



Nature-based solutions: Risk, assurance and claims management



Carbon | Biodiversity | Ecosystem Services | Natural capital



Introduction

Nature-based assets are scaling rapidly—but confidence in their long-term performance and recoverability is not keeping pace.

We support insurers, brokers, and investors with independent, science-led assurance across the full risk lifecycle—from pre-placement through to claims, including loss assessment and recovery pathways.

The market challenge

Nature is a financial asset class. However, outside of compliance markets risk understanding, assurance, and claims frameworks are still catching up.

Markets linked to carbon, biodiversity, and ecosystem services are expanding rapidly. However:

- outcomes unfold over decades (30–100+ years);
- performance is inherently variable; and
- measurement frameworks are still evolving.

At the same time:

- insurance products are emerging but not yet mature;
- claims pathways are poorly defined or untested;
- assurance mechanisms are inconsistent across markets; and
- ESG scrutiny is intensifying.

The result is a potential disconnect between asset performance, risk transfer, and recoverability – where financial, technical, and reputational risks converge.





Where we add value

We provide independent technical insight across the full lifecycle of risk, leveraging the depth of our in-house specialist teams. No other provider is, or can, offer these services.

Before risk transfer:

- Technical due diligence;
- Validation of carbon and biodiversity claims;
- Assessment of long-term performance risk; and
- Support to underwriting and placement discussions.

After risk transfer:

- Claims investigation and technical verification;
- Causation analysis (what failed – and why);
- Separation of natural variability vs project failure;
- Support in liability attribution and dispute resolution;
- Quantification of environmental loss against baseline and projected outcomes;
- Assessment of recoverability and restoration pathways; and
- Technical input to remediation and reinstatement strategies.



We work alongside insurers, brokers, and clients to ensure that risk is not only understood at placement, but can be evidenced, defended, and resolved when tested.”

Steven Minnis, Head of Technical Solutions – Specialty Environmental, Construction & Engineering





The risk landscape

Across all nature-based assets, four core questions remain:

1. **Will it deliver?**
2. **Will it last?**
3. **Can it be measured and verified?**
4. **(and critically) What happens if it doesn't?**

In practice there are a number of factors that can make claims inherently complex:

- ecological systems evolve unpredictably;
- baselines and counterfactuals can be contested;
- environmental change (climate, hydrology, land use) can alter outcomes; and
- failure is not always binary – it is often partial, delayed, or disputed.

Understanding whether a shortfall is either a natural variation, a design or implementation failure or some other external influence requires deep technical interpretation, not just policy wording. **In many cases, failure is not absolute, but recoverable over time.** The key questions then become:

- can the system be restored to its intended trajectory;
- over what timeframe; and
- at what cost and level of confidence?

This creates a direct link between claims, restoration, and long-term liability

The claims gap

This is one of the most significant – and least developed – areas in the market. While products are beginning to emerge (e.g. for carbon delivery or biodiversity performance), there remains:

- limited precedent for claims handling;
- lack of standardised methodologies for loss assessment;
- uncertainty in how to quantify partial or long-term underperformance; and
- challenges in linking environmental outcomes to insured triggers.

There is also limited capability in:

- defining what constitutes a measurable environmental loss;
- assessing recoverability and restoration potential; and
- linking technical failure to financial outcomes.

Investors are keen, but suitable risk management options are still catching up. Without robust claims frameworks, risk transfer remains incomplete.



**Without robust claims frameworks,
risk transfer remains incomplete.**

Steven Minnis, Head of Technical Solutions – Specialty
Environmental, Construction & Engineering

How we support insurers and partners

Our focus is on closing the gap between environmental performance and insurable risk and our technical specialists can support through:

Upstream (pre-placement):

- Independent due diligence and assurance
- Risk quantification across carbon, biodiversity, and ecosystem services
- Technical input to underwriting and structuring

Downstream (claims and disputes):

- Environmental claims investigation
- Causation and liability analysis
- Quantification of loss (including partial failure scenarios)
- Assessment of restoration feasibility and recovery trajectories
- Technical design input to remediation and reinstatement strategies
- Evaluation of residual risk post-restoration
- Technical support in disputes and litigation

Across ESG risk:

- Greenwashing exposure review
- Defensibility of environmental claims and disclosures



A scenic landscape at sunset or sunrise. The sun is low on the horizon, casting a warm, golden glow across the sky and illuminating the silhouettes of rolling hills and mountains. The sky is a mix of orange, yellow, and blue. A large, semi-transparent blue shape is overlaid on the left side of the image, containing white text.

Conclusion

For nature-based solutions to function as investable and insurable assets, risk must be understood not just at inception, but at the point of failure – and through the pathway to recovery. We provide the technical certainty needed at both ends of that equation.

For more information, please visit our website.

About Crawford & Company[®]

For over 80 years, Crawford has led the industry through a relentless focus on people and the innovative tools that empower them.

10K employees | **50K** field resources | **70** countries | **\$18B** claims managed annually

Crawford[®] Global Technical Services[®]

Learn more at
www.crawco.co.uk  **in**