SOUTH + CENTRAL QUEENSLAND REGIONAL FORESTRY HUB

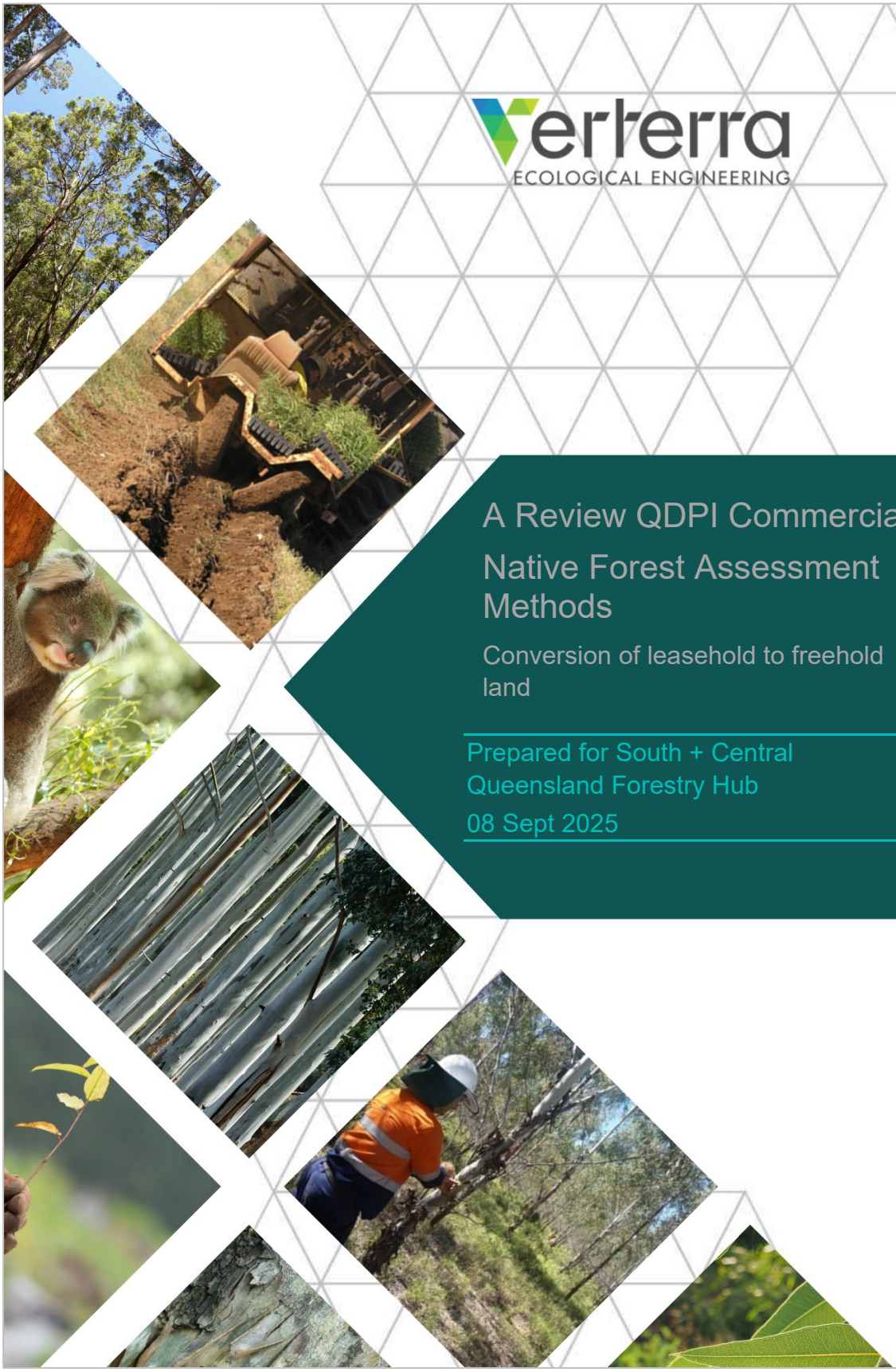
REPORT: REVIEW OF COMMERCIAL ASSESSMENT METHODS

Verterra ECOLOGICAL ENGINEERING

30 September 2025

Forest Resource Security

This report was commissioned by the South & Central Queensland Regional Forestry Hub with funding from the Australian Government, Department of Agriculture, Fisheries and Forestry.



A Review QDPI Commercial Native Forest Assessment Methods

Conversion of leasehold to freehold land

Prepared for South + Central Queensland Forestry Hub

08 Sept 2025

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Revision history

Revision	Author/Reviewer	Date	Status/Remarks
0.1	Andrew Yates Kristiina Marquardt	26 June 2025 27 June 2025	Working Draft
0.2	Kristiina Marquardt	27 June 2025	Draft for Approval
0.3	Andrew Yates	4 July 2025	Approved for Release
0.4	Andrew Yates	7 July 2025	Issued for Client Review
0.4	Andrew Yates	25 July 2025	Issued for Client Review
1.0	Andrew Yates	08 Sept 2025	Final

Distribution list

Date	Revision	Name	Title
7 July 2025	0.4	Kerry Fullarton	South and Central Queensland Regional Forestry Hub Manager
25 July 2025	0.4	Kerry Fullarton	South and Central Queensland Regional Forestry Hub Manager
05 Sept 2025	1.0	Kerry Fullarton	South and Central Queensland Regional Forestry Hub Manager

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Funding – Acknowledgement

This report was commissioned by the South & Central Queensland Regional Forestry Hub with funding from the Australian Government, Department of Agriculture, Fisheries and Forestry.

Staff - Acknowledgement

This report acknowledges the significant commitment, professionalism, and experience of Queensland Government departmental staff involved in the valuation of native forests and administration of leasehold-to-freehold land conversions in Queensland. The observations and recommendations presented are not a reflection on individual or team performance. Rather, they recognise the complexity of the task and some limitations of the current system, tools, and resourcing. Any identified gaps or areas for improvement are aimed at strengthening institutional processes, enhancing consistency, and supporting staff who are already delivering the best possible outcomes within existing frameworks.

Executive Summary

The conversion of State-owned leasehold to private freehold land in Queensland presents both significant opportunities and risks for the future of the State's native forestry sector. While transitioning to freehold tenure provides landholders with greater security, investment flexibility, and the ability to pursue diverse land uses, it also risks permanently severing access to commercial timber resources currently owned by the State. This risk is especially critical in regions where native forests supply products that underpin local timber processing industries, provide regional employment, and contribute to wider environmental and land management goals.

While private native forestry has long played a vital role in Queensland's hardwood supply, the progressive loss of State-managed forests through freehold conversion reduces government's capacity to plan strategically for a secure, sustainable timber estate, increasing reliance on landholder discretion and market forces.

Queensland is experiencing a pronounced increase in freehold land area conversion compared to other Australian states. This transition might erode the government's capacity to strategically plan and deliver a sustainable, secure supply of native timber. Without effective interventions, this trend may cause irreversible reductions in the productive native forest estate, which undermines industry confidence, diminishes investor certainty, and reduces social and economic benefits to regional communities.

Tenure type fundamentally shapes timber resource security, industry confidence and long-term management options. In order from strongest to weakest protection of resource security and access rights, tenure categories are:

1. **State Forest (Crown land)** – These lands are publicly owned and subject to long-term strategic forest management, supporting certified sustainable timber supply and conservation.
2. **Leasehold** – While landholders manage the land for a dedicated purpose, the State retains timber rights, with harvesting conducted under regulated agreements ensuring ongoing access and supply security.
3. **Freehold with Forest Consent Areas (FCA)** – When lease hold land is converted to freehold the State may require a FCA to be registered against the title. Although having freehold status, timber rights are preserved under an FCA.
4. **Freehold (no FCA)** – Once converted without FCA protection, forests on freehold lands are subject to the ***Vegetation Management Act***. These may be cleared for alternate land use, will lose ongoing timber rights, and fall outside the scope of the ***Forestry Act*** and public forest policy, risking permanent removal from timber production.

Industry stakeholders express strong concerns that current leasehold-to-freehold conversion frameworks are a risk to long-term timber production potential and ongoing supply. FCAs are a useful safeguard but may not offer sufficient certainty for sustainable forest management, supply continuity, or long-term investment planning. Without reforms, Queensland faces the risk of significant 'slippage' in resource availability of forest products, undermining processor operations, supply chains, workforce stability, and community livelihoods.

Notwithstanding industry concerns, the Queensland Government seeks to modernise its land administration system, where conversion to freehold tenure predominates. This aims to simplify tenure structures, provide landholders with increased flexibility, and reduce the governments

administrative burden. However, this must be balanced carefully against the need to protect essential timber resources that underpin ongoing and future demand, public interest, ecological sustainability, and regional timber industry viability.

The discussion within this report details improvement opportunities. The path forward demands a conversation, whether to continue with tenure reform despite gaps in inventory data and disturbance mapping, or to delay conversions until these foundational elements are fully developed and resourced. While prompt action could prevent some further erosion of forest resources, proceeding without a robust evidence base and adequate resources risks poor decision-making, inconsistencies in assessments, and unintended, irreversible consequences.

Under this context, waiting until sufficient resources and data are available represents a more prudent and responsible approach. This allows for a well-sequenced, transparent process supported by comprehensive forest inventory data, precise tenure and disturbance mapping using the latest technology solutions. Such an approach will better balance landholder interests with the public and industry need for long-term forest resource security.

To underpin this, we suggest undertaking a comprehensive cost-benefit analysis that evaluates the costs of establishing and maintaining a fully resourced, long-term forest inventory and monitoring program. This program should incorporate the latest technologies, including high-resolution remote sensing, LiDAR, artificial intelligence (AI)-powered image analysis, and real-time monitoring platforms, alongside periodic ground validation. The analysis should compare these costs against the broad spectrum of potential benefits, many extending well beyond tenure conversion reform.

Such benefits include enhanced valuation of forest resources supporting more informed land tenure decisions, improved forecasting of timber supply, stronger integration with emerging environmental markets such as carbon and biodiversity credits, and more robust national and international sustainability reporting. Moreover, an advanced inventory infrastructure lays the groundwork for improvements in private native forestry development, conservation planning, and greater transparency and accountability for both industry participants and the wider community.

Importantly, integrating modern technological tools into an inventory program promises to increase data accuracy, operational efficiency, and scalability, reducing long-term costs while enhancing decision-making capability across government and industry. Though initial investments in technology, training, and infrastructure may be substantial, the return on investment through improved resource stewardship and policy outcomes is likely to be significant and multifaceted.

The findings and recommendations outlined in this report align closely with the issues currently under consideration in the Queensland Government's draft Future Timber Plan. By drawing on the evidence and proposals presented here, there is an opportunity to strengthen the Plan and ensure it addresses the critical challenges of ongoing forest management, tenure reform, forest inventory, and long-term timber resource security. Incorporating these recommendations into the Plan would provide a clear, practical pathway for government, industry, and landholders to work together to safeguard Queensland's forest resources, enhance industry confidence, and deliver enduring economic, social, and environmental benefits for regional communities.

1. Part A – Background and Understanding

1.1 Introduction

This report addresses the objectives set by the South & Central Queensland (SCQ) Regional Forestry Hub, focusing on a review of Queensland's commercial forest assessment methods regarding conversion of leasehold land to freehold. The key objectives of this project are as follows:

- **Undertake an assessment of valuation approach:** The project evaluates the methodologies used to assess the commercial status of cypress and hardwood forests on leasehold land in Queensland. The report includes a review of these methodologies, specifically in the context of converting leasehold land to freehold and assesses their impact on state ownership decisions regarding commercial native timber.
- **Assessment of Resource Losses from Natural Disturbances:** The project includes a commentary on the impact of resource loss resulting from natural disturbances such as fire and drought. The report reviews the methodologies used by Queensland Government to assess these losses, ensuring alignment with current best practices in resource management.

To achieve these objectives, the following approach was implemented:

- **Desktop Research:** A literature review of existing frameworks and methodologies was conducted, focusing on relevant online documents.
- **Stakeholder Consultation**: Key stakeholders were engaged to gather qualitative insights and firsthand experiences on current assessment practices.

The goal of this report is to evaluate the methodologies used to assess the commercial viability of cypress and hardwood forests on leasehold land, particularly in relation to proposed conversions from leasehold to freehold. A summary of why this might be important to Queensland is given below:

- **Enhancing Transparency in Decision-Making:** By assessing and potentially refining the current assessment methods, the Forestry Hub seeks to improve transparency in the decision-making process, ensuring that landholders and stakeholders can rely on clear, justifiable data when considering timber value and land conversion.
- **Supporting Sustainable Resource Management:** More accurate assessments might help prevent errors that can arise from over, or underestimated timber values. This will lead to better long-term resource management, ensuring forests are used sustainably while also providing realistic projections of their economic value.
- **Fostering Industry Confidence:** By improving assessment accuracy and optimising valuable resource retention, the assessment process can provide forest industry certainty, support investment decisions and encourage responsible, sustainable land and timber management practices.
- **Fostering Lessee (landholder) Confidence:** Current methods may over, or underestimate the value of timber, which can create barriers for landholders seeking to convert leasehold land to freehold. Accurate assessments help to prevent this issue, making the conversion process smoother.
- **Aligning with Best Practices:** Bringing the assessment methodologies up to date with current best practices, both within Australia and internationally, ensures that Queensland's forestry management is competitive, with increased resource security.

1.2 Scope of Works

The full scope of work is stated in the original Expression of Interest issued by the SCQ Forestry Hub, summarised below for reference:

Activity 1: Review of Assessment Methods for Leasehold to Freehold Conversion

This consultancy aims to assess the current methodologies employed by QDPI and relevant agencies to evaluate the commercial value of forest products to the state on leasehold lands requested for conversion to freehold. The project aims to identify any gaps and opportunities to enhance the current assessment methods and improve process transparency.

Key objectives include:

- Reducing the risk of inaccurate assessments that may lead to false negatives regarding the viability of state-owned timber.
- Evaluating commercial considerations, including potential product ranges (saw logs, poles, etc.) and strategies for salvage operations, including extraction volumes and impacts on future allocations.
- Establishing criteria for determining minimal land parcel sizes, productivity, and relevant legal considerations, including native title and Indigenous Land Use Agreements (ILUAs).

Additionally, a literature review of established assessment standards from other Australian jurisdictions and select international examples will be conducted, focusing on jurisdictionally owned native forests and excluding native plantations. This review will account for factors such as forest type, drought resistance, fire tolerance, and commercial viability.

Activity 2: Review of Resource Loss Assessment Methods

The second activity focuses on evaluating assessment methods for resource losses resulting from natural disturbances (e.g., fire, drought). The review will consider:

- The location and commercial viability of resources before disturbances.
- The feasibility of salvage harvesting.
- The implications of poor assessment methods on claims under Force Majeure provisions.

The overall goal of the project is to enhance the accuracy and transparency of assessment methodologies, enabling governments to identify areas for improvement and fostering greater industry growth through fair resource assessment practices.

1.3 Preamble

1.3.1 The Strategic Risks of Freeholding Forested Crown Land

The ongoing conversion of Crown leasehold land to freehold tenure presents a growing strategic risk to the long-term viability of Queensland's timber industry, particularly where it results in the loss of access to forest resources. One of the most immediate concerns is that selective native timber harvesting is often excluded from current and future land uses once tenure is converted. This issue is especially pressing in Queensland, where extensive areas of leasehold land support forests of both commercial and ecological value.

Despite being the sixth most forested country globally, with over 133.6 million hectares of forest, Australia is becoming increasingly reliant on imported forest products to meet domestic demand. This growing dependence highlights a structural disconnect between national forest wealth and its

utilisation. It undermines national resource resilience, exposes local industries to international supply chain shocks, and places long-term pressure on both environmental and economic sustainability.

A compelling argument can be made that Australia should shift toward greater self-sufficiency in timber and forest products. Doing so would strengthen domestic supply chains and deliver multiple strategic, economic, and environmental benefits, including:

- Reduced reliance on imports, thereby insulating the economy from future global disruptions and trade restrictions.
- Increased regional investment and employment in forestry-dependent communities, particularly in areas of Queensland where existing regional forest industries rely on access to native timber on leasehold land.
- Improved national resource security in response to increasing global competition for forest products, and emerging international efforts to secure timber for carbon-negative materials, biomass, and bio-based construction.

Forest products are becoming a strategic natural asset, vulnerable to international pressures, including climate-related yield losses, bushfire risk, and global shifts toward carbon-positive production systems. Ensuring Australia retains access to land suitable for sustainable forest production, including native forests, is essential to safeguard long-term national interests.

1.3.2 Projection of timber demand

Projections by Forest & Wood Products Australia indicate that by 2050, Australia's population will grow to between 34 and 40 million people, driving demand for approximately 250,000 new dwellings each year. This growth will translate into a significant increase in softwood timber demand, reaching an estimated 6.5 million cubic metres annually, around 2 million cubic metres more than what was required in 2020.

However, softwood production is not expected to keep pace. Output is projected to plateau between 3.6 and 3.8 million cubic metres per year. While emerging carbon farming initiatives may deliver some future gains, these are unlikely to close the widening supply gap.

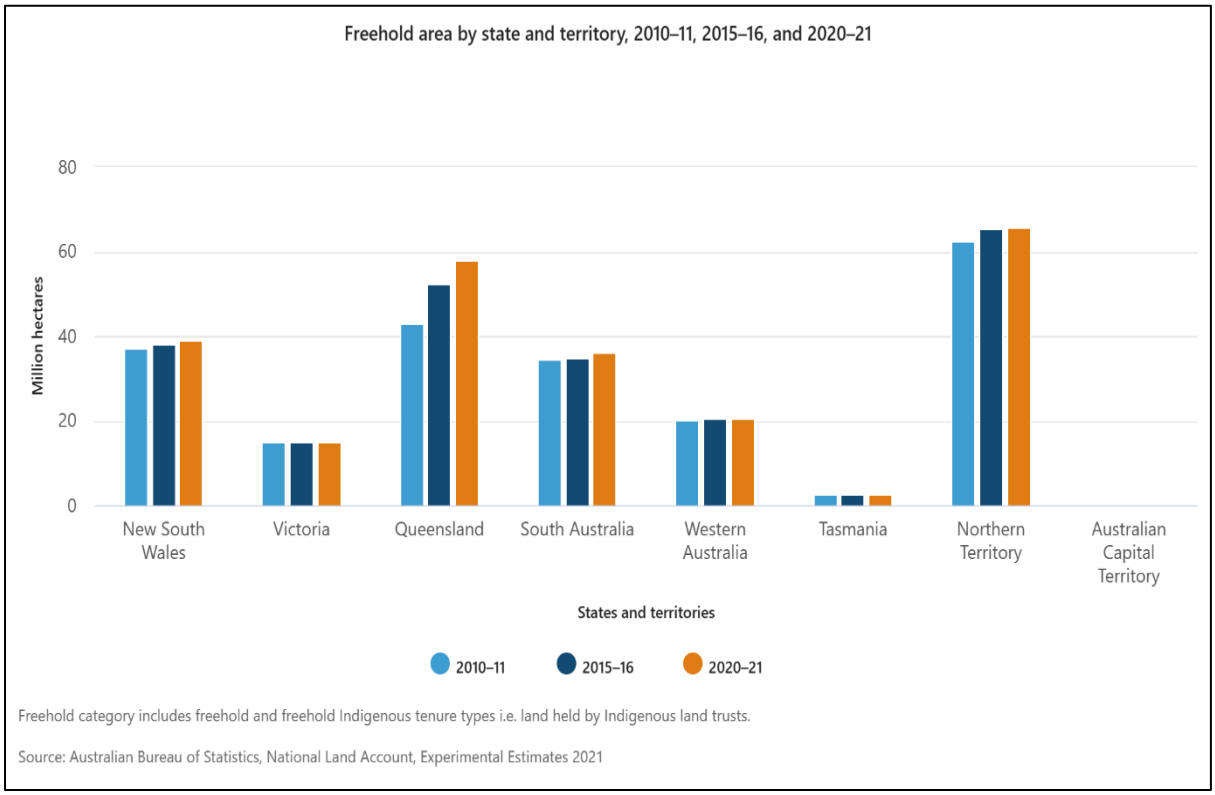
To meet the shortfall the forestry sector would need to establish approximately 465,000 hectares of new plantations or rely more heavily on imports. Yet, under present economic conditions, new plantation development remains financially unviable without additional policy or market incentives.

Under this context, sustaining and improving access to existing native forest resources, including those on leasehold land, represents one of the most practical and cost-effective options available to secure long-term timber supply. For Queensland, this underscores the importance of retaining productive forests within the broader tenure system.

1.3.3 Freehold Conversion as a Resource Risk

Recent data from the Australian Bureau of Statistics confirms a continued increase in land under freehold tenure across Australia, with Queensland showing a particularly strong trend (see Figure 1). This reflects sustained demand from landholders to convert leasehold tenure to freehold, motivated by greater autonomy, tenure security, and the ability to pursue a broader range of land uses. While such conversions support economic development and investment certainty, they also pose significant risks to the long-term availability of native forest resources for timber production.

Figure 1: Freehold Area by State



Where freehold conversion occurs without mechanisms to retain timber rights, such as the creation of a Forest Consent Area (FCA), the Government permanently relinquishes its ability to access or manage timber resources on that land. This can lead to:

- Permanent withdrawal of land from timber production, especially where landholders pursue alternative uses such as grazing, broadacre agriculture, or preservation zoning.
- Loss of forest management expertise and continuity, as landholders are no longer required or incentivised to maintain forests.
- Reduced capacity for wood supply planning, undermining industry confidence, processing investment, and workforce retention across the forestry value chain.

While private native forest management occurs on freehold land, it is typically voluntary and at the discretion of the landholder under the *Vegetation Management Act 1999*. Without an FCA or equivalent instrument, such as a registered profit à prendre, converted lands fall outside the scope of the *Forestry Act 1959*, regardless of their biophysical suitability for long-term timber production. This represents a potential erosion of access and future supply of timber products.

The extent of this risk is related to the form of tenure in place. From the perspective of long-term timber security and policy oversight, land tenures can be broadly ranked as follows:

1. State Forest (Crown land) – Full public ownership and control, with secure access for sustainable forest management and harvest.
2. Leasehold – State retains timber ownership. Harvesting may occur through regulated permits and agreements.
3. Freehold with Forest Consent Area (FCA) – Timber rights preserved post-conversion for harvesting under a profit à prendre arrangement.

4. Freehold (no FCA) – Full private ownership with no public timber rights or policy levers to re-engage land in timber production.

As Queensland continues to facilitate tenure conversion at scale, the absence of enduring forest access mechanisms places increasing pressure on the sustainability of its native timber supply from State Forests. This has long-term implications not only for the forestry industry, but also for regional communities, biodiversity, and landscape-scale land use planning. Policy reform may strengthen the use of FCAs or incentivise private native forestry on freehold land.

1.3.4 A Policy Opportunity for National Resilience

Queensland faces a pivotal moment in forest and land tenure policy. The ongoing conversion of Crown leasehold land to freehold tenure presents both a challenge and an opportunity. If managed strategically, it can support long-term environmental, economic, and resource security outcomes. If neglected, it risks the irreversible loss of access to native forest resources that are critical to regional communities and the timber industry.

To ensure that land tenure reform does not undermine timber security, the Queensland Government has an opportunity to adopt forward-looking, risk-aware strategies that embed forest value into land use planning and decision-making. These strategies could:

- **Integrate more comprehensive forest assessments into the tenure conversion process**. Ensure areas with high timber, carbon, or ecological value are identified and considered before decisions are made. This includes transparent disclosure of forest resources and potential long-term value.
- **Strengthen and expand mechanisms to retain timber rights on freehold land**. While Forest Consent Areas (FCAs) provide the State with perpetual timber rights through profit-à-prendre agreements, their practical effectiveness can be constrained by landholder cooperation, property access, and management arrangements. Complementary incentives could encourage landholders to actively manage and maintain forest resources, making FCAs a more reliable instrument for securing long-term forest supply.
- **Align landholder incentives with forest retention and active management**. While in practice most landholders do not receive a financial return for maintaining forests under State timber rights, the *Forestry Act 1959* allows for agreements where landholders may participate in silvicultural management and potentially receive a share of timber sale proceeds. To ensure these opportunities are realised, the Government could implement a program to actively inform and support landholders about these options, including guidance on eligibility, agreement processes, and complementary management practices.
- **Encourage integrated land use outcomes.** Combine sustainable timber production with carbon farming, biodiversity conservation, and improved land condition. Voluntary market-based instruments, stewardship agreements, and regional planning frameworks can help support multifunctional landscapes that deliver long-term productivity and environmental outcomes.

Without such measures, large-scale conversion to freehold risks progressively shrinking Queensland accessible timber estate at a time when domestic demand is rising (housing crises and sustainable Olympics). A strategic policy reset could assist in safeguarding long-term value of forests.

2. Part B – Management Framework

2.1 Forestry Management Framework in Queensland

Forestry in Queensland is governed through an integrated framework involving several Government departments with responsibilities across land management, timber production, conservation, and environmental regulation. The management of forestry resources reflects the complexity of land tenure (freehold, leasehold, state forest), economic use, and ecological protection.

Note that the Queensland Government is currently preparing its Queensland Future Timber Plan that will consider broader policy settings concerning the supply of native forest timber into the future. At the time of writing the Plan remains in draft and is open to public comment. As part of this, DPI Forestry will consider the strategic purpose and role of FCAs in supporting the State to meet current and future supply commitments. This may include a review of current policies and procedures in relation to FCAs and associated agreements.

2.1.1 Department of Primary Industries (DPI) – Commercial Forestry

DPI Forestry oversees the management and utilisation of Queensland's state-owned commercial native forest resources on State Forest and leasehold land.

Key Functions:

- Administration of the *Forestry Act 1959*, including timber sales, forest product permits, and commercial access arrangements.
- Management of Forest Consent Areas and Forest Consent Agreements on certain freehold lands. A FCA may be negotiated by DPI Forestry as part of a lease freehold conversion process. The FCA creates ongoing rights for the State to access and harvest forest products in perpetuity following freehold conversion.

Forest Consent Areas:

What it does:

- The FCA is primarily a binding legal agreement to ensure the State retains the right to harvest timber on land that changes from leasehold to freehold. It is a way to "lock in" access to the timber resource that would otherwise be lost once land tenure changes.
- It registers a profit à prendre on the land title, giving the State legal timber rights to enter and harvest even though ownership of the land transfers.

What it does not do:

- It does not create ongoing management obligations or require the landholder to manage the forest to maximise returns to the State from future harvesting.
- It does not always provide financial incentives or compensation to the landholder for maintaining the forest or for future rotations. Although provisions under the *Forestry Act 1959* do allow for this.

2.1.2 Department of the Environment, Tourism, Science, and Innovation (DETSI)

DETSI is responsible for the protection of statewide environmental values, biodiversity, and the management of Queensland's protected area estate, including national parks and state forests.

Key Functions:

- Oversight of protected areas under the *Nature Conservation Act 1992*, where commercial forestry is not permitted.
- Regulation of forestry-related environmental impacts, including threatened species, water quality, and carbon sequestration potential.
- Management of Queensland Parks and Wildlife Service (QPWS), which is responsible for fire management, access, and biodiversity outcomes across state forests tenures.

2.1.3 Department of Natural Resources, Mines, Manufacturing, and Regional Rural Development (DNR) – Land Tenure and Administration

DNR administers Queensland's land tenure system under the *Land Act 1994*, including the leasing of state-owned land and the conversion of leasehold land to freehold.

Key Functions:

- Coordinates with DPI Forestry and DETSI to assess applications for leasehold conversion, ensuring commercial and conservation values are recognised.
- Identifies areas of state interest, including land with timber potential or significant ecological value.
- Issues or amends lease conditions relating to timber harvesting, conservation, or future land use.

2.1.4 Inter-Agency Collaboration

Effective forest management in Queensland relies on inter-departmental coordination:

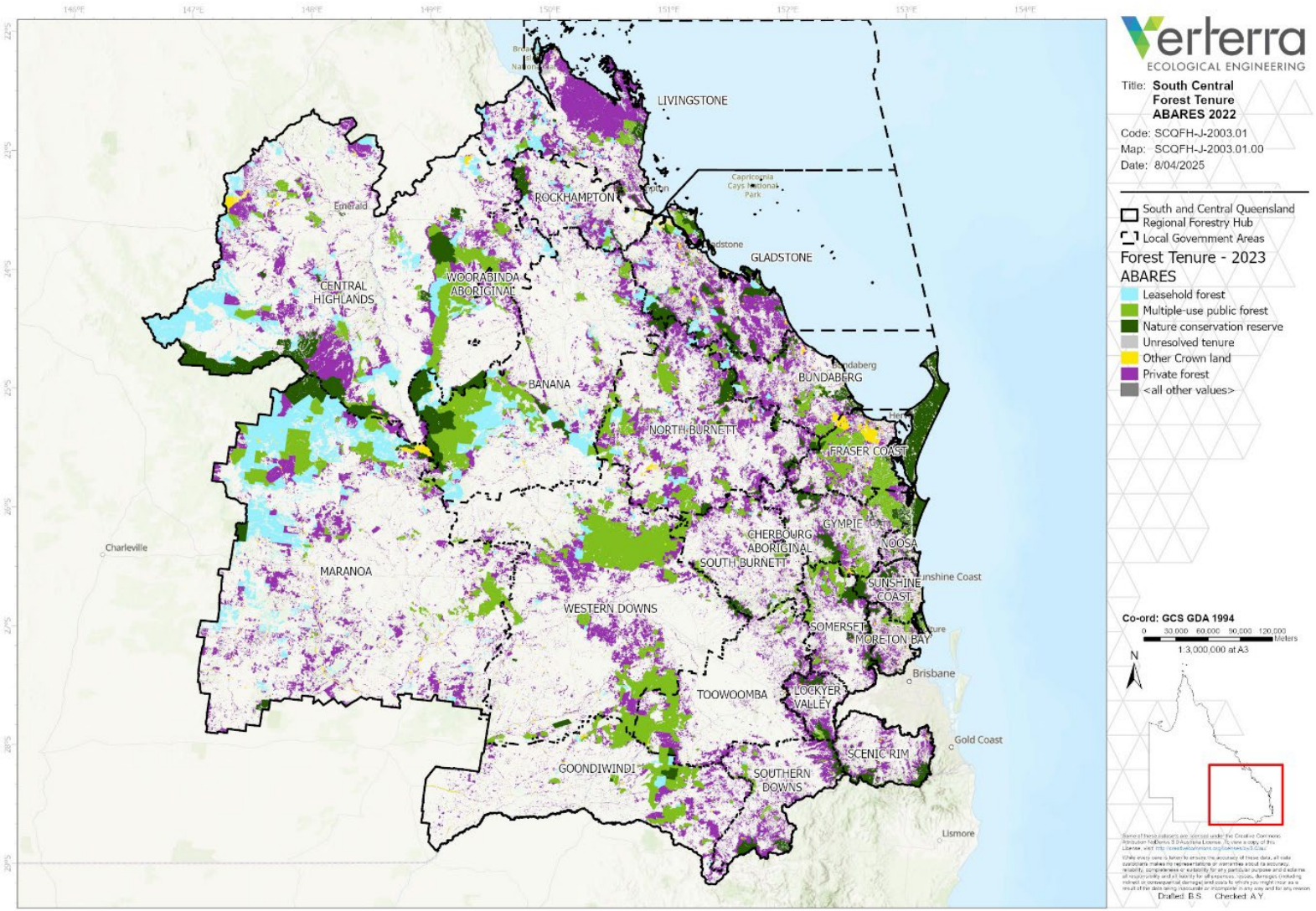
- In leasehold-to-freehold conversion, DNR leads, with DPI Forestry providing commercial forest assessments and DETSI reviewing environmental values.
- For FCAs, DPI Forestry negotiates commercial rights with leaseholders, informed by tenure rules from DNR and environmental constraints from DETSI.
- In state forest and protected area management, QPWS (within DETSI) coordinates with DPI Forestry on fire management, recreation, and timber operations where permitted.

2.2 South Central Queensland - Leasehold extent

Leasehold land occupies a substantial proportion of the South & Central Queensland Regional Forestry Hub extent. The western extent of the Hub's region shows the highest concentration of leasehold land, much of which overlaps with native cypress pine (Callitris spp.) forests (refer to Figure 2). These forests represent a sizeable portion of Queensland's remaining cypress resource and are of strategic interest to both commercial timber operators and land managers seeking freehold conversion under the *Land Act 1994*.

Given the presence of valuable State-owned Forest products on leasehold land, particularly cypress pine, lease conversion in this region often triggers the establishment of FCAs under the *Forestry Act 1959*. Figure 2 illustrates the spatial distribution and extent of leasehold land within the South & Central Queensland Regional Forestry Hub, underscoring the strategic importance of the western zone for sustainable native forest management and ongoing timber supply.

Figure 2: Freehold distribution



To place this within a national context, Table 1 below compares the area of native forest by tenure class across various jurisdictions:

Table 1: Area of native forest by tenure and jurisdiction

Tenure Class	Hectares '000							
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA
Leasehold forest	8	3,913	9,749	27,428	1,427	9	0.2	5,422
Multiple-use public forest	16	2,122	0	3,140	29	762	3,292	1,352
Nature conservation reserve	117	5,638	11	4,236	1,758	1,533	3,458	5,301
Other Crown land	1	837	487	932	74	379	131	6,971
Private forest (freehold)	0	7,708	13,064	16,114	1,839	1,024	1,342	1,720
Unresolved tenure	0	66	23	126	3	0	0	0
Total	**143**	**20,284**	**23,333**	**51,977**	**5,131**	**3,707**	**8,224**	**20,766**

Source: ABARES State of the Forest Report (updated 2023)

Note: The figures may not reflect recent policy changes in Victoria and Western Australia. As both states have recently ceased native forest harvesting on multiple-use public forests, they are excluded from benchmarking or direct comparison with Queensland in this report.

From Table 1, several key insights emerge:

- Queensland has by far the largest area of leasehold native forest in Australia, at 27.43 million ha, more than half its total forest estate.
- Queensland is an outlier in both total forest area and its reliance on leasehold and private tenures for timber harvesting, reflecting distinct governance and land use settings.
- Other states, particularly NSW and TAS, demonstrate a stronger emphasis on consolidated public forest management and conservation tenures.

The substantial extent of leasehold land in Queensland, and specifically within the South & Central Queensland Forestry Hub, raises important strategic considerations. Areas with high value cypress pine resource are at a growing risk of diminished access to State-owned timber assets as leasehold-to-freehold conversions increase. Where FCAs are not established or enforced, commercial timber rights may be lost.

This trend underscores the need for a strategic review of the current lease conversion process, FCA implementation, and forest asset retention policy to safeguard the long-term availability of native timber resources in the region.

2.3 Leasehold-to-Freehold Conversion Framework

2.3.1 Overview

As part of Queensland's land management framework, leaseholders on certain types of State land may apply to DNR to convert their leases to freehold under the *Land Act 1994*. In doing so, DNR must account for any commercial timber resources that exist on the land, a process that requires input from DPI Forestry.

When an application to freehold is made, DNR assesses the proposal and consults DPI Forestry to establish if commercial timber is present or likely to be present. This includes products from hardwood, cypress pine, and sandalwood. These products are considered State-owned assets under the *Forestry Act 1959*, and the State may wish to retain rights to them, even after the land becomes freehold.

To do this, the Queensland government established an FCA as a condition of freehold conversion. The FCA is a mechanism that allows the State to retain ownership of forest products on the land while transferring the underlying land tenure to the private landholder. This arrangement is formalised through the FCA, a binding legal document that is registered on the title as a profit à prendre. It is not negotiable.

Note, A profit à prendre is a legal right to enter someone else's land and take something from it. In the context of forestry and land tenure, it allows the holder of the profit (e.g., the State) to extract a natural resource such as timber, from land that they do not formally own.

The FCA can apply to the entire lease or just a portion. If it covers only part of the land, the landholder must engage a licensed surveyor to prepare a plan, either a formal survey or a sketch plan delineating the FCA boundaries. This plan must be approved by DPI Forestry and be included in the agreement documents.

Once in place, the FCA outlines several important rights and obligations. The landholder retains the right to use the land, including areas under the FCA, for lawful purposes such as grazing, provided land use does not interfere with State-owned Forest products or hinder DPI Forests access for future harvesting. Landholders may harvest up to 20 cubic metres of timber per year from a list of on-property commercial species for self-use but cannot sell or otherwise commercialise this timber. Any interference with forest products, even accidental damage, must be reported.

Importantly, landholders are also restricted from entering into other agreements, such as those involving carbon farming, biodiversity conservation, or mining, which might affect the FCA, without the written consent from the Queensland Government. This ensures the Governments timber assets remain protected.

On the other side of the agreement, DPI Forestry retains the right to access the land at reasonable times to manage or harvest forest products. This includes issuing sales permits to third-party contractors (known as permittees), who may harvest commercial timber from the FCA on behalf of the Queensland Government. DPI Forestry is responsible for coordinating these activities, notifying landholders in advance, and ensuring that permittees follow appropriate standards, including biosecurity controls and infrastructure repair obligations if damage occurs beyond normal wear and tear.

In cases where no FCA is required as part of the conversion process, for instance, low timber value or limited extent, the landholder may be asked to pay for the timber value as part of the freeholding price. In rare situations, the State may arrange to harvest the timber prior to conversion and offer the landholder a nil value assessment.

The following table outlines the typical pathways for leasehold land containing commercial timber. It compares scenarios based on whether a timber valuation is required, whether a FCA is applied, whether the State retains timber rights, and whether the landholder is liable to pay for the timber resource.

Table 2: Summary Table - Valuation Pathways

Scenario	Timber Valuation Required?	FCA Applied?	Timber Rights Retained by State?	Landholder Pays for Timber?
Commercial timber present, no FCA	✓ Yes	✗ No	✗ No	✓ Yes (based on valuation)
Commercial timber present, FCA applied	✗ No	✓ Yes	✓ Yes	✗ No (State harvests later)
Timber harvested to nil value before conversion	✗ No	✗ No	✗ No	✗ No

Overall, the FCA framework aims to provide a structured approach to balance the State's interest in native forest resources with landholders' interests in secure, long-term property rights. It aims to ensure continued access to commercial timber from native forests while respecting private land use and can play a significant role in maintaining the timber supply chain, particularly in regional Queensland where such forests remain economically and ecologically significant.

2.3.2 Valuation process

A commercial timber valuation is triggered under the following conditions:

- An application has been made to convert leasehold land to freehold
- Commercially harvestable timber is present on the lease
- No FCA is to be established over the land
- The timber has not been harvested recently by the State to the point where residual value is negligible.

Valuation Methodology (Steps)

To avoid cost and delays associated with detailed field-based forest inventories, DPI Forestry adopts a streamlined, desktop-based valuation approach. This process draws on multiple data sources to assess commercial timber potential, aiming to provide a conservative but practical estimate of timber value based on current market conditions, harvest potential, and site accessibility.

Assessment Process

The assessment methodology has been in place since 2013/14 guided by DPI Forestry fact sheets. The overall process includes the following steps:

- Application submission is made through the Department of Natural Resources, Mines, Manufacturing, and Regional Rural Development.
- Referral to DPI Forestry occurs where leasehold land is involved, triggering assessment of potential timber interests under the *Forestry Act 1959*.
- Resource evaluation uses a range of spatial and historical tools, including:

    - DPI Forestry ArcGIS layers
    - Aerial imagery and historical air photos
    - Regional Ecosystem mapping
    - Harvest planning systems and plot data
    - Management Unit Identifier (MUID) data
    - Previous harvest volumes
    - Local ranger knowledge
- Note: Timber Queensland consultation occurs if a MUID listed in a Schedule 10 sales permit appears to hold no State timber interest and is proposed for removal.
- Assessment of unmapped areas involves remote sensing analysis (visual only) to determine if the land holds commercial timber value. Adjoining forest data may also inform this step.
- Decision-making is based on a combination of spatial data and past resource knowledge. If MUID data is incomplete or ambiguous, local DPI Forest Rangers may be consulted and asked to conduct in-field assessments to verify standing timber volume.
- Precautionary principles are applied where assessment outcomes are marginal. If the area is considered likely to contribute to current or future timber supply agreements, an FCA is recommended.
- Without prejudice valuations are prepared where commercial timber products (e.g., rosewood posts) are not linked to State sale agreements. In these cases, a DPI Forest Ranger may estimate standing volume to inform the purchase price.

Key Data Sources

- Satellite imagery is used to identify and delineate forested areas.
- Regional Ecosystem (RE) and vegetation management datasets inform species composition and forest productivity.
- Local harvest records from adjacent State Forests or leasehold lands benchmark expected volumes and species.
- Existing reports and field observations are incorporated from prior assessments by DPI or other agencies.
- Consultation with regional DPI Forestry staff may provide localised insights where desktop data is limited.

Other Considerations

- The current assessment methodology does not incorporate non-timber forest products, including carbon credits or biodiversity values.
- However, if an application references such values, DPI Forestry will be notified. These competing land uses may warrant future inclusion in valuation frameworks, depending on policy evolution.

Basis of Valuation

- The value is determined at the date the application to convert the lease is formally received.
- It reflects the standing timber value, that is, the value of timber at stump prior to harvest, less allowances for extraction costs, marketability, and haulage constraints.

- Market rates are drawn from regional stumpage pricing data for comparable species and log grades.

This valuation is typically issued 'without prejudice' to the landholder and used to calculate the compensation payable if timber rights are to be extinguished. The commercial timber value forms part of the purchase price to convert the lease to freehold as detailed in the *Land Act* and Regulation.

Thresholds for FCA Requirement

No formal references to timber volume thresholds for FCA requirements were identified in publicly available literature when compiling this report. However, through stakeholder consultation, DPI Forestry advised that two key thresholds are used to guide whether an FCA is applied:

- A standing volume of 500 cubic metres or more of hardwood or cypress sawlogs; or
- A lower threshold of 250 cubic metres where the application area adjoins other known or mapped sawlog resources.

These thresholds are not rigidly applied as a volume per hectare. Instead, volume density is assessed in the context of forest extent and whether it supports a commercially meaningful timber supply. Areas of non-remnant vegetation, such as scattered paddock trees or sparse regrowth are excluded from the assessment.

Valuation Methodology and Market Considerations

It is important to note that the FCA thresholds do not determine when DPI Forestry provides a timber valuation, they only guide consideration of whether an FCA is required. Where an FCA is not applied, DPI Forestry must provide a commercial valuation of the standing timber, issued in writing to the landholder. Rather than using real-time market prices, DPI Forestry uses a consistent administrative pricing system, which includes:

1. A base value per tonne assigned by species group and region.
2. A haulage deduction, calculated as the theoretical transport cost from the stump to the nearest processing mill (or indicative regional location).

For example, if the base value for cypress sawlogs in a region is $87 per tonne and the estimated haulage cost is $35 per tonne, the final assigned royalty value is $52 per tonne. Note that this example was provided by DPI Forestry.

The administrative pricing is informed by product market values. DPI supplies around 90% of all cypress and nearly 50% of all hardwood in Queensland under administrative pricing. In this context, DPI Forestry considers the administrative value to be the best indicator of relevant market value.

Landholder Options

Once the valuation is issued:

- If the landholder accepts the valuation, they must confirm this in writing and agree to waive rights to judicial review or appeal through the Land Court. The conversion process can then proceed.
- If the landholder disputes the valuation, DPI Forestry will conduct a second, more formal valuation assessment. However, the original application date remains the reference point

for valuation, and the freehold conversion process is placed on hold until a revised value is agreed.

- This more formal valuation assessment is typically a site inspection from a local forest ranger, occasionally but not routinely, this will include plot measurements to verify the estimated timber volumes.

Alternative: Harvest to Nil commercial volume

In some cases, DPI Forestry may choose to harvest the commercial timber prior to conversion to freehold, reducing the standing timber value to nil. This removes the need for a timber valuation or FCA registration, simplifying conversion for the landholder. This approach does not account for future growth and transfer that benefit to the landholder.

Valuation in the FCA Context

Where the State retains timber rights post-conversion via a Forest Consent Area (FCA), no upfront valuation is required. Instead, the Queensland Government registers a profit à prendre on the freehold title, preserving access to future timber harvesting. In this case:

- The timber may be harvested in the future under a sales permit issued by DPI Forestry.
- The landholder does not pay for the standing timber.
- Compensation may still be paid to the landholder for operational impacts (e.g. fencing, pasture disruption) or share of royalties if agreed under the FCA.

2.4 Assessment of Resource Losses from Natural Disturbances

Natural disturbances such as bushfires, droughts, cyclones, and severe storms increasingly threaten forest resources in Queensland. The economic, environmental, and social values embedded in these forest ecosystems depend on accurate identification and quantification of losses from such events. In the context of this report and the current method to assess resources loss from natural disturbance, three points are offered for consideration:

- The need to understand the location, condition, and commercial viability of forest resources before disturbances.
- The evaluation of the operational and economic feasibility of salvage harvesting.
- Investigating how deficiencies in assessment methods affect claims under force majeure provisions, insurance policies, and carbon market obligations.

This review highlights some gaps in Queensland's current practices relative to other Australian states and outlines pathways for improvement.

2.4.1 Location and Commercial Viability of Resources Before Disturbances

Importance of Pre-Disturbance Baseline Data

Resource loss assessment fundamentally requires knowledge of what was lost. This means quantifying and mapping forest resources before disturbance occurs, encompassing:

- Spatial location and extent of forest stands
- Species composition and age class distributions
- Timber volumes, product quality, and commercial grade

- Accessibility, operability, and market dynamics
- Historical disturbance and regrowth patterns affecting stand resilience and timber quality.

Such data underpins valuation of assets, informs salvage decisions, and enables accurate claims for loss recovery. In Queensland, several factors restrict the availability and reliability of pre-disturbance baseline data:

- *Lack of Systematic Inventory:* Queensland does not maintain a rolling forest inventory program on public or leasehold land. Existing data are often legacy datasets collected for specific projects or legacy forestry management information that may not reflect current forest conditions.
- *Fragmented Data and Spatial Gaps:* Forest extent and condition mapping rely on a patchwork of remote sensing products with variable resolution and currency. These datasets are rarely integrated with commercial forestry data or disturbance history.
- *Absence of Market-Linked Valuation:* Queensland lacks an integrated system linking inventory data with timber markets and economic valuation frameworks. Without this, assessments cannot reliably estimate pre-disturbance commercial value.
- *Poor Historical Disturbance Integration:* Prior events such as high-intensity fires or drought stress are not spatially tracked or included in resource assessments, limiting understanding of forest health and vulnerability.

Impacts of Data Deficiencies

The consequences of these data limitations are profound:

- *Uncertain Asset Valuation:* Without reliable baselines, losses are difficult to quantify, reducing confidence in valuation during leasehold-to-freehold conversions or sale transactions.
- *Ineffective Risk Management:* Fire prevention and fighting agencies cannot prioritise high-value or high-risk forest stands for asset protection, leading to inefficient use of limited resources. Environmental assets receive a higher priority for protection than timber resource assets.
- *Impaired Recovery Planning***:** Lack of detailed pre-disturbance data delays planning for restoration, replanting, or salvage harvesting, increasing economic loss.

2.4.2 Feasibility of Salvage Harvesting

Role and Benefits of Salvage Harvesting

Salvage harvesting enables recovery of economic value from disturbed forests by extracting usable timber before degradation occurs. It can also reduce fuel loads, mitigate fire risk, and support regeneration efforts.

Effective salvage depends on:

- *Rapid and Accurate Damage Assessment:* Determining severity, spatial extent, and timber quality.
- *Logistical Feasibility:* Assessing access routes, terrain, and operational constraints.
- *Economic Viability:* Evaluating timber market conditions, salvage costs, and product suitability.

- *Regulatory Compliance:* Navigating environmental protections, cultural heritage considerations, and safety requirements.

Challenges in Queensland Salvage Operations

Queensland faces multiple barriers to effective salvage harvesting:

- *No Formal Salvage Framework:* Queensland appears to lack standardised protocols or guidelines defining salvage triggers, prioritisation, or assessment processes.
- *Reactive Rather Than Proactive Approaches***:** Salvage activities occur on an ad hoc basis (or not at all), often delayed due to absence of coordinated damage assessments and decision-making tools.
- *Market and Operational Uncertainty***:** Timber markets for salvage material can be unpredictable, and operational costs are often higher due to terrain or safety challenges.

Consequences of Salvage Limitations

- *Economic Losses:* Failure to salvage timely leads to decay and loss of timber value.
- *Increased Fire Risk*: Accumulated deadwood may fuel subsequent fire events.
- *Missed Regeneration Opportunities:* Lack of salvage delays restoration, hence future timber supply.

2.4.3 Implications for Force Majeure, Insurance, and Carbon Claims

Importance of Robust Assessment Methods

Force majeure provisions require demonstrable evidence of loss. This includes:

- Clear documentation of pre-disturbance conditions and value
- Transparent, repeatable post-disturbance damage assessments
- Linkage of losses to specific disturbance events, excluding confounding factors.

Robust assessment methodologies strengthen claims, expedite compensation, and reduce dispute risk.

Table 3: Key Gaps in Queensland Resource Loss Assessment Framework

Gap	Description	Consequence
Lack of routine, spatially explicit forest inventory	No ongoing, statewide system to track forest resources	Poor baseline for loss quantification and valuation
Outdated and non-integrated disturbance mapping	Limited real-time or high-resolution fire, drought, storm data linked to forest assets	Incomplete understanding of risk exposure and damage extent
Absence of standard salvage assessment protocols	No agreed guidelines or processes for damage assessment and salvage feasibility	Delays and lost economic value in salvage operations
Limited fire management role for forestry agencies	DPI Forestry lacks formal firefighting authority and operational role	Fire impact assessments inconsistent or delayed

Gap	Description	Consequence
No standardised loss valuation methodologies	Assessment methods risk inclusion of inaccurate date, lacking consistency, and transparency	Weak force majeure claims
Limited integration with market conditions	Market variability not routinely incorporated in assessments	Economic feasibility of salvage or restoration unclear

2.4.4 Pathways for Improvement

Addressing these gaps will require coordinated actions. For consideration:

- Develop a rolling forest inventory program integrating remote sensing and ground sampling tailored for Queensland's diverse forest types.
- Enhance disturbance mapping capabilities through satellite imagery, UAV surveys, and integrated data platforms. (Refer to example supplied in Appendix 3).
- Establishing formal salvage assessment protocols, including damage classification and operational decision tools.
- Improving data integration and accessibility via centralized databases or GIS portals accessible to government, lessees, and industry.
- Clarifying agency roles and responsibilities in post-disturbance assessment, potentially through inter-agency agreements.
- Streamlining regulatory processes to facilitate salvage and recovery operations on leasehold and public lands.

3. PART C – Stakeholder Engagement

3.1 Stakeholder Consultation

Effective delivery of this project relied on targeted engagement with stakeholders that are directly involved in or affected by commercial forest assessments and leasehold-to-freehold land conversions in Queensland. The consultation process was designed to gain insights from agencies and industry groups with operational responsibilities, policy influence, or commercial interests in forest resource valuation and management. Stakeholder input was essential to ensure the review addressed practical, legal, economic, and sustainability considerations and reflected on-ground realities.

Stakeholder consultations were conducted through structured interviews and targeted discussions between April and May 2025. The engagement focused on stakeholders with direct experience in forest assessment, land tenure administration, timber supply chain operations, and resource policy implementation. The following groups were actively consulted:

Queensland Department of Primary Industries (DPI Forestry):

DPI Forestry is responsible for the administration of long-term timber supply agreements and Forest Consent Areas (FCAs). Engagement with departmental staff provided critical insight into the current commercial forest assessment methods, policy priorities, operational challenges, and resourcing limitations. DPI Forestry also articulated the importance of maintaining timber supply security amid increasing rates of leasehold conversions and shared emerging directions under the Future Timber Plan.

Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (Land Services):

As the agency responsible for leasehold land administration and conversion to freehold, DNR offered important perspectives on the regulatory framework, procedural requirements, and current trends in tenure reform. Their input clarified how forest assessments intersect with statutory decision-making and what constraints affect tenure conversions involving forested land.

Timber Queensland:

As the peak industry body representing the interests of the native and plantation timber industry in Queensland, Timber Queensland provided feedback on the adequacy of current assessment practices and their implications for timber security, commercial investment, and the sustainability credentials of forest products. They also highlighted industry priorities regarding certification and market access.

Cypress Milling Industry Representatives (Private Operators):

Operators active in the harvesting and processing of cypress pine were engaged to understand the operational realities of timber supply, regional variability in forest condition, and the commercial risks posed by under-assessed resource areas. These stakeholders expressed a high level of concern about declining access to commercially viable cypress stands and the lack of comprehensive resource data in marginal areas.

Additional Stakeholder Groups Considered (but not formally consulted in this phase):

While landholders, Indigenous groups, local government representatives, and academic institutions were identified in the Stakeholder Consultation Plan (Appendix 1) as relevant to the broader context

of tenure reform and forestry assessment, they were not directly consulted during this project phase. (Refer to Appendix 1 – Stakeholder Consultation Plan)

3.2 Feedback Summary and Analysis

Stakeholder consultations undertaken aimed to better understand the current methods used to assess forest resources on leasehold land, identify constraints in the valuation process, and explore the policy and operational context surrounding leasehold-to-freehold land conversion. The findings provided critical insight into the complexities of balancing state timber supply obligations with broader land tenure reforms.

Context and Purpose

DPI Forestry emphasised that any tenure changes affecting forested leasehold land must be carefully considered in the context of Queensland's long-term timber supply agreements. Current contracts extend to 2037 in cypress regions and 2034 for western hardwoods, with Southeast Queensland under review as part of the forthcoming Future Timber Plan.

The department highlighted the importance of maintaining Forest Consent Areas (FCAs) on converted freehold land to safeguard ongoing supply, noting that a significant portion of commercial harvesting is now sourced through these agreements. Stakeholders widely supported the need for a clear and consistent assessment process, particularly given harvesting has occurred in some areas where FCAs were not applied, highlighting the need for transparent, well-documented procedures to ensure long-term timber supply security.

Assessment Methods and Technical Limitations

Forest resource assessments currently rely on desktop analyses using a mix of spatial datasets (e.g. ArcGIS Pro, aerial imagery, Regional Ecosystem mapping, Management Unit Identifiers) and historical harvesting records. Field inspections are used sparingly, primarily where remote data is inconclusive or where Management Units overlap with active supply agreements.

Stakeholders, including Timber Queensland and cypress millers, expressed concern that the current methods are often inadequate, particularly in marginal areas or where data is outdated. The accuracy of existing mapping for disturbances like fire and drought is variable, with cypress forests being particularly vulnerable and under-represented in recent resource assessments.

Governance and Resourcing

The governance of forest assessments and land tenure decisions is divided. DPI Forestry oversees timber sales and advises on FCA requirements, while the DNR manages lease administration and tenure conversion. Timber Queensland and Indigenous communities are consulted as required, but concerns were raised about limited transparency and coordination across agencies. A recurring theme was the need for increased resourcing, both in terms of skilled personnel and technical tools, to ensure more accurate, consistent, and defensible assessments. Several stakeholders noted that the erosion of forestry expertise over time has constrained the State's ability to meet both its commercial and stewardship responsibilities.

Policy Settings and Tenure Reform

Queensland Government policy broadly supports the conversion of leasehold land to freehold where it aligns with the "most appropriate use of the land," as defined under the *Land Act 1994* and relevant guidelines (e.g. SLM/2013/397). This reflects a long-standing effort to simplify land

administration and promote landholder investment. However, this policy direction introduces tension between economic development goals and the state's obligation to maintain timber supply and ensure sustainable forest management. FCAs offer a compromise, enabling freehold conversion while retaining timber rights.

While the conversion of leasehold to freehold tenure does not technically preclude future timber harvesting, it often leads to a shift in land use priorities. Once landholders gain full ownership, they typically focus on activities that align more directly with their primary business objectives, most commonly grazing and agricultural production. Forestry, particularly native forest management, is often viewed as a lower-priority or less economically attractive land use under freehold arrangements due to longer return periods, regulatory complexity, and limited market incentives.

As a result, even where commercially valuable timber remains on freehold land, it may go unharvested, degraded, or actively managed in a way to make way for pasture improvement. This behavioural shift has implications for the continuity of native timber supply and underlines the importance of appropriate forest value recognition and management incentives during the conversion process.

3.2.1 Industry Concerns and Future Needs

Land tenure conversion from state owned leasehold to freehold changes the risk profile for native forests and industry long term investment planning. Under State leasing arrangements timber rights are maintained. Under freehold, even with a FCA there is often no incentive for the owner to prioritise forest management via increase forest growth or reduce forest fire hazard risk exposure.

The cypress industry in particular voiced concern about the risk to future supply if assessments continue to underestimate commercial value or allow conversion without FCAs. The value of cypress is rising yet may not be fully reflected in current methods or future pricing. There is also concern that government policy is too focused on short-term supply agreements and lacks a longer-term vision for sustainable forestry. Stakeholders called for more proactive forest stewardship, inventory work, better use of available technologies, and a shift toward planning horizons that consider 25 plus years of forest productivity.

DPI Forestry noted that while comprehensive single point in time inventory is currently underway in North and Central Queensland, these efforts have not yet extended to cypress regions. As the inventory expands, it will provide a more robust evidence base for valuation and planning decisions, provided the data is routinely updated, includes analysis of log quality due to fire history, and aligned with operational assessments.

3.2.2 Key Insights for Stakeholder consultation

Consultation with stakeholders revealed several recurring themes and structural challenges affecting the management and future of native forest resources in the South & Central Queensland region. These insights reflect practical experiences with forest valuation, leasehold-to-freehold conversion, and the use of Forest Consent Areas (FCAs), as well as broader concerns about governance, data reliability, and market access.

The feedback highlights both the strengths and limitations of the current system, and points to opportunities for more coordinated, transparent, and future-ready approaches to forest resource assessment and land use planning. The following key insights provide a foundation for policy review and targeted engagement across the sector.

- The current approach to forest resource assessment is cost-effective but constrained by outdated data and inconsistent field verification.
- Governance arrangements limit coordination and transparency, particularly where decisions involve competing land use objectives (e.g., grazing vs. forestry).
- FCAs are a practical tool to balance tenure reform with timber supply commitments, but their use must be underpinned by reliable resource data.
- Stakeholders broadly support a more systematic, better resourced, and future-oriented approach to forest assessment and land valuation.

3.3 Gaps and/or areas identified for improvement

The stakeholder engagement process and analysis of the existing assessment frameworks revealed several critical gaps and areas for improvement to better align forest resource valuation and tenure conversion processes with government policy objectives and industry expectations.

Data Limitations and Outdated Assessment Methods:

Current reliance on desktop analysis with limited field verification reduces the accuracy of forest resource assessments, particularly in cypress forests. Outdated spatial datasets and infrequent ground-truthing impede reliable valuation, especially in areas affected by natural disturbances like fire and drought.

Insufficient Consideration of Natural Disturbances:

Assessment methodologies inadequately incorporate the impact of natural disturbances on timber volume and quality, leading to potential underestimation of losses and salvageable resources. This weakens the basis for land conversion decisions and complicates claims related to Force Majeure events.

Resourcing Shortfalls and Expertise Decline:

Inadequate funding to enable more accurate assessments, a growing shortage of skilled personnel, and insufficient technical tools undermine the capacity to conduct comprehensive, updated inventories and valuations with field-based verification. The erosion of institutional forestry expertise constrains the State's ability to respond effectively to emerging challenges and meet commercial and stewardship obligations.

Legal and Policy Tensions Affecting Forest Product Access:

The success of FCAs as a mechanism to retain timber rights post-conversion depends heavily on defensible and accurate resource data. Policy emphasis on freehold conversion creates uncertainty regarding timber supply security, particularly where landholders prioritise alternative uses such as grazing.

Short-Term Planning Horizons:

Current forest valuations are based primarily on standing timber volume at the time of assessment, with little or no consideration given to the future productive potential of the forest if managed well for experienced foresters. This narrow focus may lead to undervaluation of forested land, discourage investment in sustainable native forest management, and limit opportunities to align tenure reform with long-term resource planning.

Underutilization of Technological Advancements and Inventory Expansion:

Though new inventory programs are underway in some regions (notably North and Central Queensland), critical areas such as cypress forests remain under-assessed. There is a clear opportunity to leverage advances in remote sensing, GIS technologies, and systematic inventory methodologies to generate more accurate, timely, and actionable data.

4. Part D – Benchmarking

4.1 Other Australian States

To better understand the strengths and limitations of Queensland's forest assessment and tenure conversion processes, it is useful to compare them with approaches taken in other jurisdictions. This benchmarking focuses on New South Wales and Tasmania, both of which have mature native forest industries, well-developed governance structures, with established systems for resource assessment, tenure management, and market access (Note that Victoria and Western Australia are not included due to recent policy changes and ceasing native forest harvesting on State forests).

While Queensland is unique in its active conversion of leasehold land containing native forests to freehold tenure, NSW and Tasmania offer instructive contrasts, particularly in terms of how public forests are managed and how long-term native forest product supply is secured. These comparisons provide useful insights into opportunities for potential reform and alignment in Queensland, especially in areas such as interagency coordination (or governance) and data modernisation. The following table offers a comparison between the States.

Table 4: Benchmarking - Legislative and Tenure Framework

Aspect	Queensland (QLD)	New South Wales (NSW)	Tasmania (TAS)
Governance, Certification and Market Access			
Governance Model	Split responsibilities across departments (e.g., DPI, DES, DNR). Partial integration.	Forestry Corporation of NSW (FCNSW) is a state-owned enterprise. Policy oversight by NSW DPI and EPA.	Sustainable Timber Tasmania (STT) is a state-owned enterprise with operational and planning responsibility.
Certification	State-managed land is certified. Leasehold not eligible for certification. Private forests may be certified independently.	State forests are certified. Private forests may be certified independently.	State forests are certified. Private forests may be certified independently.
% Market Supply from Leasehold	Approx. 20–30% of native timber supply.	Minimal. Most supply from State Forests.	Minimal. Most supply from public land (PTPZL).
Legislative and Tenure Framework			
Tenure Conversion Mechanism	Leasehold-to-freehold conversion under *Land Act 1994*. Timber interests assessed under *Forestry Act 1959*.	Freehold conversion possible, but rare for productive forest land. Most high-value forests remain as State Forests.	Conversion of productive forest land is rare. High-value forests remain as Crown land or PTPZL.
Retention of Timber Rights	Forest Consent Areas (FCAs) allow State timber rights to be retained post-conversion.	Not typically applicable. Timbered land remains under Crown tenure. Timber rights on freehold land are privately managed.	Timber rights on Crown land retained by STT unless formally transferred. Private landholders manage timber rights on freehold land.
Valuation Basis	Based on conservative desktop estimate of standing volume. Market	Formal valuations uncommon. Long-term resource managed through strategic planning.	Formal valuations uncommon. Long-term resource managed through strategic planning.

Aspect	Queensland (QLD)	New South Wales (NSW)	Tasmania (TAS)
	valuation not always applied.		
Forest Resource Assessment			
Assessment Method	Primarily desktop based. Limited field verification. North and Central inventories underway but exclude cypress.	Combines LiDAR, permanent growth plots, and spatial models. Informs zoning and sustainable yield planning.	Continuous forest inventory and GIS-based modelling support long-term planning across PTPZL.
Data Currency	Often outdated. No systematic update framework.	Regularly updated. Supports sustainable yield calculations and forest zoning.	High-quality, up-to-date data underpins certification and resource planning.
Assessment of Future Potential	Future productivity not considered in valuation.	Future forest potential incorporated into zoning and supply modelling.	Future productivity modelled and integrated into harvest planning.
Resource Protection			
Fire	Department of Primary Industries (DPI) is not a designated firefighting authority. Fire management rests with landholders or QFES.	FCNSW is a designated firefighting authority. Leads fire suppression and recovery within State Forests.	STT is a designated firefighting authority. Integrates fire response, disturbance mapping, and asset protection planning.

4.1.1 Key Insights

The comparative analysis of Queensland, New South Wales, and Tasmania reveals several strategic lessons and areas for potential reform in Queensland's approach to native forest management and tenure conversion.

Queensland's tenure model is unique and exposed to long-term forest resource loss.

Queensland is the only jurisdiction actively converting leasehold land containing native forests to freehold tenure at scale. To preserve timber access post-conversion, it relies on FCAs, a mechanism (or similar) not often applied in NSW or Tasmania. Valuable forest land in these states are retained under enduring Crown tenure. This structural difference places Queensland at greater risk of long-term native forest resource loss, especially where FCAs are not triggered or enforced.

Forest Consent Areas provide ongoing access but limited management incentives

FCAs allow the State to retain timber rights in perpetuity following freehold conversion, securing long-term access for harvesting. However, they do not impose best management obligations on landholders, and in practice, most landholders do not receive a financial return for maintaining forests under FCAs.

In NSW, leasehold conversion occurs rarely and when it does, it's primarily in lower-value western cypress areas. Most NSW productive forests remain publicly managed. Tasmania similarly retains productive forests within the Permanent Timber Production Zone Land (PTPZL), avoiding the need for transitional instruments altogether.

NSW and Tasmania benefit from integrated governance and modern inventory systems.

Both jurisdictions have consolidated forest agencies (FCNSW and STT) with responsibility for planning, operations, and fire management. These agencies maintain up-to-date forest inventory systems, including LiDAR and permanent growth plots, enabling long-term sustainable yield modelling. Queensland's more fragmented governance and reliance on outdated datasets limit the accuracy of timber valuations and planning decisions.

Forest certification underpins market access and sustainability credentials.

NSW and Tasmania maintain forest certification across their public estate, supporting domestic and international market access and reinforcing sustainable forest management. In Queensland, certification is not available for leasehold forests, and private forest certification is voluntary and uncommon, limiting the competitiveness of Queensland's native forest products.

Queensland's valuation approach is narrowly focused on present volume.

Current valuation methods in Queensland rely on desktop estimates of standing volume at the time of application, with limited consideration of future growth, carbon sequestration, or broader ecosystem services. In contrast, NSW and Tasmania embed valuation within strategic planning frameworks (on State forests) that account for long-term productivity and resource potential.

4.2 International Benchmarking - Forest Tenure and Management

To place Queensland's forest tenure framework in a broader policy and management context, we reviewed public forest governance models from three international jurisdictions, British Columbia (Canada), Germany, and Finland. These countries were selected for their structured approaches to public land management, native forest use, and long-term resource security.

Each jurisdiction offers contrasting mechanisms for allocating, managing, and deriving value from publicly owned forests. While all three share strong institutional arrangements, legislative mandates for sustainability, and increasing recognition of Indigenous rights, their models differ significantly in how forest access is granted and how public outcomes are delivered.

British Columbia (Canada)

British Columbia (BC) has a well-established and clearly defined forest tenure system, where the rights to access, manage, and harvest public forest lands are formally granted through legally binding licences and agreements. This system is governed by detailed legislation and regulations that specify the responsibilities of tenure holders, such as sustainable forest management, reforestation, and infrastructure maintenance, ensuring that forest use is managed transparently, consistently, and in accordance with long-term ecological and economic objectives.

Approximately 94% of BC's Forest estate is publicly owned (Crown land) and administered by the provincial government under their *Forest Act*. A range of tenure types, including Tree Farm Licences, Forest Licences, and First Nations Woodland Licences, grant either area-based or volume-based rights to harvest and manage forests. These licences vary in exclusivity and duration (typically 5–25 years), but all include obligations for sustainable forest management, reforestation, and infrastructure development.

A notable feature of the BC system is the growing emphasis on Indigenous engagement and co-management, formalised through mechanisms such as the *Declaration on the Rights of Indigenous*

Peoples Act and the expansion of First Nations-specific tenure forms. Tenure reform is a current policy focus, aimed at redistributing rights, increasing local control, and addressing ecological risks such as wildfires and pest outbreaks.

BC also employs a two-step forest valuation method, where property tax is first assessed on the bare land value and later adjusted to include the value of harvested timber. This approach promotes long-term investment and aligns taxation with actual forest productivity.

Germany

Germany manages its forests through a decentralised, ownership-based governance model, in which forest rights and responsibilities are determined by ownership status rather than by time-bound tenure agreements. Approximately 52% of the forest estate is publicly owned, held by state governments (Länder), municipalities, or the federal government, while the remaining 48% is privately owned, often in small family holdings. The Länder are responsible for enacting forest legislation and overseeing sustainable forest management, primarily through state forest enterprises.

Unlike jurisdictions such as British Columbia, Germany does not allocate harvesting or management rights on public land to third parties through licences or leases. Instead, public forest agencies manage their own lands, and private owners directly manage their forests, subject to legal requirements. These include obligations to regenerate harvested areas, protect soil and water resources, and provide for multiple-use functions such as biodiversity, recreation, and timber production.

German forest policy strongly reflects the principle of multifunctionality, requiring forests to deliver ecological, economic, and social benefits. Most public forests are certified under PEFC or FSC standards, and forest planning is supported by comprehensive national forest inventories and regulatory oversight. While Germany does not recognise Indigenous land rights in the same way as countries like Canada or Finland, its long-standing community forest traditions provide mechanisms for local participation and benefit-sharing.

Finland

Finland's forest governance model combines a large private forest estate with a strategically coordinated approach to public forest management. Approximately 60% of Finland's forests are privately owned, mostly by individuals and families. These private owners make their own management decisions but operate within a strong institutional framework that provides support through advisory services, forest owner associations, incentive programs, and planning tools. This enables widespread adoption of sustainable practices and ensures alignment with national forest policy goals.

Around 26% of Finland's forests are publicly owned and managed by Metsähallitus, a state enterprise. Metsähallitus is responsible for managing public forests according to dual mandates, it oversees commercial timber production in designated state production forests and ensures the protection of biodiversity and cultural values in conservation areas. In northern Finland, this includes recognition of the traditional land use rights of the Indigenous Sámi people, with forest planning processes designed to accommodate reindeer herding, cultural heritage, and subsistence uses alongside other land uses.

The remaining 14% of Finland's forests are owned by municipalities, religious institutions, joint forest associations, and other public or semi-public bodies, which manage forests for local income,

conservation, education, and recreation. These forests are generally subject to the same regulatory frameworks and sustainability obligations as other ownership categories.

Forests play a central role in Finland's national bioeconomy strategy, supporting innovation in materials, renewable energy, and carbon markets. Their *Forest Act* provides regulatory certainty, including mandatory regeneration after harvest and environmental safeguards. Forest planning is underpinned by regularly updated national forest inventories, which inform both private and public decision-making. The result is a high level of transparency, long-term resource security, and broad public trust in forest governance.

4.3 Queensland in Contrast

Queensland's forest governance model is uniquely shaped by its extensive leasehold land system, whereby the State retains ownership of the land but grants long-term, often exclusive, land use rights to lessees, primarily for pastoral purposes.

These forested leasehold areas are generally not managed to maximise timber production, biodiversity, or cultural values, unless specific agreements or regulatory overlays apply. Instead, native forests are typically incidental to the primary land use of grazing and are managed largely at the discretion of the lessee. Although the State maintains a commercial interest in native forest products, it plays a minimal role in active forest management unless the land is formally designated as State Forest or Timber Reserve.

A key distinction lies in tenure and management instruments. In British Columbia, forest rights on Crown land are granted through defined, forestry-specific licences that include obligations for sustainable management and are governed by legislation. In Germany and Finland, public forests are directly owned and managed by state or municipal forest agencies, with clearly legislated mandates for environmental, social, and economic outcomes. By contrast, Queensland's leasehold model delegates land management to private lessees, without imposing forest-specific responsibilities or well managed stewardship expectations. The lease primarily governs land access, not forest use, and does not guarantee that native forests are managed as public assets.

This disconnect between public ownership and forest management outcomes limits Queensland's ability to strategically use its native forest estate to the maximum extent for timber production, carbon sequestration, biodiversity protection, or Indigenous partnerships. Without reform, the leasehold framework constrains public benefit from significant forested landscapes that remain under State ownership but outside the reach of coordinated public forest policy.

5. Part E – Discussion and Next Steps

There is a clear need to strengthen current forest assessment practices. Additionally, a policy shift to ensure ongoing stewardship of forests for future harvesting in leasehold areas could be considered. The recommendations outlined below focus on improving the rigour, transparency, and consistency of both desktop and field-based assessments. These actions aim to protect State-owned timber assets, enhance decision-making confidence, and support policy outcomes under the *Forestry Act 1959* and *Land Act 1994*. Importantly, they also provide a pathway to build a stronger business case for resourcing improvements, streamline inter-agency processes, and leverage technology to improve operational efficiency.

5.1 Strengthen the Business Case Through Cost/Benefit Analysis

Undertake a targeted cost–benefit analysis to evaluate the potential gains from refining the current commercial forest assessment approach. This desktop exercise should:

- Quantify administrative, operational, and policy risks under the status quo, including missed timber revenue, future growth, inconsistent valuation, or weakened policy credibility.
- Estimate the cost of implementing improvements (e.g. additional staff time, technology, training).
- Highlight efficiency gains, revenue protection, and better alignment with policy objectives (e.g. asset retention, transparency).
- Use findings to support a case for additional resources or inter-agency investment in resource assessment and verification processes.

5.2 Mandate Field Verification for All Assessments

Ensure field inspections are a mandatory component of all commercial forest assessments. This would:

- Ground-truth desktop findings and reduce uncertainty.
- Standardise how data is collected, improving auditability and comparability across sites.
- Support compliance with the *Forestry Act 1959* and *Land Act 1994*.

Key operational actions:

Further develop and communicate clear guidelines for minimum sampling thresholds, such as:

- Product-specific minimum harvest volumes (e.g. for sawlog, poles, salvage).
- Acceptable distance-to-market thresholds.

Provide Rangers with standardised field protocols, including:

- Plot location selection (randomised or stratified by forest type).
- Measurement techniques and sample intensity guidelines.
- Templates for recording and reporting field data.

5.3 Improve disturbance mapping

Enhance the accuracy and consistency of disturbance mapping to distinguish between permanent land use change and temporary or partial disturbance. This will:

- Ensure forest valuation reflects actual stand condition and recovery potential.

- Prevent underestimation of commercial volumes due to misclassification of regrowing or partially harvested forests.
- Improve equity and consistency in leasehold-to-freehold conversion decisions.

Suggested actions:

- Refine disturbance classification criteria (e.g. intensity, extent, time since disturbance).
- Incorporate multi-temporal satellite data and historical imagery to track disturbance and regrowth trajectories.
- Use disturbance maps as an input to prioritise field verification in uncertain or transitional areas.

5.4 Improve Guidance and Training for Field Staff (e.g. Rangers)

Develop clearer operational instructions to support consistency in field-based assessments. This may include:

- Updated field manuals and quick-reference sheets specific to native forest product types and regions.
- Interactive training modules for new staff or refreshers for existing personnel.
- Decision-support tools to assist in evaluating forest product marketability and access constraints.

This will improve confidence in assessments and support more transparent lease conversion decisions.

5.5 Leverage Available Technologies

Improve efficiency and accuracy of assessments through the better use of remote sensing and digital tools. This could include:

- High-resolution aerial imagery or LiDAR to support pre-field stratification and identify harvestable stands.
- Mobile data collection platforms (e.g. Survey123) for real-time field recording.
- Integration with spatial decision support systems (e.g. DROVER) to help prioritise inspection sites based on vegetation condition, cover, or tenure overlap.

Such tools can reduce costs, standardise assessments, and build a more defensible forest valuation framework. *Note a technology use case is presented in Appendix 3.*

5.6 Incentivise leasehold to maintain forests

Introduce targeted policy mechanisms that encourage leaseholders to retain native forest areas in good condition and actively manage them for multiple land uses, including sustainable timber harvesting. Capitalise on existing provisions in the *Forestry Act* that allow for this.

Most forested leasehold areas are currently underutilised for commercial forestry, despite their potential to contribute to long-term timber supply and broader landscape values such as biodiversity, erosion control, and carbon. Supporting leaseholders to manage these forests as productive assets will help reduce pressure on public native forest resources.

Appendix 1: Stakeholder Engagement Plan

Purpose of Engagement

The stakeholder engagement component of this project is a critical foundation for the review of QDPI methodologies used to assess the commercial status of cypress and hardwood forests on leasehold land. Given the legal, economic, and environmental implications of these assessments, particularly in the context of leasehold to freehold land conversion, it is essential to incorporate all perspectives and validate findings to offer suggestions for practical improvements in current processes.

This engagement plan outlines the approach taken to ensure inclusivity and transparency across all stakeholders.

Stakeholder Identification

Stakeholders are identified through a mapping process based on their influence, interest, legal responsibilities, or operational relevance to forest assessment. Prioritisation ensures that resources are directed toward those most affected by, or capable of influencing, outcomes.

The process focuses on stakeholders with a comprehensive understanding of QDPI Forestry's current approach or those directly impacted by its decisions. The scope of engagement is intentionally narrow to ensure the report remains focused on key issues.

The table below presents the stakeholder matrix and engagement priority:

Table 5: Stakeholder Matrix

Stakeholder Group	Level of Influence	Level of Interest	Engagement Priority
**SCQLD Regional Forestry Hub*	*High*	*High*	*High*
Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development	High	High	High
Queensland Department of Primary Industries	High	High	High
Forestry Industry	Med	High	High
Landholders (Leasehold)	Low	High	Low
Local Government Area (Shires):	Low	Low	Low
Indigenous Communities and Groups:	Low	Low	Low
Academic Institutions/Researchers:	Low	Low	Low

*Client is included as a stakeholder due to their direct influence on the project's direction, decision-making, and outcomes. Their engagement ensures alignment with project goals, facilitates timely feedback, and supports transparency and accountability throughout the process.

The stakeholder matrix is used to ensure the engagement strategy remains focused on high-priority stakeholders while maintaining a balance of perspectives between government and industry. Stakeholders with lower direct influence, such as academic institutions and Indigenous groups, are not targeted for engagement in this phase, though their perspectives may be considered in future stages or complementary processes.

Engagement Objectives by Stakeholder Group

The aim of engagement is to ensure stakeholders participate in ways that reflect their roles, responsibilities, and the expected impact of the project on their operations or interests. The following engagement objectives are identified for input into the analysis and final report.

Table 6: Engagement Objectives

Stakeholder Group	Engagement Objectives
SCQLD Regional Forestry Hub	• Ensure ongoing alignment on project scope, objectives, and deliverables. • Facilitate timely decision-making by maintaining open communication and providing the SCQLD with regular updates and key findings. • Incorporate SCQLD feedback and strategic priorities into the review process to ensure that outcomes are practical and relevant.
Queensland Department of Resources	• Understand current administrative processes related to land conversion. • Clarify how forest assessment outcomes inform legal and land use decisions. • Ensure alignment with tenure and land use policy frameworks.
Queensland Department of Primary Industries	• Review and validate existing forest assessment methods used for determining commercial viability. • Identify gaps in spatial and field-based methodologies. • Align assessment review with long-term timber agreements and policy commitments (e.g. Future Timber Plan).
Forestry Industry	• Understand how current assessment methods affect operational planning, investment, and supply chain dynamics. • Identify inconsistencies or inefficiencies in valuation of forest resources. • Encourage industry participation in the development of practical, future-ready methodologies.

Consultation Methodology

The consultation methodology will involve online meetings and interviews, with targeted follow-up engagement as needed. Stakeholder consultations will be structured to ensure feedback is gathered from each group according to their level of involvement and expertise. This approach facilitates informed decision-making and helps ensure the project delivers actionable recommendations.

Leading stakeholder questions

The following questions are designed to guide stakeholder discussions and address key concerns relevant to each stakeholder group.

Table 7: Leading Stakeholder Questions

SCQ Regional Forestry Hub
• How do you envision the final report or recommendations being implemented in practice?
Queensland Department of Resources
• Do you provide specific guidance for forest valuations, or leave it up to DPI forestry • What types of data or information does the Department of Resources rely on when assessing land conversion requests, and are there any gaps in data that could improve the quality of these assessments? • How does your department collaborate with other stakeholders, such as Indigenous communities and local governments, during the land conversion process to ensure all relevant perspectives are considered? • What do you see as the most significant impacts (positive or negative) of converting leasehold land to freehold on the state's timber resources and long-term sustainability? • What regulatory or policy changes do you foresee affecting the conversion of leasehold land to freehold in the future, and how might they impact the current process?
Queensland Department of Primary Industries
• From a DPI Forestry perspective can you provide some context to why this assessment/consultancy might be required? • On average, what is the demand (number of requests) for leasehold to freehold conversion? • Can you describe the current methodologies used to assess the commercial viability of timber on leasehold land? • What are the known limitations of these methods? • Are there specific data sources or tools that are used during assessments? • How do you currently factor in disturbances (like fire or drought) in your assessments? • What improvements or changes would you like to see in the current assessment methods to improve decision-making?
Forestry Industry

• How do the current assessment methods affect forestry operations in Queensland? • Are there specific aspects of timber valuation or forest commerciality that you believe are consistently overestimated or underestimated? • How do you view the current methods in terms of supporting sustainable resource management practices? • What changes would you like to see in the assessment process to better reflect the realities of the timber industry?
Landholders (Leaseholders):
• What has been your experience with the current assessment methods when considering converting leasehold land to freehold? • Have you encountered any challenges or issues with timber valuations or the commercial viability assessments? • How do you perceive the current process for converting leasehold land to freehold? • What improvements would make the assessment process clearer or easier to navigate for you as a landholder? • How important is transparency in the assessment process for your decision-making?

Communications Log

A Communications Log will be maintained to track interactions with stakeholders throughout the project. It will record meetings, discussions, and key contacts to ensure transparency and accountability in stakeholder engagement. This log will also document the flow of information, decisions made, and follow-up actions, supporting effective communication and collaboration across all relevant parties.

Appendix 2: Stakeholder Engagement Meeting Notes

These notes serve as reference for project tracking progress, clarifying next steps, and ensuring alignment between all involved stakeholders. By recording these details, the project ensures transparency, consistency, and accountability throughout the engagement process. Note, all stakeholders were offered the opportunity to review these notes before inclusion.

Table 8: Stakeholder engagement meeting notes

10 April 2025 - Department of Primary Industries
From a DPI Forestry perspective can you provide some context to why this assessment might be required? • Long term timber agreements are in place. 2037 for Cypress regions, and 2034 for Western hardwoods. The Southeast hardwood (now referred to as the Eastern Hardwoods) region has supply agreements in place until 2026 while the Government works on its' Future Timber Plan, due in 2025. Any conversion of State-owned forested land to freehold has the potential to impact the Government's commitment to these timber supply agreements, and the supply of forestry products to Queensland. • Maintaining Forest Consent Areas (FCA) on freehold land is a good compromise for those seeking to convert land to freehold. A significate proportion of timber is or will be delivered to industry via FCAs. A review of the existing process aligns well with the timing of the Future Timber Plan. • Further, articulating the process of commercial timber assessments is important for communication purposes. There has been occasion where no objections to freehold conversion (i.e. desk assessment indicates there is insufficient timber to justify an FCA) have been made by the Government, yet some harvesting subsequently occurred. Decisions are sometimes made on what the State might consider areas for viable commercial harvesting, which is enough resource to make it viable for a contractor to harvest the area, considering float cost, road construction, haulage, total log quantity, log quality and volume per hectare. Sometimes this 'grey' area of the assessment process can lead to misunderstandings.
On average, what is the demand (number of requests) for leasehold to freehold conversion? • Historically an average of 40 requests (estimate only) would occur weekly, specifically during a period where the Government actively encouraged conversion from leasehold to freehold (mid 2010's under the Campbell Newman Government). The volume of requests during this period resulted in wide use of Forest Consent Areas (FCA), where freehold would be granted but the State would retain ongoing rights to timber. • More recently, on average 4-5 requests would be received every week, covering all of Queensland. Half of these would be the SCQ Forestry Hub region.
Can you describe the current methodologies used to assess the commercial viability of timber on leasehold land? • The approach is detailed in 'fact sheets' developed in 2013/2014 The process has not changed significantly since then. In general, the following occurs:

- Application requests are made to the Department of Resources and Mines, Manufacturing, and Regional Rural Development (DNRMRRD)
- Where application involves leasehold land, a referral is made to DPI Forestry under the *Forestry Act* to assess the potential timber interests to the crown. Noting that a formal 'valuation' in terms of dollars rarely occurs, an assessment of harvesting potential to fulfill long term timber agreements is made.
- DPI Forestry uses several tools to determine if commercial timber is present on the application area. These include ArcGIS Pro layers, aerial imagery, REs, Area Information System (AIS), Harvest Planning System (HPS), previous harvesting information, MUID (Management Unit Identifier) information, sandalwood GIS information and local information. A detailed assessment using these tools will determine if a Forest Consent Agreement (FCA), WOP (without prejudice) valuation or nil interest/value is required.
- State interest is assessed though existing resource knowledge, i.e., records of past harvesting events and volumes recovered. If data under the MUID is limited, local (experienced) Rangers are consulted. This occasionally results in the need for in-field assessments to verify standing timber resource.
- Where a MUIDs that is listed in a long-term Sales Permit (Scheule 10) has no State timber interest, Timber Queensland is consulted for comment on the removal of the MUID.
- When no MUID exists, DPI Forestry will assess available remote sensing information such as historical air photos and more recent satellite images, Regional Ecosystem mapping and any neighbouring forests to determine if the State has any commercial interest in forest products.
- When decision outcomes are marginal, DPI forestry will adopt a precautionary approach. If the forest product volume has the potential to contribute to timber sale agreements, a FCA will be recommended.
- If available forest products are not included in timber sale agreements (i.e., rosewood fence posts provided as an example), then the value proposition to the State is based on an estimate of the commercial timber on the lease (refer to s170 of *Land Act 1994*). Where an estimate cannot be made via a desktop process, a forest Ranger may be asked to assess available volumes to prepare a without prejudice offer to put to the applicant. The purchase price to convert to freehold covers the value of the land plus the value of commercial timber.

Note: The current approach does not consider non-forest products such as carbon and biodiversity. However, DPI forestry will be notified when requests are made. These competing land uses might require consideration in future. The current assessment aligns with requirements under current policy and legislation.

What are the known limitations of these methods?

- There are some data limitations, i.e. cypress is fire sensitive, and the fire history mapping is not always accurate. The impact of droughts/mortality of cypress trees is difficult to monitor and assess.

- Most data used is outdated and unreliable. However, DPI's recent north and central forest inventory work is now considered with respect to yield potential.

Verterra Notes (not discussed):

- Accurate assessment of marginal areas (i.e. limited volumes over large areas) is a limitation. It is reasonable to assume DPI Forestry makes sounds judgements on these with resources at their disposal. However, this might lead to some conflict with landholders and industry.
- No direct 'valuation' is made, rather an assessment of potential for current or future harvest.
- Verterra did not ask what the in-field assessment process is when Rangers are engaged to assist with the assessments. (Follow up may be required). The resources required to undertake detailed field assessment might be limited.

Verterra Notes (not discussed):

- Can the current forest inventory assist after data collected and analysed. Does this inventory extend to leasehold and FCA, and SCQ Forestry Hub region.

Are there specific data sources or tools that are used during assessments?

- Mostly online spatial data, QLD Globe for mapping of MUIDs, RE mapping and images.
- Internal data referenced when available, i.e. historical harvesting volumes, including surrounding areas.
- Mapping work undertaken in ArcGIS Pro.

How do you currently factor in disturbances (like fire or drought) in your assessments?

- Best available information is used in all assessments. This includes known disturbances such as hot fires. Noting, as per previous questions, mapping limitations do exist.

What improvements or changes would you like to see in the current assessment methods to improve decision-making?

- DPI Forestry is committed to protecting the State resource for timber supply in perpetuity.
- There have been some instances where DPI Forestry might have exercised too much caution when recommending FCAs. A process to review these could be considered. For this, additional resource assessment staff would be welcome.

Landholders aside, who are other stakeholders in the process?

- The Dept of Resources who administers the process. They engage with Indigenous community groups and local government.
- Timber Queensland as industry representatives.

Follow up questions, email response:

Is there is a standard protocol or methodology for data collection during a valuation.

- The assessment is desktop, using the best available information. The process is described on pages 4 & 5 of the fact sheet. There are historic strip assessment processes, however these assessments are resource intensive

Are minimum viable areas are defined, either in terms of total volume, product type, or volume per hectare.

- There are thresholds for requesting FCAs. If desktop assessment indicates greater than 500m^3 of hardwood or cypress sawlogs OR 250m^3 where application area neighbour other sawlog resources, then a FCA is required. Volume per hectare is a consideration, however the desktop assessment is confined to remnant vegetation (Regulated vegetation under the Vegetation Management Act - VMA) coverage which tends to be either commercial forest with viable volumes per hectare or non-commercial forest. Scattered or paddock trees in non-remnant areas are not assessed in desktop process as there is no security in that lessee can interfere/destroy these trees under exemption under the VMA. This is the current process however further work is required on the application of thresholds and other matters including market values and haulage cost considerations.

Is distance to market factored into these assessments. And if so, is there a sliding scale of volumes to determine limiting distances.

- There is no sliding scale. If areas meet thresholds, then a FCA is required. DPI Forestry sells hardwood/cypress sawlogs using an administrative pricing system using a base value for species x Region, less a haul allowance to the nearest theoretical processing location or for cypress the mill location. E.g. Cypress Base Value of $87 per tonne – Haul allowance to mill of $35 = value/royalty of $52 per tonne.

Scenario 1 (offered by DPIF) – Desktop assessment indicates a FCA is required.

- (FCA required where desktop assessment indicates greater than 500m3 of hardwood or cypress sawlog present OR greater than 250m3 of hardwood or cypress sawlog present when application area neighbour's other sawlog resources).
- If we have requested a FCA based on desktop assessment and the applicant (lessee seeking to freehold lease area) disputes the requirement for an FCA, DPI may schedule an inspection if the property is unknown, e.g. does not have a previous harvesting history. In this situation, the local Forest Ranger will do a visual drive-over assessment of the area to verify if the area does contain commercial timber species of suitable quality (species, size, form, stocking). The local Forest Ranger then considers the approximate quantity of commercial timbered areas are likely to produce minimum thresholds of 3 to 4m3 of sawlog per hectare for the indicative commercial forest/timbered areas. If the estimate exceeds 500m3, or 250m3 if lease neighbours other known sawlog resource, then the requirement for an FCA is confirmed and forms part of the freeholding purchase conditions.

Scenario 2 - Desktop assessment indicates FCA not required and Without Prejudice Offer for commercial timber is proposed.

- DPI Forestry may make a Without Prejudice Offer (WPO) based on a desktop assessment for commercial timbers such as rosewood fencing timbers, sandalwood, and small quantities (less than FCA thresholds) of hardwood and cypress timbers.
- Desktop estimated quantities with a value of less than $5,000 are considered as nil value and no compensation for State-owned timber is required as part of the freeholding conditions. Where estimates are greater than $5,000 the value of the commercial timber is provided to the applicant via the WPO process. Where they accept the offer, the value of the commercial timber form part of the freeholding purchase price/conditions.
- In some cases, the applicant disputes the desktop timber valuation. DPI Forestry will then review the assessment/valuation and may seek additional local forest ranger input, such as a site inspection. The resulting WPO assessment/valuation will then be put to the applicant. If the applicant does not accept the WPO, then the applicant is unable to meet the freeholding offer requirements.
- Little actual physical measurement of timber has been conducted in the conversion of tenure space. Some inspections are supported by half hectare radial or strip plots to confirm visual assessments of standing volumes. The plots are to confirm visual estimates of volumes per hectare rather than a structured sampling system.

07 May 2025 Timber Queensland

- Meeting Notes (General Discussion):
- This project was initiated through concerns in the cypress division of Timber Queensland. The hardwood industry is also impacted. The project needs to ensure industry engagement occurs with cypress mills as a priority.
- There is concern in the industry that forest products are undervalued during the evaluation process. There is no clear line of sight on the existing process, despite the fact Timber Queensland is asked to comment on evaluations. Timber Queensland finds it difficult to comment given no inventory data is attached. It is not Timber Queensland responsibility to undertake field assessments to verify or validate assessments on the value of forest products (cost shifting). The State maintains an interest in forest products and therefore needs to make accurate assessments.
- The feeling is the department requires additional resources to undertake forest inventory. Noting that a large investment in inventory is occurring in North and Central Queensland. This assessment does not include Cypress for now. Notwithstanding this inventory, routine forest inventory to ensure data is up to date and inform better decisions.
- The department might not be using best available technology in their investigations.
- The final report needs to include any limitations of the existing valuation approach and identify barriers, then benchmark this against other jurisdictions (NSW and TAS identified), identify any improvements that can be made.

08 May 2025 Cypress Industry

How do the current assessment methods affect forestry operations in Queensland?

- Mistakes have been made. In some cases, landholders have profited at the expense of the Government and future supply. The future supply commitments are most concerning to industry.

Are there specific aspects of timber valuation or forest commerciality that you believe are consistently overestimated or underestimated?

- The value of pine as a resource continues to grow. It is unknown if this is taken into consideration during the assessment process.
- If the resources assessment undertaken is the same as inputs into harvesting plan, then volumes will be both under and overestimated. Is there a way to improve estimates for harvesting and commercial assessments?

How do you view the current methods in terms of supporting sustainable resource management practices?

- Not sure how valuations are undertaken. However, if land continues to be converted to freehold without FCA then there is a risk to future sustainable harvesting at current levels.
- There needs to be a greater focus on forest inventory. In any business, how can you make plans without a clear understanding of stock.

Not project related: Current silviculture practices can be improved to ensure better forest regeneration.

What changes would you like to see in the assessment process to better reflect the realities of the timber industry?

- More forestry inventory to better understand current resource, extent, quality, and volumes.
- More effort is required in managing bushfire risk. Fire does affect pine availability. Better mapping is required. The department fire mapping is outdated and in field assessment left to harvesting crews.

General discussion points:

- DPI Forestry does not get the funding required to undertake comprehensive assessments. Unfortunately, skill base continues to erode. Comments made above are not a judgement on existing staff.
- Sustainable harvesting a future forestry industry is obtainable. Appears government is only interested in short terms outcomes, i.e., matching supply agreements. Can change focus to 100 years plus, is possible are realistic if resourced appropriately.

07 May 2025 (Confidential consultation)

Unscheduled discussion (wished to remain anonymous), notes on land management (in short):

- Protected areas (i.e. Parks and Reserves) are managed under specific plans, with clear oversight by the Queensland Government.
- Leasehold land is managed day-to-day by the lessee but subject to lease conditions and oversight by the Department of Resources.

- Freehold land does not have the same level of government oversight as leasehold land. Consequently, access to forest products on freehold land may be limited, as freehold landholders often prioritise grazing over commercial forest product use.

Verterra Notes: Interestingly, conversations with government staff consistently highlighted that the conversion of leasehold land to freehold tenure does not necessarily restrict the supply of forest products to industry, as harvesting can still occur on freehold land. However, this view seems to rely on the assumption that landholders will manage forest resources as effectively as government-led oversight. In many cases, this assumption may not hold true, potentially affecting long-term forest stewardship and the availability of forest products.

28 May 2025 - Department of Primary Industries (Inventory)

How can the current forest inventory inform valuation decisions for converting leasehold land to freehold?

- Resource assessments are currently underway in Northern and Central Queensland, although Cypress pine regions are not yet included. These assessments will contribute to the broader pool of knowledge on forest condition, species composition, and potential productivity. As the inventory continues, it will provide a stronger evidence base to support more accurate and consistent land valuations during leasehold-to-freehold conversions.

What operational constraints impact forest resource assessments and valuations?

- Forest resource assessments are limited by the broad geographic spread of forested areas, along with staffing and funding constraints.
- Most commercial forest products are currently sourced from state forests in Southeast Queensland, rather than from crown leasehold land. As a result, while inventory efforts include leasehold land, these have not been prioritised.
- Under the current governance structure, the Department of Primary Industries (DPI Forestry) is responsible for administering sales permits, while land stewardship responsibilities rest with other departments and landholders. This reflects the existing division of roles.

Does converting leasehold land to freehold restrict the supply of forest products to industry?

- Not necessarily. Harvesting can still occur on freehold land, so conversion does not inherently reduce supply. However, freehold landholders may have less access to forest certification and often prioritise grazing, which could affect long-term forest product availability and supply agreements.
- The state historically supports moving land from leasehold to freehold, partly due to cost and policy reasons. A key consideration is whether the state should retain some control over forested leasehold lands to secure long-term supply agreements and sustainable resource management, this is achieved in part through use of Forest Consent Agreements.

Verterra Notes: Forest certification might be a key consideration. In previous work undertaken by Verterra for DPI exploring challenges with forest certification, some quarters of industry stated they would not purchase uncertified forest products.

What role do policy settings and access to information play in these valuation decisions?

- In general, the Queensland Government encourages conversion of leasehold to freehold.

Verterra notes: Referring to policy document (SLM/2013/397), 'Conversion of tenure as provided for under the Land Act 1994 to a more secure tenure should be allowed as long as the prescribed criteria have been satisfied, and such tenure is consistent with the most appropriate use of the land.'

More secure tenure:

- This typically means converting from a less secure form of tenure (like term or perpetual lease) to freehold, which gives the landholder full ownership and greater flexibility.
- The government supports this shift where it adds value or utility to the land and the broader economy. DPI assessment cannot occur in isolation of other policy settings.

06 June 2025 – Forests NSW

Forest Corporation NSW – Tenure and Freehold Conversion Insights

Tenure Types and Governance:

- State Forests are managed under the Forestry Act 2012 and cannot be converted to freehold.
- Crown leases fall under the Crown Land Management Act 2016. These may include:
    - Standard Crown Leases (e.g., Western Lands leases)
    - Leases over land with a State Forest dedication, which remain governed by the Forestry Act. These cannot be converted to freehold unless the dedication is revoked, a rare, ministerial-level decision.
- In practice, most requests for freehold conversion relate to subdivision, where non-forested land is subdivided out and converted, while forested portions typically remain as leasehold.

Freeholding with Timber Rights Retained:

- In some cases (not involving dedicated State Forests), Forest Corporation may consent to the conversion of leasehold land to freehold while retaining timber rights via a profit-à-prendre. This allows timber harvesting to continue for up to 10 years post-conversion.
- This arrangement is rare and used cautiously. Forest Corporation takes a precautionary approach, particularly where forests are heavily stocked or distant from markets, such areas are often retained under leasehold to maintain timber access.

Volume and Timber Value Assessment:

- Forest Corporation receives up to 20 inquiries per year for freehold conversion, though often fewer. This small number reflects a historical policy of identifying productive forests and dedicating them as State Forest, reducing the number of eligible conversion areas over time.
- When an application is made, Forest Corporation conducts a desktop timber assessment using the best available data, including GIS data sets and images, plus:

- Permanent Growth Plots (PGPs), many established in the 1950s and still measured on a rolling basis (typically every 5 years),
- FRAMES inventory data used during the Comprehensive Regional Assessments (CRAs) and Regional Forest Agreements (RFAs).

- Field verification is undertaken by dedicated resources officer when desktop data is insufficient, or a more formal valuation is required.

Disturbance, Stewardship and Fire Management:

- Forest Corporation is a core fire-fighting agency alongside the National Parks and Wildlife Service and Rural Fire Service. Fire response includes both environmental and asset protection.
- Stewardship responsibilities on leasehold land rest with the lessee, but where such land is also dedicated as State Forest, Forest Corporation maintains timber rights and may have a role in managing operational issues (e.g., fire access).
- While there have been isolated stewardship issues on leasehold land with State Forest dedication, these are not seen as a systemic concern from Forest Corporation perspective.

06 June 2025 – Dept of Natural Resources and Mines, Manufacturing and Regional and Rural Development

General discussion notes:

- DNR manages requests for land conversion. Where timber is identified DPI is consulted. No guidance is offered to DPI in terms of specifying minimum value for approval of conversions.
- Brief history: In 2014, the Queensland Government introduced key reforms to the Land Act 1994 through the Land and Other Legislation Amendment Act 2014. The amendment aimed to simplify and modernise the management of state leasehold land, particularly for the agriculture and grazing sectors.
- A major change was the removal of the compulsory rolling term lease framework, which had required many lessees to perpetually renew leases rather than seek more secure tenure. Instead, the 2014 amendment gave lessees greater flexibility to convert leasehold land to freehold, particularly where the land was used for primary production and deemed suitable for long-term private ownership.
- The amendment also streamlined the application process for freeholding, reduced red tape, and expanded the Minister's discretion to approve conversions where in the public interest. The changes were part of a broader government effort to support rural landholders by providing more secure tenure options and encouraging long-term investment in land stewardship.
- Changes to the Act was part of the Newman Government's broader agenda to reform land tenure laws, aiming to reduce regulatory burdens and promote economic development, particularly in the agricultural and resources sectors.
- The current and recent past Queensland Governments continues to support the conversion of leasehold land to freehold, building upon the reforms initiated in 2014.
- The Government now seeks efficiencies in processing, i.e., currently reviewing over 200 applications as part of a single project, rather than dealing with individual cases.

- The State Assessment and Referral Agency (SARA) is consulted on matters of state interest such as Native Title, state heritage places and potential transport corridors.

Verterra Notes: Since the 2014 reforms, there has been a significant uptake in leasehold-to-freehold conversions (AgForce), motivated by factors such as:

- Rising leasehold rents
- Improved financing options
- Greater flexibility in land management
- Enhanced buyer interest in freehold properties

Sustainable Timber TAS – 10 June 2025

General discussion notes:

- Most of the land managed by Sustainable Timber Tasmania (STT) is Crown land. While STT holds some freehold land and operates limited joint ventures (JVs) without third-party management, leasehold-to-freehold conversion is rare and not considered a significant issue in the Tasmanian forestry sector.
- Forest Inventory and Valuation: STT maintains a dedicated inventory team responsible for ongoing measurement of forest resources. This enables continuous estimation of standing timber volumes and associated commercial value. The inventory approach supports both operational planning and strategic valuation.
- Mapping and Monitoring: STT conducts highly accurate disturbance mapping and asset protection planning. They are a designated firefighting authority (like Forestry Corporation NSW), actively involved in fire response, asset protection, and land disturbance monitoring.

Appendix 3: Technology Example - Interpreting Satellite Data

Detail below is provided as an example of how the latest technology can be applied in the forestry sector. This goes beyond simply viewing the latest available data, rather analyses it to inform on-ground decisions.

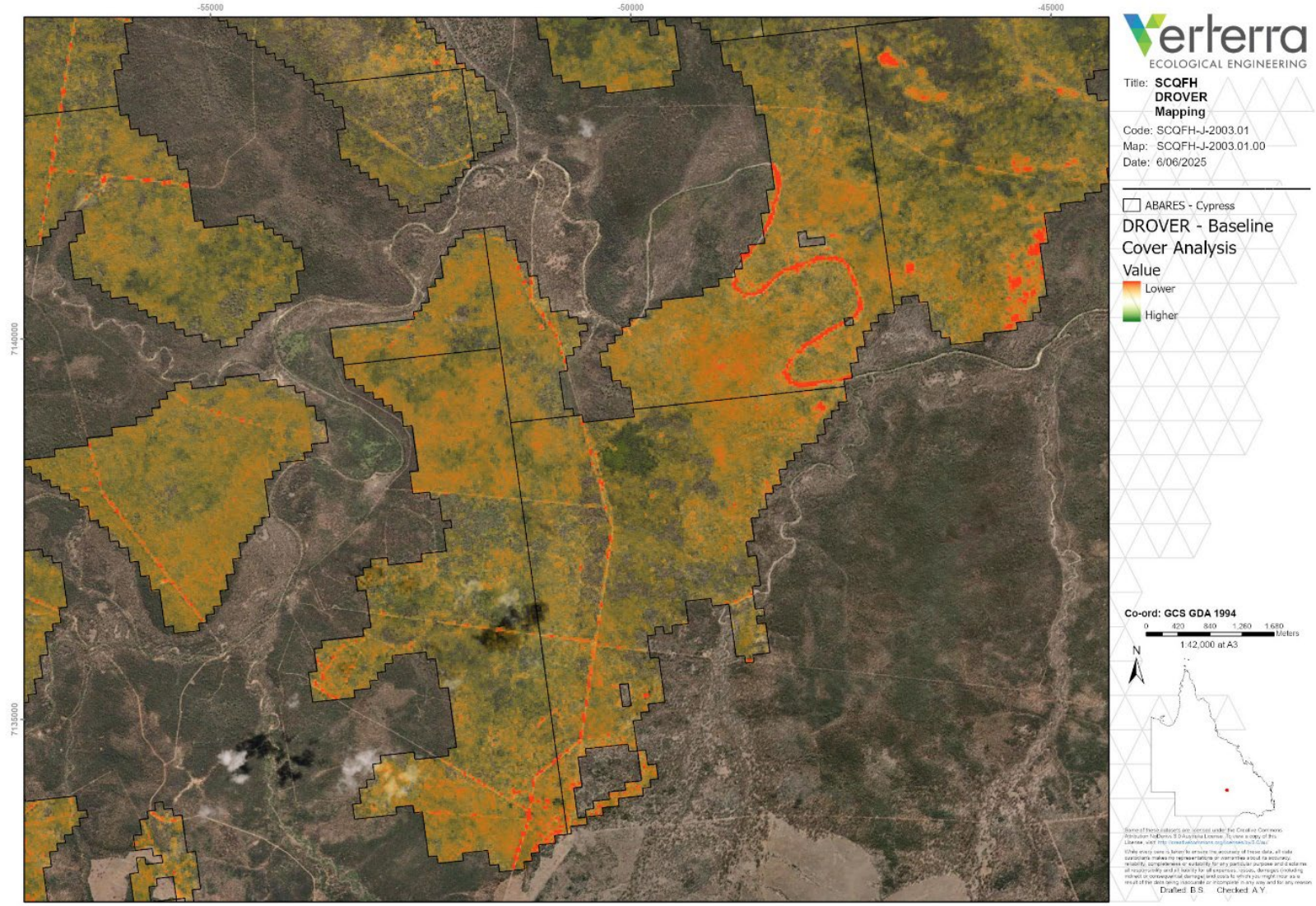
Verterra uses its internally developed DROVER™ platform to assess forest condition and track disturbance patterns across landscapes using satellite-derived remote sensing. The map below displays 30 × 30 m pixels coloured according to their similarity to local 'reference' pixels, areas with a long history of minimal or no disturbance. In this baseline analysis, which covers changes since 2017, areas shaded red or orange indicate low ground cover, often associated with recent disturbance such as fire, harvesting, or intensive grazing. Green pixels indicate higher, more stable vegetation cover.

This example is taken from a randomly selected area of leasehold land mapped as cypress pine forest. Several insights can be drawn from the image:

- **Eastern clusters of red/orange pixels** suggest recent disturbance, from fire or mechanical harvesting. These areas may warrant further investigation or could be deprioritised in timber valuation depending on recovery stage.
- **A stream corridor is clearly visible**, marked by a linear band of extremely low cover. This indicates high erosion risk or exposed soils along drainage lines, important for both environmental stewardship and infrastructure planning.
- **Central areas show mixed pixel colours**, reflecting a shift in land use or management regime. Fence lines or tracks may separate areas under different grazing pressure or silvicultural treatment.
- **Differences between lease parcels** are apparent, even across shared forest types. Some neighbours show much higher ground cover, pointing to the influence of localised management practices or disturbance history.
- **Linear infrastructure features** such as access roads or firebreaks appear clearly as bands of lower vegetation cover, supporting asset mapping and operational planning.
- **Within-parcel variability** further reinforces the need for site-specific data. Even within a single mapped forest polygon, condition can vary significantly, making uniform assumptions about forest value or management risk prone.

These insights can assist with strategic forest planning, inventory, and decision-making, particularly when evaluating leasehold-to-freehold conversion proposals or undertaking broader land assessments. Pixel-level ground cover data supports forest stratification, enabling identification of distinct zones with differing commercial, ecological, or operational characteristics. This work can be further developed to provide further insights.

This kind of spatial intelligence can inform desk-based assessments of forest value, improve consistency in preliminary valuations, and help determine where field-based surveys are most needed. This technology enhances the efficiency, transparency, and defensibility of forest-related decisions, particularly where tenure, timber rights, and long-term land use intersect.


-55000
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Verterra
ECOLOGICAL ENGINEERING
Title: SCQFH DROVER Mapping
Code: SCQFH-J-2003.01
Map: SCQFH-J-2003.01.00
Date: 6/06/2025
ABARES - Cypress
DROVER - Baseline Cover Analysis
Value
Lower
Higher
Co-ord: GCS GDA 1994
0 420 840 1,260 1,680 Meters
1:42,000 at A3
N
Drafted: B.S Checked: A.Y.