[redacted]
[redacted] 4300

7TH March 2026

Minister for the Environment and Water
Federal Australian Government
PO Box 6022
CANBERRA ACT 2600

(epbc@springfieldresidential.com), (cc – admin@savewoogarooforest.com.au)

Dear Minister,

REF: EPBC 2019/8575 Springview Village 2 & 3 – Controlled Action
Lot 9999 SP292760 (160Ha)
7001 Mur Boulevard, Springfield, Ipswich, Queensland

I refer to a proposal to clear **134 Ha** of Koala habitat by Cherish Enterprises on Lot 9999 SP292760. This was deemed to be a "controlled action" in April 2020, with Assessment by Preliminary Documentation.

This proposed development presents an extinction risk to a climate-adapted koala subpopulation. Via permanent removal & significant long term damage of an irreplaceable habitat corridor system, which offsets cannot replicate or replace.

For these reasons, approval would present a significant, irreversible & unacceptable impact to Matters of National Environmental Significance 'MNES' as assessed under the EPBC Act.
The proposed development & referral ought to be rejected.

Qualifications & Experience – [redacted]

- Diploma of Building Design & Technology, Southbank Institute of Technology (TAFE QLD), year 2009 with 20+ years related industry experience.
- Previous Employee of QLD State Government, Department of Public Works (Department for Design, Construction & Maintenance of Government Buildings & Infrastructure).
- Bushcare Group Leader for Springfield QLD Bridgewater Park Community Volunteers, operating under Local Ipswich City Council. (Approximately 1km distance from proposed development)

To the Federal Assessment Team,

I respectfully provide the following submission regarding the proposed residential development, affecting the remaining unique & ecologically valuable habitat corridor within the Springfield area. This submission focuses on cumulative ecological impact, long-term corridor viability, vegetation characterisation, and the precautionary assessment required under conditions of rapid urban expansion.

The author of this submission has been actively involved in local bushland regeneration within the surrounding landscape and has observed long-term ecological changes in adjacent urban interface corridors over multiple decades. These observations inform the governance and cumulative impact concerns outlined as follows.

Given the existing & proposed fragmentation of surrounding bushland and uncertainty around long-term ecological viability, further narrowing may push the remaining habitat ecosystems beyond functional thresholds for survival.

For broader context; the destruction of a critical wildlife corridor and endangered species habitat for the proposed relatively small & marginal housing supply contribution (0.26% of S.E.Q. annual housing supply needs by this proposed development, extended over potentially 20 years), highlights the policy necessity of prioritising housing in already-cleared or higher-density areas rather than in irreplaceable ecological zones.

Decisions made at this stage will determine whether this corridor remains ecologically functional for future generations.

Photo (dated 2025) of remaining forest & proposed development land, with existing cumulative fragmentation both sides shown.
Corridor habitat assisting linkage to D'Aguilar National Park, seen to north in photo background.

1. Summary

The currently remaining forest forms part of a remnant ridgeline and creek-linked habitat system, contributing to the ecological integrity of western Brisbane's forested landscape, including connections extending from D'Aguilar National Park through to lower elevation urban interface areas.
Over several decades, surrounding lands have undergone progressive urbanisation. As a result, remaining remnant vegetation now performs a disproportionately important ecological function relative to its size.

This submission focuses on whether the proposed action can demonstrably maintain the long-term functional viability of this corridor system under cumulative fragmentation, hydrological alteration, and climate stress.

The forest proposed for clearing is one of the last surviving, functional habitat areas in the Springfield region. It is uniquely positioned to best provide corridor function in its' current position, along with unique localised topography of both ridgelines and dry river gullies feeding into endangered perennial watercourse ecosystems.

The forest includes and/or crucially supports:

- Confirmed Endangered Koala, Endangered Greater Glider & Powerful Owl presence within proposed development area.
- Confirmed Regent Honey Eater & Swift Parrot. Both Critically Endangered & both have formally recorded sightings at approximately 1.5km from proposed development area.
- An established flying fox roost nearby & necessary feeding and shelter habitat.
- A healthy mixed eucalypt canopy.
- Perennial creek systems, gullies and riparian zones.
- Endangered and vulnerable Regional Ecosystems (REs), mapped & formally recorded by State Government.
- Critical north–south wildlife movement corridors for endangered species.

Regionally characteristic fauna indicative of structurally intact forest ecosystems are expected to be present within this forest, including arboreal mammals, monotremes, raptors, macropods, and nectar-dependent species.

It is expected the forest also provides foraging or seasonal habitat for migratory or critically endangered nectar-dependent species where suitable flowering resources exist.
(Eg: Regent Honey Eater & Swift Parrot both have confirmed sightings approx' 1.5km from proposed development in year 2019. Both these Critically Endangered & migratory birds are arguably expected to also use the forest proposed for development, as important habitat.
Lot 9999 functions as a refuge during severe weather extremes, including during the severe & widespread drought leading up to the widespread bushfire events that occurred in 2019, which was when both these critically endangered birds were formally sighted in the general area.

The continued persistence of all these listed species reflects ecological integrity, which cannot be reconstructed once fragmented and not possible to have this critical habitat corridor elsewhere.

Historical signage at this corridor, documents formal recognition by QLD State Authorities that these creek & bushland habitat systems function as wildlife corridors specifically and support species of conservation concern.
Such recognition underscores the long-standing ecological value attributed to this landscape.

"**O' Possum, Woogaroo and Mountain Creeks *are important wildlife corridors* and part of the Brisbane River catchment linking Brisbane River to bushland in the south near White Rock, Spring Mountain and Mount Flinders**", stated by Queensland Government provided signage, circa mid 2000's, that is installed at an endangered ecosystem that will be influenced by the proposed development.

Photo (dated 2026) of this historical signage.
“Remember the Environment – Protect Our Future”, noted by QLD State Government Signage installed at the habitat corridor under threat by the proposed development.

This forest is now at or near the minimum threshold required to sustain these species & locally unique habitat features.

Retaining this habitat in full is essential to ensure long-term ecological viability.

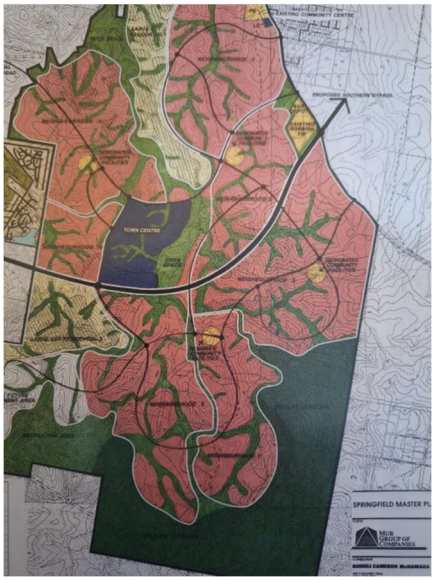
<u>Landscape Context and Cumulative Impact</u>

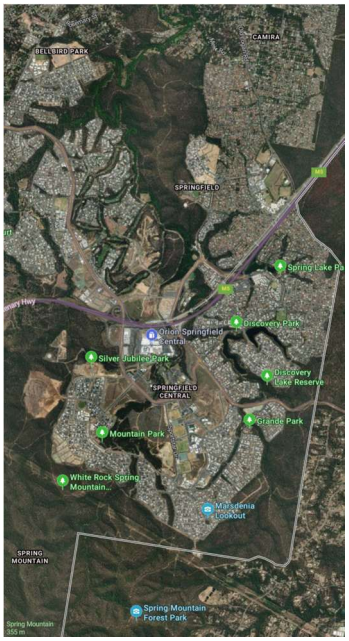
This site does not exist in isolation. Over the past two to three decades, extensive high-quality habitat surrounding this corridor has been cleared and densely urbanised as part of the broader Springfield expansion. The original urban edge has now moved beyond this forest, with development extending further west and south-west in increasingly continuous form.

The remaining forest now functions as one of the last substantial habitat linkages between expanding urban fronts. Previous clearing in the region has already significantly reduced large, contiguous habitat blocks. The cumulative impact of past clearing is substantial.

However, the future cumulative impact may prove even more consequential. Over the next 30 to 50 years, surrounding population densities are projected to increase significantly as development continues west and south-west. As urban pressure intensifies, edge effects, domestic animal presence, lighting, noise, and weed incursion are likely to increase correspondingly.
In this context, assessment of this proposal must consider not only present-day compliance metrics, but long-term ecological trajectory.

Left image of ‘Springfield Master Plan’ showing early concept, with some continuous habitat corridors represented and “Large Lot Residential” included, where buffering against more sensitive and critical wildlife corridors such as the now proposed development area.
In reality 20+ years later to current day, large lot (approx’ 1000m²) residential development areas haven’t taken place or are proposed. The many Master Plan depicted continuous habitat corridors, have instead been furthermore highly fragmented & discontinuous by actual real development and largely left to deteriorate ecologically to weedy simplification.
Further increasing the ecological significance of remaining bushland with sufficiently buffered cores.





Right Satellite Image (Dated approx’ 2025, excluding the 2026+ dated additional & currently cleared bushland with under construction tightly packed residential developments south-west & proposed clearing for developments directly abutting south of Lot 9999)
The comparison images show cumulative impacts, to this once otherwise largely intact & high value habitat, have been significantly increased & at speed. The methods used have drastically increased edge impact affects to remaining bushland and are causing remaining habitat to carry a disproportionally large ecological value relative to its’ size & also added corridor values.
The satellite image, completed developments, surrounding in construction developments & all proposed future developments show a history, of undervaluing habitat corridors and expected long term ecological degradation. This is largely due to overwhelming urban edge pressures and insufficient ecological maintenance in perpetuity. Retaining the remaining bushland (Lot 9999) is needed to effectively counteract & balance the large scale surrounding cumulative effects of clearing & development.

<u>Ecosystem Function and Cascading Risk</u>

The corridor supports an interdependent suite of fauna and flora that rely on structural continuity, canopy connectivity, and low-disturbance habitat conditions. Fragmentation does not impact species independently; rather, it disrupts ecological relationships across trophic levels.
Decline in one functional group (e.g., arboreal mammals, hollow-dependent species, nectar feeders, ground-dwelling insectivores) may alter predator-prey dynamics, seed dispersal processes, pollination networks, and nutrient cycling.
Accordingly, degradation of corridor integrity risks cumulative ecosystem simplification over time, not merely isolated species loss.

Functional Corridor Viability Over Time

The central question is not whether a vegetated strip remains immediately following development, but whether that corridor will remain ecologically functional over coming decades & in perpetuity. A corridor represented on a plan is not equivalent to a corridor that sustains habitat integrity under intensifying urban pressure. Compliance with minimum planning guideline widths does not necessarily equate to long-term habitat resilience.

Edge effects compound over time. Narrowed corridors bounded by residential development on both sides, such as the proposed development, are particularly vulnerable to gradual degradation in function. Without exceptional safeguards, a corridor that satisfies static design standards at approval, may progressively lose ecological viability.
Assessment should therefore extend beyond static width measurements and consider long-term resilience under projected population growth.

Climate Resilience and Edge Intensification

South-east Queensland is projected to experience:

- Increased average temperatures
- More frequent extreme heat events
- Altered rainfall intensity patterns
- Greater hydrological variability

Remnant forest corridors provide critical microclimatic buffering functions, including:

- Canopy shading
- Evapotranspiration cooling
- Soil moisture retention
- Wind moderation
- Thermal refuge capacity (As shown by Critically Endangered Regent Honey Eater & Swift Parrot formally recorded sightings in the general area during the most recent drought)

Field observation already indicates measurable temperature differentials between this intact forest interior and adjacent 20-year-old suburban development.

Narrowed corridors adjacent to extensive hard surfaces, retaining walls, and high-density built form are subject to intensified edge effects, including:

- Elevated ambient temperature
- Increased light penetration
- Reduced humidity
- Greater wind exposure
- Accelerated weed colonisation

Where corridor width is reduced and surrounded by high-intensity development, interior microclimate may shift toward edge-dominated conditions, reducing long-term habitat suitability for canopy-dependent fauna and heat-sensitive species.

Climate resilience is not static, it depends on sufficient width and structural complexity to maintain interior forest conditions. If effective corridor width is reduced to the extent that core microclimatic buffering cannot be sustained under projected climate stress, long-term ecological viability may be compromised even where short-term compliance standards are met.

Given the multi-decadal construction timeframe and the permanence of urbanisation, climate resilience considerations must be central to approval assessment.

Where uncertainty exists regarding the corridor's capacity to maintain functional microclimatic stability under intensified urban edge conditions, the precautionary principle is engaged.

Compliance Versus Ecological Sufficiency

Minimum standards do not necessarily guarantee ecological sufficiency in landscapes undergoing rapid cumulative urbanisation.
Mitigation measures and revegetation commitments by the proposed development are noted. However, the long-term effectiveness of such measures depends entirely on secured, indexed, enforceable funding arrangements extending well beyond the project construction phase. Management plans without environmental quality benchmark guarantees, multi-decade funding and independent oversight risk gradual degradation over time, particularly where future local government resource constraints may arise.

For a corridor of this importance, safeguards must be enforced conditionally in perpetuity, rather than aspirational.

Vegetation Characterisation and Ecological Condition

It is important to clarify that the site was historically subject to selective logging practices rather than broad scale clearing.

Selective harvesting typically retains mature canopy trees and hollow-bearing individuals to support regeneration and structural continuity. These types of trees are noted as have been retained within Lot 9999, not previously logged.

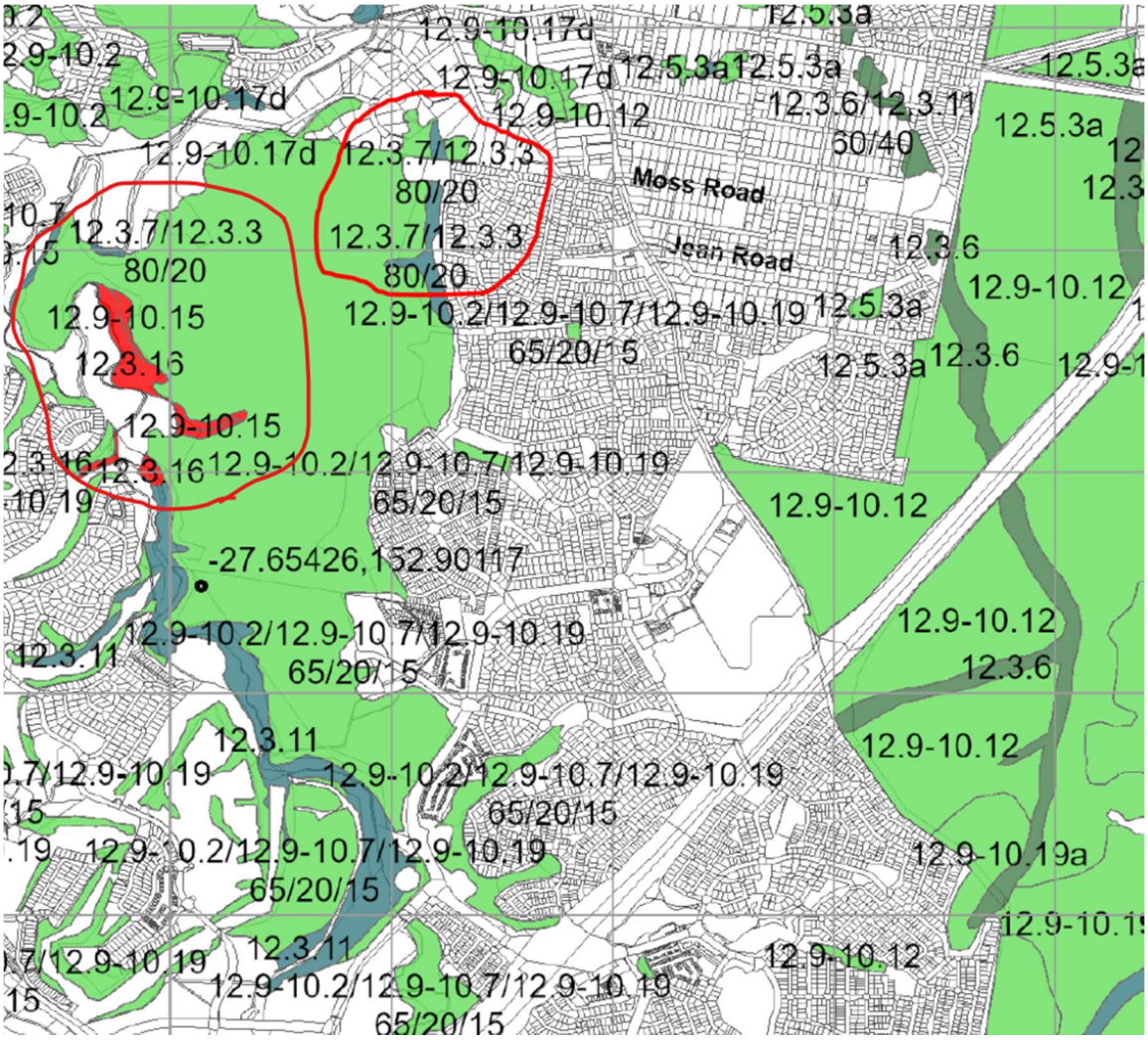
Logging activities ceased more than three decades ago following land acquisition, and the forest has since remained undisturbed by timber extraction.
Over this period, natural regeneration has occurred within an intact, robust & species rich canopy framework. The forest now exhibits characteristics of a matured system, including structural layering and comparatively low weed prevalence. Thirty years of natural recovery within an intact canopy structure represents a meaningful ecological timeframe, particularly in landscapes where surrounding comparable habitat has been permanently converted to suburbia.

The in contrast narrow vegetated strips retained along urban creek corridors in nearby suburbs and arguably as developer has proposed, this forest demonstrates relatively intact understorey condition and limited invasive species burden.

The classification of vegetation as regrowth should not be interpreted as indicative of low ecological value. In rapidly urbanising landscapes, structurally intact regrowth forests can provide critical habitat continuity and resilience, particularly where surrounding remnant areas have already been cleared.

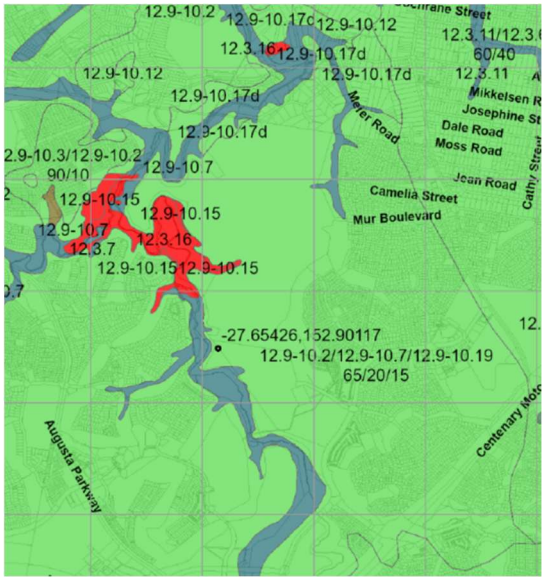
A broader representation of interior forest condition may provide a more balanced depiction of the site's ecological character.

Image of QLD State Government mapped ecosystems. Endangered ecosystems are shown to both sides of the proposed development, with arguably insufficient buffers and insufficient environmental protections proposed by the development.
Referenced Endangered Ecosystems are 12.3.3 Alluvium, 12.3.16 Rainforest & 12.9-10.15 Rainforest.
These are highly threatened ecosystems that should be adequately protected.



Ecosystem map showing Endangered Rainforest in colour 'red'. (Ecosystems 12.3.16 & 12.9-10.15)

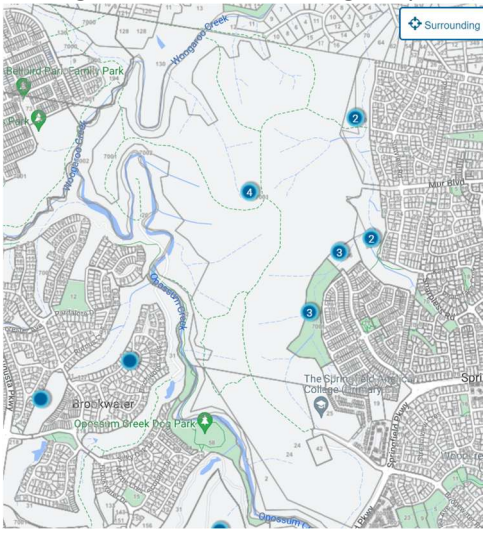
Important to note, a significant portion of Endangered Rainforest was cleared for sewer line installation work within the past decade. Rehabilitation works have arguably not been sufficient to improve the ecology substantially or reinstate the significant portion of lost ecosystem that was already at endangered status. *Instead at the sewer line works portion, compacted gravel remains with mass plantings of grasses, no environmentally significant under storey or canopy has been reinstated, further emphasising the importance of the remaining bushland within Lot 9999, to maintain the ecological threshold of the remaining habitat corridor.*

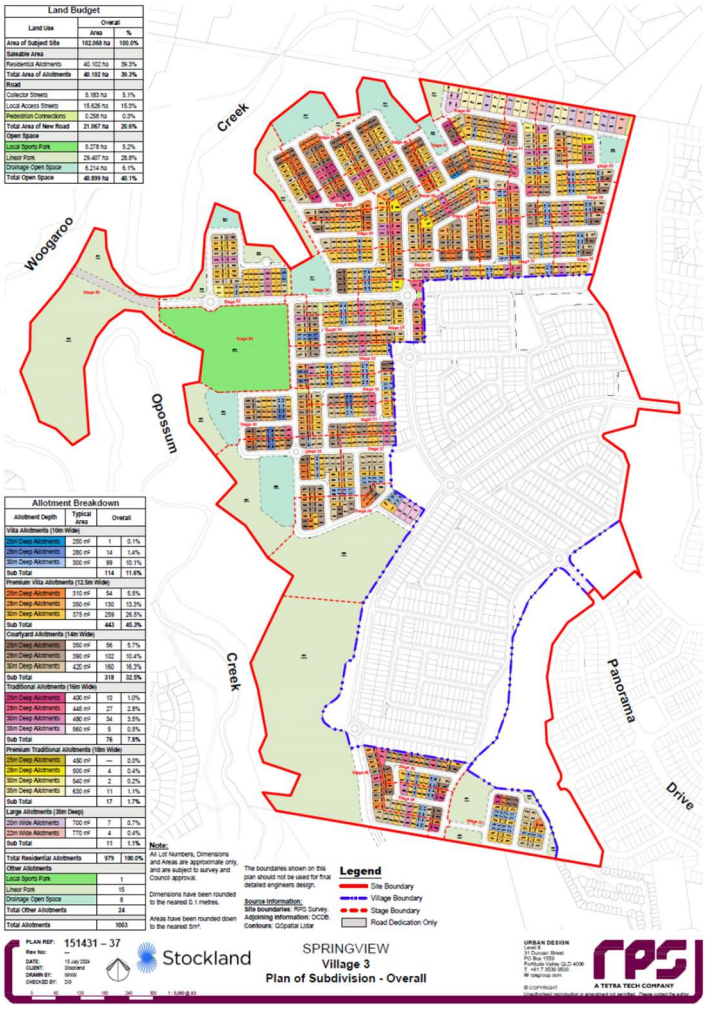


Hydrological Integrity and Stormwater Infrastructure Risk

The proposal includes substantial cut and fill operations, extensive retaining structures, and stormwater retention infrastructure, including basin/s & stormwater discharge located immediately adjacent to and/or upstream of mapped endangered regional ecosystem/s.

Please see following plans as a guide regarding hydrological impacts to endangered ecosystems.
(See previous page of mapped endangered RE12.3.3 extent, for argued clash with drainage impacts)





Hydrological integrity is a foundational determinant of riparian and downstream ecosystem health. Alterations to flow velocity, peak discharge timing, sediment load, nutrient concentration, and thermal regime can result in progressive ecological degradation, even where direct clearing within the endangered ecosystem footprint does not occur.

Stormwater detention basins in urban developments are engineered primarily for flow management and sediment capture. They are not ecological restoration systems and do not replicate pre-development hydrological regimes.

Where stormwater discharge and/or a basin is located upstream of a listed endangered ecosystem (applies to both eastern & western sides of proposed development), the following risks arise:

- Altered seasonal flow patterns
- Increased nutrient and pollutant pulses during high rainfall events
- Sediment mobilisation during construction and maintenance phases (20 year potential risk)
- Thermal loading from exposed basin surfaces
- Long-term maintenance failure or reduced performance over time

Given that the proposed development may occur over multiple decades, hydrological modelling must account not only for initial compliance standards but for cumulative, long-term operational and climate-driven variability.

Where uncertainty exists regarding whether altered hydrology may incrementally degrade an endangered ecosystem, reliance on engineered detention alone does not eliminate significant impact risk.

Approval should not proceed unless it can be clearly demonstrated through enforceable, performance-based hydrological standards, that downstream & upstream ecosystem conditions will be maintained. Either at or above current ecological health benchmarks over the life of the development, to continue supporting wildlife such as Platypus for example that are known to use the waterway that will be impacted by this proposed development.
In the absence of such demonstration, the precautionary principle is engaged.

Even small increases in sediment loads can disproportionately affect species (including Platypus) that rely on clean, structurally complex stream beds.

Photo (dated 2026) of Local Ipswich City Council sign, noting Platypus are known to live in the waterways that will receive drainage & likely sediments from the proposed development.

Site planning should avoid large-scale cut-and-fill, to minimise environmental impacts

Environmentally responsible development on steep terrain should:

- Retain natural contours where possible
- Minimise cut-and-fill earthworks
- Protect soil layers, hydrology, and drainage patterns
- Limit slope instability and downstream sedimentation, including impacts to local Platypus living in the waterways within this forest, both upstream & downstream of proposed works.
- Preserve underground refuges for fauna
- Protect & effectively re-use topsoil for bushland regeneration

Modern low-impact engineering practices show that steep land can be developed without extensive excavation, limited to maximum 1m cut/fill only where critical.

Eg: Example of a modern housing estate design guideline to better suit environmentally responsible design, *"Design guidelines prioritize slope-responsive, tiered home designs to minimize significant earthworks, with specific restrictions on retaining wall heights and cut/fill depths to manage stormwater and topography. Key rules include limiting excavation for garage pads and screening undercrofts to maintain visual amenity."*

The proposed development site could be considered hilly terrain. Instead proposed development includes mass cut and fill works, with up to approx' 14m cut/fill and potentially most retaining walls over 1m in height. Thus proposed development will drastically impact existing natural soil layers, hydrology, drainage patterns and likely result in unmanageable sediment runoff.

See below (following page) an alternative visual example of design guidelines commonly understood by the construction industry and implemented by councils / developments for hilly terrain, to minimise ecological damage through earthworks.

These methods should guide development /clearing requirements and have been implemented for modern projects.

The proposed development's current amount of cut/fill and extent, could potentially cause incalculable hydrological risk. As shown, the arguably excessive cut/fill is optional under modern building techniques and should be refused based on environmental harm under the precautionary principal.

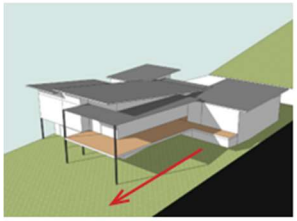
As a strong suggestion towards improving nearby damaged environments, any topsoil disturbed to be treated as highly valuable and relocated for bushland regeneration elsewhere, immediately after disturbance. Storing of topsoil removes its' ecological value by killing the locally acclimatised & valuable Australian native seed bank contained within and increases risk of contamination.

Example image (Right), dated 2026. From a nearby housing development currently under construction & adding to cumulative impact to Lot 9999. Showing arguably similar developer ideology of proposed Lot 9999 development, with large scale cut & fill to hilly terrain that is likely to impact soil layers, hydrology, drainage patterns, slope instability and downstream sedimentation. ***Note the failed sediment control barrier in the photo, which can be expected to fail or be poorly installed at many, if not most construction sites. (Based on generalised observations)***

Images shown for information. Modern cut/fill design considerations to assist with mitigating environmental impacts caused by cut/fill, which could be implemented for a site of this significance to potentially assist with avoiding catastrophic environmental harm to local ecosystems.

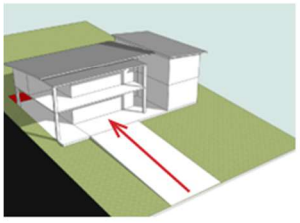
Sloping Sites

Your guide to building a house



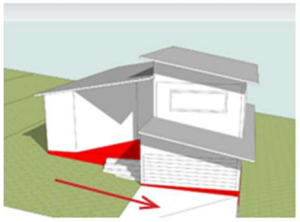
DOWN SLOPE

- Site falls away from road.
- Conducive to split level design.
- Suits suspended structural systems and hybrid systems combining lower level slab with post and beam to upper level.
- Garage carports easier to build closer to the street.
- Avoid 'going up an extra storey' at the rear which significantly increases the buildings height and bulk from the rear.
- Aim for a level transition off the street level into the elevated living areas.



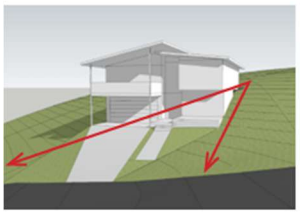
UP SLOPE

- Site rises up from road.
- Generally require more cut allowing for lower level / garage.
- Garage doors and driveways are generally more visually dominant from the street on up slope lots. A projecting balcony over the garage reduces this visual impact.
- Aim for a level transition from elevated living areas to the rear yard.



SIDE SLOPE

- Site rises/falls away from side boundaries.
- Design the house to generally have the garage at lower level with living space above.
- Need to avoid site 'benching' and large retaining walls at property boundaries which can lead to overshadowing, overlooking and drainage issues.



ROLLING SLOPE

- Site rises/falls in two or more directions.
- Design the house to take up level change within the building design by splitting the house over different floor levels.
- Avoid large unsightly retaining walls outside of the building envelope and landscape batters.

Sloping sites offer unique opportunities including great views, access to cooling breezes and often result in more interesting building forms where the design accommodates the slope. They do however require more design consideration than a flat block to balance house design, excavation and potential amenity impacts on neighbouring properties.

The key to reducing increased construction costs inherent with sloping sites is minimising the amount of cut and fill and engineered retaining walls. This is achieved by adapting a house design suited your sloping site rather than trying to significantly alter the site through earthworks to 'fit' a predetermined house design.

Although some cut and fill on sloping sites is unavoidable, the visual, structural and drainage impacts can be mitigated by designing the house to step with the landscape and minimise the need for extensive excavation. It is important that as part of your initial site analysis process, the slope of the site is carefully considered along with other considerations such as sun aspect, prevailing breezes and best vantage and view points from your house to make the most of your sloping block.

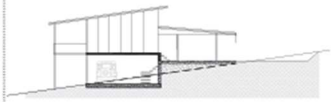
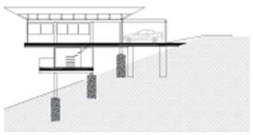
SLOPING SITE RULES OF THUMB

- ☑ Get a survey to accurately plot the contours and determine the slope of your block.
- ☑ Aim to take up level change in the building design.
- ☑ If you have a sloping block, avoid 'off the shelf' designs which have been specifically designed for a flat block.
- ☑ Single slab on ground construction (most project homes) are only really appropriate up to a slope incline of 4^0 or 7% as the cut/fill required becomes excessive (over 1.5m);
- ☑ On slopes of 4-12^0 (up to 1:5) think about stepping two or more slabs or using part slab / part post and beam construction to handle the slope.
- ☑ On slopes over 12^0-18^0 (1:5-1:3) look at post and beam construction which steps with the site.
- ☑ Slopes over 18^0 (1:3) are difficult sites to build on. Look at suspended or pole construction. This degree of slope can only really be accessed from a downslope configuration. It is generally too difficult to achieve an upslope driveway access.
- ☑ Be aware that additional costs on sloping sites can include excavation, retaining walls, scaffolding hire, additional engineering input, insulation under elevated timber floors and general increased labour costs.
- ☑ Offset these additional construction costs by reducing the amount of floor area you are building or even stage your development to 'infill the undercroft' at a later stage.

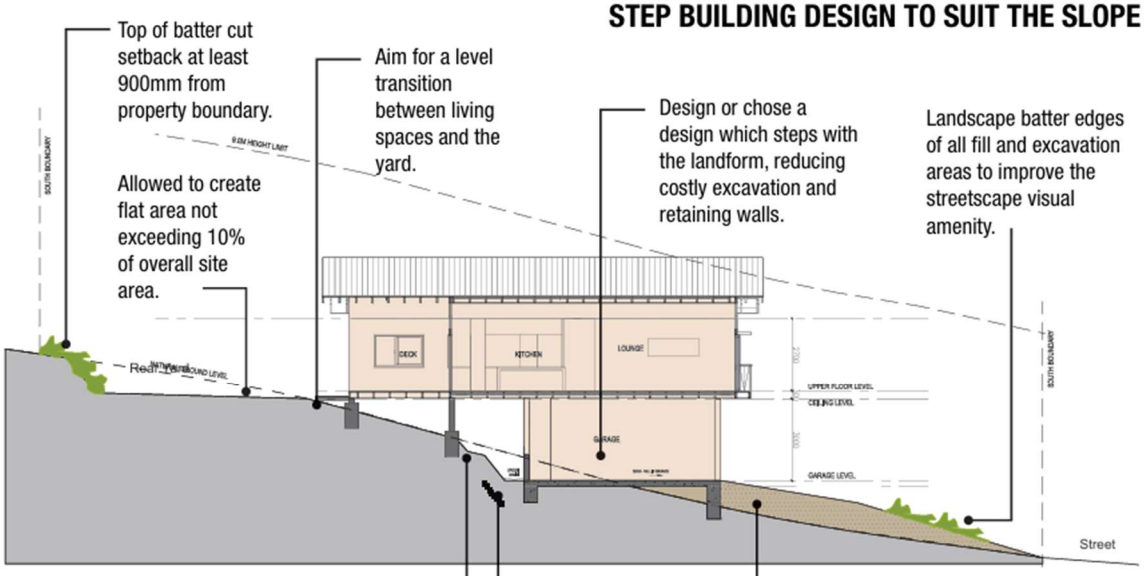
Designing to a sloping block

MATCH BUILDING DESIGN TO SUIT THE SLOPE

FLAT 0-6° / MODERATE 6-12° / STEEP 14 -18° / EXTREME < 20°

	**FLAT SITES** Single slab on ground construction (most project homes) are only really appropriate up to a slope incline of 4° or 7% as the cut/fill required becomes excessive (over 1.5m). Slopes between 4-6° should accommodate some level change within the building footprint.	☑ Single slab on ground ☑ Split or multiple slab for slopes over 4° ☑ Post and beam
	**MODERATE SLOPE** On slopes of 6-12° (up to 1:5) step two or more slabs or use part slab / part post and beam construction to accommodate the slope.	☒ Single slab on ground ☑ Split or multiple slab ☑ Post and beam
	**STEEP SLOPE** On slopes over 12°-18° (1:5-1:3) post and beam construction which steps with the site. This may include a lower part level which is a concrete slab.	☒ Single slab on ground ☑ Split or multiple slab ☑ Post and beam
	**EXTREME SLOPE** Slopes over 18° (1:3) suspended or pole construction is required. This degree of slope is more suited to a downslope configuration. Driveway access is generally difficult on upslope lots which require large batters/retaining walls and a curving driveway.	☒ Single slab on ground ☒ Split or multiple slab ☑ Post and beam ☑ Pole house

STEP BUILDING DESIGN TO SUIT THE SLOPE



Functional Corridor Assessment and Degraded Sections

The proposal appears to rely in part on existing vegetation along disturbed infrastructure corridors, including areas affected by sewer line installation and associated clearing, as contributing to overall corridor width.
However, structurally disturbed vegetation cannot be assumed to provide equivalent ecological function to intact remnant forest.
Disturbance typically results in:

- Simplified canopy structure
- Reduced hollow-bearing tree availability
- Increased weed invasion
- Edge-dominated microclimate conditions
- Altered understorey composition
- Reduced long-term habitat suitability for arboreal mammals

For species such as the Greater glider, which depend on mature forest structure and hollow-bearing trees, narrow or structurally simplified strips may not provide meaningful habitat or safe movement pathways.
Similarly, habitat connectivity for the Koala requires not only nominal canopy presence but sufficient width and structural integrity to reduce edge effects and disturbance stress.

Degraded or infrastructure-disturbed vegetation should not be counted as effective corridor width, unless it is demonstrably restored to functional ecological condition, prior to impact offset accounting or corridor width calculation.

Revegetation commitments that rely on future maturation over extended timeframes should not substitute for existing functional habitat where threshold conditions may already be present.
If effective (i.e., structurally functional) corridor width is materially less than nominal mapped width due to disturbance, redesign to increase intact remnant retention within the development footprint should be required before approval.

Photos (dated 2026) of previously cleared and not restored Sewer Line works running continuously parallel to western side of Lot 9999, impacting functional habitat corridor width & edge impacts of remaining habitat. *Land not currently suitable for habitat, should be excluded from proposed development use towards habitat corridor functional width and notes about nearby retained habitat.*

Survey Adequacy and Temporal Limitations

Assessment of habitat use and species presence should account for seasonal variability, multi-year climatic conditions, and diurnal/nocturnal activity patterns.

Short-duration surveys conducted during limited seasonal windows may not capture the full extent of habitat utilisation, particularly for migratory species, cryptic fauna, or species with episodic detection patterns.

If seasonal or migratory species such as the Swift Parrot or Regent Honeyeater are considered unlikely or uncertain due to limited survey windows, such uncertainty should be interpreted cautiously where suitable foraging resources exist.

Assessment of ecological risk should account for temporal survey limitations.

If there is a credible risk of serious or irreversible environmental harm, lack of full scientific certainty must not be used as a reason to delay protective action.

Uncertainty regarding species presence and population use should be treated cautiously under the precautionary principle.

Irreversibility and Lessons from Adjacent Urbanisation

Experience from surrounding suburbs developed approximately 20–25 years ago demonstrates that retained bushland strips & elements such as isolated remnant trees have experienced:

- Persistent weed invasion
- Ongoing erosion
- Edge-effect degradation
- Increased domestic predator pressure
- Light and noise intrusion
- Tree removal due to urban interface conflict

In many cases, original large remnant trees have been progressively removed due to perceived risk concerns, without equivalent ecological replacement. Attempts to retrofit canopy cover in constrained urban environments have proven limited by infrastructure conflict, funding constraints, and competing land-use pressures.

These outcomes illustrate that post-fragmentation management is not ecologically equivalent to retaining intact, contiguous forest systems at the outset.

Restoration in heavily urbanised landscapes does not reliably recreate the structural complexity, microclimate buffering, or habitat continuity of remnant forest.

Long-Term Governance and Post-Approval Ecological Risk

Urban interface corridors are subject to progressive degradation pressures that frequently intensify over time rather than diminish. These pressures include:

- Weed invasion
- Edge drying and canopy dieback
- Informal track creation
- Domestic animal intrusion
- Noise and light disturbance
- Stormwater erosion
- Incremental tree removal for perceived safety concerns

Evidence from earlier residential interfaces (Springfield) adjacent to this corridor indicates that narrow retained strips along waterways and filled gullies have experienced ongoing weed

proliferation, erosion, and habitat simplification. This has occurred over approximately two decades following urbanisation development and continues to occur.
Such outcomes demonstrate that initial retention at time of approval does not guarantee long-term ecological functionality.

Where development is staged over 20+ years and ultimate responsibility for maintenance transfers to local government, there is foreseeable risk that:

- Active ecological management diminishes over time
- Budget constraints reduce restoration capacity
- Remnant trees are removed for infrastructure or safety concerns
- Structural complexity declines incrementally

For species such as the Koala and Greater glider, long-term structural degradation may reduce habitat viability even where initial clearing thresholds were technically compliant.

Approval should not rely solely on construction-phase mitigation. Any approval must include enforceable, long-term ecological governance mechanisms, including:

- Dedicated, quarantined management funding for the life of the development & beyond indefinitely.
- Independent ecological auditing at regular intervals.
- Performance-based habitat condition benchmarks.
- Independently enforceable corrective action triggers where ecological decline is observed.
- Clear assignment of responsibility & ecological maintenance funding extending beyond developer exit.

In the absence of robust long-term governance, there is credible risk that retained corridors will progressively degrade below functional viability thresholds, engaging the precautionary principle.

Application of the Precautionary Principle

The Woogaroo–Opossum Creek corridor appears to function within a landscape that has experienced progressive fragmentation over several decades. Remaining remnant vegetation now performs a disproportionately important ecological role relative to its size.

The proposed action introduces additional clearing, edge intensification, hydrological alteration, and long-term urban interface pressures. While precise modelling of long-term ecological viability under these combined stressors may not be fully resolved, there is credible scientific basis to conclude that further narrowing or functional degradation may increase the risk of significant impact to MNES, including habitat supporting the Koala and Greater glider.

Where uncertainty exists regarding the long-term functional resilience of an already constrained corridor system, the precautionary principle is engaged.

In such circumstances, lack of full scientific certainty should not be relied upon to justify approval unless ecological sufficiency can be clearly demonstrated through proposed development re-design and enforceable, performance-based conditions that maintain corridor integrity at a functional landscape scale.

Transport planning should support reduced environmental pressure

Environmentally responsible planning benefits from:

- Reliable and readily accessible public transport
- Sufficient commuter car and bicycle parking facilities with un-used spaces, available at all times public transport services are operating. To ensure access at all times for all potential commuters and limit car dependency to communities.
- Integrated public transport links between Springfield, Ipswich, Logan and Brisbane
- Transport infrastructure that prevents wildlife collisions, reduces emissions via reduced car dependency etc, and avoids further land clearing

Future development should only proceed where currently available public transport & facilities reduce pressure on local ecosystems, via cumulatively reducing car dependency of communities.

Strong and growing community support for protecting the forest

Community involvement contributes significantly to environmental protection and MNES parameters detection through:

- Large petition numbers. 20,000+ verified signatures asking for any further development of the remaining forest to be prevented, as needed to environmentally conserve this forest in full. *This petition previously tabled to Australian Parliament by Australian Senator.* https://www.change.org/p/murray-watt-save-the-koalas-of-woogaroo-forest-ipswich-queensland-australia
- Citizen-science observations
- Bushcare restoration work to numerous locations bordering & nearby this forest, by various groups of passionate individuals from many walks of life. Highlighting the long held community expectation, that this forest is to be retained in full and the significant ecological value the forest provides.
- Public monitoring of threatened species within this forest and supported by this forest including Koalas, Flying Foxes, Powerful Owls, Platypus, Echidnas, Frilled-neck Lizards, Greater Gliders, Swift Parrot, Kangaroos & Wallabies, Rufous Fantail, White-throated Needletail and Regent Honeyeater. *Swift Parrots are an example of a critically endangered species, which is migratory over large distances and requires this forest to be environmentally protected in full and as a wildlife corridor.*

This public engagement demonstrates strong community expectation that the forest be protected.

Unique Koala Population with Greater Climate Resilience

Koalas at Lot 9999 Forest are likely to possess greater climate resilience, because they have already adapted to a harsher, drier vegetation community dominated by drought-tolerant eucalypt species.

Research from the Australian National University shows that koalas are *"dietary specialists whose survival hinges on the chemistry of eucalyptus leaves,"* and that individual populations adapt to the specific nutritional and moisture profiles of their local trees, often relying on *"a narrower suite of trees whose leaves offer the right balance of water, fibre, nutrients and defensive compounds."* This same research emphasises that tougher, lower-moisture leaves require greater physiological effort to process due to *"high levels of indigestible fibre"* and elevated plant toxins, meaning koalas persisting in dry sclerophyll forests (within Lot 9999) are already coping with more demanding foliage.

Climate studies further show that drought-tolerant eucalypt forests provide *"shaded microclimates that help [koalas] survive heat and drought,"* and that leaf chemotypes vary significantly between regions, with what constitutes a high-quality food tree in one area becoming suboptimal only kilometres away.

This evidence supports the conclusion that the koala population within Lot 9999 is already dependent on robust, drought-resilient tree species and adapted to lower-moisture & higher-fibre foliage. Therefore experts advise these Koalas to be more climate-ready than populations in softer coastal habitats.

Translocating koalas is widely considered a last-resort measure rather than a long-term solution, because it often fails to address the root causes of their decline, such as habitat loss and fragmentation. Translocating is fraught with risks, often resulting in high mortality rates and low success in establishing new, healthy populations.

Lack of Suitable Habitat: Many translocation sites are unsuitable or already occupied, leading to overpopulation and resource competition.

Fussy Eating Habits: Koalas are highly specialized eaters. They may not recognize or be able to eat the eucalyptus species in a new location, leading to starvation.
Leaf chemistry varies dramatically between regions and also within individual tree species.
The ANU study notes: *"Chemical defences in eucalypt foliage… vary dramatically both within and between species."* Koalas in Lot 9999 are adapted to the specific, tougher chemotypes of the local eucalypts, which differ from softer coastal forests and potentially all other forests.

Disruption of Established Populations: When moved, koalas are placed into new territories, which can create social instability and conflict with resident koalas.

Moving Koalas does not replace the destroyed, connected habitats they need to survive long-term.

Clearing this forest would therefore eliminate a uniquely climate change resilient koala population, at precisely the time when climate-adapted wildlife is most critical for species survival.

Conclusion and Requested Outcome

The historical long held planning intent for this ridgeline and corridor system appears to have recognised ecological connectivity values, which are now at risk of being functionally severed.

This remaining forest appears to be at, or extremely close to, a functional ecological threshold. Further narrowing or increased edge exposure may materially compromise the forest's ability to sustain viable populations of species including the Koala and Greater glider.
Retention of vegetation in narrow or highly exposed configurations should not be assumed to provide long-term ecological equivalence to wider, buffered corridors to extents needed for habitat.

Without sufficient width, edge buffering & favourable solar exposure orientation, retained riparian corridors in urban landscapes often transition toward simplified, weed-dominated systems over time.

Given the scale of cumulative habitat loss already experienced in the surrounding landscape and the projected intensification of urban pressure over coming decades, the climate adapted local Koala population and unique habitat corridor with refuge function, **refusal of the proposed action represents the most precautionary and ecologically responsible outcome.**

However, should approval be contemplated, it is essential that the following be secured prior to commencement:

- Legally enforceable, indexed, multi-decade funding mechanisms for ecological management, during & indefinitely past project completion.
- Independent ecological governance and performance auditing.
- Preservation of existing structural complexity within the retained corridor.
- Sufficient habitat and ecological retention to suit expert requirements for MNES species.
- Long-term legally enforceable safeguards designed to maintain functional habitat viability under increasing urban density, including permanent transfer of remaining undeveloped forest land assessed under this application to protected conservation status in perpetuity.

For a landscape of this importance, ecological resilience must be guaranteed, not assumed in intent.

This forest is irreplaceable.
Once cleared, it is gone forever.

Thank you for considering this submission.

Respectfully,
[redacted]

Proposed Development Refusal Submission Logic – Appendix A

1. Executive Summary

This submission concerns the proposed Springfield Residential Development, which affects a forested area serving as a critical habitat corridor within an increasingly urbanised context.

The action is likely to have a significant impact on a Matter of National Environmental Significance (MNES), namely the Endangered Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) listed under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The proposed clearing and urbanisation will:

- Remove and fragment established Koala habitat.
- Reduce the effective width and functionality of an existing vegetated corridor.
- Increase edge effects and long-term urban interface pressures.
- Alter site hydrology in ways that degrade retained habitat.
- Contribute to cumulative habitat decline within the broader South-East Queensland landscape.

The currently remaining forest is not an isolated patch of vegetation. It functions as part of a broader vegetated network within an increasingly urbanised matrix. The progressive narrowing and fragmentation of such corridors has landscape-scale consequences that exceed the immediate clearing footprint.

This submission contends that:
The action is likely to have significant impacts under sections 18 and 18A of the EPBC Act.
The precautionary principle applies due to uncertainty in long-term ecological and hydrological outcomes.

Cumulative impacts have not been adequately assessed at the appropriate landscape scale.

Primary Position: The proposed action should be refused.

In the alternative, if approval is granted, it must be subject to strict, enforceable, long-term conditions including permanent conservation tenure of retained habitat and legally binding long-term ecological funding obligations.

2. Statutory Framework

Under sections 18 and 18A of the EPBC Act, actions that are likely to have a significant impact on a listed threatened species require approval.

The Significant Impact Guidelines 1.1 identify that an action is likely to have a significant impact on a vulnerable or endangered species if it:

- Reduces the area of occupancy of an important population;
- Fragments an existing important population into two or more populations;
- Adversely affects habitat critical to survival;
- Disrupts breeding, dispersal, or movement;
- Modifies, destroys or isolates habitat to the extent that the species is likely to decline.

The Koala is listed as Endangered in Queensland, NSW and ACT populations. Habitat fragmentation and urban mortality are identified as key threats in the national conservation advice.

In addition, section 136 of the EPBC Act requires the decision-maker to consider cumulative impacts. Section 391 requires application of the precautionary principle where there is scientific uncertainty and risk of serious or irreversible damage.

This submission applies those statutory tests directly to the facts of the proposal.

3. Site Context and Landscape Function
Woogaroo Forest has undergone natural regeneration following cessation of selective logging more than 30 years ago, that retained tree canopy & significant hollow bearing trees.
Over the previous three decades:

- Canopy structure has re-established.
- Understorey complexity has increased.
- Soil stability has improved.
- Ecological processes have resumed.
- Habitat suitability for arboreal fauna has been restored.

The site now represents accumulated ecological resilience. It is not a degraded clearing, nor a simplified regrowth stand of negligible value. It has regained structural complexity and habitat function.

Importantly, the site operates as part of a broader vegetated corridor within the western growth corridor of Greater Brisbane. In a landscape subject to progressive urbanisation, remnant and regenerating vegetation patches perform critical connective roles.

Connectivity is not binary (connected/disconnected). It is functional and gradient-based. Corridor width, edge-to-interior ratios, disturbance gradients, and permeability of surrounding land uses all influence ecological viability.

Urbanisation adjacent to retained habitat introduces:

- Increased noise and artificial light.
- Domestic animal predation.
- Human intrusion.
- Weed invasion pressure.
- Fire regime alteration.
- Edge desiccation effects.

As corridors narrow, edge effects penetrate proportionally further into retained vegetation. The result is a decline in effective interior habitat even where nominal vegetation remains.
The proposal would materially narrow and modify this corridor and introduce intensified urban interface pressures that extend well beyond the clearing boundary.

4. Koala (Endangered) – Impact Assessment
The Koala requires:

- Suitable feed trees
- Safe movement pathways
- Landscape connectivity
- Low mortality risk environments

The development would impact each of these components.

4.1 Habitat Removal
Direct clearing reduces available habitat area. While proponents may characterise the loss as proportionally small within a regional context, significance under the EPBC Act is not determined solely by percentage metrics. The location and function of the habitat within a connective network is critical.

Habitat forming part of a corridor has amplified importance.

4.2 Fragmentation and Corridor Narrowing
Fragmentation does not require complete severance. It can occur through:

- Corridor narrowing below functional thresholds
- Increased edge effect penetration
- Behavioural avoidance due to disturbance
- Increased mortality at interface zones

Koalas exhibit reduced movement across open or hostile landscapes. Urban interfaces increase:

- Vehicle strike risk
- Dog attack risk
- Stress-induced disease susceptibility
- Barriers to dispersal

The proposal increases the probability of isolating sub-groups within a broader population matrix.

4.3 Edge Effects and Urban Interface Pressure
Edge effects can extend 100's metres or more into retained vegetation depending on slope, aspect, and exposure. These include:

- Increased wind penetration
- Reduced humidity
- Weed invasion
- Altered microclimates
- Human and domestic animal intrusion

As interior habitat shrinks, reproductive success and long-term viability decline even if canopy trees remain standing.

4.4 Hydrological Impacts and Habitat Quality
Urban development alters hydrological systems through:

- Increased impervious surfaces
- Altered infiltration rates
- Accelerated surface runoff
- Concentrated stormwater discharge
- Erosion and sediment transport
- Changes to groundwater recharge

These changes influence:

- Tree health and canopy longevity;
- Understorey persistence;
- Soil moisture regimes;
- Drought resilience;
- Fire susceptibility.

Hydrological alteration can degrade retained habitat quality over time, even without additional clearing.
This represents an indirect but material pathway of impact on Koala habitat. Degradation through altered water regimes is cumulative and often under-detected in short-term monitoring frameworks.

4.5 Cumulative Context
The western growth corridor of Greater Brisbane has experienced progressive habitat fragmentation over decades. Each additional clearing event contributes incrementally to:

- Corridor narrowing
- Genetic isolation risk
- Increased urban mortality
- Declining population resilience

The significant impact test must be applied within this cumulative context, not as a standalone isolated clearing.

5. Survey Methodology and Assessment Limitations
Robust assessment of impacts on a listed threatened species requires more than presence/absence surveys within a defined development footprint. It requires understanding of:

- Movement ecology
- Seasonal variability
- Detection probability
- Landscape connectivity
- Long-term population trends

Short-duration surveys are inherently constrained by:

- Weather conditions
- Seasonal detectability
- Temporal sampling limitations
- Observer bias
- Low detection probability in cryptic or low-density populations

Absence of observation during limited survey windows does not demonstrate absence of use.

For highly mobile arboreal mammals such as the Koala, habitat utilisation can vary seasonally and in response to climatic conditions.
Further, static site surveys do not adequately capture:

- Dispersal pathways
- Juvenile movement corridors
- Sub-adult dispersal risk
- Behavioural avoidance caused by early site disturbance

Without long-term movement modelling and corridor functionality analysis, conclusions regarding “limited impact” risk being premature.

A precautionary interpretation of incomplete ecological information is required under section 391 of the EPBC Act.

6. Cumulative Impacts and Landscape-Scale Thresholds
Section 136 of the EPBC Act requires consideration of cumulative impacts.
Cumulative impact assessment must:

- Extend beyond the immediate development footprint
- Consider regional habitat loss trajectories
- Assess corridor narrowing over time
- Model landscape permeability changes
- Evaluate genetic isolation risk

South-East Queensland has experienced sustained urban expansion over decades. The cumulative effect of repeated incremental clearing events is:

- Progressive reduction in effective habitat width
- Increased edge-to-interior ratios
- Escalating urban mortality factors
- Reduced resilience to drought and climate extremes

Ecological systems do not respond linearly to incremental loss. They often exhibit threshold behaviour, where functional collapse occurs after a tipping point is crossed.

Corridors narrowed below viable width thresholds may remain visually vegetated, but functionally degraded.

Significance must therefore be assessed not merely in hectares cleared, but in contribution to long-term corridor destabilisation.

7. Hydrology, Climate Resilience, and Indirect Impacts
Hydrology is integral to ecological integrity.
Urban development typically introduces:

- High-volume, high-velocity stormwater discharge
- Reduced infiltration and groundwater recharge
- Concentrated drainage channels
- Altered seasonal flow regimes

These changes influence:

- Soil moisture retention
- Root system stability
- Understorey regeneration
- Tree recruitment dynamics
- Disease susceptibility
- Fire risk intensity

Even where vegetation is retained, altered hydrological regimes can:

- Increase canopy dieback
- Shift species composition
- Promote invasive weed dominance
- Reduce long-term habitat suitability

In a warming climate, hydrological resilience becomes increasingly important. Vegetated corridors that retain moisture buffers provide thermal refuge and drought mitigation.

Development that compromises hydrological stability reduces long-term adaptive capacity of retained habitat.

These impacts are gradual, compounding, and often under-recognised in short-term compliance monitoring frameworks.

8. Limitations of Offsets and Mitigation

The EPBC Act environmental impact hierarchy prioritises:

- Avoidance
- Minimisation
- Mitigation
- Offset (as a last resort)

Offsets cannot replicate:

- Established corridor functionality
- Accumulated ecological resilience
- Mature canopy structure
- Site-specific landscape positioning
- Existing movement pathways

Offsets are subject to:

- Time lag between impact and maturity
- Uncertainty in ecological establishment
- Non-equivalence in landscape function
- Risk of future degradation

As the proposed development site has undergone more than 30 years of natural regeneration and structural recovery following cessation of selective logging, its ecological capital cannot be rapidly recreated elsewhere.

Offset reliance in this context fails to address the core fragmentation risk posed by the proposal.

9. Precautionary Principle and Irreversibility

Section 391 of the EPBC Act requires application of the precautionary principle.
Where there is:

- Scientific uncertainty
- Risk of serious or irreversible environmental damage

Lack of full scientific certainty must not be used as a reason to postpone measures to prevent degradation.
In this case:

- Long-term hydrological impacts are uncertain.
- Corridor threshold modelling has not been demonstrated at a regional scale.
- Cumulative decline trajectories remain incompletely quantified.
- Climate change amplifies ecological vulnerability.
- Habitat fragmentation and corridor destabilisation are effectively irreversible within meaningful ecological timeframes.

The risk profile warrants precaution.

10. Resilience and Recovery Value of the Site
Woogaroo Forest ceased selective logging over 30 years ago.
Since that time:

- Regeneration has occurred
- Structural complexity has increased
- Canopy connectivity has improved
- Habitat suitability has re-established
- Ecological processes have stabilised

The site now represents accumulated ecological resilience within an urbanising landscape.
Clearing at this stage would:

- Eliminate three decades of recovery
- Reset successional processes
- Reduce long-term adaptive capacity
- Remove a regenerating refuge in an increasingly fragmented region

In landscapes where remnant habitat is scarce, recovering systems are especially valuable.

Their contribution to resilience increases over time, not decreases.

11. Requested Determination

11.1 Primary Position — Refusal
For the reasons outlined above, the proposed action is likely to have a significant impact on a listed threatened species and its habitat under sections 18 and 18A of the EPBC Act. Including but not limited to, significant fragmentation and degradation of habitat forming part of an important population of the Endangered Koala.

The action should therefore be refused.

11.2 In the Alternative — Mandatory Conditions
If the Minister determines to approve the action notwithstanding the above, approval must be subject to stringent, enforceable, and long-term conditions including:

<u>A. Permanent Conservation Tenure</u>
All retained habitat must be:

- Legally secured in perpetuity under binding conservation protection
- Transferred to strict conservation status rather than retained as urban open space
- Protected from future rezoning, fragmentation, or incremental encroachment

Retention within a residential estate without enforceable conservation tenure is insufficient to maintain long-term ecological integrity.

<u>B. Legally Binding Long-Term Ecological Funding</u>
The proponent must establish an independently administered ecological management fund that:

- Is legally enforceable
- Is indexed to inflation
- Extends for a minimum of 25–30 years post-construction
- Funds ongoing invasive species management
- Funds fire regime management
- Funds Koala population monitoring

- Funds hydrological monitoring
- Funds independent annual public reporting

Short-term construction-phase funding is inadequate to address long-term ecological risk.

C. Independent Regional Connectivity Modelling
Prior to commencement, independent modelling must assess:

- Minimum viable corridor widths under urban-adjacent conditions
- Cumulative development scenarios
- Climate resilience impacts
- Landscape permeability over time

Modelling must not rely solely on proponent-commissioned assessments.

D. Hydrological Integrity Safeguards
Approval conditions must require:

- Pre- and post-development groundwater monitoring
- Surface flow modelling verification
- Sediment and nutrient monitoring
- Adaptive management triggers where ecological decline is detected

12. Conclusion
The proposed development & clearing will impact a regenerating, structurally complex corridor within an increasingly urbanised region of South-East Queensland.

Following cessation of selective logging more than 30 years ago, the site has accumulated ecological resilience and regained functional habitat value.

The proposal would:

- Remove established habitat
- Narrow a functioning corridor
- Increase edge penetration and disturbance gradients
- Alter hydrological regimes integral to long-term habitat quality
- Contribute to cumulative regional fragmentation

Given the Endangered status of the Koala and the documented trajectory of habitat decline across the region, the proposed action is likely to result in significant impacts under the EPBC Act.

Refusal is the appropriate and precautionary outcome.

Response to Key Assertions in Proponent Documentation – Appendix B

1. Proportional Habitat Metrics Are Not Determinative

The proponent may characterise the clearing footprint as a relatively small proportion of habitat at a local or regional scale.

However, proportional metrics are not determinative under the significant impact test. The EPBC Act requires assessment of whether an action is likely to:

- Fragment an important population
- Adversely affect habitat critical to survival
- Disrupt dispersal or movement

Habitat located within a connective corridor performs a function disproportionate to its area. Removal of corridor segments contributes to cumulative narrowing and reduced landscape permeability.

Where habitat loss affects structural connectivity, significance cannot be dismissed by reference to percentage comparisons.

2. Nominal Retention Does Not Equal Functional Connectivity

Statements that retained vegetation will maintain connectivity require scrutiny.
Connectivity is not binary. It is functional and threshold-dependent. Corridor viability depends on:

- Minimum viable width
- Edge-to-interior ratios
- Disturbance gradients
- Behavioural responses to urban interface

Edge effects commonly penetrate 50–100 metres or more into retained vegetation. As corridor width decreases, effective interior habitat declines non-linearly.

Without independent modelling of corridor width thresholds under urban-adjacent conditions, it cannot be assumed that retained vegetation will maintain functional movement capacity for Koalas. Retention without demonstrated functional modelling does not satisfy the significant impact test.

3. Limited Survey Detection Does Not Establish Low Risk

Where the proponent concludes that Koala presence is limited based on survey outcomes, this conclusion must be interpreted cautiously.
Koala detection probability is influenced by:

- Seasonal timing
- Weather conditions
- Sampling duration
- Observer coverage

Short-duration surveys cannot reliably quantify intermittent corridor use or sub-adult dispersal pathways.

The absence of high-density indicators within a limited sampling window does not demonstrate absence of ecological function.

Under section 391 of the EPBC Act, uncertainty regarding species utilisation should be resolved in a manner that avoids irreversible fragmentation risk.

4. Hydrological Compliance Is Not Ecological Neutrality
The assertion that stormwater systems will meet regulatory standards does not equate to ecological neutrality.
Urbanisation inherently alters:

- Peak discharge frequency
- Runoff velocity and concentration
- Infiltration dynamics
- Groundwater recharge regimes
- Thermal loading of receiving systems

Altered hydrological regimes influence soil moisture stability, tree recruitment, canopy longevity, and invasive species dynamics. Gradual canopy decline associated with hydrological alteration is well documented in urban-fringe ecosystems.

Hydrological change represents an indirect but foreseeable degradation pathway affecting long-term habitat suitability.

Compliance with engineering standards does not eliminate ecological impact.

5. Offsets Cannot Replicate Established Corridor Function
Where offsets are proposed, it is critical to distinguish policy compliance from ecological equivalence.
Offsets cannot:

- Recreate established canopy connectivity in situ
- Replace accumulated structural complexity
- Eliminate time lag between impact and maturity
- Restore the specific landscape positioning of an existing corridor

Thirty years of post-logging regeneration represents accrued ecological capital. Clearing results in immediate loss. Any offsets needing restoration require decades to approximate structural condition, if at all. Offsetting does not prevent fragmentation of the existing corridor, or guarantee adequate and/or suitable alternative habitat for existing wildlife and is expected to result in potentially significant wildlife deaths.

6. Socio-Economic Framing Does Not Displace Statutory Test
If the proposal is framed as achieving a balance between development and conservation, it is important to restate that the EPBC decision framework is not a generalised planning exercise. The statutory question is whether the action is likely to have a significant impact on a Matter of National Environmental Significance.

For further politically framed context, South-east Queensland as a whole is facing a broader conservation concern. Wild koalas across the region are declining due to habitat loss, disease and urban pressures, with fewer than 16,000 individuals estimated remaining in the wild within SEQ and experts warning of local extinctions without stronger habitat protection.

Meanwhile, regional planning estimates suggest SEQ will need tens of thousands of new homes per year to accommodate population growth, a figure far larger than the approximate 90 houses per year the proposed development site would yield if built out over 20 years for approximately 1800 total homes. (i.e., roughly 0.26 % of an estimated 34,500 homes per year needed).

The destruction of a critical wildlife corridor and endangered species habitat for a relatively small & marginal supply contribution, highlights the policy necessity of prioritising housing in already-cleared or higher-density areas rather than in irreplaceable ecological zones.

Where significant impact is likely, refusal is the appropriate outcome unless impacts can be demonstrably avoided.

Socio-economic considerations do not negate ecological thresholds.

Evidence on Minimum Corridor Widths in Suburban Areas – Appendix C

1. NSW Chief Scientist & Engineer – Koala Corridor Principles (2021–2022)
The NSW Chief Scientist's expert advice, now embedded in the Cumberland Plain Conservation Plan, states that **koalas require large, connected areas of habitat** and that corridors must be designed to **assist movement, reduce threats, and maintain long-term viability**.
Key quotable points:

- *"Koalas require large and connected areas of habitat to eat, move, and breed."*
- *"Corridors provide koalas with safe passage across the landscape… and improve resilience to long-term threats including climate change."*
- The advice includes **31 principles** for protecting koalas, including corridor adequacy, fencing, and maintaining connectivity.

While this guidance does not specify a single numeric width, it is widely used to argue that **corridors must be wide enough to maintain canopy continuity, food tree density, and escape routes from fire**, all of which are impossible in narrow strips.

2. National Guidance for Koala-Sensitive Urban Design (2025)
The national guidance emphasises that urban development must **avoid fragmentation**, maintain **landscape-scale connectivity**, and ensure that corridors are **ecologically functional**, not just token strips.
Corridors must be designed based on:

- **Actual koala movement patterns**, habitat values, and threats.
- Connectivity must be assessed at the **landscape scale**, not the development footprint.
- Narrow corridors in urban areas **fail to mitigate vehicle strike, dog attack, and edge effects**.

3. Queensland Koala-Sensitive Design Guideline (2022)
Queensland's own guideline stresses that koala-sensitive design must maintain **continuous canopy**, **adequate habitat width**, and **functional movement pathways**.
Corridors must be:

- **Wide enough to support habitat trees**, not just movement.
- Corridors must avoid **pinch points** that increase mortality risk.
- Habitat must be **retained, not offset**, where it forms part of a functional corridor.

4. Scientific literature
Widely accepted & well-established findings include, but are not limited to:

- **Koalas avoid narrow corridors** due to edge effects, noise, light, dogs, and human activity. Non site specific guidelines may note less than 100m corridor width causes Koala avoidance & use.
- **Functional corridors for arboreal mammals** typically require width to maintain canopy connectivity, food tree density, and microclimate stability. The required width depends heavily on the target species, landscape, and length of the corridor.
- **Fragmentation thresholds** can trigger once habitat blocks fall below thresholds or corridors narrow. Wildlife populations then experience rapid decline due to vehicle strike, dog attack, and reduced dispersal. While industry standards offer a baseline, ensuring robust connectivity for sensitive local species necessitates bespoke, site-specific evaluations conducted by independent experts.

5. Summary
Given these principles, the existing forest corridor cannot be reduced any further. Narrowing the corridor would cross known fragmentation thresholds and compromise the viability of the local & uniquely climate adapted koala population.

“Koalas require large, connected areas of habitat to eat, move, and breed, and corridors must be designed to assist movement and maintain resilience to long-term threats including climate change.” (NSW Chief Scientist & Engineer, 2021–2022)

“National koala-sensitive urban design guidance requires that connectivity be maintained at the landscape scale and that corridors remain ecologically functional, not merely symbolic.” (DCCEEW, 2025)

Evidence on Post-Development Environmental Resourcing Failures – Appendix D

Highlights for **systemic, predictable, and well-documented failures** that the EPBC Act must consider.

1. NSW Chief Scientist’s Advice
The advice explicitly notes that **corridors require long-term management**, including fencing, restoration, and monitoring.
Considering:

- Developers rarely maintain corridors after construction.
- Without ongoing resourcing, corridors **degrade, narrow, and become non-functional**.
- Government agencies often lack the funding to maintain what developers leave behind.

2. National Koala-Sensitive Urban Design Guidance (2025)
This guidance emphasises the need for **implementation, review, and adaptation**, not just planning.
As quoted:

- *“Implement… Review and adapt”* — meaning corridors require **ongoing & adequate management, resourcing & funding**, not one-off construction or political promises.
- *“Urbanisation is a threat to koalas”* — because of items raised in this submission and by experts.

3. Queensland Koala-Sensitive Design Guideline (2022)
The guideline acknowledges that koala-sensitive design requires **ongoing monitoring and adaptive management**, not just initial planning.
EPBC Act must consider that:

- Post-development neglect is a known risk.
- Without permanent adequate management, resourcing & funding, corridors lose canopy, become invaded by weeds, and fail to function.

Potential Impacts of Development on Platypus Habitat – Appendix E

The Platypus (Ornithorhynchus anatinus) depends on stable freshwater creek systems with intact riparian vegetation, complex creek-bed structure, and abundant aquatic invertebrates. Urban development in catchments upstream of platypus habitat can significantly alter these conditions.

Sediment runoff from construction and land clearing is one of the most significant risks. Vegetation removal, soil disturbance, and exposed earth surfaces increase erosion, allowing fine sediments to be transported into creeks during rainfall events.

Once in waterways, these sediments settle across creek beds and banks, causing several ecological impacts:

- **Loss of burrow habitat.** Platypus construct burrows in stable, vegetated creek banks. Sediment deposition and bank instability can fill small cavities and undercut spaces along banks, reducing suitable burrowing locations and increasing the risk of burrow collapse.
- **Smothering of creek-bed habitat.** Platypus feed primarily on aquatic macroinvertebrates such as insect larvae, freshwater shrimp, worms, and small crustaceans that live within gravel, cobbles, leaf litter, and crevices in the creek bed. Fine sediment blankets these substrates and fills the small interstitial spaces where these organisms live.
- **Reduction in food availability.** When these spaces become filled with fine sediment, oxygen flow through the substrate is reduced and many macroinvertebrate species decline. Because platypus forage by sifting through creek-bed sediments using their bill, a reduction in these invertebrate communities can directly reduce food availability.
- **Altered stormwater flows.** Urban development typically increases hard surfaces such as roads and roofs, resulting in faster and larger stormwater runoff entering waterways. These “flashier” flows can erode creek banks, scour stream beds, and damage platypus burrows. Sudden increases in flow can also wash away invertebrate communities and degrade aquatic habitat structure.
- **Habitat fragmentation and barriers.** Infrastructure such as poorly designed culverts, stormwater channels, and modified creek crossings can create barriers to movement for platypus. Maintaining connectivity along waterways is important for dispersal, access to feeding areas, and maintaining healthy populations.

Importantly, many of these impacts are not immediately obvious. A creek may appear visually intact while the ecological structure of the creek bed and invertebrate communities has been significantly degraded.

Because platypus rely simultaneously on stable creek banks for burrowing and healthy benthic invertebrate communities for food, sedimentation, altered hydrology, and habitat fragmentation associated with large-scale development can substantially reduce habitat quality and long-term population viability.

Even small increases in sediment loads can disproportionately affect species that rely on clean, structurally complex stream beds.

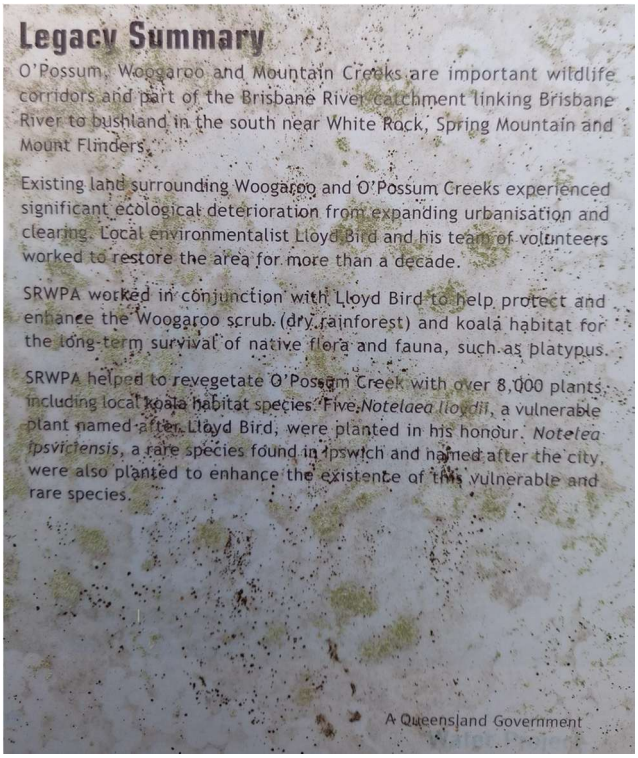
Photos of Stormwater Damage & Sediment Runoff (March 2026) – Appendix F

Intended to show extent of surrounding cumulative effects of increased urban stormwater discharge into existing Platypus habitat and example of sediment runoff & pollution via eroding pipeline installation (assumed town water from water tank on mountain) with abandoned vehicle.

The waterway appears to be experiencing large flash flooding with increased force, following the surrounding developments already completed, as shown by balustrades pushed over and debris in trees etc. This may suggest the waterway is already near threshold to support aquatic life and the proposed development may push the waterway to collapse habitat needed for Platypus and other aquatic life.

The waterway would benefit from evaluation to adequately address ecological pressures from urbanisation to maintain the existing Platypus habitat, with relevant professional ecologist input.

Signage Relevant to Ecological Relevance of Remaining Forest (March 2026) – Appendix G




Platypus live here!
The traditional word for platypus in Yagara/Yugera language is 'Meiwah' (pronounced me-i-wah)
Living alongside platypus
Platypus (Ornithorhynchus anatinus) are one of Australia's most unique and iconic species.
Being a monotreme, platypus are egg-laying mammals and they spend part of their life underwater and part of their life on land.
Platypus reside in this area and throughout many of the waterways of Ipswich, although they are often overlooked.
Protecting our platypus
Due to their semi-aquatic lifecycle, platypus have a number of habitat requirements that can be impacted by urban land use and development.
One of the greatest threats to platypus is the risk of drowning in yabby traps and entanglement in other fishing equipment.
Do not use opera house style yabby traps.
Only use open topped yabby traps, which are platypus safe and equally as effective for catching yabbys.
Take tangled line, hooks and other fishing equipment with you.
Get familiar with Queensland's recreational fishing rules and regulations.
How you can help
There are a number of things we can all do to contribute to platypus conservation in our local waterways:
Please keep your dog on a leash and do not let them swim in waterways in this area.
Get involved with projects to improve waterway health such as Bushcare.
Clean up rubbish around waterways, especially ringed items such as drink packaging, rubber bands and hair ties.
Dispose of green waste appropriately, and never dispose of in reserves or waterway corridors.
How to spot a platypus
The best way to spot a platypus is to visit a pool of permanent water around dawn or dusk. Remain quiet and still on the bank while observing the water to avoid spooking them.
If you find a sick or injured platypus
Pick up and hold a platypus safely by the tail to avoid the male's venomous spurs. Place it in a light cloth bag or secure container, keep it cool and quiet and contact 1300 264 625.
Scan the QR code to find out more about platypus in Ipswich
City of Ipswich


OPOSSUM CREEK REHABILITATION & REVEGETATION PROJECT
This area was a popular destination for early botanists and naturalists in the 1890s who arrived by train from Goodna to visit the Woogaroo or Goodna scrub. The scrub once extended from Brisbane River to Goodna and upstream. The lower reaches of Opossum Creek contain small fragmented patches of disturbed rainforest.
Opossum Creek is a significant area for biological diversity. Its dry rain forest habitat provides habitat for unique species, such as the threatened Tusked Frogs, Powerful Owl, and an abundance of bird life, together with rare and endangered flora Marsdenia coronata and Indigofera baileyi.
Contractors removed 2,233m2 of lantana and woody weeds such as Chinese Elm, Camphour Laurel, Devils Fig and Wild Tobacco, replacing these with native species endemic to the Opossum Creek regional ecosystem with the help of volunteers on community planting days.
Before (2019)
After (2020)
SPRINGFIELD LAKES NATURE CARE
www.springfieldlakesnaturecare.org.au
www.facebook.com/SpringfieldLakesNatureCare
A: Tusked Frog
B: Powerful Owl
C: Brush Turkey
D: Whipbird
E: Swamp Wallaby
F: Marsdenia coronata
G: Indigofera baileyi
This project received funding from the Australian Government's Community Environment Program.
Australian Government
WELCOME TO POSSUM CREEK
The Woogaroo Environment Team under the direction of Lloyd Bird (OAM) received significant funding by various sources to address the regeneration and rehabilitation of the site in the 1990s. According to Lloyd, "Opossum Creek was one of the best areas of Dry Rainforest in close proximity to Ipswich."
The project was left uncompleted after Lloyd Bird's death in 2009. Springfield Lakes Nature Care Inc. approached Ipswich City Council about including the area in a Bush Care program and applied for funding from the Australian Government to continue the rehabilitation and revegetation of Opossum Creek.
This project received support from Ipswich City Council and is contributing to the preservation of our natural environment.
City of Ipswich

Photos of Cleared Land (Sewer Works) Impacting Corridor Function Adjacent Proposed Development (March 2026) – Appendix H

Photos (dated 2026) of previously cleared and not restored Sewer Line works running continuously parallel to western side of Lot 9999, impacting functional habitat corridor width & edge impacts of remaining habitat. *Land not currently suitable for habitat, should be excluded from proposed development use towards habitat corridor functional width and notes about retained habitat.*

Photos of Unused, Cleared & Vacant Nearby Land (December 2025) – Appendix I

Current December 2025 photos of vast cleared bushland closer to Springfield Central Train Station & City Centre shown below. There is approximately 25 hectares / 250,000m² of currently cleared land. Sufficient space for housing 100,000+ residents comfortably, with thriving businesses & services, using mixed use high rise developments. Avoiding need to clear remaining bushland.