

Submission objecting to the Santos Narrabri Lateral Pipeline.

I, Pamela Beatrice Austin of 621 Stanhope Road, Stanhope NSW 2335, formally object to the Santos Narrabri Lateral Pipeline Project on to the following eleven (11) grounds.

GROUND'S FOR OBJECTION

1.1: NON-INCLUSION OF THE SIGNIFICANT CUMULATIVE IMPACTS OF OTHER LOCAL AND INTERRELATED PROJECTS:

Statement: I object to the proposed Narrabri Lateral Pipeline Project being approved, due to Santos's non-inclusion of the all the cumulative impacts of the proposed Narrabri Lateral Pipeline, which I my view the proponent has not included in an attempt to expediate the approval of the NLP project.

The proponent has not only failed to acknowledge the Cumulative Impacts of the NLP project in In conjunction with their Narrabri Gas Project (NGP) and their proposed Hunter Gas Pipeline (HGP) project in a number of key areas but have chosen to completely ignore the cumulative impacts **in conjunction with the existing Narrabri underground coal mine or the proposed Narrabri underground coal mine expansion.**

The proponent has also failed to account for the **Cumulative Impacts their future gas field development plans within their surrounding PELS, including their continued exploration/surveying activities**, despite a Santos employee stating, when asked what Santos plans are for future exploration and gas fields on the Liverpool Plains properties under their PELS that *'Santos intends to 'suck out every molecule of gas under the Liverpool Plains'*.

REASONS:

- The proponent's reason to **not include the existing Narrabri underground coal mine or the proposed expansion** is, in my

view, grossly misleading. There is more than enough publicly available information for Santos to have analysed the cumulative impacts in a number of categories including the current cleared native habitat and additional clearing for the proposed Narrabri Underground Coal Mine expansion and GHG emissions.

- The inclusion of the proposed Inland Rail Route in the Cumulative Impacts is merely used to provide a favourable image for the both the NGP and the HGP as well as for the proposed Corridor of the NLP.
- The proponents **failure to include their own NGP (an approved gas field and gas processing project) and their proposed HGP (an approved Survey Route Corridor)** in the various Cumulative Impacts areas, using the excuse that they are both previously approved projects BUT to **then include them both as Cumulative (Beneficial) Impacts** is, in my view, not only misleading but self-serving.
- The proponent's failure to include any future expanded gas exploration activities or development of new gas fields on their other PELs in the surrounding areas was disappointing but expected.

CONCLUSION:

- The proponent should be required to resubmit revised Cumulative Impacts to fully include these omissions outlining their combined impacts, as described within the content of my grounds for objections 1.2 – 1.6.

1.2: GAPS AND POTENTIALLY MISLEADING CONTENT IN THE CUMULATIVE IMPACTS SECTION OF THE EIS:

Statement: I object the Narrabri Lateral Pipeline Project being approved, due to the 'gaps' and potentially misleading information in the content of the Cumulative Impacts within the projects EIS.

REASONS:

- The Cumulative Impacts of clearing of native habitat (specifically) for both the NLP and the NGP within the same footprint within the Bibblewindi and Pilliga State Forests is not addressed at all.

- Cumulative Impacts on Fauna were addressed in conjunction with the NGP, but only in relation to fauna movement patterns and loss of connectivity but it did not include the Cumulative Impacts of the loss of native habitat connectivity **due HGP's proposed footprint, the existing Narrabri Underground Coal Mine's footprint or the proposed Expansion of the Narrabri Underground Coal Mine's footprint**
- The Cumulative Impact of increased vehicle movements on shared NGP and NLP project related roads and tracks for both projects were not addressed, nor were the Cumulative Impacts of the vehicle movements associated with the exiting Narrabri Underground Coal Mine or the proposed Expansion of that coal mines operational footprint.
- The Cumulative Impact of any gates and permanent fencing required by the NLP (to which whilst I can find **no** reference in the EIS but I presume to be required to exclude members of the public for security and safety purposes?), in conjunction with the NGP's current and future fencing and gate access requirements.
- I also contest the proponent's claim that there is only minimal Cumulative Impacts to properties on RU1 Land as 'most normal' agricultural activities would be able to resume during the operational phase of the project, as this is a misleading claim.
- Not only will there be RU1 land Cumulative Impacts due to the proposed expansion of the Narrabri Underground Coal Mine footprint but also the impacts on **RU1 properties within the nearby identified future mining lease areas** as well as on the proposed HGP route.
- This view has been reached due to my personal knowledge about the proponent having failed, to date, to provide a full, transparent written information outlining in detail which 'normal' agricultural activities can be resumed or could be actioned in the future, and which agricultural practices /activities would require permission to granted by the pipeline operator, or would be restricted to certain locations on the easement or not permitted at all, to impacted landholders on both on the proposed NLP corridor and on the approved HGP corridor. (Refer to 1.8)

- The presumption, by the proponent, that purchasing Biodiversity Credits or using any other offsetting method separately for the approved NGP, the (seemingly forgotten!) proposed approved HGP route and the proposed NLP project is not a Cumulative Impact.
- A social and economic Cumulative Impact benefit (that DOES include the HGP!) to NSW is extremely limited.
- The construction period for the two (combined) projects is approximately 4 months.
- The construction workforce is anticipated to be FIFO pipeline construction teams sourced from interstate or comprise of experienced overseas FIFO pipeline construction crews.
- Only minimal clearing and remediation employment will be available for 'local' NSW contractors for a minimal period of time.
- Even the proponent admits that any economic benefits will be minor, short-term, and only minimally benefit towns near to construction or accommodation sites.
- Only two potential longer term employment positions will be required for the operational phase of the NLP, **and it is unclear whether these positions will also form part of the overall number of employment opportunities for the combined NLP and HGP projects.**
- No Cumulative Impacts are provided for Aboriginal cultural heritage relating to the NLP.
- Neither the proposed Narrabri Underground Coal Mine Expansion nor the Mining Lease areas have been accounted for as part of a Cumulative Impact on Aboriginal Heritage, only the Inland Rail project.
- The Proponent's excuse that both the Approved NGP and the Approved HGP Survey Corridor either have mitigation measure in place or are developing them is, in my view, understating the potential Cumulative Impacts when they state that there is 'unlikely to be a substantial increased impacts on Aboriginal Heritage.

There is also the potential for cumulative impacts on Aboriginal heritage and cultural values. Aboriginal cultural heritage management plans would be prepared and implemented for each project, including engagement with Aboriginal stakeholders for the identification, salvage and repatriation of artefacts. With the implementation of these measures and the terms of the respective project approvals, together with the mitigation measures in Technical Report 8 (Aboriginal cultural heritage assessment report), there is unlikely to be a substantial increased impact on Aboriginal heritage.

CONCLUSION:

The proponent should be required to resubmit the Cumulative Impacts to include the impacts of both the Current Narrabri Underground Coal Mine and the Proposed Expansion of the same, and the areas of future designated mining leases and to include greater levels of information about the co dependant NGP and the HGP to account for the overall Cumulative Impacts of those projects on Biodiversity, Land Use and Agriculture as well as Aboriginal Heritage.

1.3: THE CUMLATIVE IMPACTS PROVIDED DO NOT INCLUDE GREENHOUSE GASES:

Statement: I object to the proposed Narrabri Lateral Pipeline Project being approved, due to the Cumulative Impacts information in the EIS being grossly misleading due to the 'screening out' of GHG emissions) .

- The proponents **non-inclusion under Cumulative Impacts, of GHG Emissions (specifically CO2 and methane) of both the proposed NLP and the projected emission for the two co-dependant projects, being the NGP, and the anticipated fugitive or projected operationally required methane emission from the Hunter Gas Pipeline Project**, all of which should have been included as Cumulative Impacts, is not acceptable.
- I note that Santos **did** provide the estimated emissions, of both estimated fugitive emissions and operational releases of gas for the NLP project in Chapter 18: Greenhouse Gas, so I must assume that they would have similar estimates for the Hunter Gas Pipeline project?
- Additionally, the proponent's failure to consider the Cumulative Impacts of the GHG emissions of both **the current Narrabri Underground Coal Mine operations**, which are publicly available, and **the proposed expansion of the Narrabri Underground Coal Mine**, the estimate of which is also publicly available. (See below)

- The publicly available GHG emissions for the currently operating Narrabri Underground Coal Mine in the 2024 FY was reported as **1.23Mt of Scope 1 CO2-e emissions**.
- The annual estimated emissions for the proposed Expanded Narrabri Underground Coal Mine are reported to be around **1.36 Mt of Scope 1 CO2-e emissions per year**, although this figure will likely be an underestimate. (See below)
- <https://www.abc.net.au/news/2023-06-05/coalmine-carbon-emissions-estimates-adani-whitehaven-grosvenor/102253064>
- At a minimum, the Proponent should have included in a GHG Cumulative Impacts report:
 - The **estimated fugitive and operational GHG emissions for the NLP** (as per Chapter 18 of the EIS).
 - The **estimated fugitive and operational GHG emissions for the HGP Project**.
 - The reported (if any reports exist) or alternatively, **estimated fugitive GHG and operational GHG releases for their NGP**, to account for any raw CSG or other GHGs emissions from both well and gathering line infrastructure **including their gas processing facility at Leewood, their pipeline to the Williga Power Station, and the Power Station itself**.
 - NOTE: Fugitive raw CSG emissions have been documented within the NGP operational footprint for several years. (See below)

<https://nwprotectionadvocacy.com/santos-pilliga-gasfield-still-leaking/>

- NSW EPA have also investigated reports of leaking gas well infrastructure within the NGP on a number of occasions although no findings have been made available to the public.

CONCLUSION:

The proponent should be required to resubmit the Cumulative Impacts to reflect all above mentioned as Cumulative (GHG emissions) Impacts.

1.4: THE FLAWED RATIONALE USED BY PROPONENT IN SELECTION OF SOUTHERN CORRIDOR ROUTE HAVE INCREASED THE CUMULATIVE IMPACTS OF THE PROPOSED NLP:

Statement: I object to the proposed Narrabri Lateral Pipeline Project being approved, due to, in my view, the flawed rationale (excuses) provided by the proponent for the selection of the proposed Southern Corridor route for the NLP which has resulted in increased Cumulative Impacts.

REASONS:

The rationale provided by the proponent to justify the choice of the Southern Corridor appears to be based on:

1. Avoiding going anywhere near to the existing Narrabri Underground Coal Mine or the Narrabri Underground Coal Mine Stage 3 Extension Project location, **two project which they ignored when formulating the Cumulative Impacts section of the EIS**, and avoiding an area designated for mining exploration leases, **which were also ignored in terms of the proponent formulating the Cumulative Impacts**.
2. Avoiding numerous RU1 properties **(that will be impacted anyway by both Narrabri Underground Coal Mine proposed expansion and the mining exploration leases)**, whilst **directly impacting 12 RU1 properties that would not have been impacted otherwise** by these two other projects.
3. Minimising native vegetation clearance via proposing 'co locating' both the pipeline corridor, worksites, material storage areas and access tracks and roads on land already cleared, or to be in the future for the NGP, whilst making a route choice that will vastly increase the areas of permanently cleared native habitat and temporarily cleared, but permanently disturbed, habitat areas for construction purposes next to and within the Bibblewindi and the Pilliga East State Forests, as a direct cumulative impact in conjunction with the NGP.
- The statements explaining some of the criteria used by the proponent to select a suitable route, **confirms the existence (and impacts) of both the current Narrabri underground coal mining operations and planned Narrabri Underground Mine Expansion and the land area designated for mining exploration purposes**, all of which the proponent clearly wanted to avoid impinging on, and all of which they also ignored, or made extremely poor excuses for not including in the Cumulating Impacts section of

the EIS in a full Summary of Cumulative Impacts: Land Use rather than the seemingly purposeful limited impacts as shown below.

- The Northern corridor route is 61kms long, only slightly longer than the length of the proposed NLP Southern Survey Corridor.
 - The Northern corridor has only a short section impacting Jacks Creek State Forest (native habitat) and where existing forestry tracks could be utilised for the NLP easement and construction ROW areas.
 - This route only goes through 5 mapped creeks (per the map on page 2.1 of the EIS)
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- The Central corridor route is slightly shorter than the proposed NLP Southern Survey Corridor, being 52 kms long.
 - It is described as being located along the borders of Jacks Creek State Forest which would result in little impact on the native habitat even if the boundary forestry tracks were incorporated into the required easement and construction ROW areas.
 - This route only goes through 6 mapped creeks (per the map on page 2.1 of the EIS).
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- The proposed Southern Corridor route only impacts 12 private properties and avoids existing mining exploration leases and active mining leases.
 - BUT - 34.5kms of the proposed route will directly impact native habitat and waterways in the Pilliga East and Bibblewindi State Forests and a further 8kms will directly impact native habitat bordering onto the eastern side of the Bibblewindi State Forest.
 - This route also goes through a minimum of 10 mapped creeks (per the map on page 2.1 of the EIS) and a stated 33 unnamed water courses, some on private RU1 properties. (Per Chapter 3 Project description).
 - The proponent also rationalises selecting the Southern Corridor, by claiming that most of its route is within the approved NGP

footprint and partially utilizing an existing NGP pipeline easement. This claim is, in my view, misleading and an opportunistic, self serving use of another project's specific approval conditions.

My reasons for formulating my objection to the proposed route:

The proponent clearly states that the main reasons for their choice of the Southern Corridor route was to:

1. Optimise the use of the 988 hectares of land area approved to be cleared during the productive life of, or already cleared for, the NGP within the Conditions of Approval for that project.
 - Although the proponent claims that this will reduce the cleared area of native habitat for the proposed NLP, I can find no clarification anywhere in the EIS by how much, although this 'shared' cumulative land use is mentioned as a 'positive' in the Chapter on Cumulative Impacts .
 - There is clarification however in the Technical Report 7 – Land Uses and Agriculture that, despite the proponent having previously suggested in Cumulative Impacts that already cleared land within the NGP footprint and land earmarked for future clearance for the NGP will be utilized for the NLP project, this is not the case.
 - Where existing (and future) NGP pipeline corridors are in the same general location the ones jointly used for the NGP will require to be expanded by 30m, using the the NGP approval which allows them to 'incorporate additional new linear infrastructure'.
 - But – surely that 'incorporation of additional new linear infrastructure' should be for required NGP's infrastructure needs, not for an entirely new proposed project?
2. Avoid both exploration mining leases and active mining leases, to reduce potential future conflicts with both existing expansion plans and future fossil fuel resource mining operations.
 - This is the only correct claim by the proponent.
3. Minimise impacts on landholdings zoned RU1.
 - This claim is ironic as approximately 60% + of both the Northern and Central Corridor route RU1 landholdings, are already being impacted by the threat of mining exploration leases and a potential

expansion area of the Narrabri underground expansion coal mining operations whilst none of the RU1 landholdings on the proposed Southern Corridor route were impacted by these factors. (See reasons for choice of Southern Corridor route below)

- NOTE: The proponent not only states that for the route they are proposing through RU1 properties there will be temporary clearing and disturbance of an area of 43.65 hectares of non-native planted vegetation (crops etc) on RU1 properties in Chapter 6: Biodiversity for construction purposes, but the appears to contradict themselves in Chapter 11: Land uses and agriculture, by stating there is an area of 96.2 (agricultural use) hectares within the disturbance footprint (or alternatively 97.6 hectares, according to Technical Report 7).
- I directly challenge the first three reasons evaluated by the proponent a valid grounds to to select the Southern Corridor route.
- I am also submitting the following detailed grounds for objection, being 1.5 – 1.6.1, which are also directly related to failures of the proponent to account for all Cumulative Impacts.

1.5: THE HIGH LEVELS OF CUMULATIVE IMPACTS VIA LAND CLEARING AND DISTURBANCE THAT THIS PROJECT WILL CAUSE .

Statement: I object to the Narrabri Lateral Pipeline Project being approved, due to the high level of Native Habitat destruction and the resulting fragmentation that this project will cause in conjunction with the cumulative impacts created by other local projects, (The NGP, HGP **and the unaccounted for Whitehaven underground coal mine and proposed expansion**).

REASONS:

- The projects impact of significantly increased fragmentation of existing fauna habitat including threatened, endangered, and protected species.
- The proponent has suggested that their approved NGP native habitat clearance allowance of 988hectares can be used to account for the clearing required for the NLP.
- However, this is a totally different proposed pipeline corridor to the now abandoned Western Slopes Pipeline (WSP) project.

- The originally proposed WSP route did not impinge on any native habitat in any of the Pilliga State Forests as it commenced north of the Leewood Gas Processing Plant before progressing in a south westerly direction mostly traversing privately held properties.
- There will be significant impacts on flora species, including EECs and TECs.
- There will be significant increases in edge effects on native habitat due to the creation of clearing of a 30m wide pipeline construction corridor and the additional access tracks required.
- the proponent has **failed to recognise the cumulative impacts of the proposed HGP route near Gunnedah** and the surrounding areas where ARKS (significant koala colonies) and other threatened and endangered and vulnerable fauna and flora species are recorded.
- The proponent has **failed to account for the cumulative loss of habitat and further fragmentation impacts of the current underground coal mine operations and the proposed Whitehaven Underground Mine expansion.**
- The proponent has failed to **account for the cumulative loss of habitat and further fragmentation impacts of their own NGP.**
- The NLP project will further fragment flora communities and potentially lead to the eventual loss of some species in the disturbance footprint areas and beyond, particularly in clearing concentrated impacted areas **(due to the overlap of both the NGP and the NLP project needs)**, which could prove catastrophic for some threatened, endangered and even protected flora and those fauna that are reliant on them as food or breeding sites.

Evidence source:

- Impacts on Fauna habitat: The proponent recognises the risk of the NLP project **increasing habitat fragmentation** by noting that **currently** there is 'good' connectivity within the Pilliga East and Bibblewindi State Forests **despite** the presence of a number of unsealed access tracks and existing easements for their gas NGP infrastructure.
- Impacts on native wildlife connectivity: The proponent fails to clarify if that 'good' connectivity within the Pilliga East and Bibblewindi

State Forests will be maintained, or worsened, if the NLP project is constructed.

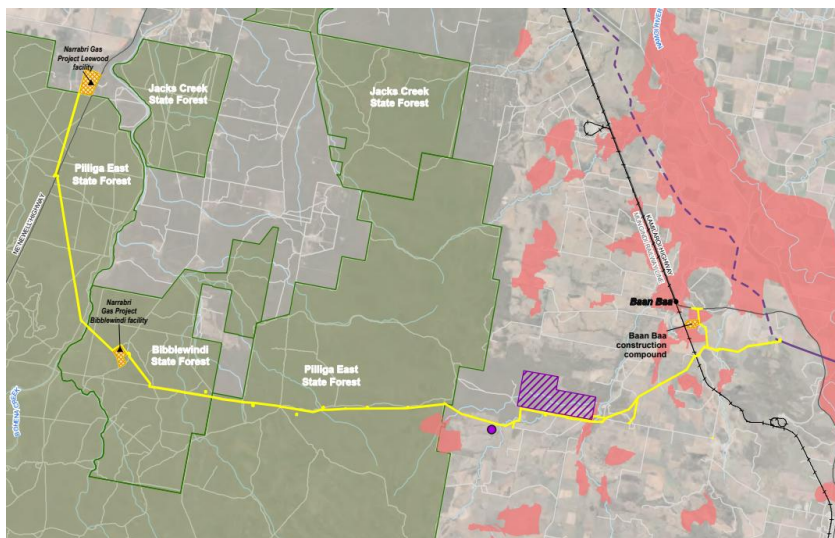
- **Direct cumulative impacts of the combined NLP and NGP project in a concentrated area**: The additional access tracks that will be required for the construction and operation of the proposed pipeline in conjunction with the cleared 30m wide easement for the pipeline through the forested portion of the proposed route, in conjunction with the cumulative impacts of the approved NGP, due to the future clearing of extensive access track and road networks, well pads and worksites and all the other associated infrastructure that the NGP will require, will vastly increase the combined fragmentation impacts of these two projects impacting both fauna and flora species. I.E. Increasing fragmentation impacts will be ongoing.
- **Impacts on Native Fauna**: Santos **agree** that there is potential for impacts on fauna connectivity, including increased vehicle strikes both during construction phase and operational phases of the NLP within the Pilliga forests.
- The proponent has failed to account for the Cumulative Impacts of vehicle strikes due to both the NGP and the NLP being located within the same footprint, meaning that there will be more vehicle movements both during the construction phase and the operational phase of the NLP project than if the NLP were as a 'stand-alone' project.
- The proponent has, to date, recorded eighteen threatened fauna species in the proposed disturbance footprint of the NLP. (See below)
- The proponent recognises that the Pilliga forests native habitats are already suffering fragmentation but states, without evidence, that there are still **some** connected habitats.
- This project will not just be a narrow forest trail or gas well access track but incorporates a 42km long 30m wide fully cleared corridor

mostly traversing through previously undisturbed areas of native bush land with over 34km being within the Pilliga forests.

- Any cleared area within these areas will create major challenges. Ongoing for many of the fauna species that inhabit them.
- The area comprising the eventual 30m corridor will become a permanent hunting corridor for both native and introduced predators, both mammalian and avian due to the loss of both the tree canopy and higher understory plants.
- There is potential for poisoning of native fauna, including many bird species, by ingestion of plants, flowers and berries impacted by spray drifted herbicide that may be used to control both noxious weed invasions and tree regrowth on the easement area and along the edge of the remaining habitat areas.
- All these factors will have a significant impact on all smaller mammals, including:
 - The Pilliga mouse (V); the Eastern Pygmy Possum (V), the Squirrel Glider (V). Corens long-eared bat (V) and the Koala (E)
- The suggestion that naturally regenerated grounds cover will replace mature tree cover and intermediate tree cover and will suffice to enable safe passage for these smaller animals to move between section of their normal habitat range is laughable.
- The proponent even admits that **some threatened and endangered species will not adapt** and that they will be seriously impacted by the loss of habitat connectivity that just the easement corridor will create.
- Fauna and flora related Biodiversity, credits, biodiversity offsets, nor the provision of 'like for like' species conservation land over 27km east of the study site, or one even adjacent to the northern side of the study area between KP 39.3 and 43.0 (and bordered by the Narrabri Underground Coal lease!) for **land that was never going to be impact anyway**, will not make up for the potential loss of local fauna species if this project is approved. Such arrangements are a net loss for species and biodiversity.

- Impacts on Flora: This project (in conjunction with Cumulative Impacts of the approved NGP) will increase the 'edge effects' impacts in new areas within previously uncleared or minimally disturbed areas of the adjoining forested areas to the east and the Pilliga East and Bibblewindi State Forests, further impacting uncleared but exposed flora species, some of which may also include the six recorded and nine 'assumed to be present' threatened flora species within the project disturbance footprint.
- A typical 30m wide easement corridor would be subjected to full sunlight and increased wind, and rainfall impacts which significantly and negatively impact the number of species of 'naturally regenerated ground covers' as well as their growth rates.
- The proponent has clearly suggested that **existing NGP pipeline easements would be expanded by 30m to accommodate the NLP project**. This would create vastly magnified, cumulative edge affect impacts.
- Whilst the proponent brush this impact off as 'expected to have a low impact on nearby habitats', the reality is that with uncertain future weather patterns creating potential significant drought, or extreme wind or rain fall events, the edge impacts could be also be extreme, leading to permanent changes to the flora species present and in fact losses of some species entirely within a far wide habitat area than just in the 'disturbance footprint'.
- The increased edge affects, created by a 30m, or potentially far wider if constructed adjacent to an existing NGP pipeline easement, pipeline corridor, of significantly more direct sunlight, wind and rain impacts, will result in rain caused erosion of root systems, as well as create drier ground conditions, both of which inhibit strong root growth making the remaining trees them more vulnerable to the increased wind, sun and drought caused damage.
- The proponent states that the threatened Box-Gum Woodland in the disturbance footprint is ALREADY highly fragmentated meaning that further fragmentation would result in the species being lost completely within that area of the Pilliga forest landscape.

- The proponent states that the clearing that the project would require within five remaining patches of Box-Gum Woodland (up to 5.44 hectares) would very likely disqualify the area as a TEC. The proponent seems to believe (see above) that sufficient Biodiversity offsets to meet the requirements (if they can even be found!) are the solution to the losses that this project, if approved, will result in.
- NOTE: Flora related Biodiversity offsets, in another area/location that was never going to be impacted anyway, will not replace the percentage of any one flora species lost in another particular area, nor assisted in encouraging its continued presence in that area of the Pilliga forests landscape that could be irrevocably negatively impacted.
- These edge effects will also impact the southern boundary flora and fauna of the Biodiversity Stewardship site property the proponent has suggested would be a suitable purchase by the proponent for 'offsetting' purposes due to proposed 30m fully cleared corridor running along its entire shared southern boundary. (See map below – Biodiversity Stewardship site shown via purple hatching)



CONCLUSION:

The proponent should be required to resubmit the Cumulative Impacts, **taking into account all the Biodiversity and Land Use – Agricultural factors outlined above that are further impacted by multiple projects being the Narrabri Underground Coal Mine, the proposed coal mine expansion and the co dependant NGP.**

1.6: THE RISK OF PERMANENT DAMAGE TO THE SANDSTONE FORMATIONS UNDER THE CREEKS TO BE CROSSED DUE TO THE NLP PROPONENT'S PROPOSED CONSTRUCTION METHODS.

Statement: I object to the Narrabri Lateral Pipeline Project being approved, due to the risk the construction methods to be employed pose to potentially cause permanent damage to the underlying sandstone formations and shallow aquifers that are a feature of many of the creeks that the route will cross.

REASONS:

- The proponent has already conceded that trenching of three of the named creeks is too risky but fail to consider that trenching of 'unnamed creeks' would also be risky.
- The proponent is proposing to use HDD to emplace the pipeline under three environmentally important creeks, Little Sandy, Tulla Mullen, and Bohena Creeks, the last of which is also culturally important to the Gomeroi People.
- The proponent is proposing to use HDD methods to cross under Little Sandy, Tulla Mullen, and Bohena Creeks. This could result in 'cracked creek beds,' due to the vibratory impacts of the drilling operation on the underlying sandstone layers resulting in lost downstream water flows or creating a major diversion in water flow.
- At least one of these creeks is on privately held RUI properties and may be an essential stock or domestic water source.
- The risk of HDD drilling fluids entering the underlying aquifers is unacceptable.
- The proponent makes use of the words 'expected not to' in this section of the EIS a lot, which means they cannot guarantee there will not be permanent damage caused to these creeks due to the construction methods used. (See below)

1.6.1: THE RISK OF PERMANENT DAMAGE TO CREEK BEDS DUE TO BOTH CONSTRUCTION VEHICLES, CONSTRUCTION MACHINERY AND MATERIALS TRANSPORTATION MOVEMENTS OVER THEM AND POTENTIAL USE FOR THE NGP DEVELOPMENT AND OPERATION.

Statement: I object to the Narrabri Lateral Pipeline Project being approved, due to the failure of the EIS to indicate whether, during the construction period, creeks beds will be crossed by any construction related heavy vehicles or if the NLP easement route (including through creeks) will be utilised by the NGP for the transportation of heavy machinery or materials during future developmental stages of that project.

REASONS:

- Crossing creeks with heavy construction machinery or heavy vehicles transporting heavy materials, such as pipes, could damage underlying sandstone layers/formations causing irreparable damage not only in state forests but also on privately held RU1 properties.
- The project, if approved, should include a condition, that any creek on the final Easement or Construction ROW corridor, even if it has no water flowing through it, should not be crossed by heavy vehicles either for construction purposes or operational purposes of either the NLP the NGP to protect the integrity of the creek beds
- However, if this condition were included, and to meet it meant requiring further permanent access tracks to be cleared to allow access to either side of these creeks causing further habitat fragmentation, this would create further Cumulative Impacts (increased native habitat damage/loss) and this project should not be approved.
- If the proponent wished to utilize the already approved 998 cleared hectares within their NGP project for the provision of such permanent tracks to protect fragile creek beds and to assist in the NLP approval process, but the total areas to be cleared would exceed that 988hectare, this pipeline corridor project should not be approved and an alternative route, that would not cause the NGP land clearance limit to be exceed, sought by the proponent. (See 1.9)

CONCLUSION:

The proponent should be required to resubmit Chapter 8 - Water to include these safeguards to the local water networks and aquifers.

1.7: FAILURE OF THE PROPONENT TO FULLY AND TRUTHFULLY ADVISE LANDHOLDER OF RURAL PROPERTIES OF THE FULL IMPLICATIONS OF AGREEING TO A PIPELINE EASEMENT, OR HAVING ONE IMPOSED ON THEM VIA COMPULSARY AQUISITION :

Statement: I object to the proposed NLP corridor, due to the negative impacts on the 12 privately held RUI properties landholders on the proposed NLP Survey Corridor Route that have not been fully explained to any impacted landholders by the proponent for this project, nor to impacted rural landholders on the proposed Hunter Gas Pipeline Project route by the same proponent company, or their employees.

REASONS:

- The proponent, Santos/HGP Pty Ltd, has already failed to fully respond in writing, as requested, to impacted rural landholders' queries and concerns on the proposed HGP route regarding the full impacts of the pipeline easement being on located their properties.
 - The proponent and their agents, rely on vague descriptions of what the landholder is allowed, or not allowed, to do on the easement land.
 - It is my understanding that the NLP impacted landholders are being given the same vague information, or that important information is being hidden in the 'fine print', whilst Santos Land Access Advisors seek their signatures for surveying access (and potentially Deed of Option (for easement) Agreements), as I discovered when reading the NLP EIS.
 - Even the Deed of Option is 'light' on full explanations of what the landholder is allowed to do, or not, and also what farm infrastructure the construction of a High Pressure Gas Transmission Pipeline may result in impacting if either the building or operational phase of the Pipeline requires it.
- The NLP proponent admits, in Technical Report 7, that RUI landholder's strategically place their property management infrastructure such as cattle holding yards and loading areas, mustering/stock laneways, cropping areas, sheds (and dams).

- The proponent failed to note that agricultural infrastructure IS located to **not only** maximise efficiency of stock and equipment movements and to maximise cropping areas (and also the water capture capabilities of dams) but is **also located, designed and built in such a way as to reduce the potential for injuries to both humans and stock.**
- There are often no other suitable location options that will integrate with an overall property management plan.
- The proponent states, in that same Technical Report 7 that these key infrastructure features may need to be 'adjusted' (which seems to mean 'moved'!) or replaced to accommodate the NLP project! (See below)
- The proponent has also noted (hidden away in Technical Report 7) that even **dams may need to be 'adjusted' or replaced.**
- Dams are always located in specific locations to maximise water capture and for ease of dam water usage. They cannot just be moved 30m over, or even 20m or just 10m and be expected to retain the same water capture qualities or water useability qualities. Plus, if dam overflow locations and directions were also altered this could result in significant negative impact on the surrounding land.
- NOTE: **The proponent has already not chosen to disclose, to other impacted landholders on the HGP route,** that some of their dams may need to be either completely decommissioned, or re constructed in potentially less suitable locations, to allow the construction and safe operation of the HGP.
- A prior Santos/HGP's "Easements Dos and Don'ts" publication (no longer available since the first quarter of 2024) stated that no dams were to be construction on or located 'near to' the pipeline easement but failed to explain what distance 'near to' was.
- When HGP impacted landholders queried this and asked about the potential impacts on their current dam locations they were not provided with either a verbal nor a written answer and this concerning "Don't" requirement disappeared from the webpage shortly afterwards.
- Whilst there was an offer by the prior owners of HGP Pty Ltd to use a future pipeline construction land clearing contractor to build a replacement dam for a landholder for one that they advised would

need to be decommissioned, that landholder pointed out that there is a world of difference between the skills and knowledge of a land clearing contractor and an experienced dam builder and advised the prior owners of HGP Pty Ltd that he would not be allowing his dam to be moved.

- It appears, according to the NLP Technical Report 7, that landholders on the proposed HGP route were correct in their belief, that has been verified by expert legal advice, that the same proponent can ignore 'landholder preferences' for the location of the eventual easement and not only require very strategically located holding and loading yards (and other structures) to be 'adjusted' (moved) but even require the removal of current dams for the benefit of the 'final route plan' on the grounds of ease of construction and 'safe' operational aspects the HGP pipeline.
- Santos/HGP Pty Ltd Land Access Advisors, when asked by HGP impacted landholders about the potential impacts of the HGP proposed route on their current farm assets and infrastructure, have consistently insisted that landholders need to sign a survey access agreement, to allow a survey to be conducted on their properties for the Final Route, to enable Santos/HGP Pty Ltd to even discuss such matters with them. This is despite us all living in the age of satellite imagery where Santos/HGP Pty Ltd could easily see, without setting foot on a property, which farm assets or infrastructure the landholder is concerned could be impacted.
- Landholders impacted by the HGP route are also very aware that the terms of the Deed of Option (for an easement) offered by Santos/HGP Pty Ltd provides the proponent the legal ability to ignore landholder easement location preferences, even if verbally agreed to, based on 'meeting the needs of the construction and safe operational phases' of the proposed pipeline.
- Land holders on the proposed HGP route had many other questions that they were not provided definitive written answers to by the proponent. E.G. What type of agricultural machinery could be used on the easement land to continue their 'normal farming activities'.
- The allowable and non-allowable agricultural activities found in the NLP EIS Technical Report 7 are almost identical to the available 'light on detail' HGP information that prompted many HGP

landholder's queries about the allowable weight of farming machinery that could be operated on their cropping land that was included in the easement.

There has been **no clarification** by the shared proponent, despite repeated requests by impacted landholders on the co-dependant HGP route to obtain written advice, if very heavy non road registerable vehicles **such as harvesters** will be permitted to operate on the NLP (or the HGP) easement for the property owners 'normal agricultural' cropping production activities to continue on the easement land (as has been widely advertised and claimed by the proponent) only that such vehicles 'may' be allowed to (only) cross the easement via constructed HV crossings.

- Many cropping landholders on the proposed HGP route (and the proposed NLP route if approved) may be forced to reduce their production area as a result to this 'only road registrable HV' restriction to avoid the risk of damaging the pipeline for which they will have no public liability insurance cover.
- The failure of the shared proponent of the HGP and the NLP projects to provide full written information requested by the impacted landholders as well as the contentious and troubling clauses and terms found within both the Voluntary Survey Access Agreements and the Deeds of Option is why.

CONCLUSION:

Require the proponent to provide ALL impacted landholders with prior to requesting to access their property to survey for the final route plan including:

- Full written details outlining ALL potential construction and future operational requirements and impacts.
- Full written details of what costs a landholder can justify requiring the proponent to pay to comply with any of these requirements and how to ensure they are all accounted for in any negotiations.
- All the restrictions and limitations, in detail, that both the pipeline operator and the State government will require a landholder to adhered to.

- Full details of landholders 'duty of care' in relation to the safe operation of the pipeline and reporting any damage or suspected damage to either the pipeline, associated above ground infrastructure or the easement.
- All potential limitations to land use or safe enjoyment, including any potential unintended impacts or risks that the presence of the pipeline easement on any property may cause.
- Full details of any State legislation relating to hazardous pipelines that will apply to the NLP and any landholders whose land it is located on
- Full details of what activities will not be restricted for a landholder or land user due to the presence of a pipeline.

1.8: THERE IS A FOURTH CORRIDOR OPTION THE PROPONENT IGNORED THAT WOULD REDUCE THE CUMULATIVE IMPACTS.

Statement: I object the Narrbari Lateral Pipeline Project being approved, due not only to the proponents flawed rationale for their choice of the Southern Corridor (See Objection 3), but for failing to have investigated a fourth, more suitable option that would reduce the Cumulative Impacts.

REASONS:

- The proposed NLP Survey Corridor, which the proponent has favoured, due to their avoidance of other fossil fuel projects on the other two corridor route options (See 1.4), if approved, will result in a route that will directly impact 168.34 hectares of identified native habitat via clearing it both permanently or temporarily for construction purposes.
- NOTE: Most of the native habitat clearing will be on a 42km section of the route with 34.5km being within the Pilliga East and Bibblewindi State Forests with the balance to the eastern border of the Bibblewindi State Forest.
- A **minimum** of 126 hectares of the native habitat, which has been identified by the proponent as being in the proposed project's 'disturbance footprint', will be permanently cleared of all trees for the 30m wide pipeline easement.
- Whilst the proponent indicates that they intend to allow natural regeneration of native 'ground cover' grasses and low growing

native shrubs on a 10m wide 'edge' of the 30m wide easement, no tree species will be allowed to regenerate.

- The direct impacts will also include the extensive permanent clearing for **additional** access tracks and roads for both construction and operational purposes and for which no estimated area has been provided in the EIS.
- **The proposed route increases the cumulative environmental damage due to this proposed project and the NGP as well as the proposed HGP and other local projects, both existing, proposed and potential future ones.**

BUT

- **There is a fourth option:** The proponent could have chosen to locate the route of the NLP from the Leewood Gas Plant to the Hunter Gas Pipeline without any loss (or minimal loss) of native habitat and also incorporated an existing Santos held pipeline easement that would have met all their stated rationale. (See below)

Suggested Fourth Corridor Route:

- Commence the NLP just north of the Leewood Gas Treatment Plant.
- Utilise the existing Santos pipeline easement from the Leewood Gas Treatment Plant to the Williga Gas Fired Peaker Plant and partially beyond it.
- From there, circumnavigate around the Narrabri township to the north east and then turn directly east to join with the Approved Hunter Gas Pipeline Survey Corridor Route approximately 30km further north of the currently proposed ontake point. (See modified HGP route map below)

KEY: ● Williga Gas PP, ● Leewood Gas Plant , purple line = existing easement, yellow line = suggested alternative route for NLP, ● Ontake point at HGP, ● potential Offtake point for Narrabri).



- The above suggested route not only meets BUT **exceeds** the proponents declared rational for their currently proposed route of the NLP by:
- Commencing at the Leewood Gas Processing Plant outside of any State Forest Lands, (as did the proposed but abandoned APA Western Slopes Pipeline route)
- Avoiding areas where the proposed coal mining expansion and the mining lease land is located.
- Avoiding removing significant areas of native habitat almost entirely.
- Crossing Bohena Creek outside of the Pilliga and Bibbewindi State Forests areas (The areas being contested by the Gomeroi People under Native Land Title Rights).
- Utilising an existing Santos gas pipeline easement for almost half the route's length to and then beyond the Wiliga Gas Power site.
- Providing a suitable location for a gas offtake point and other required aboveground infrastructure such as a metering station, to assist with Santos meeting the requirements of supplying an offtake point for towns that request one, in accordance with both the Q-HGP Conditions of Approval and to support their recently signed MOU agreement with the Narrabri Council to supply gas to Narrabri.

- Avoiding the township of Narrabri.
- Impacting a far reduced area of privately held properties including RU1 landholdings.

CONCLUSION:

Require the proponent to consider this fourth option.

1.9: THE FAILURE OF THE PROPONENT TO OUTLINE THE RISKS OF AN IGNITED PIPELINE RUPTURE OF THE NLP:

Statement: I object to the Narrabri Lateral Pipeline Project being approved, on the grounds that the proposed Survey Corridor and eventual easement, which will include aboveground high pressure gas pipeline associated infrastructure, is located within a known High Bushfire Hazard Zone.

REASONS:

- The 42 km section within the surrounding forested areas and the Pilliga and Bibblwindi State Forests places the forests, the wildlife, and all surrounding private properties, **including the Biodiversity Stewardship property that the proponent is suggesting could be purchased by themselves**, at risk if a Serious Incident occurred on the pipeline.
- In the Risks and Hazard section of the EIS the proponent has only addressed the risks of bushfire and a bush fire protection plan only during the construction period.
- Impacts of a Serious Incident on landholders, members of the public and Santos and forestry employees:
- The proponent does however acknowledge the significant risks if the NLP (a high-pressure gas transmission pipeline) ruptures and the gas ignites.
- But as with the Hunter Gas Pipeline Risk and Hazards assessment, the lack of a high enough number of humans (sensitive receivers) living near to the pipeline, or as Proponent assumes for their

modelling, the lack of any humans being present at all anywhere on the pipeline, they have rated the risk level to be acceptable

- This reasoning does not account for landholders working on or enjoying their land nor for their family members, visitors or contractors or employees.
- Just because the pipeline is not located near to a residence or place of work does not mean that the location of the pipeline will be devoid of human beings.
- Impacts of a Serious Incident on the Natural Environment:
- The Pilliga Forest has a notorious reputation as a fast-moving fire prone area and any fire within it can threaten privately held land and residences surrounding it as well as the wildlife within it in a very short period.
- Reminder: The Duck Creek Fire commenced on 7th December 2023 and was not declared extinguished until early January 2023. The fire, fanned by intense winds, burnt over 135,000 hectares of the Pilliga Forest well as areas in Bibblewindi and Jacks Creek State Forest moving in a north easterly direction. Some of Santos's gas well infrastructure was also impacted.
- Though the risk is rated 'intermediate' by the proponent IF there was an ignited explosion on the pipeline, anywhere within the 43kms within the forested area on the proposed NLP Corridor route, during fire weather, not even a 50m wide fully cleared easement would be protection enough for the surrounding vegetation.
- The NLP corridor **does not appear to have a location designated for an intermediate main line valve** that can be remotely operated, in the case of a leak or sudden loss of pressure being detected, to isolate a section of the pipeline. If this is the case and a sudden rupture occurred, the gas contained in the entire 55km+ pipeline would be at risk of ignition.
- Vertical flame lengths from such a fire can be up to 300+ meters (with the radiant heat zone being far longer and wider than the flame).
- If the rupture resulted in an angled lateral jet flame, that would be akin to firing a very large flamethrower directly into the tree line and

other combustible organic materials and grasses along the forest edge, potentially already impacted by drying edge affects, with no hope to extinguish the seat of the fire for up to 8 hours or until the all the gas within the pipeline has been burnt off.

- In 16.4.2 The proponent has appeared to have downplayed this risk with their choice of wording yet still classed it as being an Intermediate risk scenario and admitted that under the right conditions a resulting bushfire if it extended to densely vegetated area outside of the easement could become a large fire if not extinguished in a suitable time frame. (See the 8-hour period prior to the seat of the fire being extinguished on the Jemena Queensland Pipeline below).
- In 16.4.2 the proponent also acknowledges that aboveground infrastructure is susceptible to ignition by bushfires in area they are located, but the risk is far lower.
- What the proponent has not mention in 16.4.2., is the potential impacts of an ignited gas pipeline rupture event impacting RUI properties, where 'normal farming and grazing activities' are being advised by the proponent to landholders that they will be allowed to continue to 'farm' over the easement, I.E. Ignited grazing land or drier pre harvestable grain and fibre crops directly above the pipeline could result in potentially devastating fast moving 'grass fires' (in the right conditions) which in turn could reach heavily treed areas or alternatively pose a threat to RU1 landholders residences, their lives and their stock.
- Nor have then mention in 16.4.2 that in the forested areas on the proposed NLP Corridor they intend to allow native grasses and low growing vegetation to regenerate on the pipeline easement for the benefit of native fauna connectivity, vegetation that will be subjected to drying edge affect ensuring an easily ignited fuel source is available at all times outside of wetter conditions.

Such Serious Incidents have occurred in Australia the recent past.

- a. The Jemena Queensland Pipeline explosion on 5th March 2024, was not extinguished for over 8 hours due to the need to burn off the gas remaining in that 75km section of pipeline. The underground

Queensland Pipeline is comparable in size to the proposed NLP. Fortunately, that part of Queensland had experienced a lot of rain, and the vegetation was lush and green plus there was little wind. The only reason Jemena have given for the cause to date is “a fire on the pipeline cause a leak to ignite and rupture the pipeline.”

<https://7news.com.au/news/rationing-plan-as-work-to-restore-leaking-queensland-gas-pipeline-at-bauhinia-set-to-begin-c-13844687>

- b. The Santos Toolache (S.A.) Pipeline (location: Strzelecki Track) explosion in 2019, was caused accidentally, by a Santos employee's dropping a tool, during maintenance work at a scrapper station installation. Witnesses described the fireball as reaching over eighty meters into the air and the explosion and fire resulted in that section of the Strzelecki Track being closed to traffic for days.

<https://nwprotectionadvocacy.com/serious-incidents-explode-santos-claims-of-safe-operator/>

- Fortunately, neither of these ignited gas pipeline explosions occurred in a high bush fire hazard risk (forested) zone like the Bibblewindi and Pilliga State Forests or surrounding forested areas, nor were there any casualties or injuries.
- The proponent has played down the risks posed by an ignited gas rupture event that could eventuate anywhere on the proposed operational NLP pipeline corridor and instead focussed on:
- There being a large enough fire plus or large volumes of combustible material,
- That occurs during the right condition and
- Where the fire cannot be extinguished in a timely manner.
- These are all the hallmarks of a high-pressure gas transmission pipeline rupture caused fire.

CONCLUSION:

The proponent should be required to revisit Chapter 16: hazards and Risks and re-evaluate the section on Fire Hazard

1.10: THE LACK OF AN ORDORANT BEING ADDED TO THE GAS BEING TRANSPORTED VIA THE PROPOSED NLP (AND THE HGP)

Statement: I object to the Narrabri Lateral Pipeline Project being approved, on safety grounds, due to no odorant being added to the odourless gas, at the Leewood Gas Processing Plant, prior to it being transported firstly by the NLP and then the HGP onward to Hexham (via the Jemena Hunter Lateral for the final 5.6kms) .

REASONS:

- There is a risk for minor undetected leaks of the pipeline itself, but more probably from any above ground infrastructure, due to the gas being undetectable by smell.
- The NLP will traverse twelve privately held landholdings and several roads.
- The HGP will traverse hundreds of private landholdings, often passing extremely close to 'isolated' residences (within 5m or less at some locations) and under numerous roads.
- Minor leaks, due to undetected pinholes or hairline cracks, are often not detected between PIG inspections as a pipelines operating pressure and other remote monitoring devices cannot detect such minor losses of gas.
- Rural pipeline impacted landholders are expected to report any suspected leaks of this highly combustible and explosive gas to the pipeline operator and to 000 but how can they do so if they can't smell it, unlike the eventual end users in NSW towns and cities who are protected by the Federal Government required added odorant.

CONCLUSION:

As an added public safety measure the proponent should be required to add the requisite levels of an odorant to the gas being processed at Leewood, prior to it entering the NLP 55km long and then the 465 km long HGP.