



# IOWA DEPARTMENT OF NATURAL RESOURCES

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LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

Water Use Program Annual Stakeholder Meeting  
Water Supply Engineering Section  
July 18<sup>th</sup>, 2024

# Agenda

- SFY 2024 Program Accomplishments
- 2023 Water Use Summary
- Drought Update
- Jordan Aquifer Update
- SFY 2025 Anticipated Work
- Proposed SFY 2025 Water Use Program Annual Fee
- Proposed Rule Changes / EO10
- Q & A
- Iowa Geological Survey Presentation

# SFY 2024 Program Accomplishments

- Stakeholder meeting held 7/19/2023 to set 2024 Annual Fee; approved by EPC on 8/09/2023
- Taylor Jorgensen joined the Water Use Program as an Environmental Specialist in January, 2024
- Deb Williams retired in March, 2024
- Invoiced & tracked ~3,300 Annual Fee payments
- Sent ~370 Renewal Applications; Issued ~330 renewed Permits

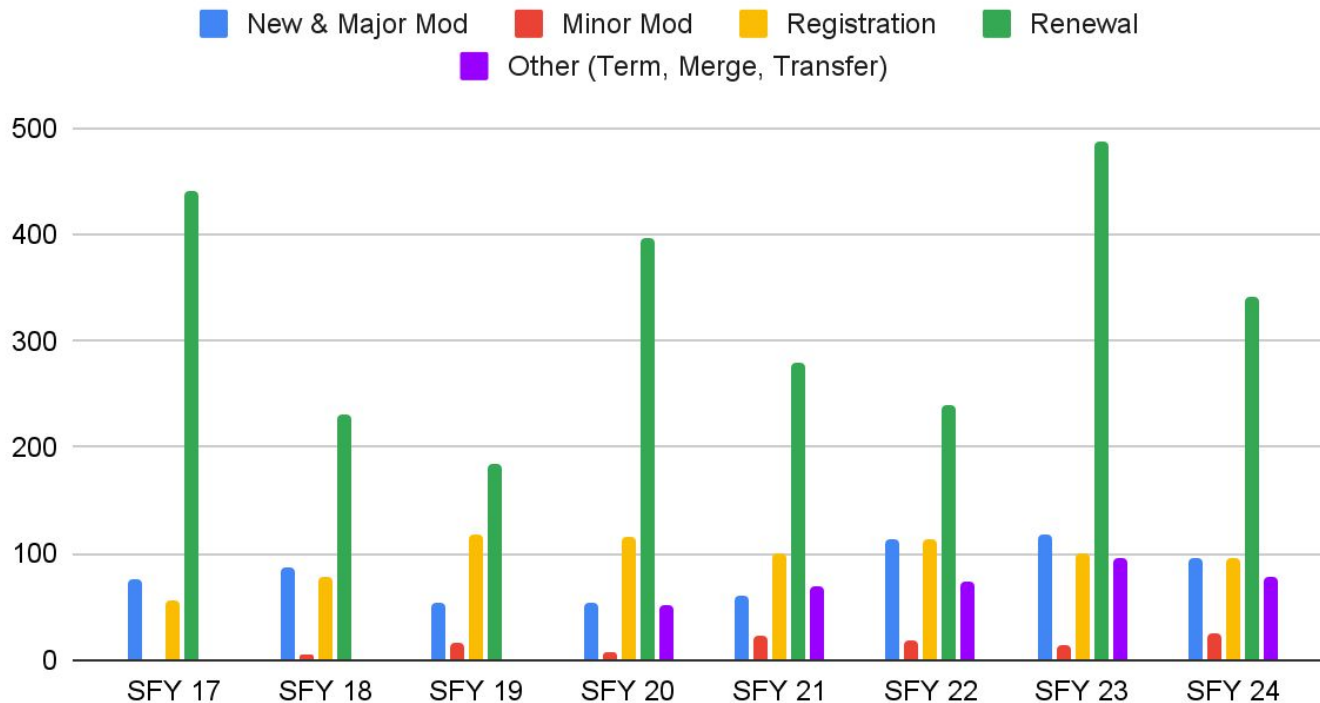
# SFY 2024 Program Accomplishments

- Mailed Annual Water Use Report forms & entered ~2,000 Annual Water Use Reports into WACOP database
  - 95.9% compliance rate
- Tracked Water Use Exceedances for 2023
- Monitored stream levels & issued protected flow restrictions
- DNR headquarters relocated from the Wallace Building to 6200 Park Ave

# SFY 2024 Program Accomplishments

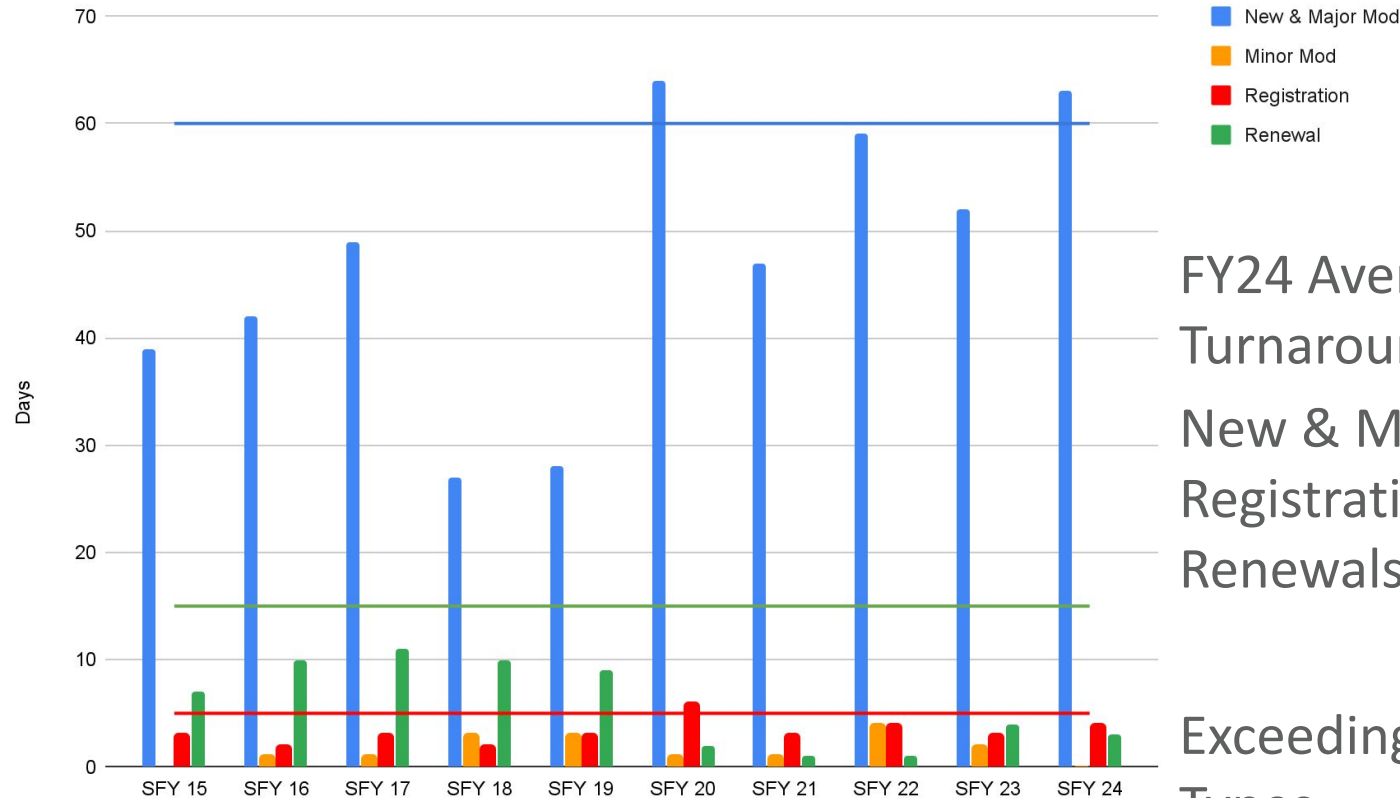
638 Applications Received (all types); 611 Applications Closed Out  
Higher than average (10 year = 488)

## Projects Received by SFY



# SFY 2024 Program Accomplishments

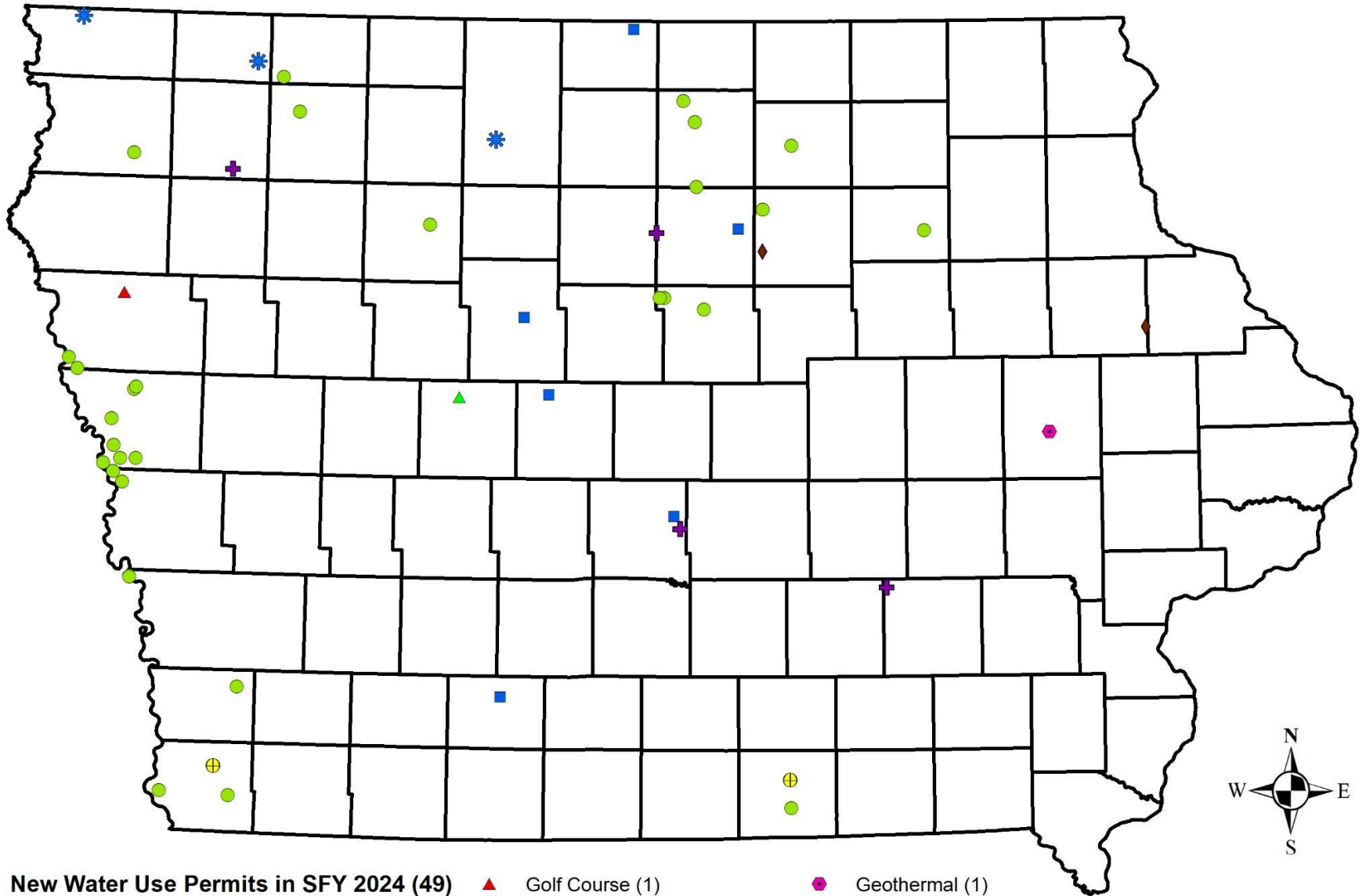
Average TAT



FY24 Average Project Turnaround Time:  
New & Major Mod = 63 days  
Registrations = 4 days  
Renewals = 3 days

Exceeding Goal on Most Types

# New Water Use Permits - SFY 2024

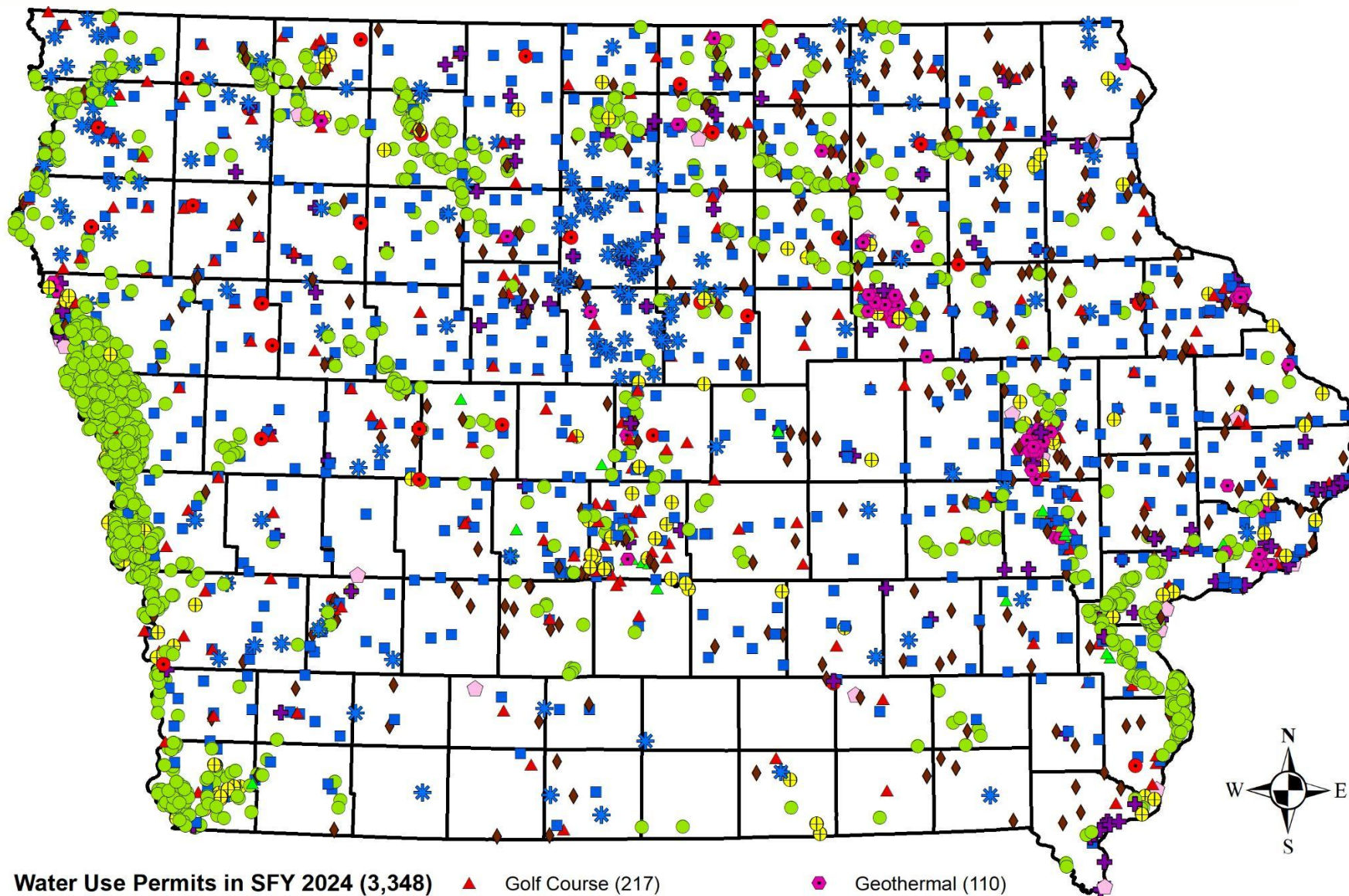


## New Water Use Permits in SFY 2024 (49)

- |                           |                                |                          |
|---------------------------|--------------------------------|--------------------------|
| ● Crop Irrigation (29)    | ▲ Golf Course (1)              | ◆ Geothermal (1)         |
| ■ Public Water Supply (6) | ✳ Animal Feeding Operation (3) | ● Ethanol Production (0) |
| ◆ Quarry Operation (2)    | ✚ Industrial/Commercial (4)    | ◇ Power Generation (0)   |
| ⊕ Recreational Water (2)  | ▲ Other (1)                    |                          |



# All Active Water Use Permits - SFY2024

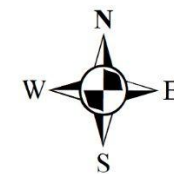


## Water Use Permits in SFY 2024 (3,348)

- Crop Irrigation (1,561)
- Public Water Supply (659)
- ◆ Quarry Operation (325)

- ▲ Golf Course (217)
- ✱ Animal Feeding Operation (150)
- ✚ Industrial/Commercial (131)
- ⊕ Recreational Water (116)

- Geothermal (110)
- Ethanol Production (32)
- ⬠ Power Generation (20)
- ▲ Other (25)



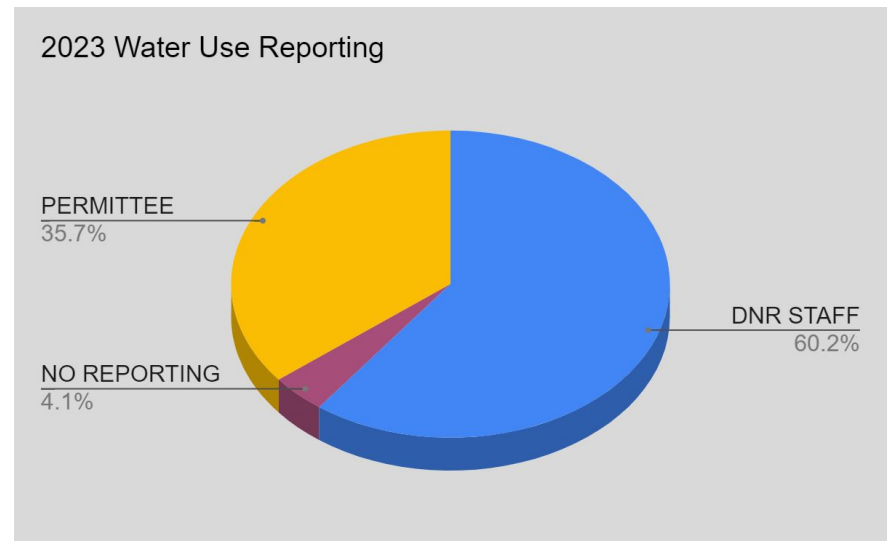


# All Active Water Use Permits - SFY 2024

Use Type	2023 Use MGY	# of Permits	% of Total Use	% of Total Permits
Animal Feeding Operation	4921	146	0.6	4.3
Ethanol Production	8091	32	1.0	1.0
Heating/Cooling	7653	110	1.0	3.3
Industrial/Commercial	86219	134	10.8	4.0
Irrigation	37085	1801	4.7	53.6
Other	344	21	0.0	0.6
Power Generation	457059	20	57.4	0.6
Public Water System	160759	661	20.2	19.7
Quarry	27297	333	3.4	9.9
Recreational	6763	100	0.8	3.0
<b>Total</b>	<b>796191</b>	<b>3358</b>		100.0

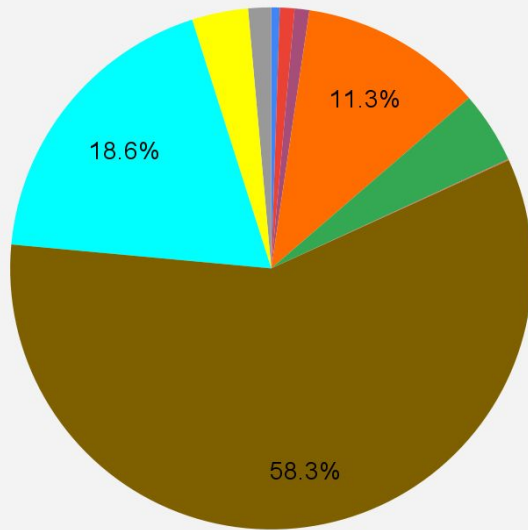
# SFY 2024 Program Accomplishments

- WACOP Database User Statistics
  - 1861 users have a WACOP account linked to 1 or more permits => **19% increase**
  - 1910 WU Permits linked to a user => **57% of active permits & 19% increase**
  - 1010 fees (all types) paid online in SFY2024 => **14% increase**
  - 1187 (**35%**) 2023 Annual Water Use Reports entered online by permit holders; **4% increase!**



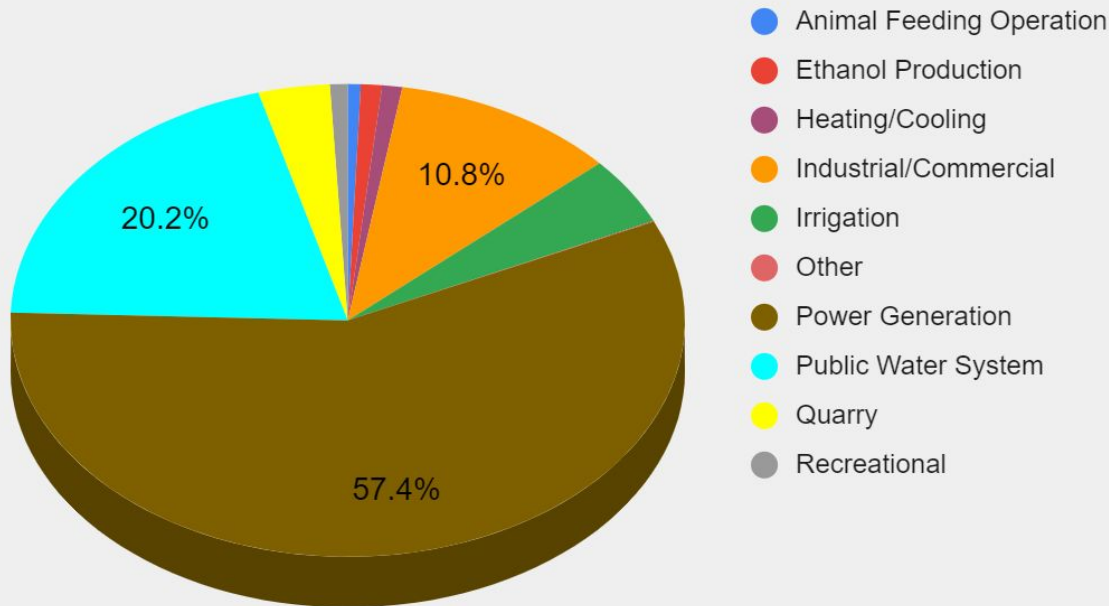
# 2023 Water Use Summary

2022 Use by Category



2022 Total = 843 Billion Gallons  
 2023 Total = 796 Billion Gallons (-5.6%)

2023 Use By Category

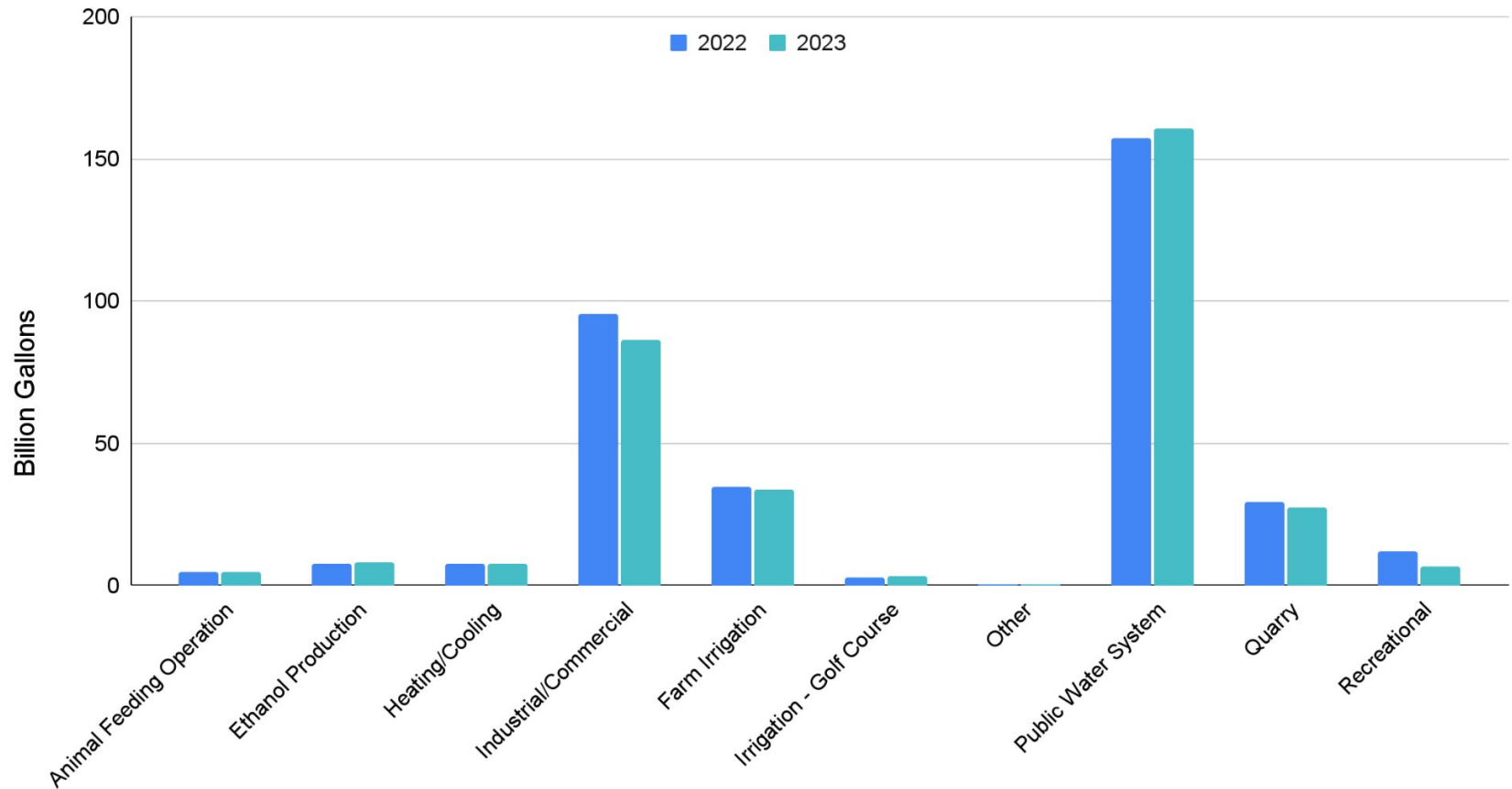


# 2023 Water Use Summary

Use Type	2022 (MGY)	2023 (MGY)	Percent Change
Animal Feeding Operation	4533	4921	+8.5%
Ethanol Production	7653	8091	+5.7%
Heating/Cooling	7669	7653	-0.2%
Industrial/Commercial	95562	88219	-7.7%
Irrigation - Corn & Soybean	31673	30970	-2.2%
Irrigation - Golf Course	2931	3157	+7.7%
Irrigation - Speciality Crops	2975	2987	+0.4%
Other	511	344	-32.6%
Power Generation	491720	457059	-7.0%
Public Water System	157476	160759	+2.1%
Quarry	29376	27297	-7.1%
Recreational	11899	6763	-43.2%
<b>Total</b>	<b>843,978</b>	<b>798,220</b>	<b>-5.4%</b>

# 2023 Water Use Summary

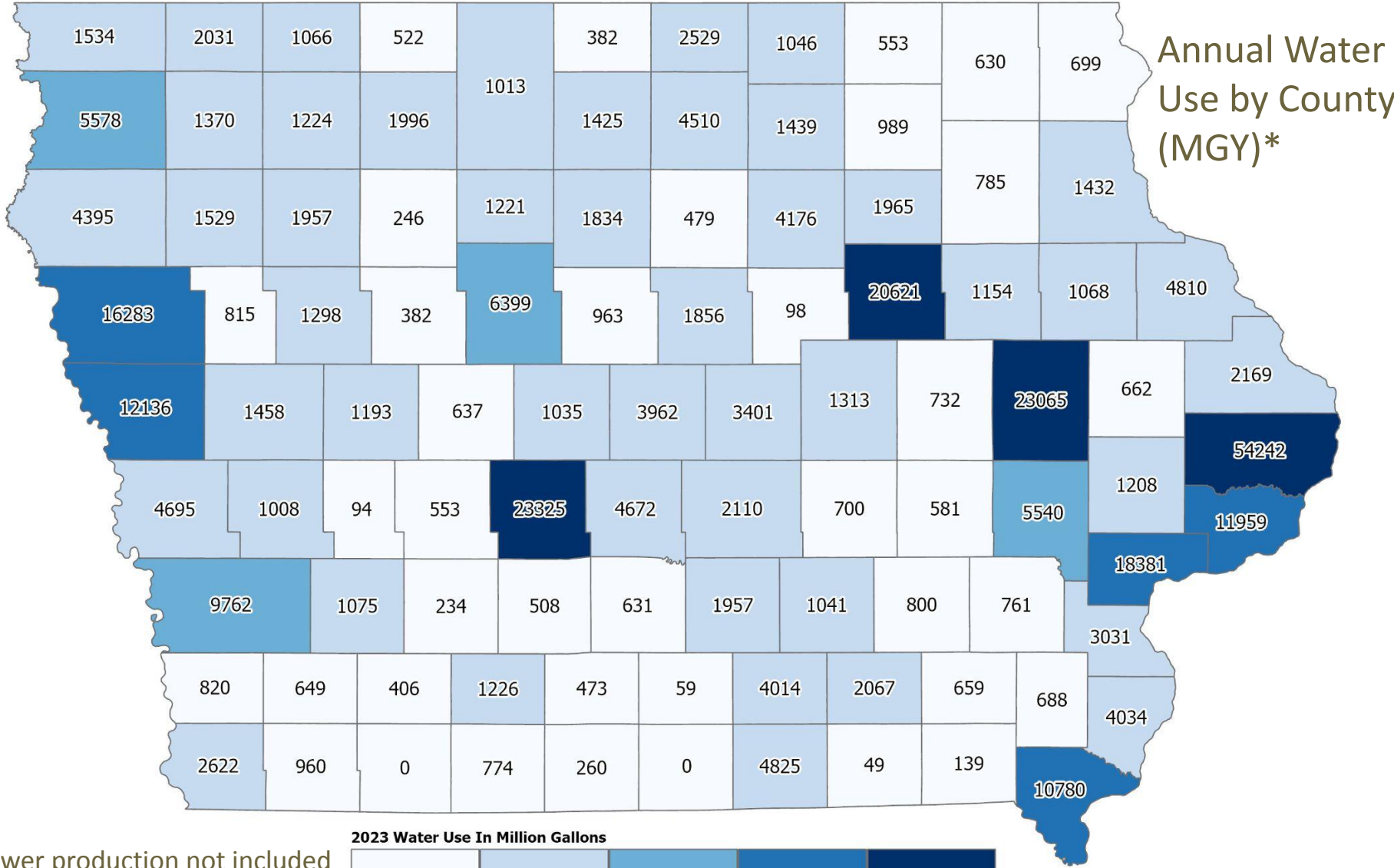
Annual Water Use by Major Category  
(power production not included)



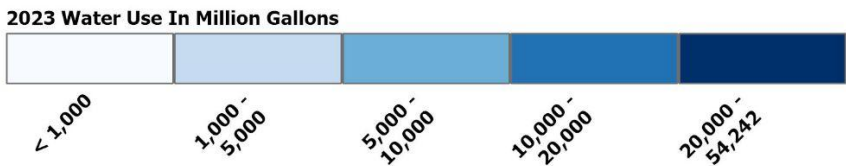
See appendix for 2022 precipitation level data



# 2023 Water Use by County



\*power production not included



# Drought Update

September 2023

Map released: Thurs. July 18, 2024

Data valid: July 16, 2024 at 8 a.m. EDT

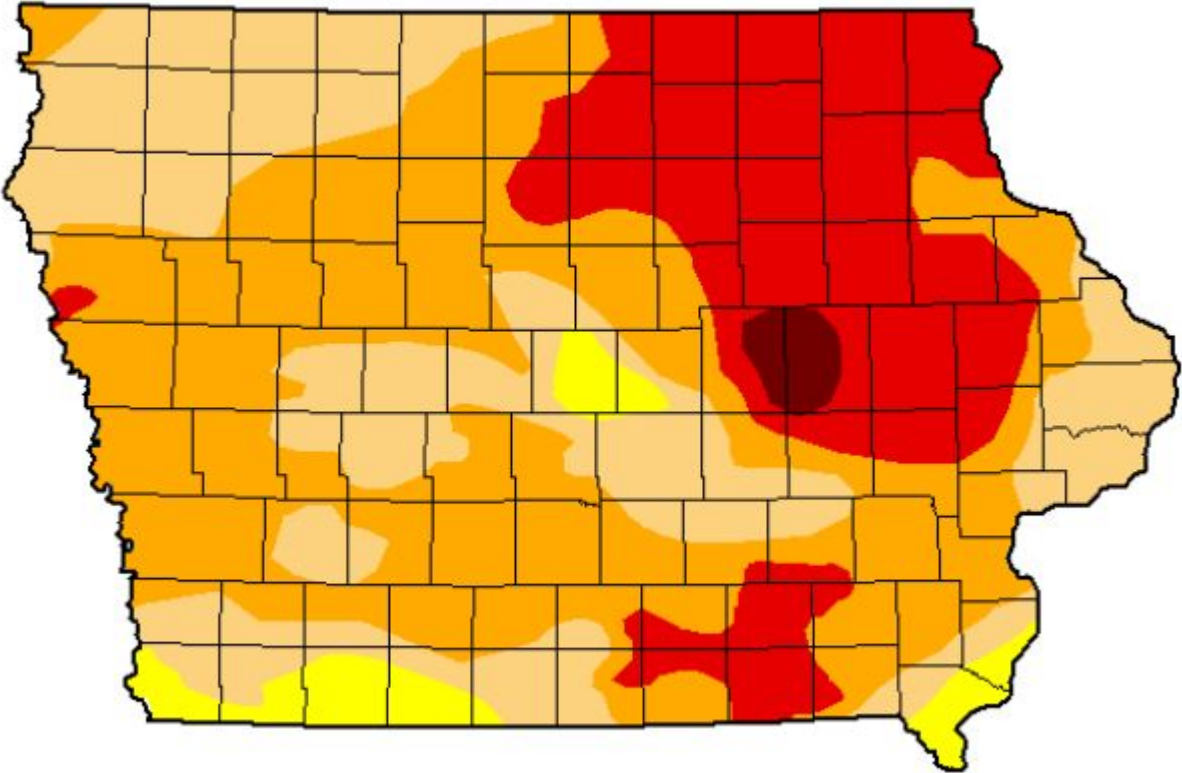
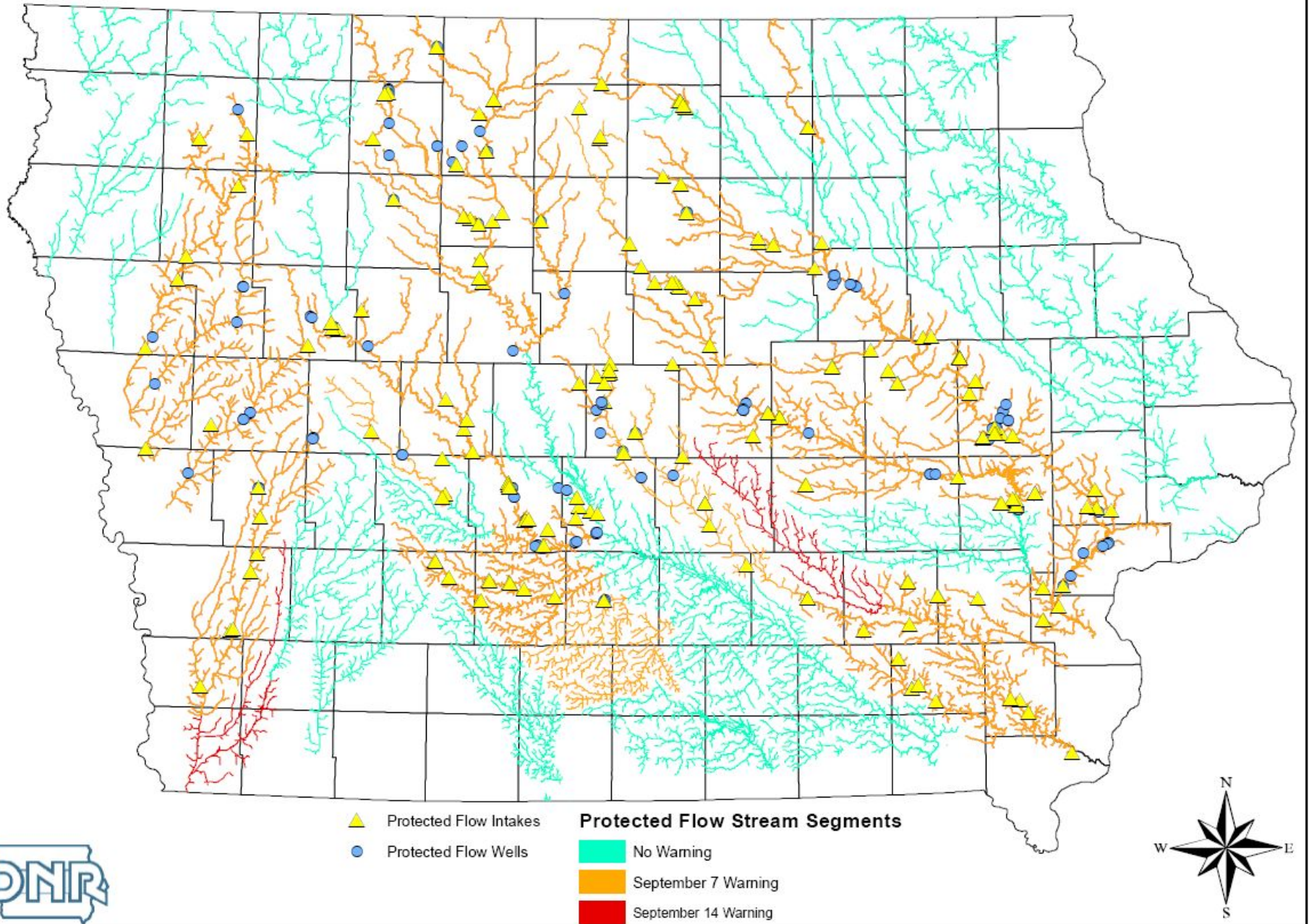


Photo Author(s):  
Drought Mitigation Center

Map Author(s):  
National Drought Mitigation Center



# Iowa Rivers Under Protected Flow September, 2023





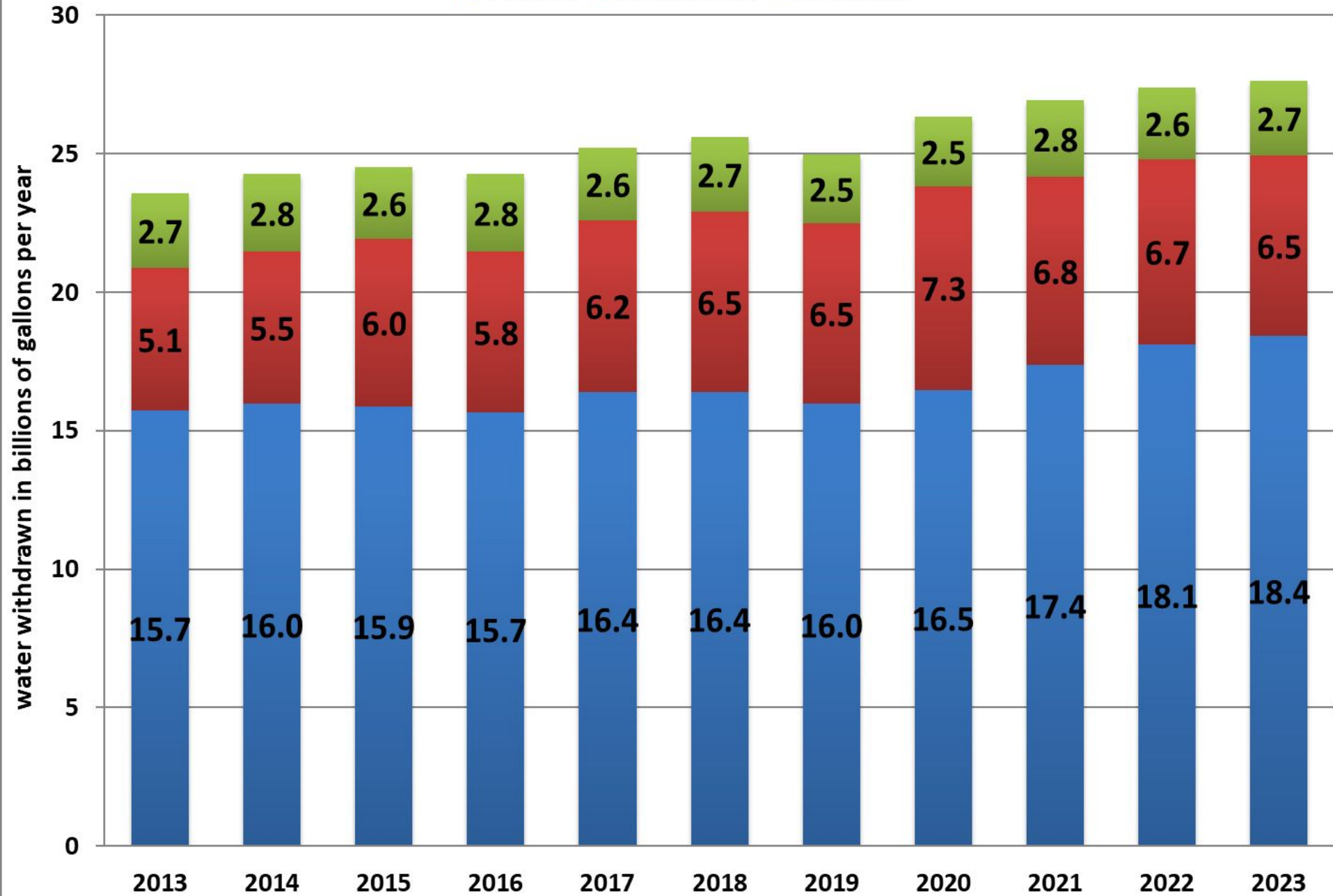
# SFY 2024 Program Highlights:

## Drought

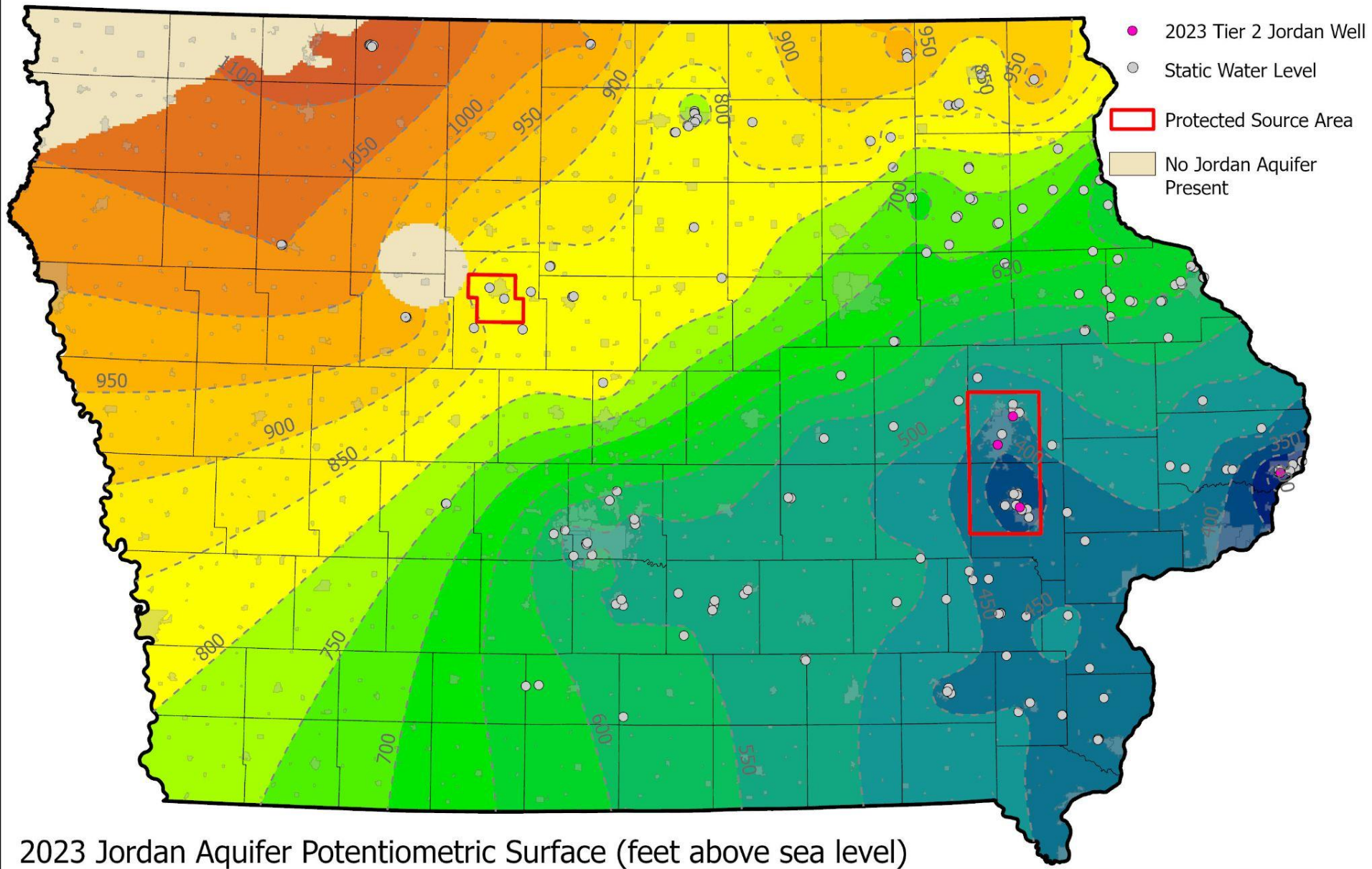
- Last year saw the continuation of an extensive drought that lasted until late spring/summer of 2024.
- Iowa Water Use program sent “Protected flow” withdrawal cutoff letters sent out first week of September.
- Over 150 protected flow letters sent to irrigators, recreational users, golf courses, and quarries.
- Many major rivers affected by protected flow, including the Nishnabotna, Des Moines, Skunk, Cedar, and Wapsipinicon rivers.
- 7Q10, or ‘restricted flow’, was encountered.

# Water Use from the Jordan Aquifer

Public Industrial Ethanol

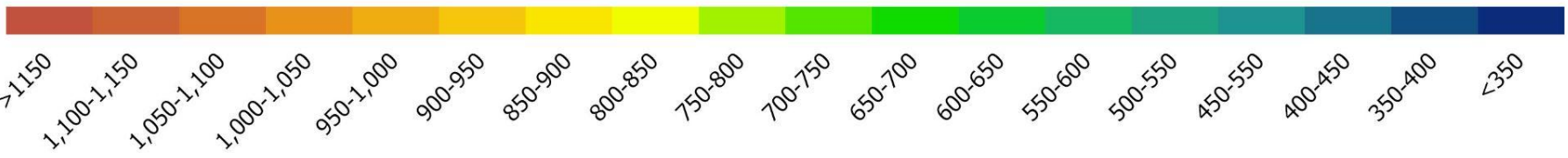


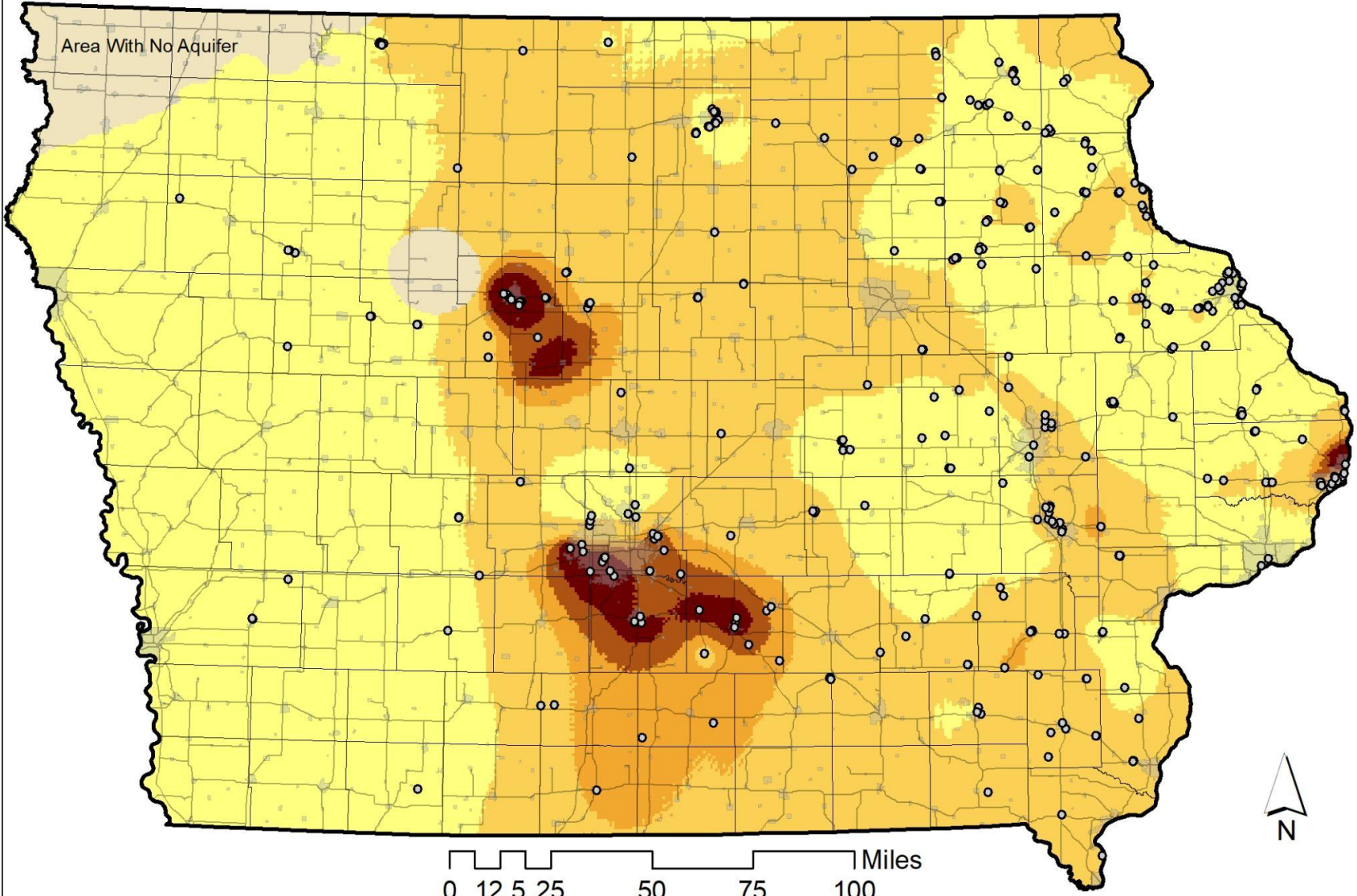




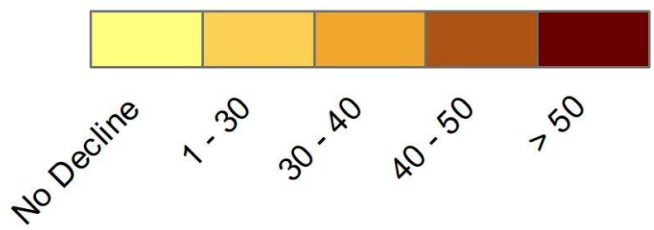
- 2023 Tier 2 Jordan Well
- Static Water Level
- Protected Source Area
- No Jordan Aquifer Present

2023 Jordan Aquifer Potentiometric Surface (feet above sea level)





**Water Level Decline in Feet from 2015-2023**



# SFY 2025 Anticipated Work

- Routine Work
  - Issuing permits; Annual fee collection; Database maintenance; Conflict resolution; Program administration; Data entry; Exceedance tracking
- Encourage online permit management by permit holders, including annual fee payment & water use reporting
- Continue to meet & exceed project review and close-out TAT goals
- Continue implementing Jordan aquifer management strategies; work with affected Tier 2 systems
- Add necessary improvements or fixes to WACOP 2.0
- Update existing statewide Jordan aquifer model
- Continue with EO10

# FY25 Budget – Major Cost Items

- Staffing = 84% of budget
  - 4 FTE
- Indirect = 11% of budget
  - Internal Department costs
- Remaining 5% of budget
  - Publishing (public notices)
  - Miscellaneous (travel, office supplies, postage, phones, etc.)
  - Computer equipment, modeling software
  - Scanning needs to move towards a “paperless” workflow

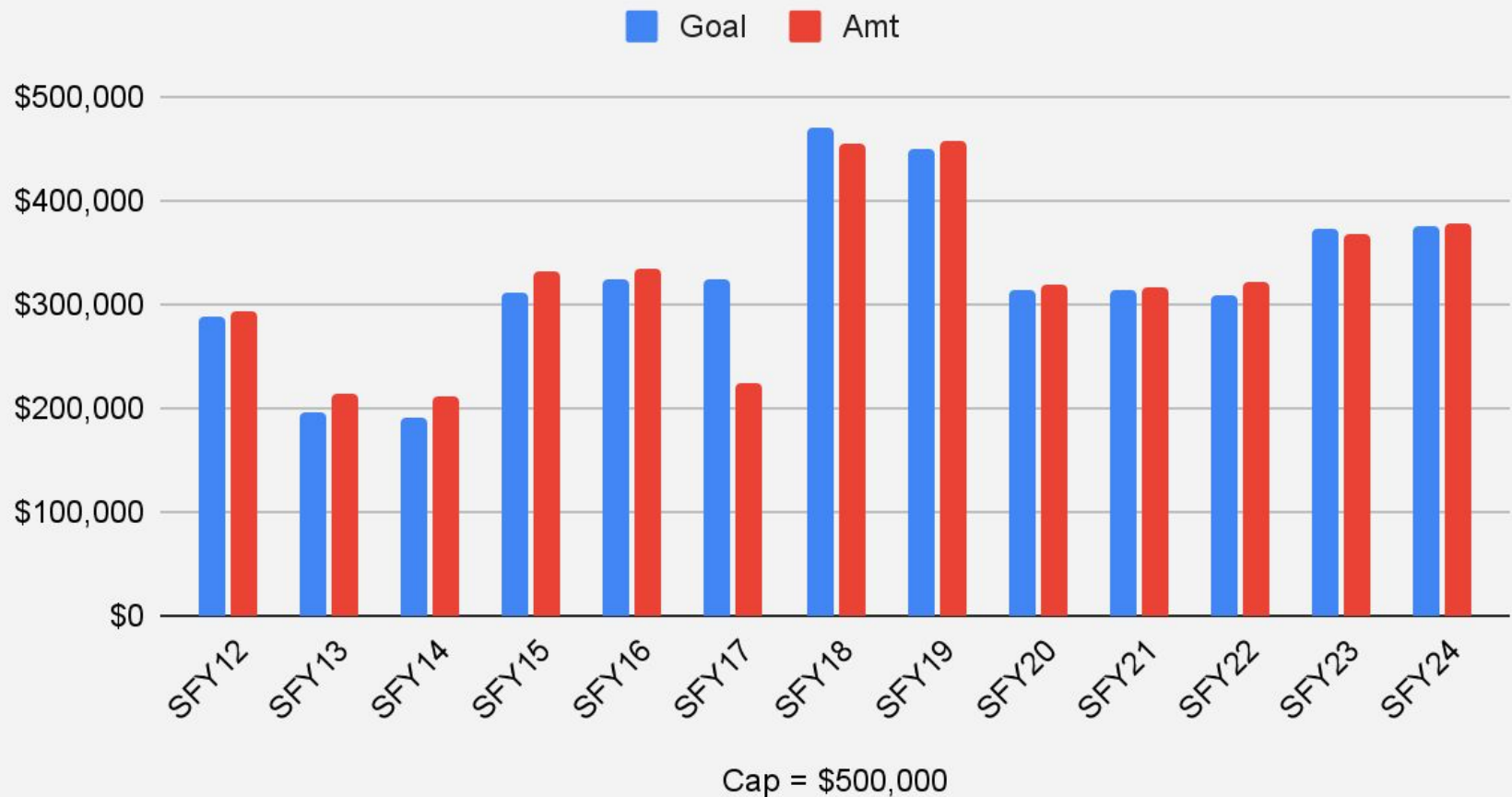
# Forecast for Long Term Budget Needs

- Staffing costs rise over time
- WACOP Upgrades
- Continue to hold annual fees as steady as the budget allows



# Fees Generated from Water Use Permits

## Annual Fees Generated from Water Use Permits



# Annual Fee Calculation

- Fee Calculation

\$613,966 budget

-184,190 General Fund

-35,000 application fees

-18,956 carryforward

\$375,820 to be collected from Annual Fees

- Number of active permits: 3347 (no attrition expected)
- Number of permits paying 2025 fee: 3268
- $\$375,820 / 3268 = \$115.00$  per permit
- **Proposed 2025 Annual Fee: \$115.00**
  - EPC meeting 8/20

Year(s)	Amount
2010-2011	\$135
2012	\$95
2013-2014	\$66
2015-2016	\$99
2017	\$66
2018-2019	\$134
2020-2022	\$95
2023-2024	\$115
2025	\$115

# Annual Fee Calculation

- Directed to assume no General Fund in SFY 2018 & 2019, but was received; resulted in carryforward amount built up
- We have been gradually spending down the carryforward to a target of \$200,000 by reducing the annual fee; reached in FY22
- If there is no GF, the carryforward will cover 2 years of budget
  - Carryforward in 2021: \$232,487
  - Carryforward in 2022: \$220,288
  - \$8,007 FY22 spend down
  - \$212,281 carryforward
- In 2022, we raised the permit fee to \$115 in order to maintain carryforward of ~\$200,000; attempt to hold steady/maintain equilibrium in future years
- Due to staffing changes, a larger carryforward was built up in FY24; We anticipate to spend this down again in FY25
- We will spend down ~\$19,000 of carryforward to hold the annual fee at \$115

# SFY 2024 Program Highlights:

## Executive Order 10

### Water Use Program Rules (IAC Chapters 50-55)

- Program believes majority of the current rules and regulations are working well. Changes include:
  - Removal of 200 gpm withdrawal limits from streams and unconfined aquifers in watersheds that drain <50 mi<sup>2</sup>
  - Remove rules regarding water storage and agricultural drainage wells
  - Merge and update Chapters 50-52 into single chapter
  - Clean-up and clarification
  - Update/merge definitions
  - Update references
  - Update DNR form numbers

# Executive Order 10 Process & Timeline

- Clean and redline strikeout versions of proposed rules and public hearing information:  
<https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Quality-Rulemaking>
- Currently finalizing rule language.
  - **July 31st** - final proposed chapters and all associated documents submitted to legal for review
  - **Late September** - regulatory analysis public hearing
  - **Spring 2025** - rules become final
- **Questions, comments, issues, about our current rules?**

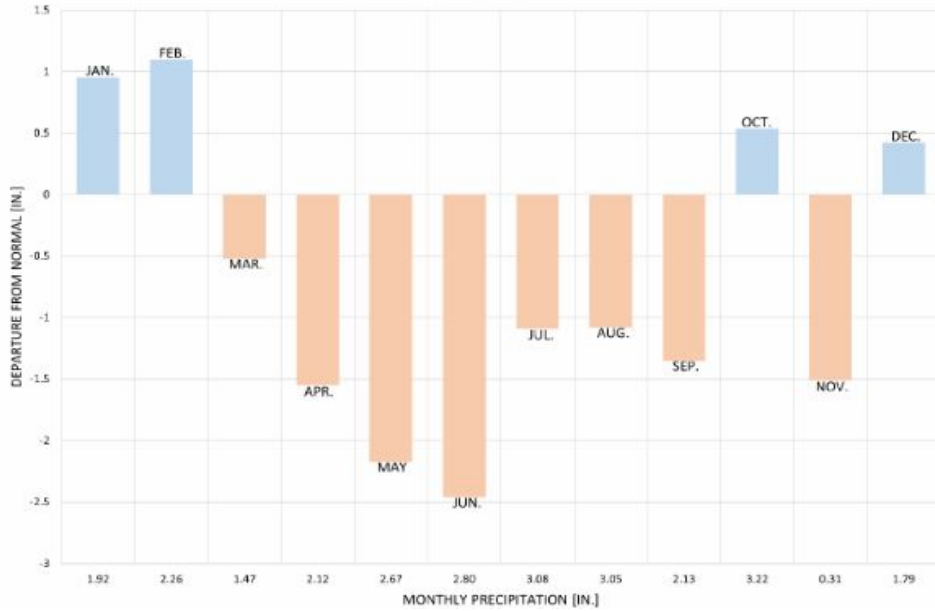
# Questions????



Any objection to proposed FY25 Annual Fee?  
SFY2025 Annual Fee Approval Request at August 20th  
Environmental Protection Commission Meeting

# Appendix

2023 Monthly Precipitation



2023 Annual County Average Precipitation Departure [in.]

