

General		
The City of Kwinana strongly opposes the proposal to mine Lot 53 and Lot 1320 Banksia Road, Wellard due to the unacceptable nature of the impacts on conservation significant fauna, Threatened Ecological Communities (TECs) and Matters of National Environmental Significance (MNES).		
Response to Public Notice		
Document Reference	Claim	City of Kwinana Response
Use of GHD Report	The proponent was permitted to use reports Prepared by GHD for City of Kwinana	The City has advised PGV, formally and through their lawyers, that the use of the documents prepared for the City by GHD is not permitted.
PGV Letter, Section 1	RPS estimated drawdown at a distance of 600m	The drawdown at the site is likely to impact on the vegetation immediately adjacent to the mining area. The affect of drawdown or significant rapid water level changes is catastrophic to native vegetation and Banksia species in particular. The proposal has not considered that the adjacent vegetation will also be impacted considerably by the proposal. Even minimal drawdown can have considerable impacts.
PGV Letter Section 1	Failure to remediate the site may lead to contamination of groundwater.	Conversely, the proposed activities in the mining proposal may also lead to groundwater contamination and significantly increase the risk of the dust source/receptor pathway being realised as a result of significantly reduced buffers between screening and sieving activities and residential properties.
PGV Letter Section 1	Hanson has included a Remedial Action Plan and the commitment to engage an auditor during the remediation process. The process of lead removal is outlined in this document (Attachment 7).	The City requires that the appropriate level of remediation for the site is 'Decontaminated' and any target levels for remediation are determined by the City of Kwinana, prior to the commencement of mining.
PGV Letter, Section 3	PGV did not record foraging evidence on the site, potentially due to the lag in cone production after a fire in 2002.	<p>The difference between the Site surveying in 2013 by PGV and GHD in 2015, relating to the amount of foraging evidence present, would suggest that the Banksia species present at the site are a biological anomaly, as the amount of cones that have been produced between 2013 and 2015, in a two year period, is extraordinary.</p> <p>Furthermore, for the amount of foraging evidence present to have accumulated in a two year period, a significant foraging resource and a high value habitat must be sustaining considerably higher numbers of Black Cockatoos than has been reported. The Black</p>

		<p>Cockatoos, to create this amount of foraging evidence must be almost entirely dependent on the vegetation within this Reserve.</p> <p>This is further reinforced by the recent reporting of a roosting site 800m from the site in 2017.</p>
PGV letter, section 3	There was no roosting on the site recorded during the Great Cocky Count in 2016 and in 2014.	No surveying was actually undertaken at the site on these occasions by the community. As no surveying was undertaken, using this information to evidence that no roosting sites are present is incorrect and misleading.
PGV letter, section 4	The rehabilitated area restored post mining site will be managed by the City of Kwinana for conservation/recreational uses consistent with maintaining Black Cockatoo foraging habitat.	<p>At no point in time has the City been consulted regarding this statement. The City does not support mining in this location and will not assume management of the area without detailed consultation. <b>This statement is false</b></p> <p>The City of Kwinana has not been consulted in regards to this statement. The City has not been involved with determining the completion criteria for the site nor any relevant plans. <b>As such the City considers this statement to be false.</b></p> <p>The City will also state that it will not subsidise the proponent by managing a former mine site with ratepayer funds. The City expects that the management of the area will be undertaken post mining in perpetuity by the proponent or the State of WA.</p>
PGV Letter, Section 4	Hanson has committed to a weed control and a dieback management plan as per the Restoration Plan (Attachment 12;	The plan is not sufficient to prevent the spread of dieback within or from the site to other sites based on the absence of any reference to dieback within attachment 12 M70/915 Wellard – Site Restoration Management Plan. The attachments to the plan only have a broad reference to dieback and does not present any methods, specific to the characteristics of the site suitable to prevent the spread within or from the site.
PGV Letter, Section 5	The Clearing permit was granted by DER on 22 October 2016	<p>The Clearing Permit was granted by Department of Mines and Petroleum</p> <p>The assessment of the Clearing Permit did not include impacts on Banksia Woodlands TEC which was listed on 16 September 2016. This represents a significant impact and new information and a referral to the EPA would be required according to section 48I of the EP Act.</p>
PGV Letter, Section 6	<i>Demonstrate that the action is not inconsistent with any relevant recovery plan or threat</i>	The action, as demonstrated by the lack of detail specific to the management of dieback relevant to the site characteristics, management of the site, topsoil handling and remediation process, is inconsistent with the Threat Abatement Plan (TAP)

	<p><i>abatement plan including (but not limited to):</i> Australian Government Department of the Environment (2014). Threat abatement plan for disease in natural ecosystems caused by <i>Phytophthora cinnamomi</i>. Commonwealth of Australia, Canberra</p>	<p>Referral of proposed action 23 February 2013 pg. 27 stated: "There is no risk of spreading the fungal disease from this site".</p> <p>However, the reserve contains at least two known areas of <i>Phytophthora Dieback</i> infestations.</p> <p>The TAP identifies that "Humans can spread <i>P. cinnamomi</i> further and faster than any other infestation vector. <u>High risk</u> activities for spread include mining"</p>
<p>PGV Letter, section 6</p>	<p>The proposed measures are not inconsistent with the Recovery Plan for Forest Red-tailed Black Cockatoos and Carnaby's Black Cockatoos as it will not:</p> <ul style="list-style-type: none"> <li>• Decrease the number of Forest Red-tailed Black Cockatoos in Western Australia;</li> <li>• Decrease the number of Forest Red-tailed Black Cockatoos breeding pairs;</li> <li>• Decrease the number of Forest Red-tailed Black Cockatoos roosting sites; or</li> <li>• Decrease the number of juvenile Forest Red-tailed Black Cockatoos in each roosting flock.</li> </ul>	<p>The identification of a roost site in close proximity to the site in 2017 indicates that the usage of the site is greater than has been indicated by PGV Environmental.</p> <p>The impact on quality native vegetation, suitable for foraging for both species of black cockatoos utilising the site, will be devastating. As the significant majority of the site has not been previously cleared, the foraging values are some of the highest for several kilometres. The identification of a roost site in 2017 confirms that there will be impacts on roost sites for both species of black cockatoos using the site.</p>
<p>PGV Letter, Section 6</p>	<p>The Dieback survey by Glevan Consulting shows surrounding bushland as infested with Dieback with</p>	<p>A Dieback Management Plan has not been prepared relevant to the issues at the site.</p>

	<p>small areas that are not. A Dieback Management Plan will be prepared outlining appropriate hygiene protocols during construction and management of stormwater to ensure the disease is not transmitted through run-off:</p>	
<p>PGV Letter, section 7</p>	<p>Therefore, the vegetation has a risk of removal, or 'Risk of Loss' irrespective of the implementation of the proposal.</p>	<p>The City has been monitoring the site for several years and has concluded that the lead is not mobile, and there is no risk of the lead becoming airborne through dust due to the vegetation cover on the site if it remains in its current state. DWER has advised the City of Kwinana, via letter, that the environmental values at the site may outweigh the risk posed by lead in its current state.</p> <p>Conversely, the proposal does not factor that the process of moving and stripping lead, through the abrasive forces, will make the lead more soluble and increase the risk of lead becoming airborne, particularly during site clearing works as lead is strongly bound to organic molecules in an acid environment as is the case in this Reserve.</p> <p>The proposal greatly increases the risk of exposure pathways to sensitive receptors being realised. As the mine has reduced buffers, this risk is brought closer to those receptors also.</p> <p>The conclusion of section 4.1 of the Ram plan are also invalid as the site is not publicly accessible as it is managed as a conservation Reserve and the visual impact statement is subjective. The City of Kwinana has discussed this with residents and can advise that the residents consider that the mining proposal represents a greater visual impact than what is currently present at the site.</p> <p>Additionally, if the site was reclassified as 'Contaminated – remediation required', the footprint of remedial works would not require 16.25ha of vegetation to be removed. In actuality, the highest concentration of lead could be removed simply by excavating the bunds around the shooting ranges only as this is where the highest concentration of lead is located. Current information indicates that the site's soil processes are adequately binding lead and mitigating mobilisation to groundwater and airborne pathways.</p>

		Any reduction to the offset calculations using this reasoning should be reviewed as 16.25 hectares is not required to be cleared to facilitate remediation of lead contamination.
PGV Letter, Section 7	The overall outcome of contributing to a larger parcel of land is beneficial to the environment, providing larger areas of protected bushland, improving habitat values, decreasing threatening and degrading processes such as edge effects, also improving the economic viability of managing the site in the future.	<p>This statement does not consider the impact the loss of much of this Reserve will have on the local environment.</p> <p>As the Reserve has very high species richness and diversity, the Reserve acts as a node that exports species rich DNA to the surrounding bushland on residents property. Removal of 16.25ha of the site will decrease the functionality of the Reserve and negate the ability of this Reserve to act as a node in wildlife corridors that connect neighbouring Reserves and pockets of bushland.</p> <p>The impact on the functionality will persist post mine closure as the current Reserve, with it's close to ideal boundary/area ratios, will be significantly compromised resulting in edge effect, increased predation, weed invasion and loss of species including conservation, priority and endangered fauna such as <i>Lerista lineata</i>, <i>Neelaps calonotus</i> and two black cockatoo species.</p>
PGV Letter, Section 7	<i>These contaminants may cause unacceptable risk of harm to human and environmental health as well as an unacceptable aesthetic impact to employees (and/or contractors/subcontractors) working at the sand quarry</i>	This risk can be entirely mitigated if sand mining is not to occur on the site.
PGV Letter, Section 7	There is a likelihood that if the site is not remediated as proposed that the site will be reclassified to "Contaminated - remediation required". Such a classification	<p>Incorrect. Site classification is not dependent on the remediation methods proposed.</p> <p>Classification is likely, although the remediation methods that are appropriate are those that remediate the site to an acceptable level independent of what is proposed for the site.</p> <p>The State is unlikely to have any remediation obligation if the site is classified as requiring remediation.</p>

	triggers a statutory remediation obligation for the State Government under s. 23 of the <i>Contaminated Sites Act 2003 (WA)</i> .	
PGV Letter, Section 8	Offsets Policy	<p>The offsets proposed are insufficient to compensate the community for loss of TECs or high value conservation Reserves.</p> <p>Banksia Woodlands have not been considered as part of the referral, and subsequently the offsets are insufficient to address the impacts on MNES.</p>
PGV Letter, Section 9.1	The remediation of the lead on the site will allow the site to be used for public recreation (rather than the current state where it is surrounded by a high mesh fence) providing a valuable natural asset. The proposed action will also result in mitigating the risk to the community of accidental exposure to lead.	<p>The site is managed as a Conservation Reserve. The community accepts that the conservation values at the site are greater than the recreational value. The statement also assumes that upon closure of the site it will be free of contamination. Additionally, the City has no intention of managing a former mine site for recreational purposes without the City approving any such plans. Contrary to what has been stated in other areas of the letter and accompanying information, the <b>City has not been consulted with regard to post closure management and will not accept management of a former mine site for recreation purposes.</b></p>
	<b>9.2 Strategic importance of the Action</b>	<p>The WA building industry is at an all time low. The demands for such material are a fraction of what is stated and there are currently many operating quarries that can satisfy this dwindling need.</p> <p>The property was not identified as a basic raw material node in the WA government's suspended Strategic Assessment of the Perth and Peel Region suggesting that this proposal was insignificant in the considerations of Directions 2031 and the more recent Perth and Peel@ 3.5 Million Plan.</p> <p>Any statements regarding urgency need to reflect the actual requirements of the housing market.</p>
	<b>9.3 Locational importance</b>	<p>The location of the proposal is immediately adjacent to residential properties. The proposal will impact on the amenity of those properties/occupiers and the health and well being of the property owners. The proposal will increase truck movements on roads not designed for such traffic or frequency of movements.</p>

	<p>Department of Mines and Petroleum (DMP) who have mapped the sand resource as a “Regionally Significant Basic Raw Material (BRM)” after an extensive review of BRM within the Perth Peel Region.</p>	<p>The Strategic Assessment of the Perth and Peel (SAPPR) region did not identify the Reserve within the Basic Raw Materials Class of Action.</p> <p>Instead, the SAPPR identified the Reserve for inclusion into the conservation estate.</p> <p>Please See Attachment A</p>
	<p>9.4 Greenhouse gas</p>	<p>The clearing of vegetation at the site represents a significant release of sequestered carbon and removes the ability of the Reserve to further capture carbon. Complex remnant vegetation communities are more efficient at long term carbon capture than revegetation as the amount of management input is considerably less.</p> <p>Any claims that proposal to clear vegetation from the site is the option with the least amount of carbon dioxide produced is incorrect. It is more likely clearing the site will be the option that produces the largest amount of carbon dioxide.</p> <p>There are several quarries operating within a 3km range that can service any demand for sand products. These quarries are not operating at full capacity.</p>
<p>PGV Letter, Section 9.6</p>	<p>The employment of 5 people on site will support an additional 30 jobs</p>	<p>This claim appears to be unfounded and unsubstantiated. Economic Modelling from REMPLAN indicates that 5 jobs in this field would sustain an additional 1 job in the wider supply chain, based on an employment multiplier of 1.2 typically found in the industry.</p> <p>The impact of this development would be negligible on the \$11 billion housing industry quoted.</p> <p>Please see attached REM Plan report included in Attachment B.</p>
	<p><b>9.8 regulator consultation</b></p>	<p>The consultation with the City of Kwinana has been insufficient and, as such, has been misrepresented within documentation.</p> <p>City currently strongly opposes the proposal due to the impacts on native vegetation, fauna, dust, noise, traffic and end use.</p>

		<p>Any claims that the City supports or has been consulted with regarding management post mining are false.</p> <p>Additionally, as the City of Kwinana represents the community, the City has received information that many of the claims regarding consultation with the community are also false, have been extrapolated or misconstrued.</p> <p>There is no agreement between the City and the proponent regarding Road Upgrades and Contributions for Sand Mine. Any statement made by the proponent indicating they have an Agreement with the City of Kwinana is false.</p>
PGV Letter, Section 10	Impacts to black cockatoos will be avoided in the buffer area	<p>This statement is incorrect. The decrease in density will affect the foraging behaviour of both species. The drawdown resulting from groundwater abstraction will affect the vegetation on site outside of the mining area and is likely to result in significant decline of foraging habitat. This impact on native vegetation and black cockatoos is yet to be assessed as it is outside the clearing permit area.</p> <p>As there is likely to be impacts outside of the mine area, a separate EPBC Act referral should be made to assess those impacts.</p>
DoEE 8 May Correspondence	Departmental Quality Value (8)	The majority of native vegetation on site is in excellent condition, is a TEC and supports considerable foraging habitat for endangered species. The value of 8 is incorrect and should be either 10 for the whole proposal area minus the ranges or 9.
Theis Drawdown Modelling		<p>The drawdown modelling indicates the vegetation within the Reserve, but outside of the lease area will be impacted by drawdown.</p> <p>As the species present in this area are very sensitive to changes and reductions in the height of the water table, there will be impacts to Banksia Woodland TECs that have not been accounted for in the current application.</p> <p>This will require a separate EPBC Act referral.</p>
InSitu, Remedial Action & Management Plan	<p>approach will be to screen the topsoil zone and monitor the subsoil horizon.</p> <p>Should significant lead shot/bullets be seen to extend down further into</p>	<p>Screening requires a 500m separation from residential properties according to WA EPA guidance.</p> <p>The <i>Contaminated Sites Act 2003</i> is the guiding legislation relating to remediation of the site. The Mining approval, with its reduced buffers contradicts guidance in the:</p> <ul style="list-style-type: none"> <li>-<i>Contaminated Sites Act 2003</i>;</li> <li>-Contaminated Sites Management Series;</li> </ul>

	The subsoil, then the subsoil area will also be screened.	-NEPMs; -EPA Guidance; and -Mines Safety Regulations relating to buffers between residences
Insitu RA&MP	Section 4.5. ...transported offsite for disposal at a suitably licensed facility, transported via internal haul roads to a fixed screening plant located to the centre of the site or screened centrally in	500m required. Buffer proposed does not comply with WA EPA guidelines.
Insitu RA&MP	A HIL of 300mg/kg (or 300 ppm) will be adopted for the assessment of lead in soil. This is the NEPM criteria for 'standard residential' areas.	The Remedial Action and Management Plan will likely increase lead contaminated dust from the site reaching sensitive receptors.  The City of Kwinana has not been consulted in regards to the use of the site post mine closure and rehabilitation.
Insitu RA&MP 5.5	5.5 Key Plant and Equipment A centrally-located screening plant and a front end loader will be used during the mining and rehabilitation process. Screening plant will be used to screen out lead particles and/or clay pigeon fragments from sand resource for potential use as resource or as fill onsite, subject to verification testing by a qualified land contamination specialist. Screening plant will be located at a centralised site location to allow for maximum	A screening plant requires a 500m buffer

<p>Insitu RA&amp;MP 5.5</p>	<p>Site infrastructure. Transportable site office;  <ul style="list-style-type: none"> <li>• vehicle/equipment compound;</li> <li>• toilet; and</li> <li>• refuelling facility (5,000 litre maximum self-bunded diesel above ground tank).</li> </ul> </p>	<p>Advice regarding the suitability of proposed infrastructure has not been sought from the City of Kwinana. These will require formal application and approval from the City of Kwinana who will determine their suitability.</p>
	<p>Site will be selected by the remediation contractor and will be meet the following objectives:</p> <ul style="list-style-type: none"> <li>• Compliance with all traffic road rules.</li> <li>• Minimisation of noise, vibration and odour to adjacent premises.</li> <li>• Utilisation of state roads and minimisation of use of local roads.</li> </ul> <p>Site access/egress and transport will utilise public roads including</p>	<p>There is no agreement between the proponent and the City of Kwinana relating to the use of roads, any upgrades required or compensation for deterioration of the City's road assets.</p>
<p>Insitu RA&amp;MP 6.2.4</p>	<p>Dust (and potential lead dust) may be made airborne during soil handling activities, loading and unloading of materials, as a result of wind-borne dust from exposed surfaces and stockpiles, during vehicle movements on paved and unpaved roads and screening activities.</p>	<p>The risk of dust exposure to adjacent receptors is exacerbated due to the reduced buffers approved. Considerable risk is present to adjacent neighbours.</p>
<p>Rocla Site Restoration</p>	<p>General</p>	<p>Restoration to the current condition is not possible.</p>

Managem nt Plan		
Rocla Site Restoration Managem ent Plan		The site restoration plan is inconsiderate of soil hygiene requirements necessary to prevent the spread of soil pathogens such as dieback which is present on the site. This will be in contravention of the Threat Abatement Plan.
Rocla Site Restoration Managem ent Plan	Batter angles Grades approximately 1:3 should be designed as a minimum.	To use the site for the purposes of Public Open Space (POS) the grades are required to be 1:6. The plan is therefore not compliant with the City of Kwinana requirements for a POS.
Restoring a biodiverse plant community	General	The document is in draft format. Reliance on draft documents to guide rehabilitation of sites that are contaminated and contain dieback is not supported.
Clearing Permit Approval	<b>DMP approval</b>	<p>It would appear the Clearing Permit has been approved by the DMP which introduces considerable conflicts. DMP does not appear to have considered the local and regional value of the site in granting the approval.</p> <p>At no point has the DMP contacted the City of Kwinana regarding the concerns stated previously nor has the DMP informed the City of Kwinana of the granting of the approval. As the City is the vested management authority of the Reserve it would be appropriate to have advised the City of the approval so any rights of appeal may have been investigated. As this has not occurred, the City has not had an opportunity to appeal the Clearing Permit approval.</p> <p>In addition, the Clearing Permit has been granted when there is clear evidence that the proposal is inconsistent with the majority of the 10 clearing principles especially in light of the considerable values for fauna habitat that are evidenced by the GHD report included in the application.</p> <p>Please note that the GHD reports, commissioned by the City of Kwinana, included in the documents made available in the Public Notice by PGV Environmental are being used without the permission of the City of Kwinana. Reproduction, advertising or publishing findings or the report without the permission of the City is not permitted.</p>
Epa guidance for assessment of environmen tal factors	<b>Mining buffer</b>	<p>Please note that EPA Guidance documentation indicates that a 500m buffer is appropriate for the proposal.</p> <p><a href="http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/GS3-Separation-distances-270605.pdf">http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/GS3-Separation-distances-270605.pdf</a></p>

Clearing Permit	<b>fauna impact</b>	<p>The Clearing Permit has been granted with no apparent consideration of impacts on fauna present at the site as can be demonstrated by the lack of conditions applied to the Clearing Permit that would mitigate such impacts.</p> <p>As demonstrated by the City of Kwinana, the site has regionally significant fauna values. The approval of the Clearing Permit is inappropriate and will result in the death of priority and native fauna.</p>
From EPBC Response 21 June 2018, question 2	PGV Environmental claim that the species <i>Kunzea glabrescens</i> , is the species that the Dwarf Hammer Orchid often grows in association with, and that there was no <i>Kunzea glabrescens</i> recorded on the site.	<p>This is false, as the GHD report (2014) clearly indicates in Appendix E, species recorded in the study area includes <i>Kunzea glabrescens</i>, and so there is the possibility of the Dwarf Hammer Orchid at the site. No additional surveys have been conducted to confirm this.</p> <p>Another spring survey is required to determine presence/absence of the Dwarf Hammer Orchid.</p>
Question 3	PGV Environmental claimed to have surveyed the site 2013 and did not record foraging evidence on the site, potentially due to lack of cone production after a fire in 2002.	<p>According to the Black Cockatoo Habitat Assessment (PGV Environmental, 2014), the methodology indicates that the site visit was undertaken on one day in November 2013. In particular, Carnaby's Cockatoos can vary their patterns of foraging so as to visit different sites on different days. One visit to the site would not be sufficient to gather the relevant scientific evidence to claim that the area is not a foraging site.</p> <p>Furthermore, the claim that one fire in 2002 has reduced banksia cone production, based on personal comments from the original proponent (John White), is false and misleading.</p> <p>The City of Kwinana has collected and recorded <i>Banksia attenuata</i>, <i>Allocasuarina fraseriana</i> and <i>Allocasuarina humilis</i> seed from the site in 2015, in sufficient quantities to suggest that cone production has not been significantly affected from this described 2002 fire. In fact studies have suggested that in order to maintain populations of "Banksia" species (specifically, <i>B.prionotes</i>, <i>B.menziesii</i>, <i>B.leptophylla</i> and <i>B.attenuata</i>) the heath should be burnt at a frequency of no less than ten years. (Cowling, R.M., Byron, B., Lamont, and S.M.Pierce, 1987). This would suggest that at the time of the survey in 2013, ten years after the fire, Banksias would have been at peak cone production.</p> <p>City of Kwinana has installed fauna monitoring cameras at the site since the beginning of 2016. It</p>

		provides continuous data about presence/absence of native species and feral animals. Carnaby's Cockatoos have been recorded foraging at the Reserve on the 24 of June 2017 and the 3 <sup>rd</sup> of August 2017 (please see photo plates 1-3).
Question 3	PGV Environmental claim that there has been no record of a roosting site in the north of the project area. The GHD report from 2014 suggested that there could be a potential roost site north of the project area.	<p>A valid roost site has been recorded approximately 800m to the north of the project area (Referred to by Birdata as SERWELR002). Current data recorded from the Great Cocky Count in 2017 indicated the presence of 298 Carnaby's Cockatoos on one night, and 75 Carnaby's in 2018. With such a large population roosting in close proximity, the project area is a very important foraging site.</p> <p>PGV have not produced any material as part of this submission, that clearly indicates the "Current Use" by Black Cockatoos at this site.</p>
General	The full conditions for the mining proposal have not been included in the public notice	The full set of Conditions attached to the Mining Proposal and Closure Plan have not been made available to the City of Kwinana or the general public.

Attachment A – Strategic Assessment of the Perth and Peel Region mapping



Source: Department of Premier and Cabinet, Strategic Assessment of the Perth and Peel Region Mapping.



## Impact Report for Kwinana (C)

### Impact Scenario

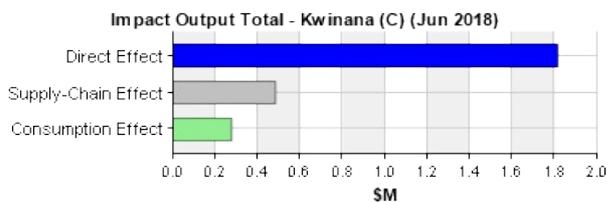
Industry Sector	Direct Change Jobs	Direct Change Output (\$M)
Non Metallic Mineral Mining	5	

### Impact on Output

From a direct increase in output of \$1.813 million it is estimated that the demand for intermediate goods and services would rise by \$0.483 million. This represents a Type 1 Output multiplier of 1.267. These supply-chain effects include multiple rounds of flow-on effects, as servicing sectors increase their own output and demand for local goods and services in response to the direct change to the economy.

The increases in direct and indirect output would typically correspond to the creation of jobs in the economy. Corresponding to this change in employment would be an increase in the total of wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are estimated at \$0.276 million.

Total output, including all direct, supply-chain and consumption effects is estimated to increase by up to \$2.573 million. This represents a Type 2 Output multiplier of 1.419.

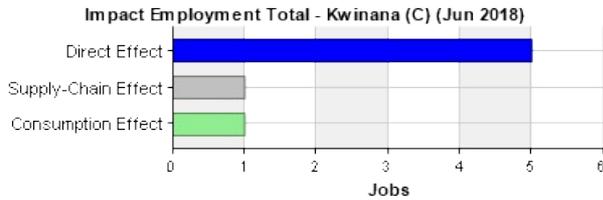


### Impact on Employment

From a direct increase in output of \$1.813 million the corresponding creation of direct jobs is estimated at 5 jobs. From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in the gain of a further 1 job. This represents a Type 1 Employment multiplier of 1.200.

The increase in direct and indirect output and the corresponding creation of jobs in the economy are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are estimated to further boost employment by 1 job.

Total employment, including all direct, supply-chain and consumption effects is estimated to increase by up to 7 jobs. This represents a Type 2 Employment multiplier of 1.400.

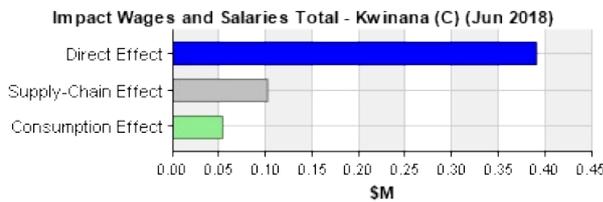


## Impact on Wages and Salaries

From a direct increase in output of \$1.813 million it is estimated that direct wages and salaries would increase by \$0.390 million. From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in the gain of a further 1 job and a further increase in wages and salaries of \$0.101 million. This represents a Type 1 Wages and Salaries multiplier of 1.260.

The increase in direct and indirect output and the corresponding creation of jobs in the economy are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are expected to further boost employment in sectors such as retail therefore further increasing wages and salaries by \$0.053 million.

Total wages and salaries, including all direct, supply-chain and consumption effects is estimated to increase by up to \$0.545 million. This represents a Type 2 Wages and Salaries multiplier of 1.397.

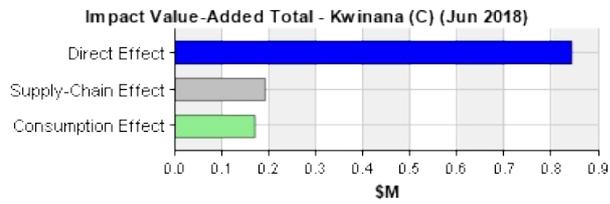


## Impact on Value-Added

From a direct increase in output of \$1.813 million the corresponding increase in direct value-added is estimated at \$0.842 million. From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in a further increase to value-added of \$0.192 million. This represents a Type 1 Value-added multiplier of 1.228.

The increase in direct and indirect output and the corresponding boost to jobs in the economy are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are expected to further boost value-added by \$0.170 million.

Total value-added, including all direct, supply-chain and consumption effects is estimated to increase by up to \$1.203 million. This represents a Type 2 Value-added multiplier of 1.430.



## Impact Summary

Impact Summary	Direct Effect	Supply-Chain Effect	Consumption Effect	Total Effect	Type 1 Multiplier	Type 2 Multiplier
Output (\$M)	\$1.813	\$0.483	\$0.276	\$2.573	1.267	1.419
Employment (Jobs)	5	1	1	7	1.200	1.400
Wages and Salaries (\$M)	\$0.390	\$0.101	\$0.053	\$0.545	1.260	1.397
Value-added (\$M)	\$0.842	\$0.192	\$0.170	\$1.203	1.228	1.430

# Photoplates

Plate 1 – Carnaby's Black Cockatoo – Ground Foraging



Plate 2 – Carnaby's Black Cockatoo – Ground Foraging



Plate 3 – Carnaby's Black Cockatoo, Ground Foraging



9 August 2018

Hon Stephen Dawson MLC  
Minister for the Environment  
12<sup>th</sup> Floor Dumas House  
2 Havelock Street  
WEST PERTH WA 6005

Our Ref.: D18/47317

Dear Minister

**PROPOSED CLEARING OF REGIONALLY SIGNIFICANT BUSHLAND - BANKSIA ROAD  
MINING PROPOSAL**

The proposed clearing of Reserve 24784 (Lot 1320) Banksia Road, Wellard and Reserve 32621 Banksia Road, Wellard (Lot 53), known as the Rifle Range, is being referred to you under section 38(4) of the *Environmental Protection Act 1986* (EP Act) due to the great public concern the proposal has generated. If approved, the proposal will result in the removal of Banksia Woodland that is classified as a *Threatened Ecological Community* under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The affected reserve is the best quality native vegetation of its type in the area, supporting a high diversity of native flora and fauna.

The proposal was referred to the Environment Protection Authority (EPA) in March 2009. The EPA determination, released on 19 May 2009, was 'Not Assessed'. The community (Wellard Progress Association Inc.) appealed (Appeal 096/09) to have the site assessed by the EPA, however, the then Western Australian Minister for the Environment, Donna Faragher, dismissed this appeal on 24 May 2009.

**Administration**

Cnr Gilmore Ave & Sulphur Rd, Kwinana WA 6167 | PO Box 21, Kwinana WA 6966 | Hours Mon-Fri 8am-5pm (Cashier hours 8am-4pm)  
Telephone 08 9439 0200 | Facsimile 08 9439 0222 | TTY 08 9419 7513 | admin@kwinana.wa.gov.au | www.kwinana.wa.gov.au

Significant new or additional information justifies the reassessment of the issues raised by the proposal:

1. Subsequent to the EPA decision to not assess the proposal, the affected bushland has been listed as a *Threatened Ecological Community* under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act);
2. The City commissioned a report by GHD, which found the reserve to have excellent biodiversity values both for its size and its particularly high habitat value for fauna species due to the variety of microhabitats and various resource niches available (i.e. fallen logs, hollow logs, leaf litter, sandy soil);
3. The Reserve is now of sufficient size, shape and condition to be considered Regionally Significant.
4. Banksia Woodlands were listed prior to the approval of the Clearing Permit and should have been considered by the Department of Mines.

The City is concerned that appropriate consideration of the impacts on conservation significant native vegetation proposed by this development during previous assessments may not have occurred. On this basis and in view of the public interest in this matter, the City is requesting that you refer the proposal to the EPA pursuant to section 38(4) of the EP Act.

Yours faithfully

Carol Adams  
**Mayor**

Cc. EPA Chairman, Dr Tom Hatton

Attachments: Report presented to the City of Kwinana Council (Item 14.1) at the Ordinary Council Meeting held on 8 August 2018, inclusive of Attachment A, EPBC Act Submission.



9 August 2018

Hon. William (Bill) Joseph Johnston MLA  
Minister for Mines and Petroleum  
9<sup>th</sup> Floor Dumas House  
2 Havelock Street  
WEST PERTH WA 6005

Our Ref.: D18/47352

Dear Minister

**PROPOSED CLEARING OF REGIONALLY SIGNIFICANT BUSHLAND - BANKSIA ROAD MINING PROPOSAL**

The proposed clearing of Reserve 24784 (Lot 1320) Banksia Road, Wellard; and, Reserve 32621 Banksia Road, Wellard (Lot 53), known as the Rifle Range, is being brought to your attention as it appears that the Department of Mines and Petroleum (The Department) has made a decision on a significant proposal [s.37b(1)] of a prescribed class [s.48I] without referring the matter to the Environmental Protection Authority as required by the EP Act.

A Clearing Application proposing to clear 17.359ha was submitted to the Department on 23 February 2015. This application included a document that stated:

*“Perth’s Banksia woodland communities are coming under increasing pressure from development and as a result, these once extensive woodlands are diminishing”.*

*“... Outside of a few notable exceptions... large preserves of pristine and intact tracts of Banksia woodland are rare.”*

**Administration**

Cnr Gilmore Ave & Sulphur Rd, Kwinana WA 6167 | PO Box 21, Kwinana WA 6966 | Hours Mon-Fri 8am-5pm (Cashier hours 8am-4pm)  
Telephone 08 9439 0200 | Facsimile 08 9439 0222 | TTY 08 9419 7513 | admin@kwinana.wa.gov.au | www.kwinana.wa.gov.au



The 'Banksia Woodlands of the Swan Coastal Plain' ecological community was listed as endangered under Australia's national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), on 16 September 2016. This listing coupled with the Conservation Advice prepared by the Threatened Species Scientific Committee provided further evidence that this proposal is likely, if implemented, to have a significant effect on a federally listed TEC and endangered species.

The area proposed to be cleared was listed as 'endangered' under the EPBC Act after the Clearing Application was submitted, however, Banksia Woodlands were listed prior to the approval of the Clearing Permit and should have been considered by the Department.

Further significant new or additional information justifies the reassessment of the issues raised by the proposal:

1. The City commissioned a report by GHD, which found the Reserve to have excellent biodiversity values both for its size and its particularly high habitat value for fauna species;
2. The Reserve is now known to be of sufficient size, shape and condition to be considered Regionally Significant;
3. The City has determined that the Reserve contains areas of 'pristine' vegetation so environmentally significant that there is now no minimum area threshold for referral of proposals to clear such areas to the Department of Environment and Energy; and
4. The City has determined that the proposed clearing would be at variance to at least eight (8) of the ten (10) clearing principles.

The City is concerned that appropriate consideration of the significant effect on conservation significant native vegetation proposed by this development during previous assessments have not occurred. On this basis, the City is requesting that you now refer the proposal to the EPA pursuant to section 38(5) of the EP Act.

#### Administration

Yours faithfully

Carol Adams  
**Mayor**

Cc. EPA Chairman, Dr Tom Hatton

Attachments: Report presented to the City of Kwinana Council (Item 14.1) at the Ordinary Council Meeting held on 8 August 2018, inclusive of Attachment A, EPBC Act Submission.

**Administration**

Cnr Gilmore Ave & Sulphur Rd, Kwinana WA 6167 | PO Box 21, Kwinana WA 6966 | Hours Mon-Fri 8am-5pm (Cashier hours 8am-4pm)  
Telephone 08 9439 0200 | Facsimile 08 9439 0222 | TTY 08 9419 7513 | [admin@kwinana.wa.gov.au](mailto:admin@kwinana.wa.gov.au) | [www.kwinana.wa.gov.au](http://www.kwinana.wa.gov.au)



9 August 2018

Hon. Josh Frydenberg MP  
Minister for the Environment and Energy  
PO Box 6022  
House of Representatives  
Parliament House  
CANBERRA ACT 2600

Our Ref.: D18/47360

Dear Minister

**PROPOSED CLEARING OF REGIONALLY SIGNIFICANT BUSHLAND - BANKSIA ROAD SAND MINING PROPOSAL**

The City of Kwinana, Western Australia, has been managing a public reserve for several decades for conservation purposes. The reserve has also been granted a mining lease contrary to the wishes of the City of Kwinana and adjacent residents.

The City of Kwinana opposes mining of this site as it has significant habitat for Federally listed endangered species (Carnaby's Black Cockatoo) and, comprises vegetation that is also a Federally listed Threatened Ecological Community (TEC) being Banksia Woodlands.

The proposed clearing of Reserve 24784 (Lot 1320) Banksia Road, Wellard; and, Reserve 32621 Banksia Road, Wellard (Lot 53), known as the Rifle Range, should be referred by you to the Western Australian Environmental Protection Authority, under section 38(5) of the Western Australian *Environmental Protection Act 1986* (EP Act), as the Western Australian Department of Mines and Petroleum (DMP) has approved a proposal that impacts on Banksia Woodlands without appropriate consideration.

**Administration**

Cnr Gilmore Ave & Sulphur Rd, Kwinana WA 6167 | PO Box 21, Kwinana WA 6966 | Hours Mon-Fri 8am-5pm (Cashier hours 8am-4pm)  
Telephone 08 9439 0200 | Facsimile 08 9439 0222 | TTY 08 9419 7513 | [admin@kwinana.wa.gov.au](mailto:admin@kwinana.wa.gov.au) | [www.kwinana.wa.gov.au](http://www.kwinana.wa.gov.au)



The 'Banksia Woodlands of the Swan Coastal Plain' ecological community was listed as endangered under Australia's national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), on 16 September 2016. This listing coupled with the Conservation Advice prepared by the Threatened Species Scientific Committee presented evidence to the Western Australian Department of Mines and Petroleum that the proposal was likely, if implemented, to have a significant effect on the environment.

The ecological community proposed to be cleared was listed as 'endangered' under the Environmental Protection and Biodiversity Conservation Act 1999 after the Clearing Application was submitted. The documentation that was prepared to support the Clearing Permit application was therefore devoid of information relating to the proposals impact on Banksia Woodlands. However, Banksia Woodlands were listed prior to the approval of the Clearing Permit on 27 October 2016 and should have been considered by the Western Australian DMP.

The proponent also referred their proposal to the Department of Environment and Energy as required by the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) (please see referral 2015/7438). As the referral was made prior to the listing of Banksia Woodlands (August 2016) the proposal to clear Banksia Woodlands from the site will not have had any State or Federal consideration of the impact to this TEC.

The Department of Environment and Energy (DoEE) is a decision-maker that is aware that the proposed action, if implemented, will have significant impact on a Threatened Ecological Community that had not been considered at any stage of the assessment.

The Western Australian Environmental Protection Act compels decision-makers to refer proposals that are likely to have a significant impact on the environment to the Western Australian Environmental Protection Authority.

#### Administration

Cnr Gilmore Ave & Sulphur Rd, Kwinana WA 6167 | PO Box 21, Kwinana WA 6966 | Hours Mon-Fri 8am-5pm (Cashier hours 8am-4pm)  
Telephone 08 9439 0200 | Facsimile 08 9439 0222 | TTY 08 9419 7513 | [admin@kwinana.wa.gov.au](mailto:admin@kwinana.wa.gov.au) | [www.kwinana.wa.gov.au](http://www.kwinana.wa.gov.au)

Further significant new or additional information justifies the reassessment of the issues raised by the proposal:

1. The City commissioned a report by the competent and respected consultant, GHD, which found the reserve to have excellent biodiversity values both for its size and in comparison to other reserves within the region, providing particularly high habitat value for fauna species;
2. The Reserve is of a sufficient size, shape and condition to be considered Regionally Significant.
3. The City has determined that the Reserve contains areas of 'pristine' vegetation, so environmentally significant that there is now no minimum area threshold for referral of proposals to clear such areas to the Department of Environment and Energy; and,
4. The City has determined that the proposed clearing would be at variance to at least eight of the 10 clearing principles.

The City is concerned that appropriate consideration of the significant effect on conservation significant native vegetation proposed by this development during previous assessments have not have occurred. On this basis, the City is requesting that you now refer the proposal to the Western Australian EPA pursuant to section 38(5) of the Western Australian Environmental Protection Act 1986.

Yours faithfully

Carol Adams  
**Mayor**

Cc. EPA Chairman, Dr Tom Hatton  
Cc. Projects Assessments West Section (DoEE), Mallory Owen,  
Cc. Secretary, Department of the Environment and Energy, Finn Pratt.

Attachments: Report presented to the City of Kwinana Council (Item 14.1) at the Ordinary Council Meeting held on 8 August 2018, inclusive of Attachment A, EPBC Act Submission.