



At the heart of modern construction

An insurance-led perspective for
reservoir construction projects

Executive summary

Reservoir construction projects are complex, high-risk, and capital-intensive civil engineering endeavours that require specialised insurance solutions. QBE offers expert underwriting and integrated risk management tailored to the unique challenges of these projects, supporting long-term resilience and safety.



Unique reservoir risks

Reservoir construction involves geotechnical uncertainties, large earthworks, permanent water retention, and strict regulations, with risks including embankment failure, long construction timelines, large footprints, critical risk phases, complex contracts, and extensive peripheral infrastructure.



Integrated risk management

QBE's Risk Solutions team are embedded in underwriting, offering early-stage reviews, independent challenges of works and water management, support for high-risk activities, and experienced risk managers to reduce loss likelihood and severity.



QBE's underwriting expertise

QBE's teams possess direct experience with major water infrastructure, enabling precise risk assessment, tailored insurance programmes across the contractual supply chain from concept and construction through to ongoing maintenance and refurbishment.



Claims and stakeholder support

QBE provides specialised claims handling for rare but complex events, engages throughout the project lifecycle, and aligns insurance with contractual risk allocation to enhance funder confidence and project delivery.

Points for discussion

Insurance placement challenges

- Period of insurance
- Unique nature of risk
- Long testing and commissioning period

Risk management

- Challenges of managing a changing risk profile over an extended period
- Managing risk in the contractor supply chain.

Reservoir construction



Reservoir construction represents one of the most complex, capital-intensive and risk-critical segments of the civil engineering market. Projects are long-duration, technically demanding and characterised by low-frequency but potentially catastrophic loss scenarios. In this environment, insurance is not a commodity purchase; it is a core component of project governance, finance and long-term asset resilience.

QBE is uniquely positioned to be the insurer of choice for reservoir construction projects. Through our underwriting expertise, a genuinely integrated risk management capability and a proven track record across major water infrastructure schemes, QBE supports customers not only by transferring risk, but by actively reducing it.

Understanding the unique risk profile of reservoir construction

Reservoir projects differ fundamentally from other civil engineering works. They combine geotechnical uncertainty, large-scale earthworks, permanent water retention and stringent regulatory oversight.

Key characteristics include:

- **High-severity loss potential** – embankment instability, uncontrolled water release or structural failure can lead to catastrophic outcomes
- **Long construction periods** – exposure accumulates over many years, increasing sensitivity to climate variability, contractor change and design evolution

- **Large construction footprints** – construction work fronts can be spread over a large area, increasing the risk of third-party interaction, in addition to theft and vandalism. This is compounded by projects being in remote or secluded areas
- **Critical risk inflection points** – activities such as cofferdam removal, spillway commissioning and first fill represent peak loss periods
- **Complex contractual structures** – joint ventures, multiple designers, specialist subcontractors and interface risk are the norm
- **Periphery projects** – usually reservoir projects are not limited to the water storage component, but often large periphery infrastructure requirements, such as pipelines and other assets such as pumping and abstraction stations.

Effective insurance for reservoir projects therefore requires more than standard **Contractors' All Risks (CAR)** capacity. It demands an insurer with the technical depth to understand technical designs, statutory requirements, failure modes, the discipline to underwrite sustainably and the capability to engage throughout the project lifecycle.

QBE's specialist reservoir underwriting capability

Technical underwriting expertise

QBE's construction underwriting teams include professionals with direct experience of major water infrastructure projects. This enables:

- Informed assessment of geotechnical and hydrological risk rather than reliance on generic assumptions
- Intelligent structuring of CAR, Delay in Start-Up (DSU) and liability programmes aligned to actual risk drivers
- Clear and deliberate treatment of design risk, including appropriate cover for defective design, materials and workmanship.

Our underwriters understand that reservoir projects are design-led assets where loss prevention begins at concept stage, not at policy inception.

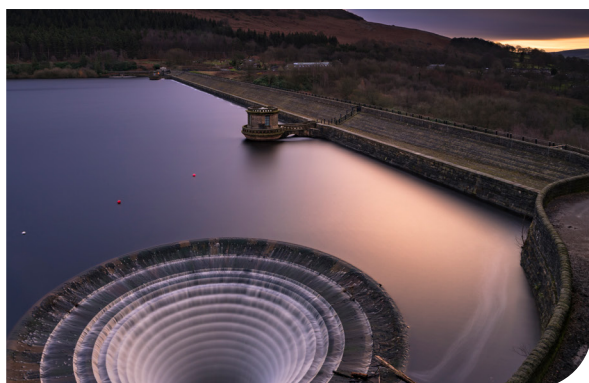
This expertise is not limited to new assets such as Havant Thicket, but also refurbishment projects required post All Panel Engineer Section 10 inspections. Lyn Celyn spillway replacement being an example.

Sustainable lead-market approach

QBE is an established lead market in construction insurance. For reservoir projects this means:

- Clear wordings with minimal ambiguity at the point of loss
- Consistent underwriting appetite across multi-year programmes
- Capacity deployed with a long-term view, supporting project continuity rather than short-term pricing cycles.

This approach provides certainty to owners, contractors and funders at a time when confidence in insurance structures is critical.



Risk management as a core part of the proposition

Integrated risk solutions

QBE's Risk Solutions capability is embedded into the underwriting process rather than bolted on afterwards. For reservoir projects, this includes:

- Early-stage (outline design), risk reviews to identify critical construction and operational exposures
- Independent challenge of temporary works, sequencing and water management strategies
- Critical programme activities to support assurance oversight
- Support around high-risk activities such as first fill, commissioning and emergency planning
- Support conventional casualty risk exposure and support effective controls to limit exposure.

This is underpinned by risk managers with extensive capital water industry experience from both a customer and contractor perspective. This is enhanced with a reach back capability of structural civil engineers with extensive earth works and reservoir and dam experience.

The objective is simple: reduce the likelihood and severity of loss, not merely price it.

Project-lifecycle engagement

QBE engages across the full reservoir lifecycle:

- **Pre-construction** – input into insurance strategy, contract alignment and risk allocation
- **Construction** – targeted risk reviews, site engagement and incident trend analysis
- **Commissioning and first fill** – focused assurance during the highest-risk phase of the project
- **Post-completion** – we can support the transition to operational insurance.

This continuity of engagement differentiates QBE from insurers who disengage once the policy is bound.

Claims expertise for high-severity events

Reservoir claims are rare but complex. When they occur, outcomes depend on speed, technical understanding and decisive leadership.

QBE offers:

- Dedicated construction claims specialists with experience of large-loss civil engineering events
- Early deployment of technical experts to stabilise situations and protect assets
- A pragmatic, solution-focused approach aligned with project recovery rather than adversarial outcomes.

Supporting stakeholder confidence

Insurers play a critical role in enabling reservoir projects to proceed.

QBE supports this by:

- Providing confidence to funders through robust, clearly articulated insurance structures
- Engaging transparently with regulators, advisers and independent engineers where required
- Aligning insurance programmes with contractual risk allocation to reduce disputes and coverage gaps.

By acting as a knowledgeable and credible counterparty, QBE helps projects move from approval to delivery.

Why choose QBE for reservoir projects

In summary, QBE brings together:

- Proven experience in major water and reservoir construction
- Experience of delivering projects directly as a customer and contractor
- Technically strong underwriting led by understanding, not dictated by rule books
- Market-leading risk management capability embedded into the project lifecycle
- Claims expertise tailored to high-severity, low-frequency events
- A partnership mindset focused on long-term resilience, not transactional insurance.

Reservoir construction needs an insurer that understands what is truly at stake.

QBE doesn't simply insure reservoir projects – we help make them safer, more resilient and more insurable.

Ask your broker about QBE business insurance or drop us a line.

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