

**Submission
No 269**

**INQUIRY INTO FEASIBILITY OF UNDERGROUNDING
THE TRANSMISSION INFRASTRUCTURE FOR
RENEWABLE ENERGY PROJECTS**

Name: Janet Harwood

Date Received: 14 July 2023

The Future is the Natural World



"Biodiversity loss is the most significant environmental problem facing Australia"
Professor David Lindenmayer. (2007) "On Borrowed Time"

Inquiry into the feasibility of undergrounding the transmission infrastructure for renewable energy projects.

Dear Committee,

This research would like to thank the opportunity to speak on behalf of rarest native wildlife struggling to find remaining habitat, in the city of Sydney (or any urban area in Australia).

Case Study of near-to-station rare urban biodiversity (fauna & flora) from within rarest near-to-station remnants of Blue Gum High Forest (BGHF) and Sydney Turpentine Ironbark Forest (STIF). Appreciating the almost impossible task of undergrounding transmission infrastructure in vast areas of an urban landscape, this research (originating in 20 + years of resident bush care), supplies context briefly, stating multiple new threats to wildlife. Lands for undergrounding transmission infrastructure, in areas of rare Urban Forest should have future planning and Protection Strategies, to deal with biodiversity loss and climate extremes. If planning is done under external development pressure, by planning systems also external, imposed, unaware of and unsympathetic to, changed local conditions: then residents and wildlife suffer immediate & cumulative negative impacts (usually irreversible). A pilot Transition project to test the feasibility of undergrounding the transmission infrastructure for renewable projects will save last critical biological infrastructure (ie rare Urban Forest).

Nature needs areas for her to restore herself for the future, and ecological integrity is crucial to protect, restore and fund to food source and habitat to maintain diversity, but lack of foresight & updated thinking, has allowed huge loss. Without necessary foresight, no new planning controls and no adoption of fundamental new concepts or new zones (E5 2012), deep ecological flaws are visible. For eg. lack of inclusion of biodiversity and climate crises in "*A new approach to re-zoning*" (DPE, 2022). Under such pressures, in areas of rarest remaining BGHF and STIF, with old gardens and Eco-literacy disappearing, verges, streets, sports fields, bowling clubs, golf courses, natural areas and Parks are crucial for survival of all species.

Loss of critical biological infrastructure (CBI). State government laws changed by previous government to "facilitate" the Economy and have allowed non-locals and ecologically unqualified planning and development systems to decide loss of rare urban bushland. Such areas of rare urban biodiversity greatly need undergrounding transmission infrastructure To PROTECT last remaining CBI, fauna and flora in the city from fires and winds, storms blowing away nests, soil moisture loss, and prevent rare hollows and food-source being lost. Incredibly, E- for Environment zones have been changed by planning and development systems to E-for Employment zones – with no strategy for the protection of last Urban Forest other than targets for tree planting – in climate likely to Not favour habitat return.

Since conservation is inappropriately sought within the planning process (DECC 2008), this research has proposed a pilot Transition Town study (2018), to engage ecologically sustainable survival economics (ESSE), to allow (a) Accounting FOR Nature (not offsetting

loss), (b) to overcome flaws in the current powerful planning & development system, and (c) Eco-literacy, mental health, and national reconstruction of last native Urban Forest.

Current ecological considerations enabling this Transition exercise in last environmentally sensitive areas can be overridden by too powerful Planning.

1. The planning and development department are powerful because they are the sole department able to contact the State Government Planning sections responsible for rezoning and thus they are the sole people able to make (gazette)LEPs, do Amendments (with no oversight) and do spot re-zoning or listen to locals requesting correction and protection (limited to just 3 E-for Environment protection zones being now changed to E-for Employment zones).
2. Suppression of sensitivity by planning has erased the detail of critically endangered ecological communities of species – white out to allow re-zoning of development in last ESAs such as the “critical habitat and corridor ecology” to take effect.
3. Treatment of Parks, Reserves and Sportsgrounds as discrete entities steamrolled and zoned RE1 has been a trojan horse for disposal in future, with little regard for local residents and security of Public ownership of undergrounded transmission infrastructure – this will cause problems like foreign ownership of poles and wires.
4. Simplify, certainty & speed are catch calls of the planning and development system & dumbing down of complex Ecology is a requirement of current P&D to ensure #1
5. Thus survival of ALL species AND addition of more urban wildlife, has been achieved at great cost – cost to Nature and Cost in dollars to consultant reports.
6. It needs federal government to be engaged to protect MNES for the NRS.
7. In the [Age of Environmental Breakdown](#), It takes more than “targets” to plant trees to achieve a Protection Strategy the Transition Town project to protect fauna and flora by undergrounding renewable transmission must be a serious exercise- not a game to deny and delay protection but speed and satisfy development, sport and recreation.
8. It needs previously denied empathy and engagement of local citizens and residents by intelligent signage, to educate and protect, restore and add to rare Urban Forest.
9. Briefing to make ESAs comply with the cost of considering matters of undergrounding electric wires to protect BGHF and STIF from storms and fires.
10. The aim of this urban Transition is to overcome that conflict and plan the undergrounding of transmission infrastructure – to protect, restore and fund the conservation of the rarest matters of national environmental significance (MNES) - an exercise free of flaws and ecological illiteracy exhibited by current planning systems.

Transition must be an audit of what remains, before loss is irreversible in the base of the food chain (eg. Insects, tree canopy, mid and ground cover – for the powerful owl, its food, small birds and ground dwellers like dunnarts and water dragons). An Ecology department in the Transition Town fully equipped with required qualifications must attempt re-wilding, restoration and repair - in association with undergrounding of transmission.

[The Economics of Biodiversity](#) In NSW, the context is a complex situation where planning & development systems have failed to ensure enough protection for the Age of Environmental Breakdown. As a result the rarest include systemic flaws (such as too few environment zones, introduction of multiple impacts development, recreation and sport), do not have local understanding of impact of multiple protected tree removal, windbreak loss, new windspeeds, loss of old gardens and ground, shrub, midstory and canopy cover, removal of creeks, riparian areas. All impacts are also irreversible as soils and seedbank are converted

at high speed to concrete, bitumen and lead to soils moisture level reduction and nesting space decline (alongside and near rarest remnants).

Secret plans to develop bushland, and rare Urban Forest ESAs (streets, parks, and connecting reserves and corridors, etc) rapidly cause loss of remnant intact bushland and creeks to synthetic grass, and old gardens to be amalgamated into lots for massive developments, and for established food and habitat trees to be removed by Council officers with little or no regard to allowing them to stand for food-source and habitat. Street trees are weakened by footpaths, verge trees with hollows are lost, which should all be protected for future critical habitat & corridor ecology (see pages). With lost gardens, verges are critical for remaining trees, and small bird habitat. But in urban areas verges are overused by agencies for water, etc. and subject to cycle and footpath use.¹

Local Strategic Planning Statement (LSPS) prioritizing housing not protection of ratepayers and wildlife, instigated tree removal in anticipation of development. Rare Urban Landscapes, were Master-planned “in isolation” to allow maximum rezoning for development. A housing strategy if mis-planned to take advantage of lack of regulation (for future renewable energy requirements), will create a steamroller effect. Instead, by planning the undergrounding of Transmission infrastructure to protect critical biological infrastructure (CBI), the outcome would be ecologically sustainable survival economics (ESSE).

Developers buy up entire streets, to demolish by neglect and pre-empting the possible undergrounding of renewable infrastructure. Last town centre trees which are left for urban wildlife are authorized for removal to allow Greyfield (dilapidated, moribund appearances). This is happening in crucial urban landscapes near-to-stations and where intact remnants have already been re-zoned and converted to concrete, proving lack of understanding of unforeseen feedbacks in Nature, due to clear loss of mapped biodiversity.

What is stopping the undergrounding? Pressure from re-zoning for development in critical habitat, has caused conflict of interest between Protection & Use. Factsheets encouraging Crown Land Leases to be gifted to Freehold, and language such as ‘underutilized’, ‘Public Bushland’ and ‘Open Space’ mean bushland retention for future underground cabling is threatened and restoration is highly unlikely, due to regional sport and recreation being called. The domino effect of improper re-zoning of critical habitat landscapes, has added to inaccurate language encouraging developers and public to “activate” lands which are dependent on soils which are unique to this location.

Current flaws, laws, loopholes, and lack of wildlife perspective, means unforeseen, irreversible loss of ecological integrity. Native forest clearing in urban areas begins with rezoning for development – a higher order trigger than the current Key Threatening Process (KTP) which is clearing native vegetation. Rezoning for development by erasing the sensitivity of an area of sensitivity, or incorrectly protecting it, means the last habitats of vanishing wildlife, will not be saved for the future.

¹ <https://www.caselaw.nsw.gov.au/decision/549f8fe33004262463aca54e> “Where species or communities have been listed as critically endangered, the preservation and protection of a few neighbouring isolated trees can contribute to the long-term viability of a greater community and should be preserved. No community can re-generate if the seedbanks or sources of those seedbanks have been removed.... Where a community once existed there remains a distinct possibility that viable seed banks may be retained in the surrounding soils..... With respect to the connectivity and fragmentation of endangered and critically endangered species, a few remaining trees may well provide a critical link to maintaining and contributing to the long term viability of refugia

No assessment of the cumulative removal of fauna and flora communities. The Transition Town in critical habitat is an opportunity to test the undergrounding of transmission infrastructure for cities to retain rare Urban Forest. The research shows natural and built significance, lost to multiple re-zonings for development. This means loss of local soils, seedbank and mature trees (with hollows, roost, food source and shelter). This is happening despite calls for recovery plans, objections to impacts of sport and recreation, court cases, protests and submissions to protect intergenerational inheritance for the future of all species.

Protection is meaningless under current laws and left to powerless volunteers. Native forest loss in urban areas begins with rezoning for development – a higher order trigger than the current Key Threatening Process (KTP) which is clearing native vegetation. Rezoning for development by erasing the sensitivity of an area of sensitivity, or incorrectly protecting it, means the last habitats of vanishing wildlife, will not be saved for the future. Current flaws, laws, loopholes, and lack of wildlife perspective, means unforeseen, irreversible loss of ecological integrity.

Protect Restore and Fund Critical Biological Infrastructure (CBI) loss. In such last BGHF &STIF reserves for repair and rewilding, restoration and revaluation:

In a situation, where planning and development systems include systemic flaws such as:

- too few environment zones,
- forced introduction of multiple impacts by development, recreation and sport,
- no local understanding of multiple protected tree removal, windbreak loss, new windspeeds, loss of old gardens and ground, shrub, midstory and canopy cover, consequences loss and removal of creeks, riparian areas.
- leading to complex degradation of soil moisture level reduction and nesting space decline adding to insect extinction (base of food chain) and
- No calculation or consideration of irreversible loss such as of soils and seedbank converted at high speed to concrete, bitumen and synthetic grass....

Then a Pilot Project to test the undergrounding of transmission infrastructure in the proposed The Transition Town would be a well-supported citizen science engagement project.

Ten years of extinction debt lost to denial, delay and destruction of the same ESA – means an Audit of threatened species in the proposed Transition Town will save critical habitats and corridor ecology.

Recommendations will be sent to the Committee, the NSW Auditor General Office, the Biodiversity Conservation Act Review, the NSW Premier and Federal Government.

With good wishes,

Janet Harwood

IPBES Stakeholder <https://www.ipbes.net/news/Media-Release-Global-Assessment>

14th July 2023.

The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>). Please cite this article as: Pedro Cardoso, et al., Biological Conservation, <https://doi.org/10.1016/j.biocon.2020.108426> Pedro Cardoso*, Philip S.

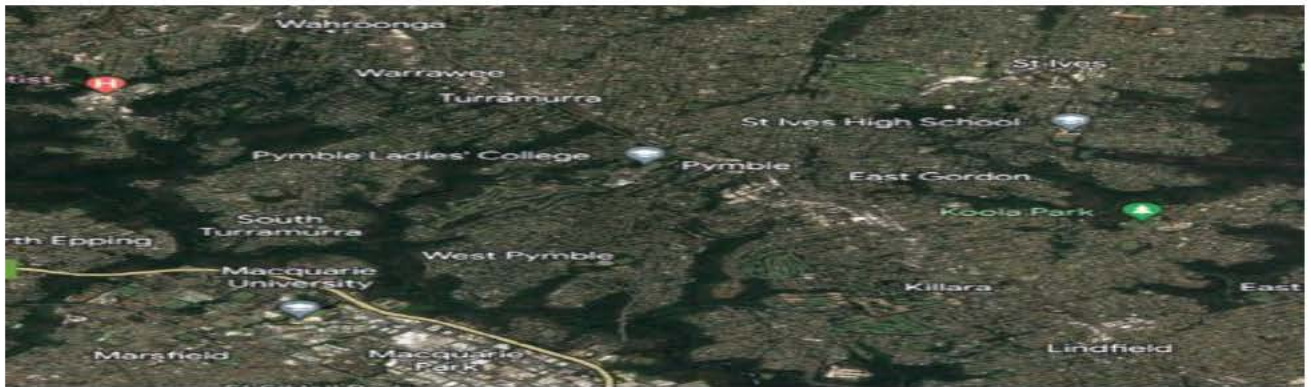
A B S T R A C T Here we build on the manifesto 'World Scientists' Warning to Humanity, issued by the Alliance of World Scientists. As a group of conservation biologists deeply concerned about the decline of insect populations, we here review what we know about the drivers of insect extinctions, their consequences, and how extinctions can negatively impact humanity. We are causing insect extinctions by driving habitat loss, degradation, and fragmentation, use of polluting and harmful substances, the spread of invasive species, global climate change, direct overexploitation, and co-extinction of species dependent on other species.

Measuring what Matters – Soils and Seedbank saved by undergrounding.

Federal Treasurer must leverage Transition to the Economics of Biodiversity (Account FOR Nature). Test the undergrounding of transmission infrastructure as a prototype, update controls for biodiversity conservation via accounting system & pilot study.

This area should have been declared "critical habitat" in 2009 (for rare urban wildlife the powerful owl, possum, bandicoots etc), as asked by Friends of Turramurra (FOT). This critical habitat should now be protected by Federal Government and State Government for advanced landscape conservation (ALC) and critical biological infrastructure (CBI).

NSW Planning & Development systems removed **Rare environmental assets for concrete** - a double loss for the combined natural & built heritage from Fox Valley Rd to Ryde Rd & Highway to Lane Cove National Park (including rare reserves, Hillview, the Town Hall, Presbytery, etc).



Not only was the deferred matter site lost (LEP194) ... but LEP2015 plans to give remaining Transition Town to the crony development system.

Asset stripping out of control: housing numbers far exceeded targets in 2007 and again in 2017. Showing what has happened to rare remaining critical habitat. Not far from the recent Town Hall, Planning Proposal. What is happening? Predetermined land-grab, resulting from LEP2015 re-zoning for un-necessary over-development: Needs investigation by the National Integrity Commission (NIC).



The Biodiversity Conservation Act has not rectified the irreversible error of not Protecting rarest Urban Forest for future urban populations and other than human species.

The Crown Lands Management Act does not even acknowledge the importance of the Act to protecting the rarity of biodiversity.... by taking appropriate and in-depth steps to protect Australia's remaining biodiversity on Crown Land in NSW.

A Landscape Museum for Eco- Literacy in the Teansition Town - “The Little Village Park, Hillview HCA & Sheldon Forest Sanctuary”

A Transition Town must test new concepts & protection zones in last critical habitat.

The Landscape Museum gives locational Eco-Literacy through visitor experience & signage.

A Landscape Museum in a Transition Town in NSW Green Grid enables re-generation, restoration & Eco-literacy.

Why have planning controls and proposals for heritage not included the Hillview Heritage Precinct to teach about its rare Urban Forest for health and wellness of Society?

The Little Village Park is integral to history of Ku-ring-gai’s railway and Hillview (C/E5)



\$320,000 was allocated to the Little Village Park for restoration and improvement in 2013 – but was “forgotten”.

This money must be used on suggested signage to raise awareness and **Eco-Literacy through heritage / community native garden (habitat corridor connectivity with pocket parks and Eco literacy spaces. C/E5 gazettal should ensure security of public ownership – for early history and connections.**



The Hillview Nomination for State Heritage Listing seeks to elevate recognition of critically endangered setting and siting by the C/E5 zoning recognition of advanced landscape conservation (ALC). State Government must fund Public Assets to be used for environmental awareness raising. Adaptive reuse should match other similar precincts: the *Grounds of Alexandria*, *Paddington Reservoir* and *The North Sydney Coal Loader*. The Hillview Heritage Conservation Area (red line) is State Heritage for recognition of layered history since settlement (T. Boyd land grant). Needs security by tailored C5/E5 Zoning.



BGHF Urban Forest and sanctuary for rare birds and ground bound wildlife

This showpiece must be protected as a Wildlife Sanctuary & for citizen science & Eco-literacy. Planned with empathy for the future city, The Sheldon Forest proposed Wildlife Sanctuary is last critical habitat walkable by foot from two railway stations – Turrumurra and Pymble. Rare wildlife seek refuge in the levels of indigenous vegetation provided by this endangered habitat. It is the last publicly owned Blue Gum High Forest to stretch to the Pacific Highway. RE1 zoning must be changed to a new C/E5 zoning for true “in perpetuity” **protection of Biodiversity and** for public appreciation & education.

The Landscape Museum in the Transition Town is a pilot project for C/ E5 Zones to protect rare public land from public asset loss to planning & development systems (“crony capitalism”), & to Account FOR Nature public assets must provide Eco-literacy, culture and health.

Crown Land “Management” Act - Enabling Corruption/Public Asset loss Agreed in 2012 but disregarded.

The C/E 5 Zone would help in Accounting FOR Nature & Valuing Urban Forest remnants:

1. Allocate value to critical biological infrastructure (CBI) for civic security: raise community Eco-literacy in the understanding of Nature.
2. Engage public participation (hands -on) in breeding, rehabilitating and preventing loss of wildlife in Reserves, by providing research and Eco-literacy to future proof Sydney’s rare urban forest.
3. Remove the conflict of interest between protection & use zoning, when correction is located in just one department.

Note Then Mayor’s advice from staff, “*Their advice is that there would be no impact in Ku-ring-gai*” ... The advice to the Mayor in 2012 shows double speak and “blindness” to a new opportunity to protect areas of private and public land FOR NATURE.
Many additional values via the new Zone would deliver "Eco-literacy".

From: E5zoneandsubzones@planning.nsw.gov.au [<mailto:E5zoneandsubzones@planning.nsw.gov.au>]

Sent: Tuesday, 22 May 2012 1:33 PM

To: janet harwood

Subject: Re: Zone E5 Environmental Protection in NSW

Dear Janet
thank you for your email.

The answer to all your questions is - yes. Proposed E5 zone can include 'manage and restore' - one may assume that all these actions are covered by the verb 'protect'.
Councils may also add their own local objectives to refer to specific conservation plan, locality etc.
Mandatory prohibition of agriculture and residential accommodation has been included to absolutely 'close' the zone, unlike existing E2 zone. The intention was to make it suitable for community land in public ownership.

Should you wish to discuss further application of Standard Instrument zones on a local government level I would suggest you to contact our Regional team who is best placed to discuss specific Ku-ring-gai planning circumstances:

Sydney West Region

10 Valentine Ave, Parramatta NSW 2150
GPO Box 39, Sydney NSW 2001
Tel: 02 9860 1560

Again, thank you for your valuable input.

Kind regards

Senior Planner

NSW Department of Planning & Infrastructure | GPO Box 39 | Sydney NSW 2001

T 02 9228 6481

Subscribe to the Department's e-news at www.planning.nsw.gov.au/enews

2012 – 2023 Please Note:

Survival Economics: a Business U-Turn to secure Future Biodiversity.

- Development in Ku-ring-gai in just 10 years is at 80% of 2036 targets, by suppressing real protection of critical habitat for Blue Gum High Forest and Sydney Turpentine Ironbark Forest
- The State Government says a Planning Proposal by Local Government can issue a new zone to secure core, and adjoining habitat, (by use of the C/E5 zone).
- New Concepts The intent of the C/E5 zone in 2012 is the same as now - to protect rarest biodiversity in combination with protecting public assets for character and eco-literacy.

Planning System Flaws need correction.

Planning and development systems ignore Environment Protection in various ways: For example, *A New Approach to Rezoning, Advisory guide to Master Planning, outdated classification of rare Urban Forest as “Greyfield” etc*

Urban Forest of critically endangered ecological communities is rarest native forest. In Environmental Breakdown (this is not acknowledged/recognized by the P&D system), un-protected ESA for critically endangered ecological communities, leaves protection to volunteers. Habitat loss (roost and hollows) for the Powerful Owl being removed to protect Power Lines.



These removals are proceeding on public and private land - with no prosecutions for the removal of federally protected communities of species – providing habitat & food source. Rare fauna and flora and their last habitats and food source are not protected.



Habitat loss is now unsustainable. The above Powerful Owl had never been seen in this backyard alongside Sheldon Forest. Predator and prey relationship, extinction debt, decline of biodiversity are not understood by the planning & development system.

**A Voice to Protect ESAs - Transition Town Turrumurra shows:
Soils & seedbank still converted to concrete by LEP194 and subsequent LEPs.**

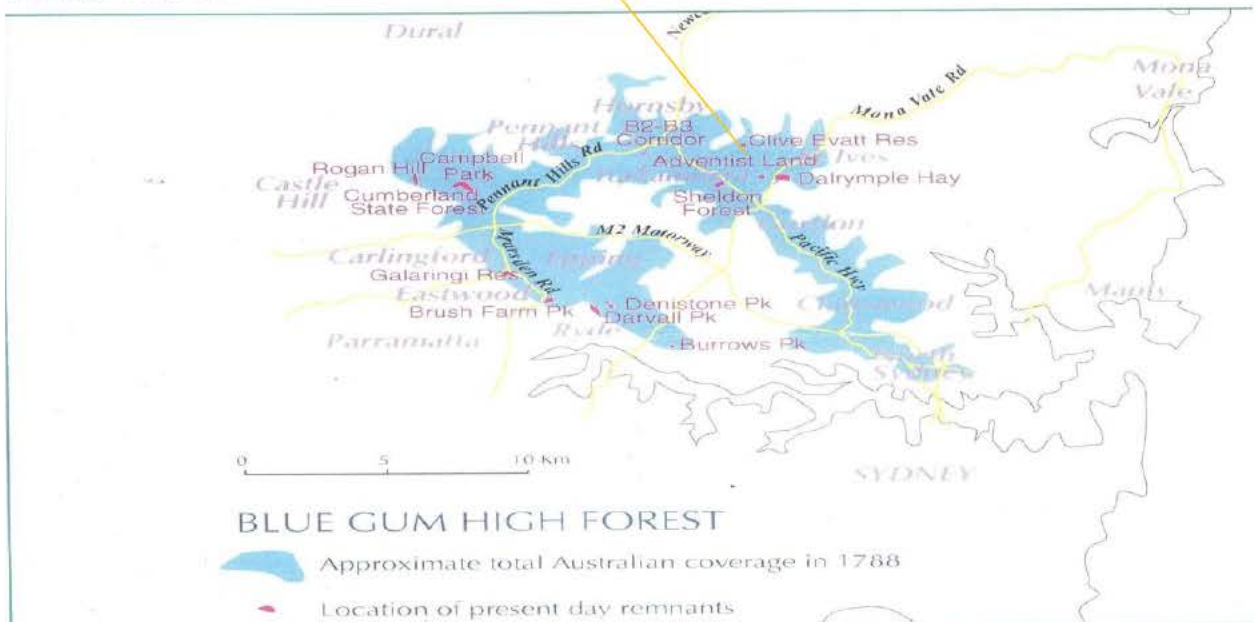


Above concrete chain is directly opposite Sheldon Forest.



Can the Voice to Parliament help protect native fauna and flora from extinction?

Where was it?



How much development is still in the pipeline waiting to remove rare urban biodiversity?

Why a secret plan to develop bushland that only the planning and development system knows?

Planning system flaws need correction.

Planning Flaws do not gazette lands for protection of last the habitat: add lack of signage. Did planning and development advise State Government of sensitivity of the TTT or has sensitivity been suppressed?



Corellas using a tree hollow

Food-source for the Powerful owl is losing its habitat.



Transition to avoid Extinction Debt

The Biodiversity Conservation Review must Account FOR Nature

Why? Because the Planning and Development system has Re-zoned this ESA for development and re-zoning for Development is a key threatening process (KTP).

NSW Laws are Meaningless for Nature. Trickle-down effect of Flawed State Government Laws. Hollows and Foodsource of iconinc rare birds like the Powerful Owl are being lost. This detail should have been covered by the Urban Forest Strategy but it was co-opted and briefed by the Planning and Development system.

Failure to protect in the Urban Forest Strategy in critical habitat & corridor ecology, means the civil and civic side of Governance (local voices) must be heard to protect last ESAs in NSW.

Is the high loss of trees (now experienced in this ESA) due to assessment of the Urban Forest Strategy as “Forestry”?

Please Note this question is asked since: Disregard in favour of internal consultation, has meant the Strategy was guided by an incorrect Local Strategic Planning Statement (LSPS).

To do a Business U-turn the Landscape needs to be protected for a new Economics of Biodiversity in a Transition Town for critical habitat and corridor ecology must be Eco-literate.



This research

(TFNW) submitted to the UF Strategy call for submissions - that “forestry” is not an appropriate language for an advanced interpretation of a Strategy for rare Urban Forest. Protected Tree (girth 6m) removed from Turramurra Memorial Park – should it have been partly protected, used for education/ecoliteracy?

The Future is the Natural World



“Biodiversity loss is the most significant environmental problem facing Australia”
Professor David Lindenmayer. (2007) *“On Borrowed Time”*