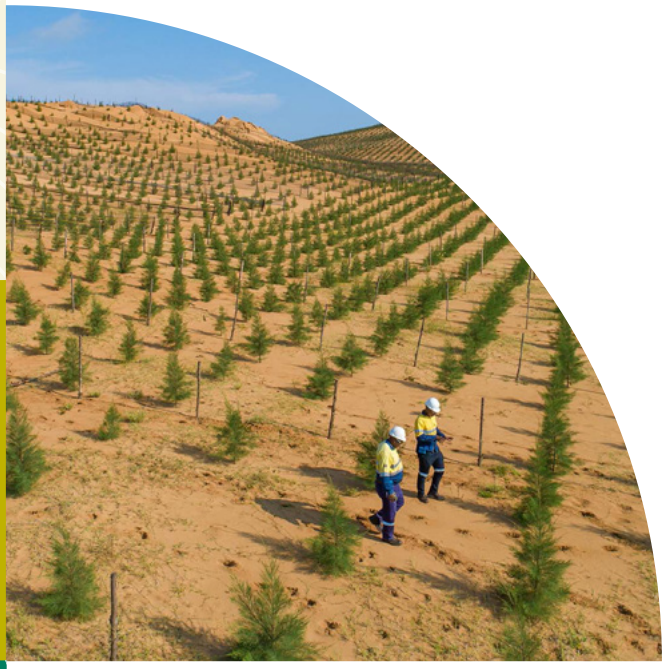
ERM



Rio Tinto

Global Report

Independent Cultural Heritage Management Audit

The business of sustainability

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Acronyms and Abbreviations

CHMP	Cultural heritage management plan
CHMS	Cultural heritage management system
CSP	Communities and Social Performance
ERM	Environmental Resources Management Australia Pty Ltd
ESG	Environmental, Social and Governance
FPIC	Free, Prior and Informed Consent
GIS	Geographic information system
HSEC	Health, Safety, Environment and Community
IHMP	Integrated Heritage Management Program
PKKP	Puutu Kunti Kurrama and Pinikura People
SME	Subject matter expert
UNDRIP	United Nations Declaration on the Rights of Indigenous People
UNESCO	United Nations Educational, Scientific and Cultural Organisation

ERM would like to acknowledge Traditional Owners and Custodians, First Nations Peoples and all knowledge holders whose homelands and territories includes lands on which Rio Tinto operates. We recognise their enduring connection to land, waters, skies and communities and we pay our respects to all Elders past and present.

ERM would like to thank those who generously shared their time, knowledge, culture and stories. The feedback and insights provided is appreciated.

Abstract

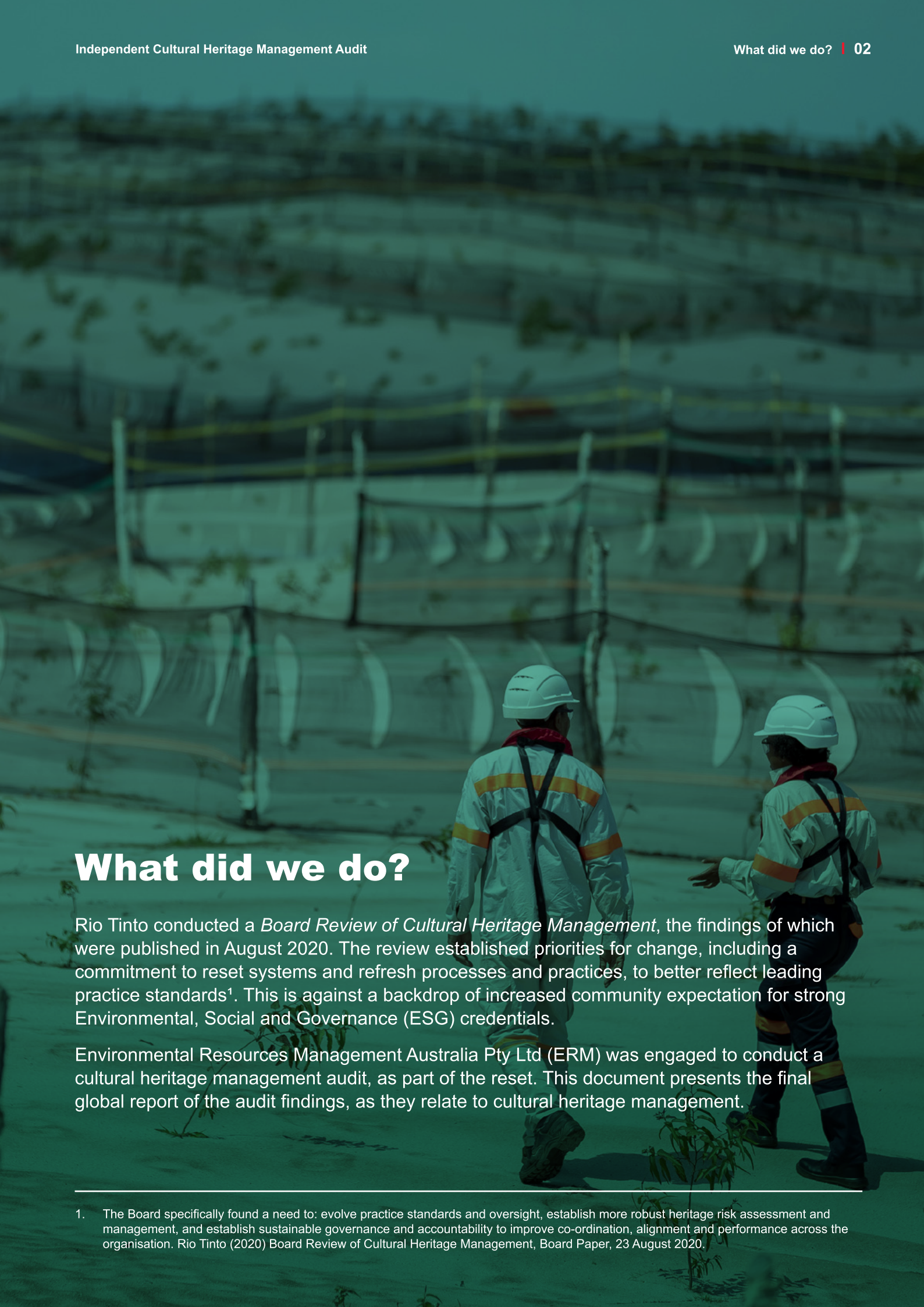
Following the destruction of the rock shelters at Juukan Gorge in Western Australia, in May 2020, Rio Tinto sought to reset its approach to cultural heritage management. This involved investment in systems and processes, particularly within the Iron Ore product group in Australia, to support alignment with global good practice standards.

As part of the reset, Rio Tinto undertook an independent cultural heritage management audit. A summary interim report on the Phase 1 audit findings was released by Rio Tinto as part of the Communities and Social Performance Commitments Disclosure in 2022. This document presents a final report of the Phase 1 and Phase 2 audit findings.

Overall, while examples of good practice, and in some instances leading cultural heritage management practices were found, further work is required across the business to align with Rio Tinto's internal standards. Critical to this is ensuring that all assets have the appropriate foundations, specifically a functioning cultural heritage management system, underpinned by the principles of co-design and respect for human rights.

The destruction of the rock shelters at Juukan Gorge in May 2020, in Western Australia, had a profound impact, particularly for the Puutu Kunti Kurrama and Pinikura People (PKKP). The incident resulted in the desecration of a significant part of the PKKP's cultural heritage.

In the weeks and months following the incident, cultural heritage, and how it is managed, received global attention. The response was clear – a demand for better management, underpinned by the principles of co-design and respect for human rights aligned with United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). For those actively involved in cultural heritage management, co-design is not a new idea. It has long been considered the basis for good practice and is central to an effective cultural heritage management system. The destruction of the rock shelters at Juukan Gorge highlighted, and reinforced, the notion that co-design is fundamental to cultural heritage management.



What did we do?

Rio Tinto conducted a *Board Review of Cultural Heritage Management*, the findings of which were published in August 2020. The review established priorities for change, including a commitment to reset systems and refresh processes and practices, to better reflect leading practice standards[1]. This is against a backdrop of increased community expectation for strong Environmental, Social and Governance (ESG) credentials.

Environmental Resources Management Australia Pty Ltd (ERM) was engaged to conduct a cultural heritage management audit, as part of the reset. This document presents the final global report of the audit findings, as they relate to cultural heritage management.

1. The Board specifically found a need to: evolve practice standards and oversight, establish more robust heritage risk assessment and management, and establish sustainable governance and accountability to improve co-ordination, alignment and performance across the organisation. Rio Tinto (2020) Board Review of Cultural Heritage Management, Board Paper, 23 August 2020.

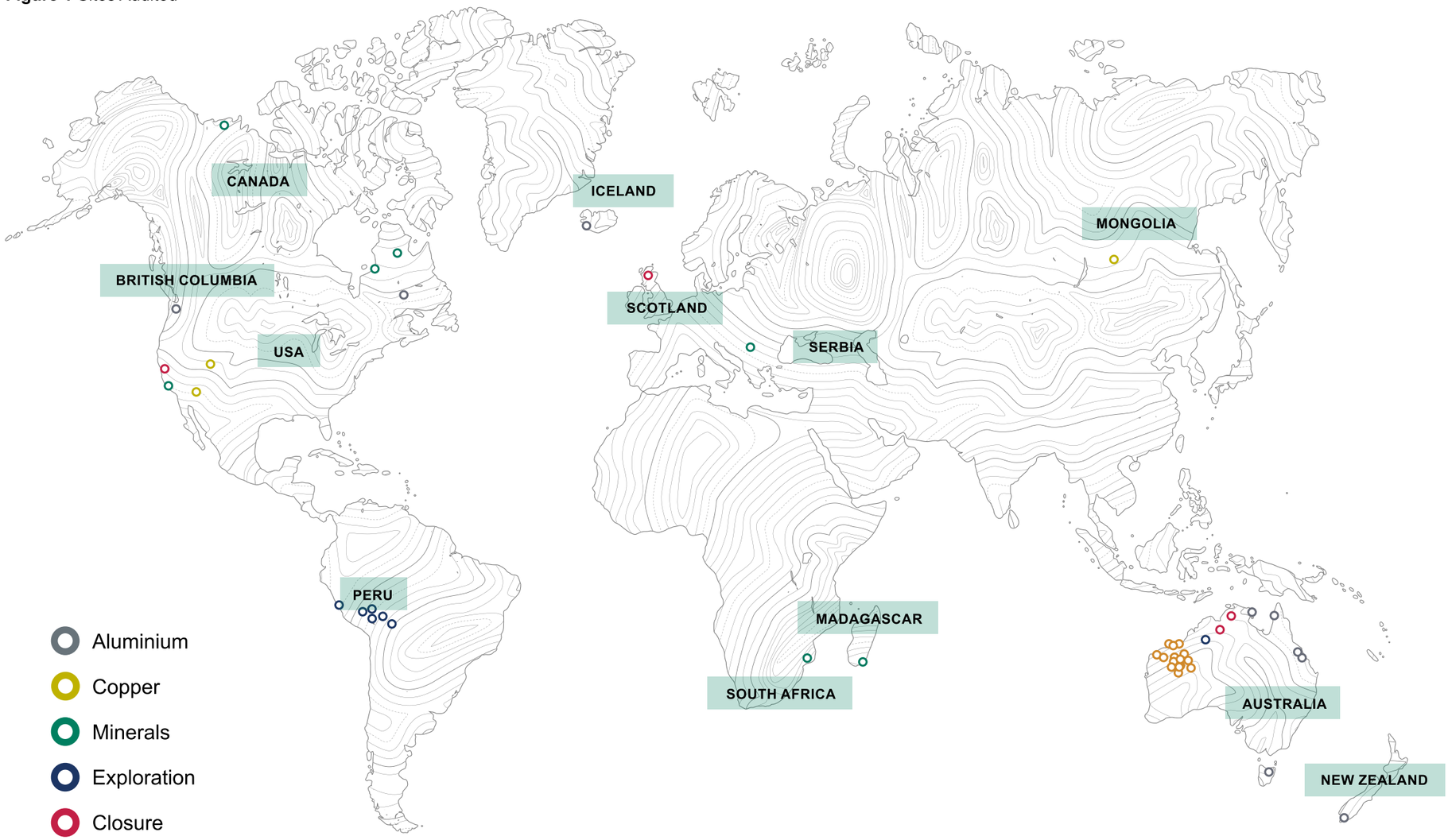
Independent Cultural Heritage Management Audit

Audit Approach

The audit involved a two-phased approach. Phase 1 commenced in June 2021, with a focus on Australian assets. Phase 2 commenced in May 2022, targeting non-Australian assets (**Figure 1**).

Assets selected for the audit sought to reflect Rio Tinto's current operating footprint. For this reason, the audit included a representative sample of sites, including exploration, project, operating and closure assets. A total of 37 assets were audited, of which 20 assets were located in Australia, and 17 assets were located outside of Australia (**Figure 1**). This included 10 Aluminium assets, three Closure or Legacy assets, three Copper assets, three Exploration assets, 11 Iron Ore assets, and seven Mineral assets.

Figure 1 Sites Audited



Iron Ore (Australia)	
Dampier Salt Limited	West Angelas
Dampier Ports	Greater Brockman
Cape Lambert Ports	Greater Hope Downs
Robe Valley	Yandicoogina
RTIO Rail	Gudai-Darri
Greater Paraburdoo	

Aluminium	Location
New Zealand Aluminium Smelter	New Zealand
ISAL	Iceland
Saguenay-Lac-Saint-Jean	Canada
BC Works	British Columbia
Gove Operations	Australia
Weipa Operations	Australia
Queensland Alumina Limited	Australia
Yarwun Alumina Limited	Australia
Boyne Smelters Limited	Australia
Bell Bay Aluminium	Australia

Copper	Location
Oyu Tolgoi	Mongolia
Resolution Copper	USA
Kennecott Copper	USA
ERA Ranger	Australia
Argyle	Australia

Minerals	Location
Diavik	Canada
Iron Ore Company of Canada	Canada
RTFT Direction/ HSP	Canada
Boron	USA
Jadar	Serbia
QMM	Madagascar
Richards Bay Minerals	South Africa

Exploration	Location
Suyawi	Peru
The "Mara project"	Andahuaylas-Yauri, Ayacucho, Apurimac, Cusco, Peru
Winu Project	Australia

Closure	Location
Death Valley	USA
Whinnyhall	Scotland

The audit team was made up of cultural heritage management practitioners, largely anthropologists and archaeologists, with deep technical knowledge and experience working with Indigenous peoples. The team members were drawn from a global pool of specialists. This was done to help ensure that the auditors understood local, contextual nuances, including common on-ground practices and regulatory requirements. A total of 17 auditors were involved.

The auditors followed a multi-step approach. This included:

1. **A desktop review of documentation provided as evidence by Rio Tinto.**
2. **A series of interviews with relevant personnel. This included senior operational leaders as well as representatives from key supporting functions, with a focus on roles in managing cultural heritage. The interviews were conducted face-to-face, wherever possible.**
3. **Follow-up to address any evidence gaps. This included a presentation of the findings to asset leadership.**
4. **Preparation of a site audit report.**

During the audit, an invitation was extended to external stakeholders, including those for whom cultural heritage connects them to the land being managed. A total of 27 external stakeholders were engaged. The views provided by external stakeholders were invaluable. For confidentiality reasons, no names or statements have been attributed to specific groups or individuals.

In addition to the site audit reports, an interim summary report was prepared at the conclusion of Phase 1, while a final global report was developed at the conclusion of Phase 2. This report forms the final global report.

Phase 1 vs Phase 2

Phase 1 commenced approximately one year after the destruction of the rock shelters at Juukan Gorge. It was evident during the audit that Rio Tinto – as an organisation – had invested in reflection, revision and assurance of its cultural heritage management practices. Much of this investment appeared to be a response to the events at Juukan Gorge, specifically the reviews conducted following the incident.
It was within the Iron Ore product group where the most substantial investment was observed, not only in systems, processes and platforms, but also resourcing. A range of new systems were introduced, and a host of subject matter experts (SMEs) and specialists were brought into the business. This investment has resulted in improvements in on-ground management, in line with global good practice.

One key change was the introduction of the Integrated Heritage Management Program (IHMP). The IHMP has improved the accuracy of cultural heritage information maintained by Rio Tinto. The IHMP has facilitated a review of existing data sets in consultation with Traditional Owners. Moving forward, the IHMP will facilitate periodic review of the condition, integrity and status of cultural heritage sites and places as well as the cultural heritage data maintained by Rio Tinto. This will continue to be done in consultation with Traditional Owners.

The investment made in Australia following the incident at Juukan Gorge, particularly within the Iron Ore product group, was not as evident elsewhere in the business. As a result, this investment was a key point of difference between Phase 1 and Phase 2.

The other point of difference was the audit framework. Phase 1 and Phase 2 used different audit frameworks, which reflects Rio Tinto's global approach to cultural heritage management. The Australian assets are subject to Rio Tinto's Communities and Social Performance (CSP) Standard, as well as a Cultural Heritage Group Procedure, which captures local contextual nuances and expectations. However, assets outside of Australia are only subject to Rio Tinto's CSP Standard.

These differences, both the investment and audit framework, have influenced the findings.

Audit Framework

The audit considered Rio Tinto's internal standards and procedures (**Table 1**), as well as relevant legislative frameworks, global conventions, and leading international practice guidance and standards.

The audit identified good practices, non-conformances and improvement opportunities[2] against Rio Tinto's internal standards and procedures. In addition, recommendations to align with leading global practice were provided.

Table 1 Rio Tinto Internal Standard and Procedures

PHASE 1 June 2021 - May 2022	Communities and Social Performance Standard 2015
	Cultural Heritage Management – Group Procedure for Australian Businesses 2015
	Cultural Heritage Management Guidance Note 2015
PHASE 2 June 2022 - December 2022	Communities and Social Performance Standard 2015[3]
	Cultural Heritage Management Guidance Note 2015

Table 2 Global Good Practice Standards, Conventions and Principles[4]

Phase 1 and Phase 2

International Finance Corporation Performance Standard 7	UNESCO Convention on the protection and promotion of the diversity of cultural expressions 2005
International Finance Corporation Performance Standard 8	UNESCO Operational Guidelines for the Implementation of the World Heritage Convention 2021
International Council on Mining and Metals Principles	United Nations Free Prior and Informed Consent Principles
Towards Sustainable Mining Principles	
United Nations Sustainable Development Goals	European Bank for Reconstruction and Development Performance Requirement 8: Cultural Heritage
United Nations Declaration on the Rights of Indigenous Peoples	Joint International Council on Monuments and Sites and The International Committee for the Conservation of the Industrial Heritage. Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes 2011
United Nations Educational, Scientific and Cultural Organisation (UNESCO). Convention for the Safeguarding of Intangible Cultural Heritage 2003	
UNESCO World Heritage Convention 1972	

2. **Non-conformance:** Issue represents a Health, Safety, Environment and Community (HSEC) control weakness which could have or is having an adverse effect on the ability of management to achieve HSEC objectives, relevant to the site for the area/process under review. **Improvement opportunity:** Observation which could lead to a Non-Conformance, if allowed to continue uncorrected; or an existing condition without adequate supporting evidence to verify that it constitutes a non-conformance.

3. Although the 2015 CSP Standard was used for this audit, ERM is aware the CSP Standard has recently been refreshed (2022). ERM considered the requirements of the 2022 CSP Standard when providing opportunities for improvement and recommendations for the business to achieve performance beyond compliance.

4. The applicability of global good practice standards, conventions and principles was considered within the context of individual assets.

While the audit was conducted against Rio Tinto's 2015 CSP Standard, it is noted that Rio Tinto introduced an updated CSP Standard in 2022. The revised Standard establishes enhanced safeguards for cultural heritage, with the aim of further improving on-ground management. An 18-month transition period means that assets must close any existing gaps and be compliant with the revised Standard by early 2024. During the audit, it was evident that a number of assets had progressed towards achieving the requirements outlined in the 2022 Standard.

Definition of Cultural Heritage

'**Cultural heritage**' is a broad term. For the purposes of the audit, the definition that follows was used. It is noted that the Rio Tinto definition of cultural heritage, as captured in the 2015 Standard, is narrower than the definition provided below.

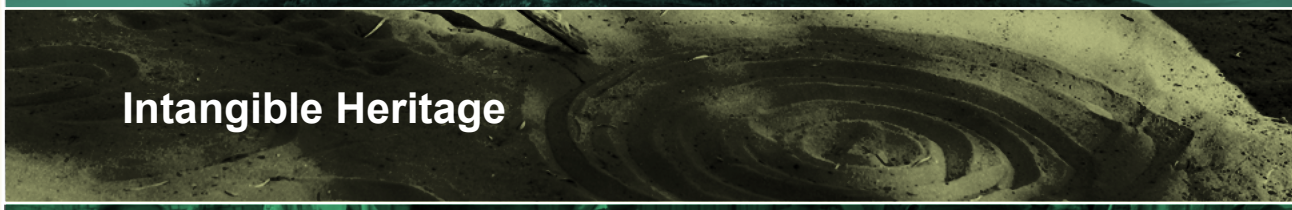
Given that a key focus of the audit was on understanding where Rio Tinto sat in terms of adoption of global good practice standards, a broader definition of cultural heritage, aligned with global good practice, was used for the audit.

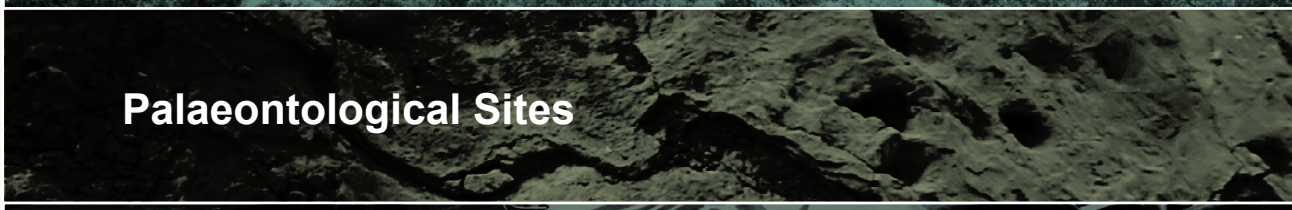
What is Cultural Heritage?

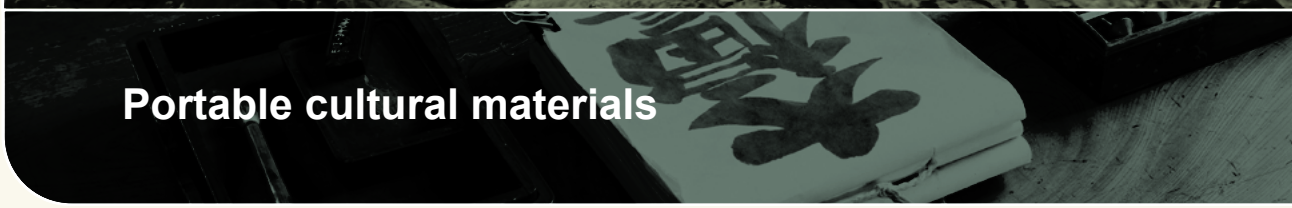
Cultural heritage is the collective social embodiment of a community, often passed down through tradition or with some historical association. There are different types of cultural heritage that can be tangible, such as buildings, industrial structures and technology, landscapes and artefacts; non-visible such as subsurface archaeological deposits; and intangible values such as language, processes, art, music, performance, religion, beliefs and customary practices.

Cultural heritage is simultaneously personal and shared, particular and universal. It is an integral part of our present and fundamental to our future state.

Cultural heritage can include:







Natural Heritage

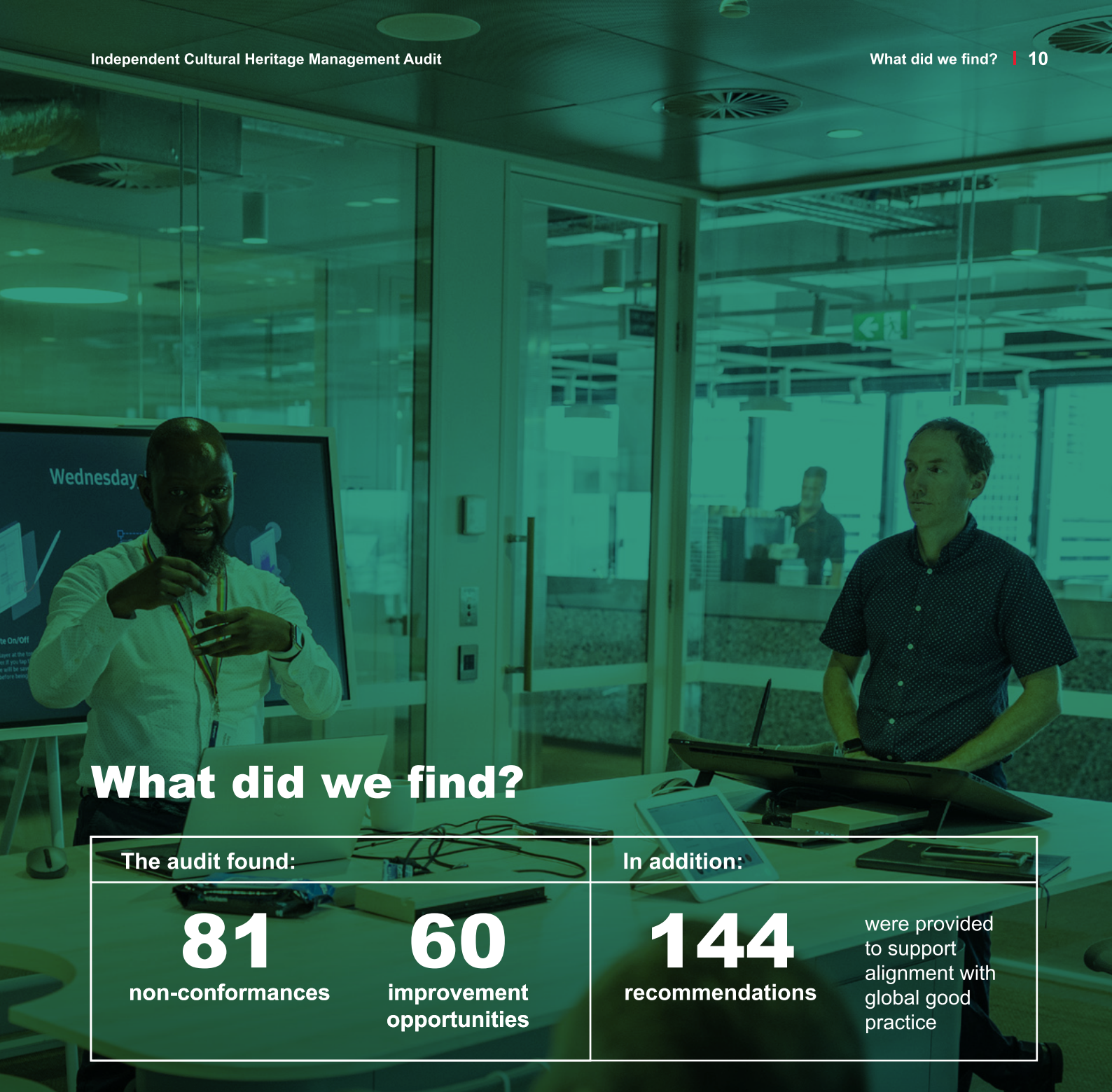
There are different types of heritage, most of which can be captured under the banner of 'cultural heritage'.

Natural heritage refers to natural features, geological and physiographical formations, unique ecosystems and rare or endangered habitats for threatened animal or plant species. It includes natural sites and places of scientific, conservation and aesthetic value.

Natural heritage includes a range of values, from existence value to socially-based values. What fundamentally differentiates natural heritage from cultural heritage is that of *"natural and dynamic ecological processes, earth processes and evolutionary processes, and the ability of ecosystems to be self-perpetuating"*[5].

With this said, there are some overlaps of the different types of cultural heritage. For example, landscapes and landforms with particular importance to specific cultures may have cultural heritage and natural heritage values. Natural heritage was considered within the context of the audit.

5. Australian Natural Heritage Charter 2002: 4



What did we find?

The audit found:		In addition:	
81 non-conformances	**60** improvement opportunities	**144** recommendations	were provided to support alignment with global good practice

The audit found 81 non-conformances and 60 improvement opportunities. In addition, 144 recommendations were provided to support alignment with global good practice.

There was commonality in the findings, meaning that there were similar findings across assets. Typically, the findings related to gaps in the design and implementation of an asset's cultural heritage management system (**CHMS**). A **CHMS** is the framework that guides on-ground, day-to-day management of cultural heritage. The key components that make up a **CHMS** are described on Page 11.

The audit also found subtle differences between geographies and business units (i.e. Aluminium, Closure, Copper, Exploration, Iron Ore and Minerals). These differences not only reflect the local context, such as the regulatory framework and stakeholder expectations, but also the type and function of the asset.

Cultural Heritage Management System

Knowledge Base:

The knowledge base is fundamental to good cultural heritage management. This includes having an up to date understanding of the cultural heritage resources and values that are present at or associated with the asset. This requires an understanding of the broader interconnected cultural landscape, not just individual heritage sites, places and resources. It needs to be updated at regular intervals, to reflect the evolving manner of culture and heritage. A knowledge base is not static, but continues to evolve over time, as culture does, which means that regular reviews are required.

Integrated Data Management:

The CHMS should include processes and procedures that are formally integrated into a single consolidated data management system. This includes digitising the knowledge base and incorporating cultural heritage spatial data into centralised geographic information system (GIS). The efficacy of the data management system will depend on how well it is integrated into the asset operational management system.

Engagement and Consultation:

Engagement and consultation on heritage matters needs to occur early in the project lifecycle, at exploration, and continue through post-closure. The approach to engagement should be underpinned by an engagement plan and grievance mechanism. Ongoing tracking of engagement activities and grievance resolution should occur, so as to retain institutional knowledge and support effective follow through on actions and commitments.

Resourcing:

Effective implementation of the CHMS requires having, at a minimum, access to appropriately qualified and experienced cultural heritage practitioners. Depending on the type, extent and risk to cultural heritage values, a Cultural Heritage SME may be required at the asset level (i.e. a need for internal resources).

Cultural Heritage Awareness Training:

This refers to training for all personnel, including visitors and contractors, to ensure that they not only understand the cultural heritage resources and values present, but also the risks to these values and resources as a result of their activities. It is important that personnel understand how to manage these risks. In some instances, this will include cultural awareness training, which contributes to developing an embedded appreciation and respect for cultural heritage. Training needs to be supported by appropriate oversight, such as coaching and monitoring.

Cultural Heritage Management Plan:

A cultural heritage management plan (CHMP) identifies potential risks and impacts to cultural heritage, and strategies to manage the identified risks and impacts. This includes having:

1. an understanding of the potential impacts to cultural heritage values,
2. having agreed management strategies, and approach to ongoing monitoring of the condition and integrity of cultural heritage resources,
3. established accountabilities and auditing requirements,
4. a means to celebrate cultural heritage,
5. strategies for appropriate storage, curation and repatriation of artefacts, and
6. a mechanism for managing chance finds.

When it comes to understanding impacts, it is important to take a landscape, or whole of country, approach so that potential cumulative impacts are appropriately understood and managed.

The key non-conformances and improvement opportunities are presented below. Overall, 100% of the assets audited were missing at least one CHMS component. In other words, the foundations for good practice were, to some extent, missing at all assets.

Knowledge Base:

A number of assets (19%) had an out-of-date knowledge base, while others (19%) had key or critical gaps in their knowledge base. The knowledge base at some assets was more than 20 years old.

The information and assessments that constitute the knowledge base should be sufficiently comprehensive to reflect the cultural heritage landscape. Given the evolving nature and status of cultural heritage values, it is critical to ensure the knowledge base is up-to-date and there is a process for ongoing engagement and consultation with knowledge holders. This is critical to ensuring that decisions being made are appropriately informed.

Cultural Heritage Management Plan:

The absence of a CHMP was noted at nearly a quarter of the assets during the audit (22%), while other assets had either an out-of-date CHMP (8%) or a CHMP with critical gaps (19%).

Consequently, there is a risk that current and emerging impacts to cultural heritage are not being readily identified and/or appropriately managed. All assets should have a CHMP, which is scaled to the cultural heritage risk profile of the asset. The CHMP should be developed through a co-design process in consultation with relevant communities, knowledge holders and suitably qualified professionals.

Centralised Data Management System:

In a number of instances, the systems used by assets to capture cultural heritage data (e.g. the knowledge base) are not centralised or integrated into operational data management platforms (24%). In practice this can create a disconnect between the data sets that are used to inform decision-making. This presents a risk that cultural heritage information is not being effectively and efficiently fed into decision-making.

Resourcing and Accountability:

Nearly half of the assets (49%) had a resourcing gap – specifically there was a gap in access to appropriately qualified and experienced cultural heritage SMEs within the business.

In some cases, there was a reliance on contractors or consultants, which means that external parties are overseeing the approvals process and making decisions that potentially affect cultural heritage. The ownership of such decisions should reside within the business. In other instances, existing teams lacked the capacity to dedicate resources to cultural heritage management, particularly where personnel responsibilities were multifarious.

The extent to which access to a SME is required will depend on the type, extent and level of risk to cultural heritage. Having access to a SME provides the business with assurance and validation in the decisions being made. This extends to decisions associated with selection of management strategies, incident investigations, assessment of new discoveries, and implementation of a CHMP. A SME can also help to ensure that as global good practice evolves, so do the practices that are implemented at an asset level.

Engagement and Grievance Management:

At numerous assets, it was noted that engagement activities (30%) and grievances (51%) were not being systematically managed, recorded, and tracked. Not tracking engagement activities and grievance resolution presents a risk, in particular the potential to lose institutional knowledge. Retaining institutional knowledge provides a record of decisions and commitments made in collaboration with external stakeholders. It also supports change management when a new stakeholder relationship manager is introduced and provides a systematic way to ensure that commitments are met, which supports efforts to build trust with stakeholders. Lastly, it provides a means to support continual learning and improvement, as stakeholder feedback can contribute to future improvements. Where assets were actively tracking engagement activities, it was readily recognised that the information captured provides a valuable data set, particularly when there is turnover or a change in staff.

Closure Planning:

While the audit found that many assets are actively planning for closure, cultural heritage requirements are not yet consistently fed into the closure planning process (27%). Closure planning is an ongoing process, commencing at the earliest stages of an asset's life (e.g. exploration, design). Planning for closure may influence decisions made at each stage of an asset's life, including (but not limited to) how material culture may be stored in perpetuity or repatriated at a future date.

Cultural Heritage Training:

Although training is being rolled out at assets, the audit found that in a number of instances (22%) the training does not incorporate information on asset-specific cultural heritage values and appropriate management strategies. This includes training provided to staff, as well as visitors and contractors. Tailored cultural heritage training provides the necessary information for staff, contractors and visitors to understand the potential impact of their activities on the cultural heritage values and how to effectively manage the risk. It is not only an important part of ongoing management but a platform for embedding cultural heritage awareness. In addition to cultural heritage management training, cultural awareness training, particularly such as immersion programs, helps to embed a strong appreciation for cultural heritage, which supports the creation of an inclusive and respectful organisational culture.

Observations

During the audit, a range of observations were made, which sit outside the non-conformances and improvement opportunities. These included:

Water management:

Land disturbance processes were generally observed to be robust. However, the processes that exist around land disturbance, as it relates to cultural heritage management, are not yet reflected in other key risk areas, in particular water management. There is a heightened risk of unintended impacts eventuating, particularly where multiple companies operate in close proximity to one another: the confines of a water resource do not necessarily align to an asset's footprint.

There are also a growing number of instances where changes in water levels have exposed known or unknown artefacts or other cultural heritage resources[6]. This presents another type of risk that needs to be considered when managing water resources.

In recent years, the issue of water management has become more complex in light of changing climatic conditions, which is influencing the frequency and timing of rainfall events and hence the availability of water. In the end, water management, as it relates to cultural heritage, is an area that warrants further focus by the business to ensure that the potential impacts to cultural resources are sufficiently understood and managed.

Co-design:

The audit found examples of great partnerships with knowledge holders and co-designed aspects of cultural heritage management. However, this was not a consistently applied approach across assets. Co-design underpins good cultural heritage management and is embedded in global good practice standards. To achieve co-design, there needs to be a commitment to consistent and ongoing engagement and partnerships with communities and knowledge holders. It is noted that the revised CSP Standard sets out requirements for co-design of a CHMP along with co-design of controls associated with the protection of cultural and intellectual property rights.

Risk Identification:

Regardless of the nature of an asset, including its operational footprint, its status of operation and/or its age, there remains an inherent responsibility to manage, maintain and preserve cultural heritage. This is important to emphasise, as during the audit, there was an expectation that a static footprint would present a lower risk to cultural heritage, but the audit found that footprint, age and/ or status were not good indicators of risk. This further emphasises the need to have a CHMS in place at all assets, so that risks and impacts are understood and appropriately managed.

Organisational culture:

The audit highlighted the role that organisational culture plays in effective cultural heritage management. An embedded understanding, respect and appreciation of cultural heritage (tangible and intangible) supports not only improved management, but also a business environment where knowledge holders and communities are partners.

During the audit, it was observed that in most instances, management efforts were driven by a concern that cultural heritage would be adversely affected, rather than driven by a deeply embedded respect for cultural heritage.

6. Archaeological features, sites and complexes (surface expressions and subsurface deposits) are subject to soil movement associated with extreme water fluctuations and consequent damage to the structural integrity of stratigraphic deposits.

Good Practices

While the audit identified a range of non-conformances and improvement opportunities, good practices were also identified. A selection of good practice is captured in **Box 1**. This is not the full breadth of good practices identified but represents the types of practices being employed by assets. There are opportunities for these practices to be cascaded through the business to support efforts to achieve continuous improvement.

Box 1 Examples of Good Practices

Integrated Operational Technology - Trimble GuidEx

The introduction of the Trimble Guidex system installed in dozers was noted at one asset (although at the time of the audit, this system was being rolled out more broadly across other assets), which provides an additional layer of protection for cultural heritage sites and supports the heritage (and environmental) management process

CHMS component:
Integrated Data Management

Technology to Inform Engagement

At one particular asset, landform rehabilitation design undertaken in consultation with the knowledge holders is a strong demonstration of Free, Prior and Informed Consent (FPIC), as well as an effective co-design process. The use of the 3D printed landform model, digital overlays and video in traditional language is a commendable engagement technique

CHMS component:
Engagement and Consultation

Literacy Heritage - Seminal Publication

At one particular asset, a seminal literacy publication was created to record and preserve new language associated with a new industry. Language is fundamental to a community's culture and subsequently its heritage and traditions. The publication is also housed in the national library providing access to educational institutions.

CHMS component:
Cultural Heritage Awareness and Training

Visitors Centre or Cultural Centre

Several assets had well designed and curated visitor and/or cultural centres that tell the story of the place, culture and heritage. In one case, the story told of a mine's history, and its significance to the historical development of the region, over the last century. This particular centre includes a collection of historic photographs and information compiled into a publication which is a wonderful form of documenting, preserving and celebrating the mine's industrial cultural heritage.

CHMS component:
Cultural Heritage Awareness and Training

Knowledge Holder Monitoring Program

A regionally unique program that demonstrates partnership through the employment of a full-time team of tribal monitors and cultural specialists. This team is involved at all stages of a Project activity.

CHMS component:
Engagement and Consultation

Integrated Heritage Management Program

Within the Iron Ore product group in Australia, the IHMP is an additional assurance program that works with the cultural heritage management system and the approvals request process. The IHMP allows for systematised management, and additional and improved governance of heritage sites and places.

CHMS component: Integrated Data Management

Cultural Closure Criteria

At one asset, co-designed cultural closure criteria including cultural reconnection programs is a focussed and meaningful cultural awareness strategy for closure.

CHMS components:
Cultural Heritage Awareness and Training and Engagement and Consultation

Integrated Engagement Schedule

The integrated engagement schedule was developed regionally to support a assets. It supports consultation and engagement planning and is a good example of where technology has been effectively leveraged to enhance engagement efforts with stakeholders.

CHMS component:
Integrated Data Management

Advanced archaeological and ethnographic research programs

In a number of instances, assets are partnering with universities, leading practitioners, and knowledge holders to undertake archaeological and ethnographic research programs (including multi-year excavations). Along with the benefits of long-term relationships with these stakeholders, valuable data can be returned to communities and those who are connected to land and heritage.

CHMS components:
Knowledge Base and Engagement and Consultation

Relationships and Partnerships with Research Institutes

At several assets globally, long-standing relationships with local universities and research institutes provides access to fresh ideas, innovative perspectives and local resources.

CHMS components: Knowledge Base, Engagement and Consultation and Resourcing

Recording of Intangible Heritage

Several assets globally are partnering with local communities, authorities and knowledge holders to document intangible cultural heritage values. A variety of projects and methodologies are being employed such as constellation mapping and training local communities on new methods for recording oral histories.

CHMS components:
Knowledge Base and Engagement and Consultation

Cultural Immersion Programs

Numerous assets roll out cultural immersion programs that are co-designed and delivered by knowledge holders, senior leaders of the asset spend time on country to share experiences and learn about the land they operate on - cultural landscapes, intangible values/ sites and places, archaeological/ tangible resources and living cultural heritage where stories, language and customs are valued.

CHMS component:
Cultural Heritage Awareness and Training

Where to next?

The investment that has been made, in particular within the Iron Ore product group, has led to a range of improvements in on-ground practices. Despite this, the audit found that further work is required across the business to align with Rio Tinto's internal standards.

Based on the audit findings, the following actions are recommended to support the business as it progresses towards its commitment to implement global good practice.

Establish a Strong Foundation

A CHMS provides the foundation for managing cultural heritage. Although no two systems look exactly alike, there are core elements that should exist (see CHMS). In the end, a CHMS provides the framework for a deep and respectful understanding of cultural heritage and supports a business environment where communities and knowledge holders are considered as partners.

The audit found that all assets had one or more gaps in their CHMS. In some instances, this meant that a key component was missing (e.g. no CHMP). In other instances, there were gaps within existing component (e.g. a knowledge base that did not cover the breadth of what constitutes cultural heritage).

Recommendation:
Each asset should have a CHMS that reflects the type, function and scale of the asset. Critical to this, is an up-to-date understanding of the cultural heritage landscape (knowledge base), captured in a centralised, integrated geo-referenced data management system.

Embed a Co-design Approach when Managing Cultural Heritage

Rio Tinto has made a commitment to co-manage cultural heritage. As such, co-design with knowledge holders and affected communities will play an integral role in the way Rio Tinto approaches cultural heritage management (**Box 2**).

The audit found that there are instances where co-design has or is occurring with knowledge holders and affected communities. However, this is not yet a consistent, embedded practice across the business.

Co-design is an iterative process. It requires resources with the capability and capacity to drive engagement and the associated decision-making process involved in co-design.

Recommendation:
Each asset should reflect the principles of co-design in its approach to managing cultural heritage. While this will look different at each asset, it requires ongoing investment in relationships, which is facilitated through consistent engagement, capacity building to support informed decision-making and maintaining records of the outcomes achieved.

Box 2 Co-Design and Free Prior and Informed Consent

Co-design is a process not an event. It is not a linear process and cannot be rushed. There are no step-by-step procedures or checklists. The process is as variable as the problems it aims to address, reflecting the issues and the needs of all people it involves. It requires a commitment to create change.

Co-design is intricately linked to the principles of FPIC. Under the UNDRIP, affected Indigenous Communities are expected to have adequate information and adequate time to consider information in making a decision that may affect their cultural heritage/their country. Indigenous people have a fundamental right, as described in UNDRIP, to maintain, control, access, practice and protect their cultural heritage, in a way that respects their right to self-determination. Co-design and FPIC as concepts are underpinned by the need to build relationships based on trust. This is achieved through transparent, robust and open conversations. This requires a shift from transactional processes to relationship building exercises that extend beyond an individual consent for an activity. Efficacy will only be achieved if the relationship is established early in the project lifecycle, sustained and maintained through to closure, and the process is documented to retain institutional knowledge.

Enhance Capacity to Manage Cultural Heritage

Appropriate resourcing is required to facilitate effective implementation of a CHMS. The level of risk to cultural heritage will influence the resourcing model employed.

The audit found that access to qualified and experienced cultural heritage SMEs was an issue at nearly half of the assets audited. SMEs play an important role not only in day-to-day driving good practice, but also in providing appropriate expertise during incident investigations and internal assurance programs.

Whilst contracted cultural heritage specialists with local knowledge and experience are critical to support the development of the knowledge base, implementation of the CHMP and assistance in on-ground management, it is important to have internal oversight by an SME. This supports the retention of intellectual property and corporate knowledge.

Recommendation:
Each asset should have access to appropriately qualified and experienced in-house cultural heritage expertise. Where internal expertise already exists, it should be leveraged to support capacity building within the organisation.

Box 3 Knowledge Sharing and Capacity Building

There is an opportunity to further enhance internal capacity and access to cultural heritage expertise through dedicated knowledge sharing initiatives.

There are a range of ways in which knowledge sharing can occur. One example is the establishment of a community of practice, supported by dedicated knowledge sharing platforms. It is through a community of practice model that mentoring and/or coaching opportunities could be established, by leveraging in-house expertise. Another example is development of an ‘exchange program’ for practitioners to ‘work’ across assets on a temporary basis to experience how cultural heritage is managed.

While it is important to continue to enhance knowledge of existing practitioners, knowledge sharing initiatives should not be limited to those within the Communities and Social Performance teams. It is important to enhance knowledge across operational roles, to further support the integration of cultural heritage management requirements into operational decision making.

Manage Water as a Cultural Resource

Water is often a highly valued cultural resource. It can be intimately connected to a community or knowledge holder's sense of identity, spirituality and culture. This means that impacting water resources presents a risk to cultural heritage.

The audit found that most assets have strong, embedded land disturbance management practices, which provide a means through which cultural heritage resources are managed. However, the processes surrounding water management are less well established and/ or embedded and understood.

Unlike land management, the impacts to water resources are often harder to predict. This means that unanticipated consequences can occur. How an asset responds to these consequences is important, specifically managing the impact in a collaborative manner with relevant knowledge holders and affected communities.

Recommendation:
Each asset's CHMS should explicitly consider the potential impacts to cultural heritage resources due to changing water regimes. In addition, cultural heritage values should be captured in site water management planning processes.

Capture Cultural Heritage Requirements when Planning for Closure

Planning for closure is an established process at Rio Tinto. However, the audit found that for many sites planning for closure is not yet consistently capturing cultural heritage management requirements. In practice, this requires feeding cultural heritage requirements into the closure planning process, as well as capturing closure requirements in an asset's CHMS.

Recommendation:
Each asset's efforts to plan for closure should include consider cultural heritage management requirements. An asset's CHMS should capture closure requirements.

Apply a Global Cultural Heritage Definition

Cultural heritage is broad and multifaceted. The audit found that the understanding of how 'cultural heritage' is defined varied across assets. For consistency, as well as alignment with good practice, it is important to adopt a comprehensive definition of cultural heritage.

Recommendation:
The breadth of what constitutes cultural heritage should be captured within Rio Tinto's definition and management efforts.

Enhance the Current Governance Framework

Rio Tinto revised its CSP Standard in 2022. This involved incorporating new requirements regarding cultural heritage management to closely align with global leading practice.

The audit highlighted the variability that exists between locations and product groups, as local context influences the way that cultural heritage is identified and managed. These differences could be addressed via the application of regional and/or product group procedures that are linked directly to the revised CSP standard. Procedures should be developed by a team of appropriately qualified specialists, and include local and regional expertise supported by Rio Tinto's global team of cultural heritage management specialists.

Recommendation:
Consider the development of regional and/or product group procedures to support the effective management of cultural heritage.

Leverage the Opportunity to Enhance the Assurance Process

Rio Tinto has an established internal assurance program. The audit adapted Rio Tinto's standard approach to assurance, with a key point of difference being engagement with knowledge holders and affected communities, where possible. The feedback and insights received that was received from knowledge holders and affected communities was invaluable to the outcomes of the audit, given the connection and understanding held by these individual and groups relation to cultural heritage.

Recommendation:
Engage with knowledge holders and affected communities in future audits, where cultural heritage is a focus. This supports the principles of co-design.

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