

Data Centers: What's at Stake and What You Can Do in Your Community

Why Local Governments Matter

- Most decisions about land use, siting, and permitting for data centers are made at the local level.
- City councils, county boards, and planning commissions often hold public hearings where residents can voice concerns.
- **Action step:** Sign up for email alerts about hearings, zoning meetings, and permit applications in your community.

Watch the State Legislature

- Some states have passed laws that limit local authority over data centers.
- In some cases, state laws:
 - Prevent cities/counties from rejecting data centers.
 - o Redirect tax revenue from local governments into state coffers.
- Action step: Monitor state bills that affect local control and funding from data centers.

Key Environmental Concerns

1. Energy Use

• Scale: Data centers operate 24/7 and require enormous amounts of electricity. A single large facility can consume as much power as a small city. According to Environmental and Energy Study Institute, electricity demand from data centers can vary, but will account for about 12 percent of all U.S. demand by 2030.

- Sources: If electricity comes from fossil fuels, data centers increase air pollution and greenhouse gas emissions. Even with renewables, grid demand may slow down the transition to clean energy for homes and businesses.
- **Local Impacts:** Utilities may need to build new power plants or transmission lines, with costs often passed to ratepayers.

2. Water Use

- Cooling Needs: Most data centers use water-based cooling systems. Facilities can consume millions of gallons of water every day—especially in hot or dry climates. In fact, large data centers can consume 5 million gallons of water per day, as much as a city home to 50,000 people.
- **Competition:** This demand can compete directly with local drinking water supplies, agriculture, or river ecosystems during droughts.
- **Transparency Issues:** Companies rarely disclose exact water use, leaving communities uncertain about long-term impacts.

3. Wastewater Treatment & Disposal

- **Discharge:** About 80 percent of water used by data centers evaporates during the process of cooling the center's technology, but the remaining 20 percent is wastewater. Heated water discharged into rivers or streams can raise water temperatures, harming fish and aquatic life.
- **Chemicals:** Some cooling systems add biocides or anti-corrosion chemicals that require treatment before release. If treatment systems fail or are overloaded, pollutants may enter waterways.
- **Local Systems:** Increased wastewater loads can overwhelm municipal treatment plants, leading to higher infrastructure costs for communities.

4. Habitat, Wetland & Landscape Impacts

- Construction: Building large-scale facilities often means clearing farmland, wetlands, or forests.
- Wildlife: Loss of habitat disrupts migration corridors, nesting sites, and local biodiversity.
- Land Use Conflicts: Data centers are often located in industrial zones but may expand into rural or natural areas where impacts are greater.

5. Environmental Review Process

- **Importance:** Environmental reviews should carefully assess energy, water, and land impacts before approval.
- **Gaps:** In some states, large data centers have been exempted from review or granted fast-track approvals.
- **Community Role:** Public comments during reviews can highlight overlooked issues and push agencies to require mitigation measures.

How You Can Engage

- No expertise needed. Showing up and speaking out is the most powerful action.
- Ask general questions at hearings:
 - o How much energy will this facility use?
 - o Where will the water come from?
 - o How will wastewater be treated?
 - o What are the impacts on local land and wildlife?
- Encourage decision-makers to slow down and fully consider the **long-term costs** and risks.

Bottom Line

Data centers bring serious environmental challenges. Local voices can ensure that decisions put **community needs and natural resources first.**