



SIERRA CLUB
IOWA CHAPTER

PROTECT YOUR COMMUNITY: DATA CENTER ORDINANCES

August 2020



Agenda & Speakers

1. Basic Overview of Data Centers & Concerns
2. Data Centers in Iowa
3. Local Ordinances and how to pass one
4. Statewide Legislation
5. Q&A



Cindy Golding
Iowa House of
Representatives



Jo Ann Beer
Mayor of Fairfax



Pam Mackey Taylor
Sierra Club Iowa
Chapter Director



Wally Taylor
Sierra Club Iowa
Legal Chair



Jess Mazour
Sierra Club Iowa
Conservation Program
Associate



Briana Kouma
Sierra Club Iowa
Conservation
Coordinator

Basic Overview & Concerns



Microsoft Data Center near Des Moines | Jess
Mazour

WHAT IS A DATA CENTER

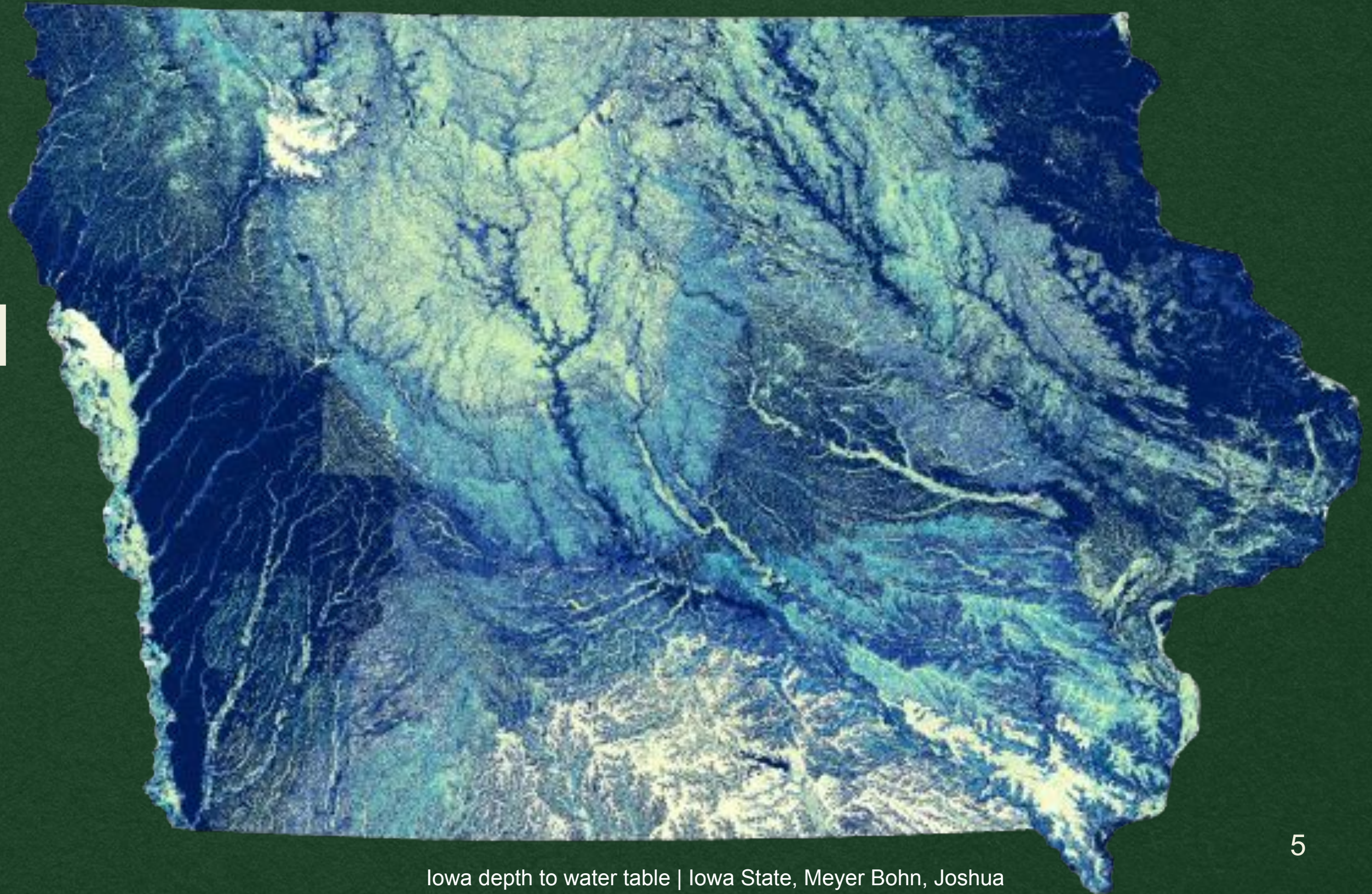
A data center is a physical facility that centralizes an organization's shared IT operations and equipment. It houses critical servers, data storage drives, and network equipment to process, store, and share vast amounts of digital information.

WHY SO MANY?

The massive surge in data center construction is driven by the explosion of generative AI. These AI models require exponentially more computing power and energy.



IOWA IS WATER AND LAND RICH WITH FEW PROTECTIONS



Iowa depth to water table | Iowa State, Meyer Bohn, Joshua
McDanel, & Bradley Miller

OUR CONCERNS

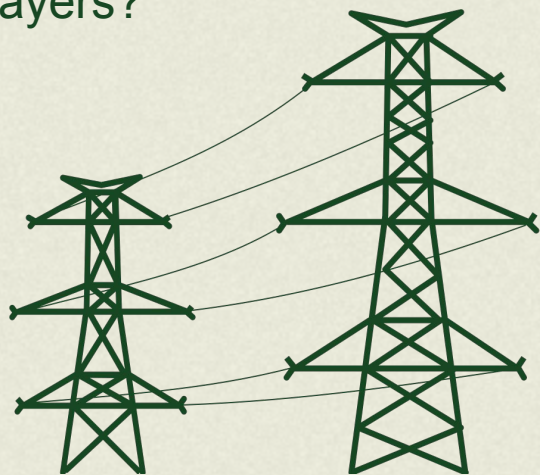


WATER USAGE

Water is a shared public resource, and communities deserve to understand how much will be used and what the long-term impacts could be. Some proposed data centers in Iowa could use millions of gallons of water every day. Increased water demand can place additional stress on rivers, aquifers, and municipal water systems, especially during drought or periods of high demand.

ELECTRICITY USAGE & INCREASED COSTS

Data centers operate 24 hours a day everyday and require enormous amounts of electricity. Large increases in electricity demand can put additional strain on the grid especially during periods of peak demand or extreme weather. Would these energy costs be passed on to ratepayers?



QUALITY OF LIFE

Cooling equipment and backup generators create continuous noise. Data Centers often include bright security lighting that can affect nearby homes and wildlife. Along with increased truck traffic during construction impacting local roads and neighborhoods. These buildings occupy hundreds of acres changing the rural landscapes, property values, and the character of communities.

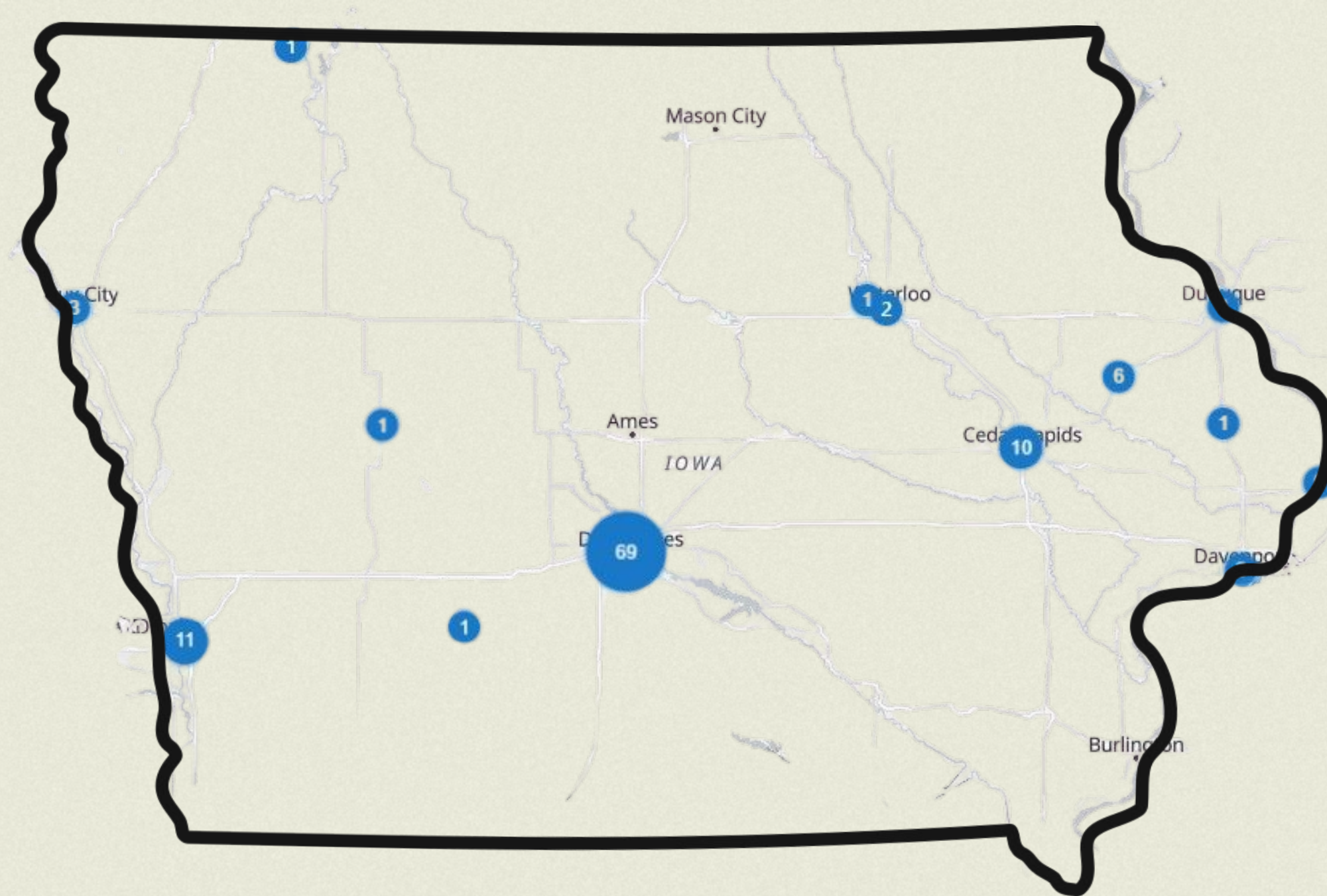
TOO MANY, TOO FAST, NOT PREPARED

Many cities and counties do not yet have ordinances specifically addressing data centers. Without clear local standards, communities may have limited ability to address concerns once a proposal is submitted. Planning ahead gives communities more time & options than reacting after a proposal arrives.



116 Data Centers in Iowa

- 69 - Des Moines
- 11 - Council Bluffs
- 10 - Cedar Rapids
- 6 - Monticello
- 6 - Clinton
- 3 - Davenport
- 3 - Sioux City
- 2 - Waterloo
- 1 - Greenfield
- 1 - Carroll
- 1 - Cedar Falls
- 1 - Lake Park
- 1 - Dubuque
- 1 - Maquoketa



Some Current Proposed Data Center Projects

- Ames
- Palo
- Hancock County
- Charles City
- Jefferson County
- Clinton (largest)
- West Des Moines
- Salix
- Cascade
- Plus Others!

RESOURCE USAGE



Energy

“A January 2026 report by Bloom Energy predicts that U.S. data centers’ total combined energy demand will nearly double between 2025 and 2028, jumping from 80 to 150 gigawatts (GW).

That’s like adding a country with the energy needs of Spain in just three years.”

Nicole Greenfield, Consumer reports, March 20, 2026



Water

Large data centers can consume up to 5 million gallons per day, equivalent to the water use of a town populated by 10,000 to 50,000 people

Miguel Yañez-Barnuevo, EESI, June 2025

BIG PLAYERS IN IOWA



MICROSOFT



GOOGLE



META



QTS

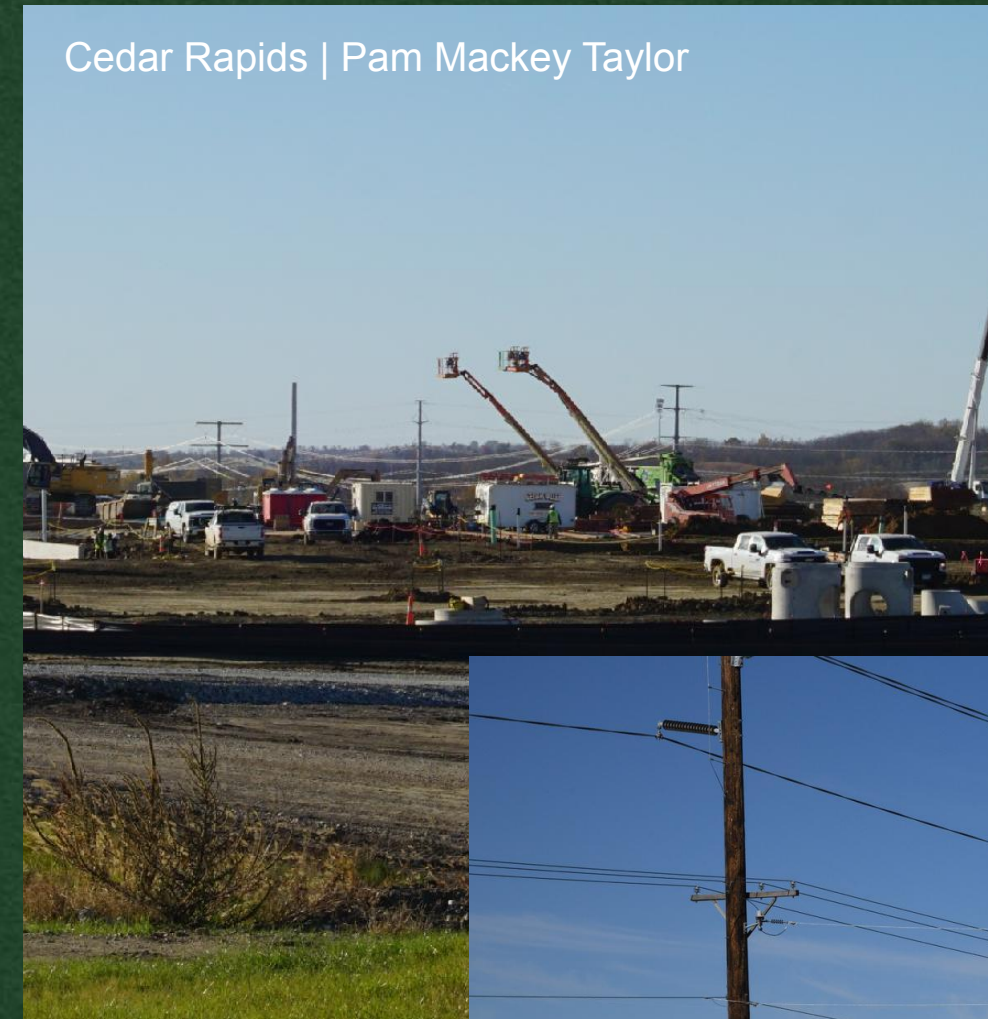


APPLE

- Usually out-of-state for-profit companies
- Usually work under the radar with NDAs
- For-profit companies don't always have our local interests in mind
- Usually want lots of statewide and local subsidies
- There are many other companies operating or proposing to build in Iowa

IOWA IS NOT PREPARED

Cedar Rapids | Pam Mackey Taylor



Council Bluffs | Tom Reardon

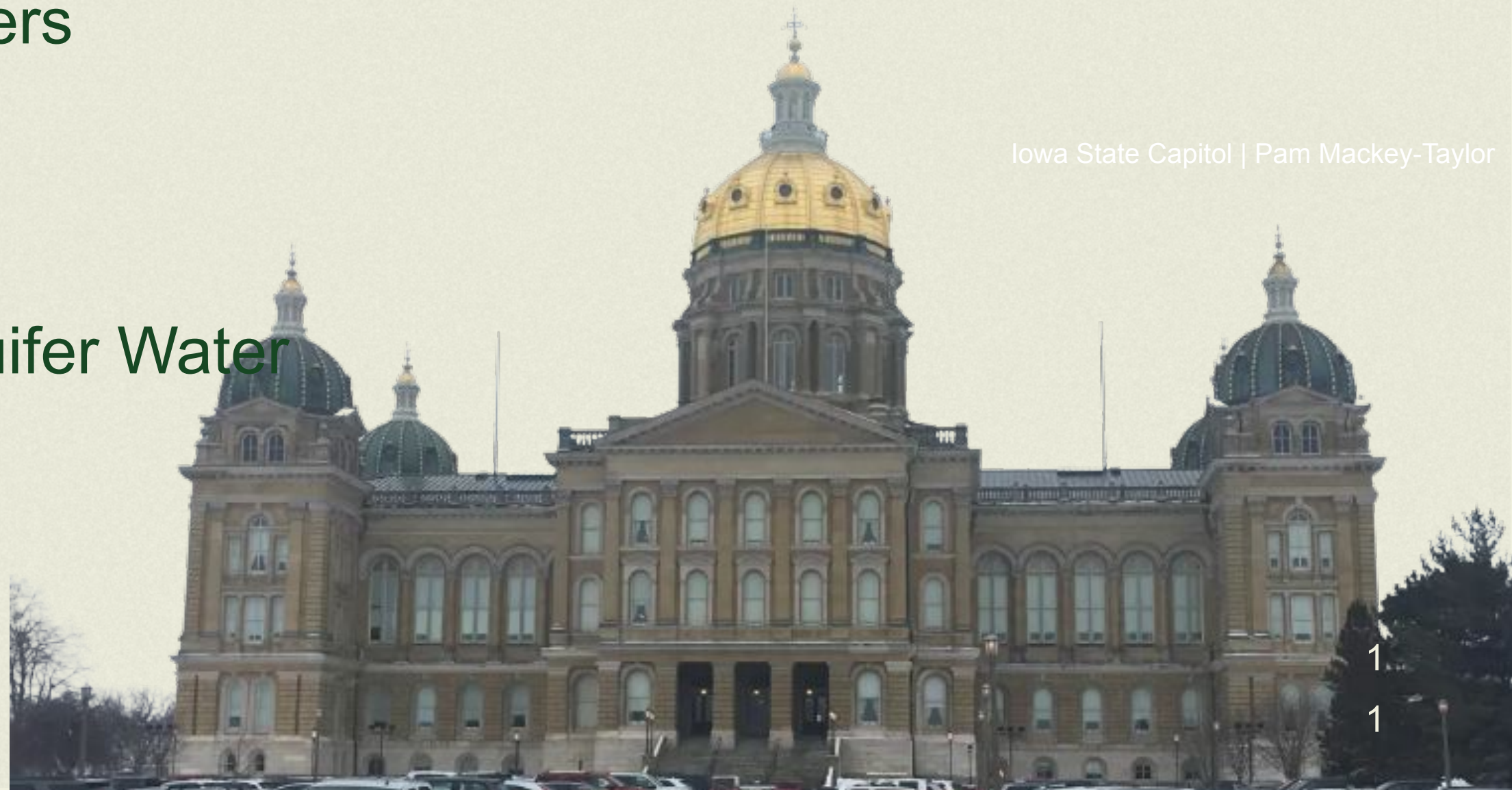


No Statewide Protections

NO....

- Setbacks
- Rate Protections for Consumers
- Quality of Life Protections
- Transparency
- Comprehensive Study on Aquifer Water

Iowa State Capitol | Pam Mackey-Taylor



Data Center Construction | Pam Mackey Taylor



Overview of Data Center Ordinances

Presented by Wally Taylor
Sierra Club Iowa Chapter Legal Chair

Key Pieces of Ordinances

Data Center Ordinances provide protections for communities.

Protect Water

- Independent study of water resources paid for by data center company
- Requirement to use a closed loop system or non-evaporative closed loop cooling
- Expectations during water emergency or shortage

Setbacks/Quality of Life

- Distance away from homes, buildings, parks, city limits, businesses, and other important places of interest
- Rules around noise
- Rules around lighting
- Rules for traffic
- Emergency Response Plans
- Decommissioning

Zoning

- Data Centers should be a conditional use in an industrial zone, no special use districts for data centers

Fairness/Transparency

- Reporting requirements for water and electricity usage
- Transparency of water and electricity source
- Ensuring costs of infrastructure or usage is not passed along to consumers
- Ensuring communities don't keep important information confidential or don't have unfair NDAs

DATA CENTER ORDINANCES IN IOWA

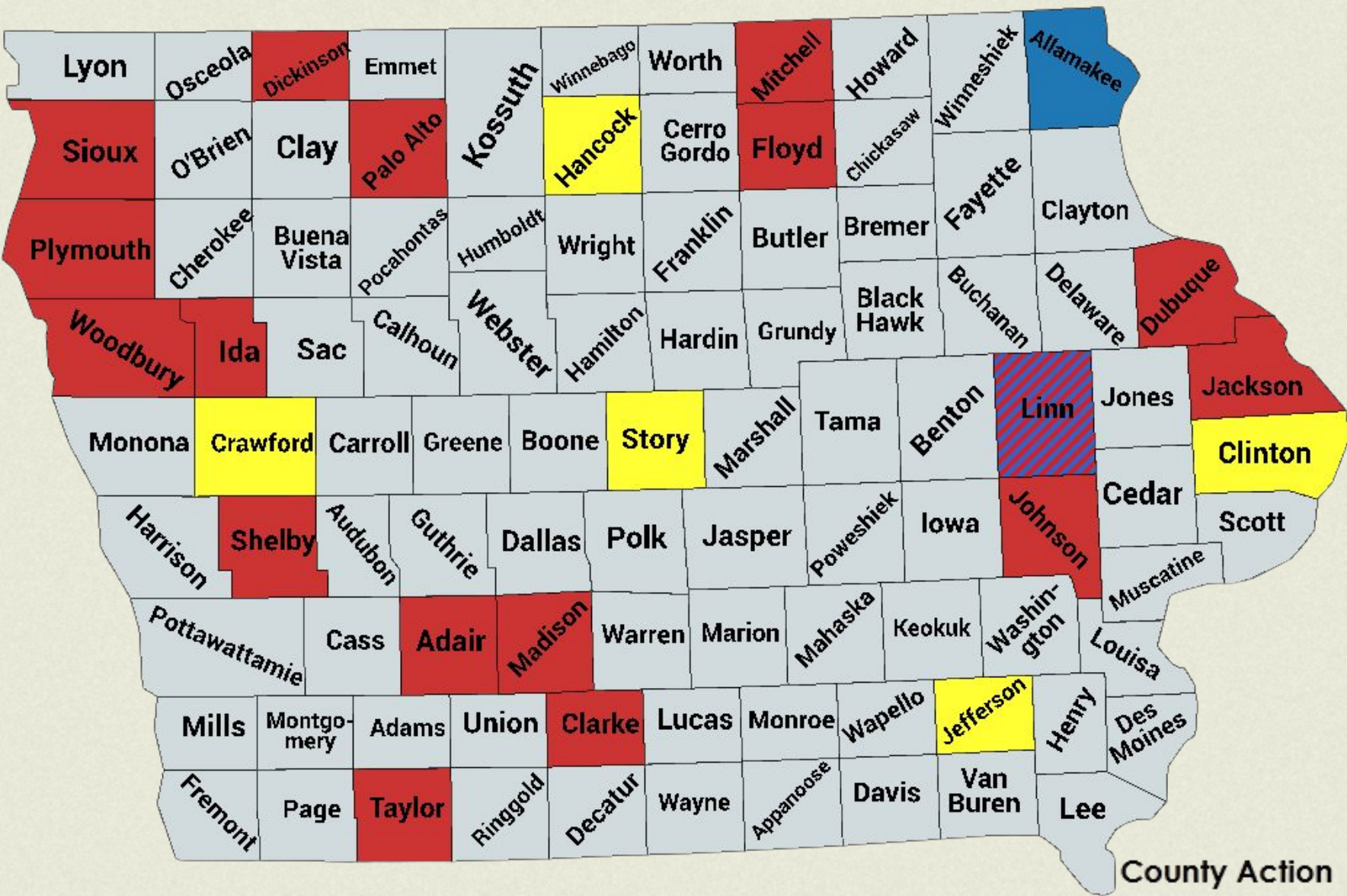
Ordinance Templates

County:

- Strongest - Allamakee County
- Good - Linn County
- Counties without zoning - Jefferson County

Cities:

- Sierra Club Draft



Some counties and cities are passing moratoriums as they consider what protections are and aren't in place.

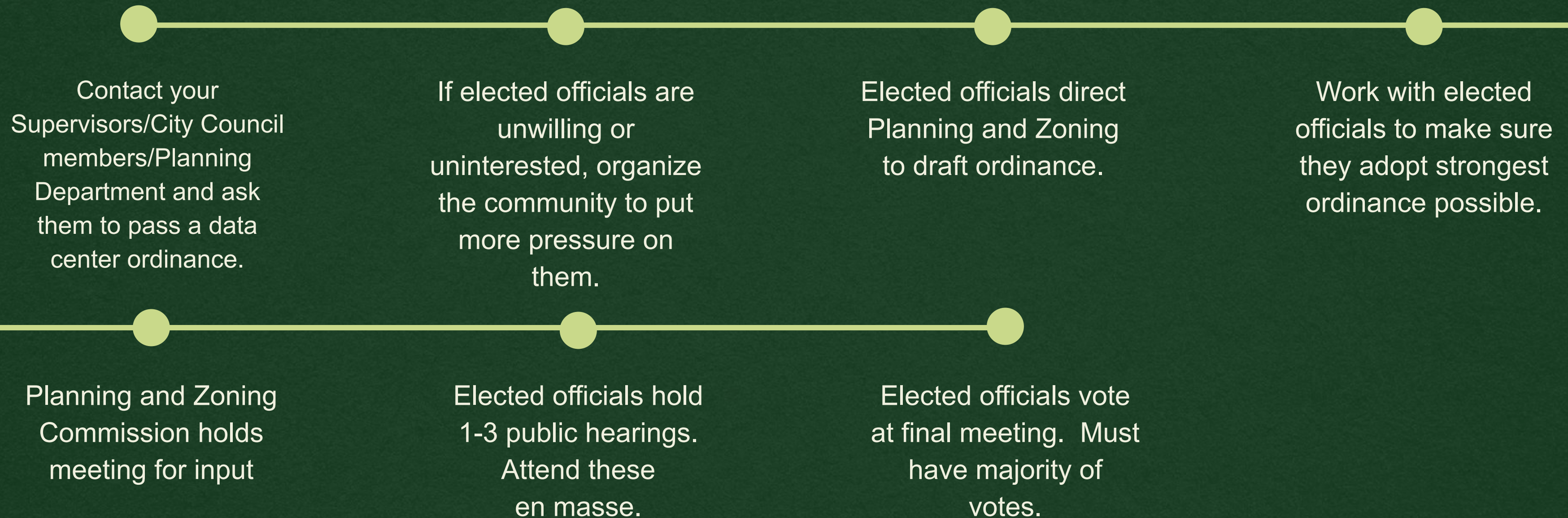
County Action

- Counties with a Moratorium
- Counties with a Moratorium and Ordinance
- Counties with an Ordinance
- Counties considering an Ordinance



DON'T WAIT UNTIL A
DATA CENTER
COMES TO
TOWN

Ordinance Process



Cedar Rapids Data Center Construction | Pam
Mackey Taylor

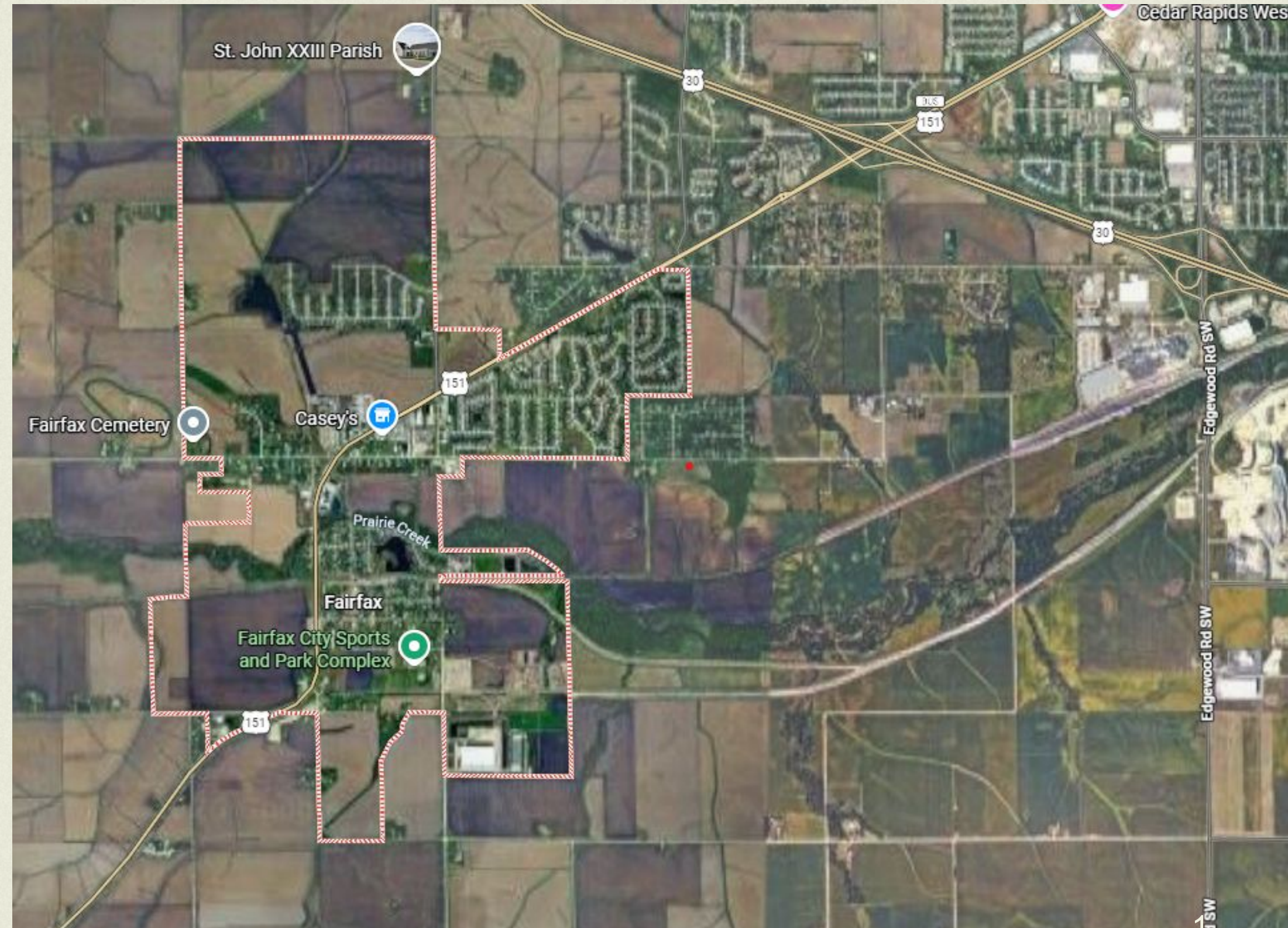


Fairfax

Presented by Jo Ann Beer
Mayor of Fairfax

Proposed Fairfax Data Center Ordinance

- Zoning and District Limitations
- Structural Setbacks and Visual Buffering
- Utility and Environmental Safeguards
- Noise and Performance Controls
- Financial and Public Safety Agreements



Take Action

Protect Our
Water

NO
INCREASED
RATES

SEE & HEAR FOR YOURSELF: Drive by a data center



Take Action!

Step 1

Contact Supervisors & City Council

- Email, call, write or meet with your elected officials. Let them know your concerns about data centers.
- Ask them what the county is doing to protect communities and if they're willing to pass an ordinance.
- Send them a copy of the Allamakee Ordinance and any other materials you think will help convince them.

Step 2

Contact your friends, family and community

- Start a petition and circulate it through the community.
- Create a Facebook group where like-minded neighbors can connect and organize.
- Write a Letter to the Editor to educate your community about your concerns and that your elected officials should pass an ordinance.

Step 3

Hold a Meeting

If your elected officials are hesitant to take action, hold a community meeting to get more support. We can help!

Step 4

Be Involved in the Process

If your elected officials are ready to move forward, attend the meetings and be involved in the process.



Statewide Legislation

Representative Cindy Golding has
introduced two pieces of legislation to
begin to address data centers

Data Center Transparency Bill

Requires data center company to
file information on water and
electricity including source,
amount, and performance
calculations.

Requires IUC to make sure costs
aren't passed on to consumers

Protect Our Aquifers:

Requires DNR to evaluate
each water request
independently to determine if
it meets the beneficial use
of Iowans and the
environment.



Upcoming Webinar:

Engaging Candidates on Data Center Issues

Thursday, Sept 3

Time TBD



SIERRA CLUB

IOWA CHAPTER

Contact Sierra Club Iowa Chapter

Jess Mazour - jessica.mazour@sierraclub.org

Briana Kouma - briana.kouma@sierraclub.org

Contact Your Supervisors

iowacounties.org/member-resources/county-directory/

Contact Your City Council

Visit your city webpage

BK Sources

<https://www.eesi.org/articles/view/data-centers-and-water-consumption>

<https://www.desmoinesregister.com/story/tech/2026/07/14/data-centers-in-iowa-map/90675626007/>

<https://pines.bemidjistate.edu/cgi/viewcontent.cgi?article=1094&context=j-earth-life-sci>

<https://www.datacentermap.com/usa/iowa/>

<https://www.pewresearch.org/chart/top-states-data-centers/>