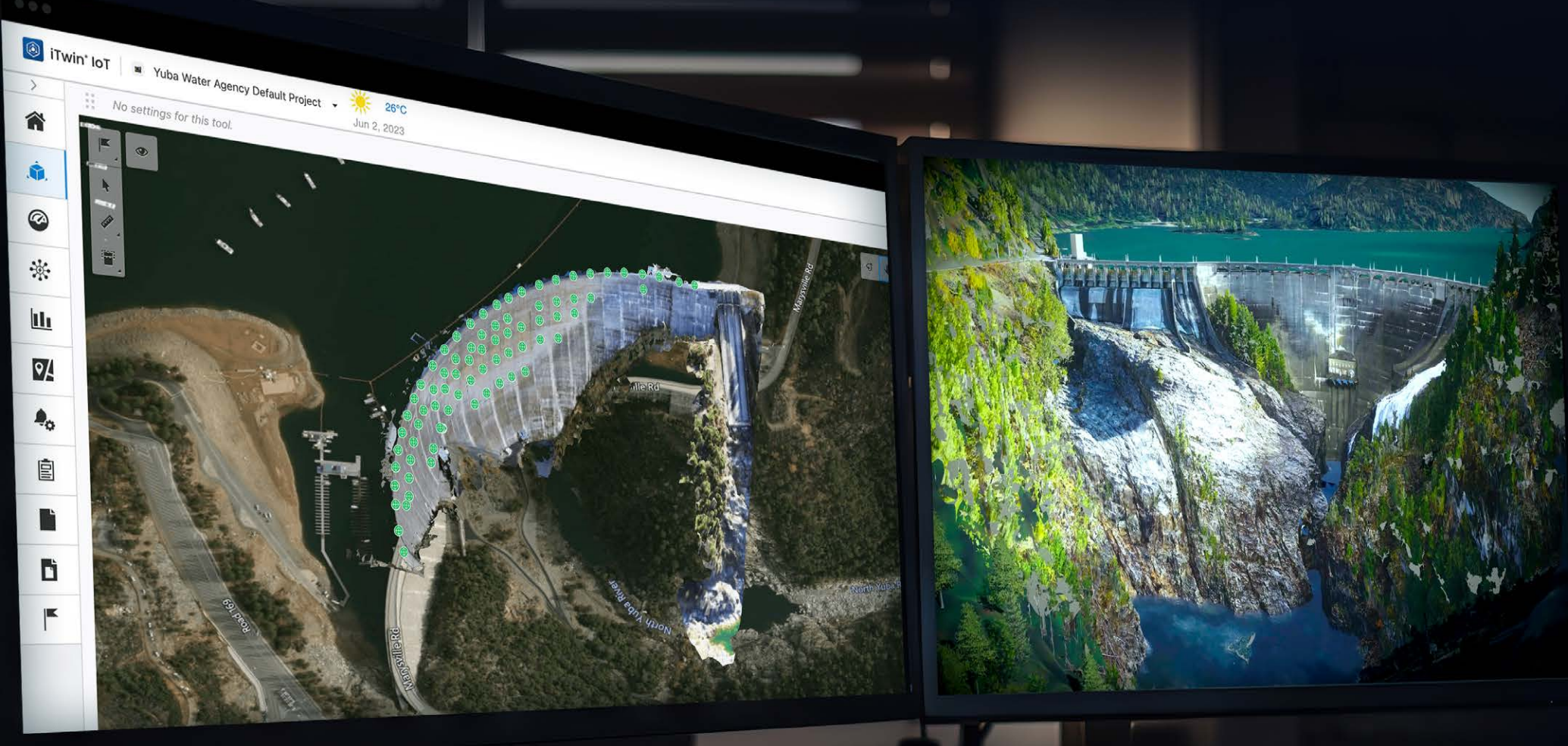


Dam Safety and Resilience



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

58,000+

Large dams* worldwide

60 years

Average age of large dams

Most of humanity

will live downstream of large dams built in the 20th century, in the year 2050

*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

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.

79%

of dam owners use Excel as their primary data management tool

59%

of dam owners said maintaining data and inability to visualize is the No. 1 pain point

55%

of dam owners said error-prone data is the No. 2 pain point

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

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.

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

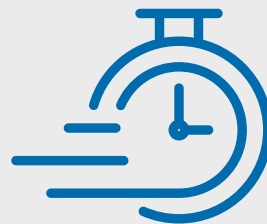
The Results:



Risk mitigation and improved safety



Improved data quality and insights



Faster and more accurate decisions



Improved collaboration and information sharing

Make Risk-informed Decisions

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

[LEARN HOW >](#)