

## WATER

Data centers are incredibly water intensive. Water is used directly to cool onsite equipment and indirectly through energy consumption.

- Large data centers can consume over **5 million gallons of water per day**.<sup>1</sup>
- Water used by data centers is mostly evaporated, which means they will concentrate existing pollutants, such as PFAS, nitrates, and heavy metals, in the water they discharge back into our watershed.<sup>2</sup>

## ENERGY

Massive amounts of energy are needed to power data centers. Ameren intends to build gas and nuclear generation to meet data center demand, which will increase data center water needs. Increased use of fossil fuels, like natural gas, will continue to accelerate droughts, floods, and severe storms across the state.

- **One large data center can use** over 100 MW of electricity, or **the equivalent of 16,400 homes**.<sup>3</sup>
- Electricity rates skyrocket for homes near data centers, rising up to 20%.<sup>4</sup>
- Homes near data centers are at higher risk for electricity outages: In 2022, Texas data centers caused 112 MW of outages.<sup>5</sup>

## HEAT + HEALTH

Data centers are hot, noisy nuisances. They run 24/7, creating non-stop heat, noise, and light pollution, which disrupts human health.

- Internal noise levels in data centers reach up to **96 decibels**, which can cause permanent hearing loss after just 30 minutes of exposure.<sup>6</sup>
  - Constant noise exposure affects sleep, increases stress, and damages cardiovascular health.<sup>7</sup>
- Light pollution from constant security lighting can disrupt sleep and is linked to breast cancer and negative effects on mental and cardiovascular health.<sup>8</sup>
- Data centers generate so much heat that their excess is being used to warm thousands of homes in Finland, Sweden, and the UK.<sup>9</sup>
  - **Heat is already deadliest weather event in the country**, claiming over 1,200 lives each summer.<sup>10</sup>
- Nationwide, data centers are expected to **increase healthcare costs by \$5.6 billion**.<sup>11</sup>

## ELECTRONIC WASTE HAZARDS

Like any digital technology, data center equipment has a limited lifespan. E-waste from data centers is expected to reach **5 million tons by 2030**, which will need to be safely reused or recycled.<sup>12</sup>

- Missourians have already suffered from improper e-waste recycling of lithium ion batteries, which caused an explosion resulting in evacuations, a fish kill, and respiratory problems.<sup>13</sup>
- Improperly handled e-waste can release up to 1,000 different chemical substances, causing stillbirth, damaging neurodevelopment, and exacerbating respiratory illness.<sup>14</sup>



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