1. Predicted Workforce
   a. Operational Workforce
      • Workforce estimates for the Project were based on the Maules Creek Coal Mine Feasibility Study.
      • Actual employment figures at the Maules Creek Coal Mine are greater than estimated in the Feasibility Study. Based on Whitehaven’s actual experience, it is expected the Project would require at least 450 FTE operational personnel.
      • Employee figures are not directly related to the volume of ROM coal mined (as proposed by NSC).
      • There will be differences between the Approved Mine and the Project workforces, as the Project incorporates additional components including an on-site Coal Handling and Processing Plant and rail spur in addition to the higher annual mining rate, increasing the operational workforce requirements associated with the specialised workforce (e.g. process, mechanical and electrical engineers, plant maintainers and operators).
      • The breakdown of where Project employees would reside presented in the EIS was assumed for the purposes of impact assessment, based on Whitehaven’s experience with the existing workforce in the region.
      • Whitehaven does not support a condition that dictates where employees will reside as it is ultimately dependent on individual preference.
   b. Construction Workforce
      • As a result of the specialised construction workforce required it is predicted that the majority of the construction personnel would be non-local (as outlined in the EIS).
      • Potential impacts associated with a majority non-local construction workforce would be associated with the construction period of the Project only (i.e. approximately a 12-month period).
      • Construction personnel would be preferentially hired from within the Project region where possible.
      • Whitehaven would encourage non-local construction personnel to use the Boggabri Accommodation Camp to relieve short-term pressure on local house prices and availability.
      • Some changes to gender balance are likely to only occur in the short-term, associated with the construction workforce. Whitehaven’s Workforce Diversity Policy aims to facilitate greater gender diversity in the workforce, which would be implemented for the Project.
      • Whitehaven has established a workforce Code of Conduct which governs personnel behaviour at work and in the community.
      • Note during the construction period for both the Maules Creek and Boggabri Coal Mines the workforce residing at the Boggabri Accommodation Camp was greater than that estimated for the Project.
c. **Indigenous Employment Target**

- Whitehaven’s target for 10% of the operational workforce being of Aboriginal and/or Torres Strait Islander descent within 5 years of commencement of operations considers the demographics within the region (i.e. the Tamworth-Gunnedah Statistical Area 3 at the 2016 census date) and is consistent with Whitehaven’s *Stretch Reconciliation Action Plan* (prepared in consultation with the community).

- Actual Indigenous employment at Whitehaven’s existing Maules Creek Coal Mine exceeds this target and the Indigenous employment program at Maules Creek, and was recognised by the NSW Minerals Council as ‘best in class’ within the industry.

2. **Mining Equipment Automation**

- Whitehaven does not currently have any plans to introduce an automated mining fleet into the Project.

- Whitehaven has a small automated handling system trial underway at the Maules Creek Mine.
  - The productivity of the system is being assessed.
  - The trial at Maules Creek involves some haul trucks only.
  - Other mining fleet including bulldozers, front end loaders, water trucks, drills, excavators continue to be manned, as are other jobs including those associated with CHPP operations, rail loadout facilities, water management, environmental monitoring, logistics, engineering, construction works, maintenance, cleaning, rehabilitation, blasting, community consultation, administration, etc.

3. **Annual Production Rate**

- Table 2.2 of the Project EIS provides the indicative mine schedule over the Project life. This was updated in the *Vickery Extension Project Amendment Report* (Whitehaven, 2019) to reflect the reduction in total mined resource from approximately 179 Mt to 168 Mt, with an associated change in average rate of mining from 7.2 Mtpa to 6.7 Mtpa.

- Note the maximum production rate for the Project of 10 Mtpa, as well as the maximum waste rock removal rate of 95 Mbcm remains unchanged from the Project EIS. Therefore the maximum predicted operational workforce requirements are also unchanged for the amended Project.

- The indicative mine schedule would be revised throughout the mine life pending further detailed mine planning in consideration of mine geology.
4. **Bushfire Risk**

- Rehabilitation of areas of the Project mining area to woodland/forest has been strategically selected consistent with surrounding land uses (e.g. the Vickery State Forest and Namoi River) and to maximise Whitehaven’s ability to meet biodiversity offsetting requirements in accordance with NSW Government policy.
- During the mine life, bushfire management measures for the Project would be detailed in a Bushfire Management Plan.
- Whitehaven would continue to consult with the NSW RFS and provide assistance to the organisation as required.

5. **Agriculture**

- Note that the Project is primarily located on land approved for mining development (i.e. the Approved Mine) and has been disturbed by previous mining activities (i.e. the former Vickery and Canyon Coal Mines).
- The Project final landform represents an improvement to the current final landform (which contains five existing voids) and to the Approved Mine final landform (which includes three final voids, including the existing Blue Vale void).
- The rehabilitation of the Project includes restoration of approximately 342 ha of agricultural land in the Project mining area, borefield and rail spur.
- Rehabilitation of areas of the Project mining area to woodland/forest has been strategically selected consistent with surrounding land uses (e.g. the Vickery State Forest and Namoi River) and to maximise Whitehaven’s ability to meet biodiversity offsetting requirements in accordance with NSW Government policy.
- If the waste rock emplacement were to be rehabilitated to agricultural land, Whitehaven may need to secure additional areas for biodiversity conservation in perpetuity outside the Project mining area to meet its offset obligations in accordance with NSW Government policy. This may result in sterilisation of existing agricultural land.
- During the mine life Whitehaven-owned lands that adjoin the Project would continue to be used for cropping and grazing purposes (e.g. via agistment of stock, leasing or agreements with previous landholders.
- After the completion of the Project it is expected these properties would continue to be used for agricultural purposes in the future.
- There is no statistical relationship between mining and agricultural employment (AnalytEcon, 2018). That is, data does not suggest that an increase in mining employment in an LGA results in a corresponding decrease in employment in the agricultural sector, as employment in the agricultural sector has also decreased where mining activities do not occur.
- Increases in mining-related employment in the region provide alternative employment opportunities and assist to curtail population decline as a result of decreasing agricultural employment.
6. **Water Licensing**

- Whitehaven would hold sufficient surface water and groundwater access licenses for the Project. Modelling to date, including for periods in the rainfall record similar or drier than the conditions experienced in 2018 and 2019, indicate this can be achieved.

- Sufficient water license allocations would be retired at the completion of the Project to account for (i.e. offset) groundwater inflows to the final void post-mining.

7. **Economic Benefit**

- As discussed above, the Project workforce has been estimated on the basis of Whitehaven’s existing operations (specifically Maules Creek).

- Notwithstanding, the Project’s economic benefit to NSW largely consists of royalty payments and company income tax payments, in addition to benefits associated with employment such as disposable income and personal income taxes.

- Net economic benefits to NSW with and without employment benefits have been provided and are as follows (in net present value terms and updated for the amended Project):
  - royalty payments to the NSW Government of $656 million;
  - company income tax payments attributable to NSW of $105 million;
  - Project cash surplus which would accrue to NSW shareholders of $40 million; and
  - disposable income payments accruing to NSW residents of $271 million.

- It is noted the Division of Resources and Geoscience in its submission on the Project stated:
  
  *AnalytEcon has also estimated royalties to the New South Wales Government of $671 million in Net Present Value (NPV) terms, which is slightly less than the independent royalty calculation conducted by the Division (DRG) ($695 million). The difference relates to slightly higher coal price assumptions used by the Division.*

- The Economic Assessment assumed a long-term coal price and variable exchange rate based on CRU forecasts.

- A sensitivity analysis was undertaken of the cost-benefit analysis to changes in the assumed coal prices and exchange rates in the Economic Assessment.

8. **Housing Demand**

- Consistent with the recommendations of the Social Impact Assessment, Whitehaven would implement the following management strategies to minimise potential impacts on housing availability and affordability:
  - encouraging Project contractors and suppliers to preferentially employ local residents within the region;
  - operations recruitment strategy, including preferential employment of local residents and implementation of the Whitehaven Workforce Diversity Policy;
  - encouraging non-local personnel to use the Boggabri Accommodation Camp; and
  - monitoring of cumulative impacts to housing availability and affordability, in consultation with DPIE and other mining operations.
• Analysis of housing availability in Boggabri in the Social Impact Assessment indicates that increased access to rental and purchasable properties would be required to meet predicted demands from new households (e.g. release of currently unoccupied dwellings into the rental pool, construction of new houses etc.). However, Narrabri and Gunnedah have sufficient capacity to cater for any excess demand.

9. **Planning Agreement**

• It is noted the current Planning Agreement offers to the GSC and NSC totals $10.7 million. This is significantly greater than 1% of the Project’s Capital Investment Value (i.e. $6.07 million) as well as the VPA for the Approved Mine.

• Whitehaven’s Planning Agreement offer to NSC was developed on the basis that 30% of the Project disturbance area is located within the Narrabri Local Government Area, consistent with the 70:30 ratio (GSC:NSC) in the Planning Agreement offers that were agreed with both Councils for the Approved Mine.

• The Planning Agreement for NSC proposes to allocate the proposed contribution amount to a number of community development projects within Boggabri, consistent with the feedback NSC received from the community.

• Whitehaven is already a significant employer in the Narrabri Local Government Area. In addition to any planning agreement payments for Whitehaven’s existing operations, during FY18/19 Whitehaven contributed the following to the Narrabri Local Government Area:
  ▪ Approximately $25 million paid to 72 local businesses.
  ▪ Approximately $34 million paid in wages and salaries to existing personnel who reside in the Local Government Area.
  ▪ This includes approximately $6.5 million paid in wages and salaries to existing personnel who reside in Boggabri.

10. **Incremental Assessment of the Project**

• The Project EIS assessed the potential impacts of the Project in entirety (i.e. maximum production rate, total surface disturbance area, total predicted workforce, mine progression).

• Where relevant, the potential impacts of the Project are compared to those already approved for the Approved Mine for context.