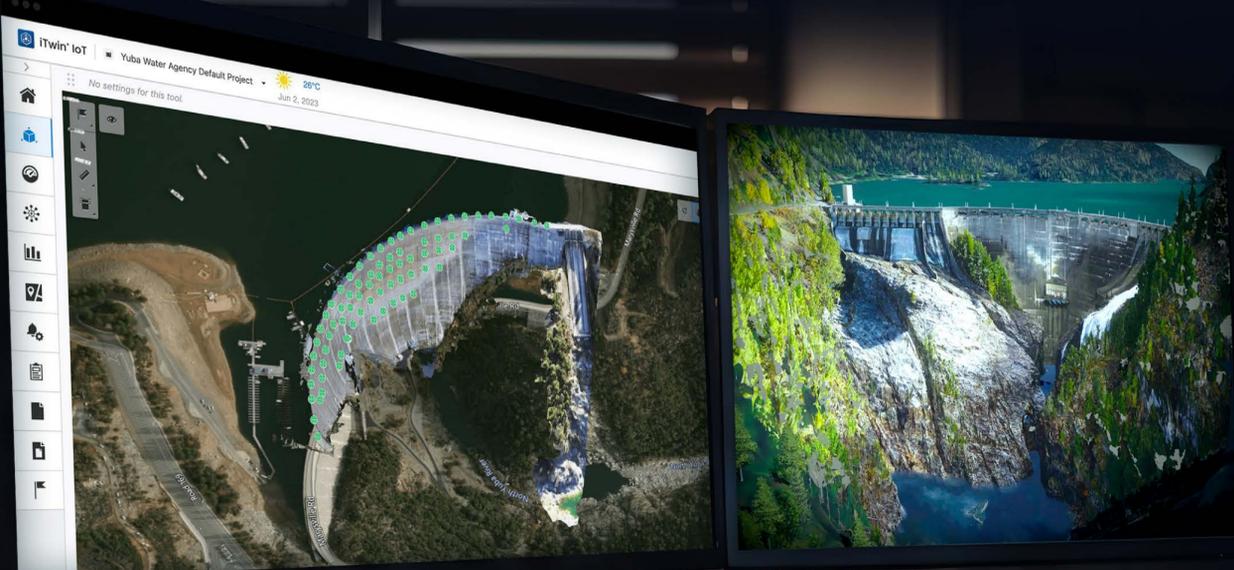


# Dam Safety and Resilience



**Dam safety is a challenging responsibility for engineers, owners, and operators who manage, monitor, and maintain these crucial infrastructure assets.**

## Dams Worldwide Are Approaching the End of Their Design Service Life

<p><b>58,000+</b> Large dams* worldwide</p>	<p><b>60 years</b> Average age of large dams</p>	<p><b>Most of humanity</b> will live downstream of large dams built in the 20th century, in the year 2050</p>
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\*Large Dams: a category largely defined by structures taller than 15 meters, or 49 feet. Source: [https://www.icold-cigb.org/GB/world\\_register/general\\_synthesis.asp](https://www.icold-cigb.org/GB/world_register/general_synthesis.asp)

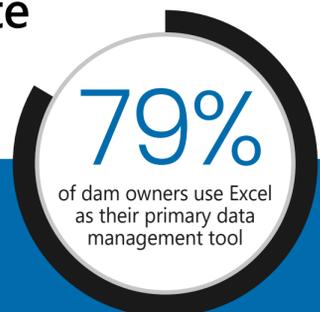
**A growing number of dams are subject to increasing hazard creep as climate change alters weather patterns.**

## DATA CHALLENGES

Dam operators face numerous issues to effectively manage their monitoring programs.

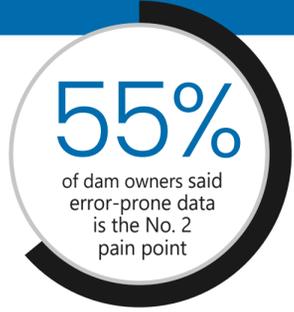
- Not enough data
- Siloed data
- Complex data

**Manual data management and analysis does not help.**



## THERE'S A NEW APPROACH...

**74% of dam owners** have identified the need to use technology to solve those challenges, but do not know where to start.



Source: Bentley Systems Annual Condition Monitoring Report 2023 (500-company, industrywide survey)

## THE ANSWER

**Move from manual to automated and continuous condition monitoring.**

Bentley's Dam Monitoring Solution utilizes digital twins to consolidate engineering and operational data in a single view and inform stakeholders in a timely manner.



## HOW?

**Bentley's Dam Monitoring Solution can:**

- Implement cloud-based infrastructure that provides a centralized data hub
- Visualize and analyze engineering and operational data
- Improve understanding of underlying causal factors and risk drivers

## The Results:

<p><b>Risk mitigation and improved safety</b></p>	<p><b>Improved data quality and insights</b></p>	<p><b>Faster and more accurate decisions</b></p>	<p><b>Improved collaboration and information sharing</b></p>
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## Make Risk-informed Decisions

Contact us to learn how you can leverage digital twins in your dam safety program.

[LEARN HOW >](#)