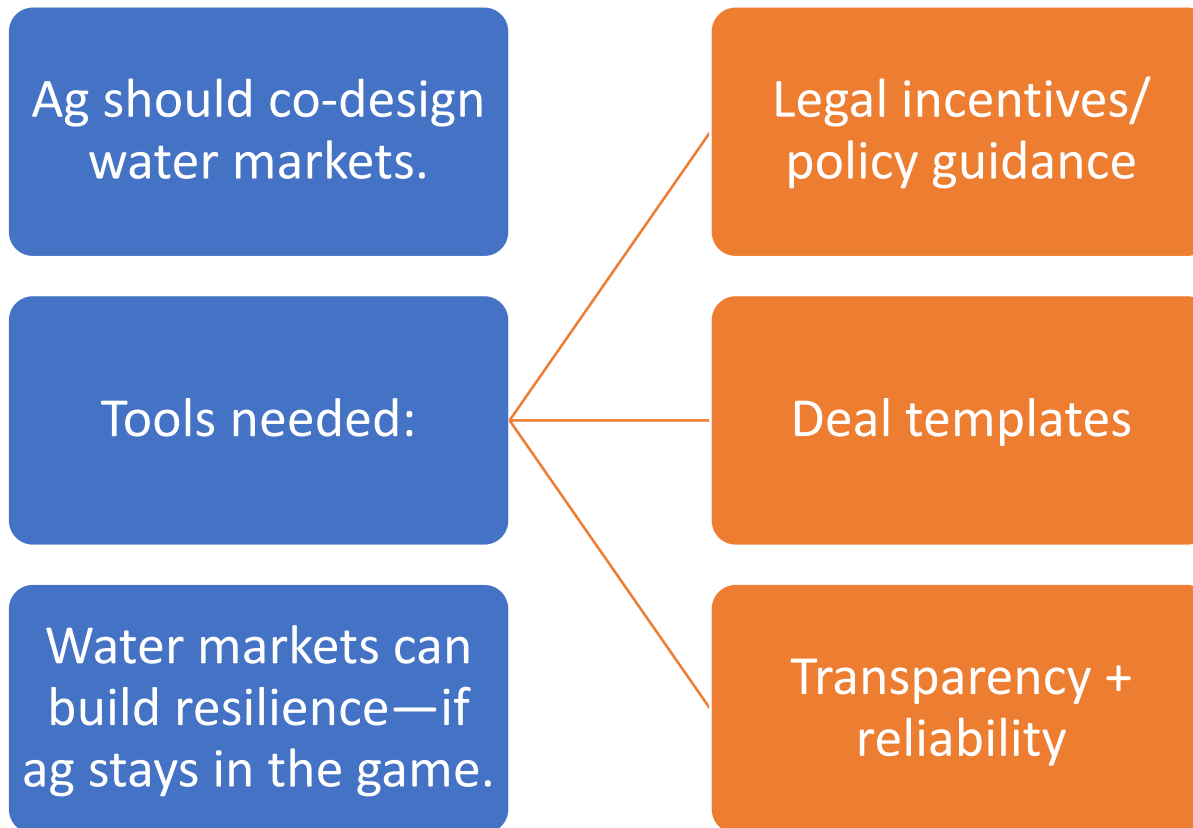
Crop-switching

Interruptible supply agreements



# The Future: Ag as Market Maker, Not Casualty

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# Lessons from other markets

## Location

## Innovation

## Caution

Australia



Separated water rights from land; robust leasing

Needed major regulation after environmental collapse

California



Groundwater credit trading in pilot programs

Still struggling with verification & equity

Chile



Fully privatized rights

Backlash → constitutional reform to reassert more public control



4) Better agricultural conditions & greater resiliency

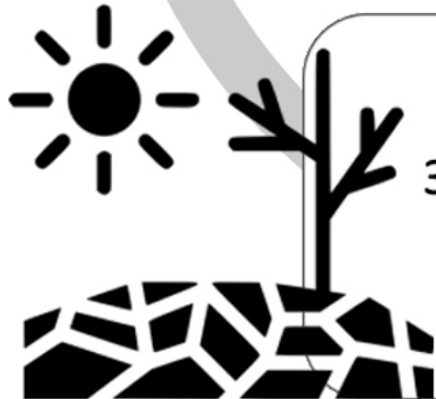
1) Payments to agricultural producers



2) Increased flexibility to adopt regenerative ag practices that save water, sequester carbon, & builds healthy soil



3) Slow climate change & aridification



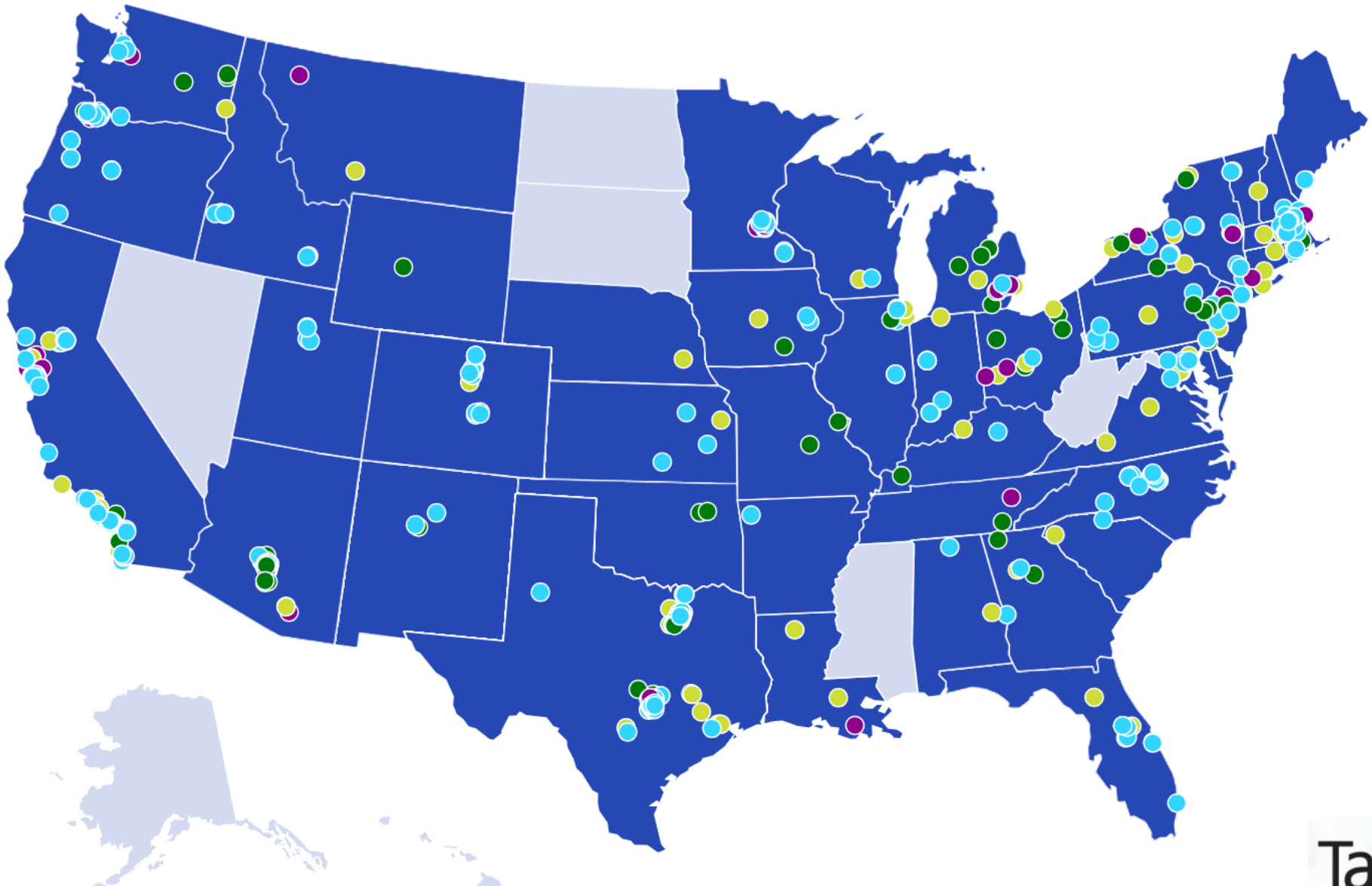
**WATERGARD**

**.ORG**

# The Hidden Thirst of the Digital West

- TSMC Phoenix:
  - Fully operational > 15KAF (13MGD)
  - Enough to supply ~50,000 people
- Data Centers Across the West:
  - Each hyperscale center can use 3-5 MGD
  - For cooling, not processing
  - Many built near rural or tribal lands with limited groundwater

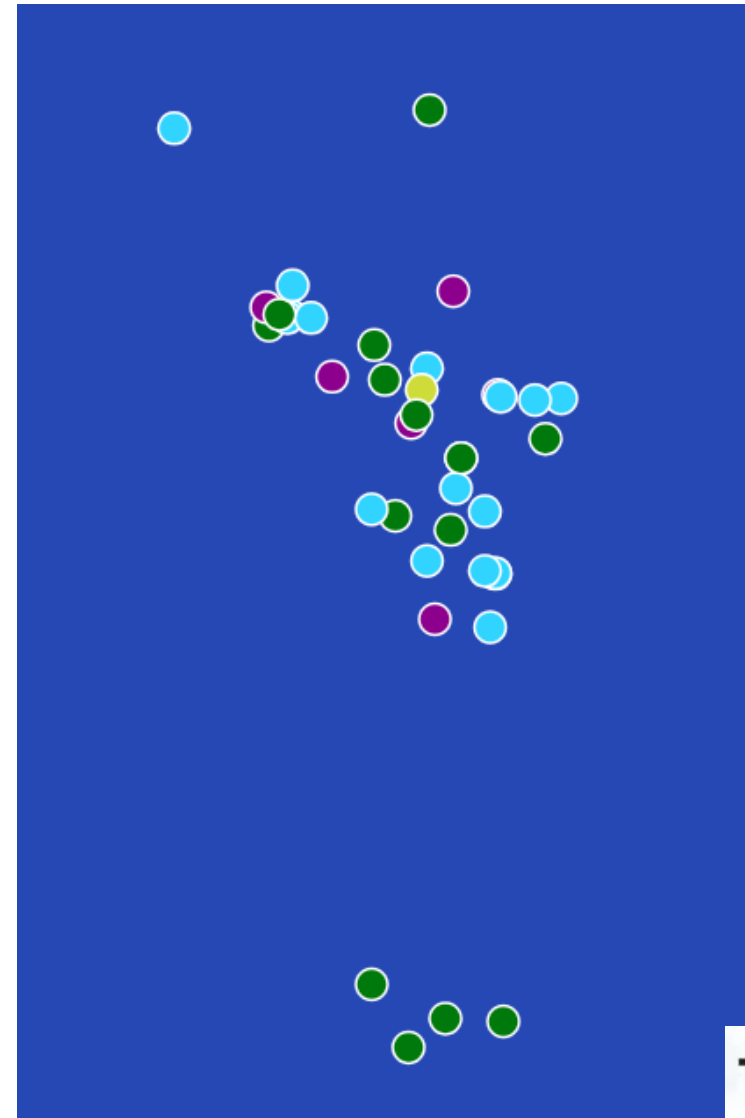
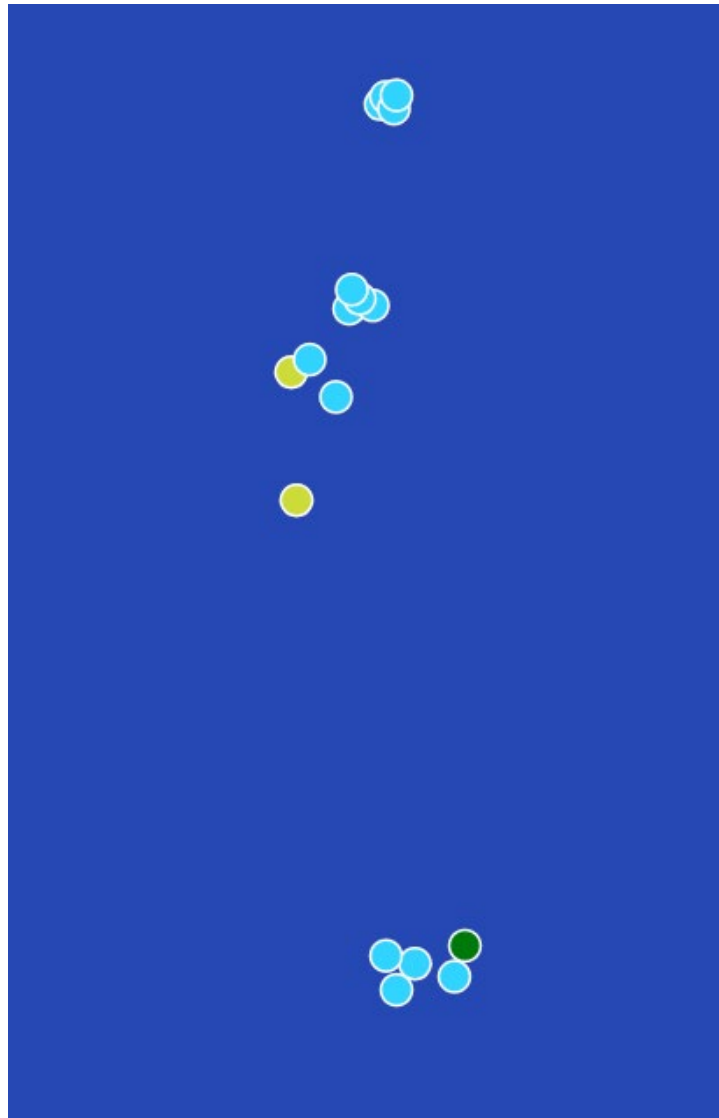




DEN/FR

VS

PHX/TUS



# A quick note on water quality...

Not all “wet” water is equal: quality affects use, value, and liability

Key concerns for ag buyers:

**Salinity & hardness** – impairs irrigation, clogs pivots

**Nutrient loading** – excess nitrogen/phosphorus → algae, weed growth

**Bacteria/coliform** – red flag for domestic or livestock use

**Metals & selenium** – natural or legacy mining/oil impacts

**PFAS / ‘Forever Chemicals’** – emerging risk near airports, military, and fire training sites

Test before you close: especially for domestic wells, ponds, or stock tanks

Ask: “Can this water legally and safely be used the way I need it to?”



# TRUMP

## THE ART OF THE DEAL



DONALD J. TRUMP with TONY SCHWARTZ

