



Appeals Convenor
Environmental Protection Act 1986

**REPORT TO THE
MINISTER FOR ENVIRONMENT**

**APPEALS IN OBJECTION TO THE DECISION OF THE ENVIRONMENTAL
PROTECTION AUTHORITY NOT TO ASSESS A PROPOSAL**

**LIMESTONE AND SAND EXCAVATION
LOTS 1001 AND 1002 PRESTON BEACH ROAD, PRESTON BEACH,
SHIRE OF WAROONA**

PROPONENT: DOYLES LIME SERVICES PTY LTD

Appeal Numbers 017 to 019 of 2015

September 2015

Appeals Summary

This report addresses three appeals in objection to the decision of the Environmental Protection Authority (EPA) not to assess a proposal to develop a limestone and sand quarry approximately 4.5 kilometres north of the Preston Beach town site in the Shire of Waroona.

The EPA advertised its decision of 'Not Assessed: Public Advice Given' on 16 March 2015. In summary, the EPA considered that the likely environmental effects of the proposal were not so significant as to warrant formal assessment, and concluded that the potential impacts could be effectively dealt with through other statutory decision-making processes.

Broadly the appellants contended that potential impacts on hydrological processes/inland waters environmental quality/amenity are significant and warrant formal assessment, and that the EPA's decision is inconsistent with EPA Report 1359 *Strategic Environmental Advice on the Dawesville to Binningup Area*.

In responding to the matters raised in appeals and additional information presented through the appeal process, the EPA advised that given the uncertainties about hydrological predictions and monitoring and management, the EPA would support the proposal (as referred) being remitted to the EPA for assessment.

The EPA was of the view that potential impacts to amenity arising from the proposal can be evaluated and regulated through other statutory decision-making processes. The EPA also advised that given the proposed land use is for the extraction of limestone and sand (and not agriculture or residential use), the proposal is not inconsistent with strategic advice outlined in Report 1359.

Noting information raised in the appeals and consistent with the advice from the EPA, the Appeals Convenor concluded that there is uncertainty as to whether the proposal is likely to have a significant effect on the environment and the extent to which the EPA's objectives for Hydrological processes and Inland waters environmental quality can be met by the proposal.

Recommendation

The Minister allows the appeals to the extent that, pursuant to section 101(1)(c) of the EP Act, the proposal the subject of the appeals is remitted to the EPA for assessment.

INTRODUCTION

This report addresses appeals lodged by the Waterbird Conservation Group, M. Whitehead and Associate Professor R. Vogwill, and the Peel-Harvey Catchment Council (Inc) in objection to the decision of the Environmental Protection Authority (EPA) not to assess a proposal by Doyles Lime Services Pty Ltd (proponent) to develop a limestone and sand quarry on Lots 1001 and 1002 Preston Beach Road North, Preston Beach (the proposal), in the Shire of Waroona.

The proposed development is located approximately 4.5 kilometres north of Preston Beach town site and comprises separate limestone and sand pits, 7.5 hectares (ha) and 1.5 ha in area respectively. The proposed limestone pit is located approximately 200 metres (m) from Lake Pollard¹ (refer to Figure 1). An additional 2.5 ha limestone pit is proposed for the future². The proposed quarry is expected to operate for 20 years.

Figure 1 – Location and layout of the proposed limestone and sand excavation



(Source: Landform Research 2014² & whereis.com 2015)

In August 2013 the proposal was referred to the EPA to determine whether or not the proposal required environmental impact assessment and, if so, what level of assessment would be applied. The proposal was advertised for a seven day public comment period and 14 public comments were received. The EPA identified that the following preliminary environmental factors were relevant to the proposal:

- Hydrological processes/Inland waters environmental quality;
- Amenity; and
- Rehabilitation and Decommissioning.

¹ Environmental Protection Authority 2015, 'Public advice under section 39A(7) *Environmental Protection Act 1986*', Environmental Protection Authority, Perth, viewed 29 June 2015, <<http://www.epa.wa.gov.au>>

² Landform Research 2014, *Excavation and Rehabilitation Management Plan, Lots 1001 and 1002 Preston Beach Road North, Preston Beach*, prepared for Doyles Lime Service, July 2014.

The EPA concluded that its objectives for the above preliminary environmental factors could be met, primarily on the basis that the proposal is on previously cleared land, is relatively small in scale, includes a 100 m buffer to the wetland and a 10 m vertical buffer to the ground water. As a result, the EPA considered that the likely environmental effects of the proposal were not so significant as to warrant formal assessment under Part IV of the *Environmental Protection Act 1986* (EP Act). The EPA also considered that the potential impacts can be effectively dealt with through other statutory decision-making processes¹.

In March 2015, the EPA released its decision not to assess the proposal and provided Public Advice¹ on the environmental aspects of the proposal, and it was against this decision the appeals were received.

OVERVIEW OF APPEAL PROCESS

A report was obtained from the EPA in relation to the matters raised in the appeals. The proponent also provided advice on the matters raised in the appeals. During the appeals investigation, representatives of the Office of the Appeals Convenor consulted with the appellants to discuss their appeals in further detail through meetings and by telephone, and also met with the proponent.

For appeals in relation to an EPA decision not to assess, the Appeals Convenor normally considers questions of environmental significance, relevance of factors, additional information not considered by the EPA, and whether other approvals processes can adequately address the relevant environmental factors without the need for formal assessment by the EPA. The level of public interest may also be relevant. This document is the Appeals Convenor's formal report to the Minister for Environment (the Minister) under section 109(3) of the EP Act.

In determining appeals with respect to a decision of the EPA not to assess a proposal the following decisions are available to the Minister, he may either dismiss the appeals; or allow the appeals in full or part by remitting the proposal to the EPA for a fresh decision or assessment.

OUTCOME SOUGHT BY APPELLANTS

The appellants requested that the Minister remit the proposal to the EPA with a direction that the proposal be formally assessed and include a public review period.

Appellants were of the view that, given the environmental significance of the area, the proposal was environmentally unacceptable and should not be allowed to proceed at this location.

GROUNDINGS OF APPEAL

The appellants raised a number of concerns, which have been broadly summarised under the following grounds:

1. impacts on hydrological processes/inland waters environmental quality;
2. strategic environmental advice; and
3. impacts on amenity.

Appellants also raised matters that they contend are relevant to the Minister's consideration and are discussed under 'Other Matters'.

GROUND 1: HYDROLOGICAL PROCESSES/INLAND WATERS ENVIRONMENTAL QUALITY

The appellants raised concerns that the proposal abuts Lake Pollard. The appellants contended that the dune system to the west of Lake Pollard is an important source of freshwater for the lake, and the proposed excavation has the potential to alter the hydrology and water quality of the Lake, and is likely to significantly impact on its environmental values.

Appellants raised concerns that Lake Pollard is a Ramsar listed wetland that supports large numbers of local and migratory waterbirds (the latter listed under international agreements), is protected under the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* and is a Conservation Category Wetland located within the Yalgorup National Park.

The appellants were of the view that further research and monitoring is required to properly assess potential impacts of the proposal on Lake Pollard and surrounding lakes within the Yalgorup Lakes system.

An appellant also contended that consideration of subterranean fauna has been dismissed by the proponent and it is not known if stygofauna occur in the area or may be affected by the excavation and changes to hydrology.

In addition, appellants contended that the EPA did not appropriately apply the Significance Test as set out in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012*³ (Administrative Procedures) in its assessment of the referral, particularly with regard to hydrological processes/inland waters environmental quality.

Consideration

It is noted that the EPA's objectives for the environmental factors 'Hydrological processes' and 'Inland waters environmental quality' are, respectively:

- To maintain the hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance, are protected; and
- To maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected⁴.

In response to the appeals, the proponent submitted that the proposed limestone quarry is comparatively small in scale, sufficiently separated from Lake Pollard by a buffer of native vegetation and is unlikely to significantly impact on the hydrology and environmental values of the lake. The proponent advised that its Excavation and Rehabilitation Management Plan² (ERMP) outlines management measures to control potential impacts, and that at the end of excavation the site will be rehabilitated and replanted with native vegetation. The proponent was of the view that limestone quarries have operated in other areas to the south without impacting the environment.

In its response to the appeals, the EPA advised that the Yalgorup Lakes are shallow and have surface heights varying below sea level, and act as groundwater sinks with no inflow or outflow channels. Water levels are maintained by direct precipitation, localised run-off and groundwater, which is the primary water source. Hydraulic connectivity exists between the

³ Western Australian Government 2012, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012*, Western Australian Government Gazette, No 223, 7 December 2012.

⁴ Environmental Protection Authority 2015, *Environmental Assessment Guideline for Environmental principles, factors and objectives*, EAG 8, Revised January 2015, Government of Western Australia, pp. 5-6.

lakes, the groundwater and the ocean. The EPA noted recent research⁵ which states that the dune system which separates the lake system from the ocean plays a significant role in storing winter rains which seep freshwater into the lakes along the western shoreline as lake waters evaporate and salinity and water density rises. The freshwater seepage continues into the dry season, reducing shoreline salinity and creating localised habitats that underpin the productivity of Lake Pollard. The Yalgorup Lakes all have different limnological characteristics and contain unique benthic microbial communities. In particular Lake Pollard has high alkalinity which creates distinct habitat types and invertebrate communities, and the water chemistry that defines Lake Pollard is a product of the chemistry of the inflow from shoreline seepage.

The EPA advised that the proposed clearing of vegetation and partial removal of the limestone ridge has the potential to increase groundwater recharge and to change the quantity and quality of groundwater seeping into Lake Pollard. The EPA noted the 7.5 ha area of the proposed limestone quarry has previously been strip cleared, which may have changed groundwater recharge and impacted Lake Pollard. The EPA also advised that potential changes to groundwater recharge from clearing the remaining vegetation is unlikely to cause significant changes in groundwater quantity, but noted there would be a degree of uncertainty in assessing the impact from clearing on the catchment.

The EPA noted that in making its judgement about the potential significance of impacts to the environment, the EPA considered the likelihood and consequence of potential impacts to changes in groundwater quality and quantity entering Lake Pollard.

The EPA advised that after considering the matters raised in appeals, the uncertainties about the hydrological predictions have heightened and the consequences of underestimating the potential impacts on ground water quality and quantity could be higher than originally judged. The EPA also advised that given the State and internationally recognised environmental values of the receiving environment (Lake Pollard) and the consequences of potential changes to groundwater quality and quantity, any management and monitoring regime (should the proposal proceed) needs to be sufficiently robust to ensure the proposal is implemented as proposed and monitoring occurs to ensure risks to Lake Pollard are acceptable over the long term. The EPA was of the view that, given the uncertainties about hydrological predictions, and monitoring and management, if it is the intention of the proponent to proceed with the proposal within the development envelope at the scale proposed, the EPA would support the proposal being remitted to the EPA for assessment.

Notwithstanding the above, the EPA advised that the risk to Lake Pollard could be further reduced by scaling back the proposal, which would reduce the uncertainty in relation to potential impacts to hydrology, increase the buffer to the Lake and reduce visual impacts. The EPA also advised that a peer review of the proponent's hydrological assessment could provide greater confidence in the predictions and develop appropriate monitoring, trigger criteria and contingency actions to address any risks to Lake Pollard.

During appeal meetings the EPA's response to the appeals was discussed with appellants and the proponent. In relation to this issue, the appellants asserted that a scaled back proposal would not reduce the level of uncertainty around potential impacts to groundwater and water quality. The proponent was of the view that a scaled back proposal is likely to be economically unviable.

In relation to concerns about the EPA's assessment of the proposal, the EPA advised that the environmental impact assessment process was undertaken in accordance with the

⁵ Whitehead M. 2013, 'Advice on Lake Pollard – Food Chain Dynamics and Ecology', unpublished report.

Administrative Procedures and relevant EPA Environmental Assessment Guidelines. It is noted that the EPA's Public Advice¹ indicated that it considered the 10 aspects of the Significance Test as set out in the Administrative Procedures.

In relation to potential impacts to stygofauna, it is noted that the proponent's consultant undertook a reconnaissance survey for stygofauna within the proposal area in May 2013⁶. The EPA advised that the results from the reconnaissance survey and other studies on karst systems within the local area were considered during its assessment of the referral. The EPA noted that limestone within the area is geologically young and has low potential for the development of widespread karst features. The EPA also advised that excavation would be limited to a maximum depth of 10 m above the groundwater table, which will minimise potential impacts on any subterranean fauna.

The EPA's view, notwithstanding its advice in relation to Hydrological processes/Inland waters environmental quality, that subterranean fauna is unlikely to be significantly impacted by the proposal is supported.

It is considered that in making its original decision not to assess the proposal, the EPA had regard to relevant guidelines⁷ in reaching the conclusion that the likely environmental effects were not so significant as to warrant formal assessment, and that other statutory decision-making processes could manage potential impacts.

However, upon consideration of the additional information presented through the appeal process and consistent with the EPA's advice, the uncertainties about hydrological predictions have heightened and it is considered that there is uncertainty as to extent to which the EPA's objectives for Hydrological processes/inlands waters environmental quality can be met from the proposal (as referred). It follows that there would be merit in the proposal being remitted to the EPA for assessment.

GROUND 2: STRATEGIC ENVIRONMENTAL ADVICE

Appellants were of the view that the EPA's decision not to assess is inconsistent with EPA Report 1359 *Strategic Environmental Advice on the Dawesville to Binningup Area*⁸ (Report 1359), which made recommendations against development on the western side of the Yalgorup Lakes system due to the importance of the area. It was contended that proposal is also inconsistent with intent of the EPA's strategic assessment of the Perth and Peel regions (in progress) and the Western Australian Planning Commission's *Coastal and Lakelands Planning Strategy: Dawesville – Binningup* (1999), which indicate that threats from land use adjacent to the Yalgorup National Park should be minimised.

Consideration

In response to this ground of appeal, the EPA noted that Report 1359 discusses the significant risk of impacts occurring from additional residential and agricultural development to the lakes and the significant vegetation, flora and fauna. The EPA advised that the proposal is for a quarry and not residential or agricultural development, which have different effects on the environment, primarily through nutrient enrichment and groundwater abstraction.

⁶ ERMP, Appendix 3.

⁷ Environmental Protection Authority 2015. *Environmental Assessment Guideline for Application of a significance framework in the environmental impact assessment process. Focussing on the key environmental factors, EAG 9.*

⁸ Environmental Protection Authority 2010, *Strategic Environmental Advice on the Dawesville to Binningup Area, Report 1359*, May 2010. Government of Western Australia.

It is noted that the EPA has recently provided (and published) interim strategic advice to the Minister for Environment, *Perth and Peel @ 3.5 million Environmental impacts, risks and remedies*⁹, which states that the Yalgorup Lakes and other significant environmental values found together in the Dawesville to Binningup area make it an extremely important area for conservation. The EPA indicates that these values could be protected by increasing and consolidating the area of Yalgorup National Park through the acquisition of private land enclaves west of the lakes and lands adjacent to the lakes, and/or those that contain internationally, nationally and regionally significant environmental values.

As noted above, during appeal meetings the EPA's advice in response to the appeals was discussed with appellants. In response to the EPA's advice on this issue, the appellants were of the view that the risk of impacts from a quarry was as significant and unacceptable as that from residential or agricultural development near the Yalgorup Lakes.

Taking into account the above information, noting the appellants' concerns and the findings outlined in Ground 1, it is concluded that the matters raised in this ground of appeal would be considered during further assessment of the proposal.

GROUND 3: AMENITY

An appellant contended that the EPA did not appropriately consider potential impacts to amenity arising from the upgrade of road infrastructure required to access the proposal area. The appellant asserted that the clearing of native vegetation for road upgrade, and dust and noise generated during quarry operations and truck movements to the site would significantly impact Lake Pollard and surrounding native vegetation. The appellant also contended that the amenity for users of Yalgorup National Park and Martins Tank Campsite would be similarly affected. The appellant submitted that the dust management measures proposed by the proponent are inadequate, and substantially more groundwater abstraction would be required to control dust. The appellant was of the view that the reliance on other statutory decision-making processes to evaluate and regulate these issues was unacceptable and would lead to unsatisfactory outcomes.

Consideration

It is noted that the EPA's objective for the environmental factor 'Amenity' is 'To ensure that impacts to amenity are reduced as low as reasonably practicable'⁴. It is also noted that EPA's Public Advice¹ indicates that the Department of Parks and Wildlife raised concerns regarding potential dust impacts from the proposal to Lake Pollard and the surrounding vegetation, and recreational users of the Yalgorup National Park.

In its response to the concerns raised under this ground of appeal, the EPA advised that the proposal as referred did not include road infrastructure upgrades that would be required to access the proposal area.

The EPA also advised that, consistent with its Public Advice¹, potential impacts to amenity and relating to the upgrade of road infrastructure can be assessed, managed and regulated through other statutory decision-making processes including:

- Part V of the EP Act (clearing provisions and works approval and licensing process);
- groundwater abstraction licensing process under the *Rights in Water and Irrigation Act 1914*;

⁹ Environmental Protection Authority 2015, *Perth and Peel @ 3.5 million Environmental impacts, risks and remedies – Interim strategic advice of the Environmental Protection Authority to the Minister for Environment under section 16(e) of the Environmental Protection Act 1986*, July 2015. Government of Western Australia.

- *Environmental Protection (Noise) Regulations 1997*; and
- development approval processes by the Shire of Waroona and the Western Australian Planning Commission.

It is noted that the EPA's advice in respect to this issue is consistent with the *Environmental Assessment Guideline for Application of a significance framework in the environmental impact assessment process. Focussing on the key environmental factors*¹⁰, which states that the mitigation of impacts may be managed through conditions applied as a result of other regulatory processes to which a proposal may be subject.

Taking the above information into account, the EPA's view that the potential impacts to amenity and relating to the upgrade of road infrastructure can be evaluated and regulated through other statutory decision-making processes is supported.

OTHER MATTERS

In addition to the matters considered above, the appellants were of the view that the proposal should be referred for assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) due to potential impacts to matters of national environmental significance.

The EPA advised that it is the proponent's responsibility to refer the proposal to the Commonwealth Department of the Environment if the proposed action is likely to have a significant impact on a 'Matter of National Environmental Significance'. It is also understood that the Commonwealth Department of the Environment is automatically notified of all new referrals through the EPA seven day public comment period. The EPA also advised that the decision of the EPA not to assess this proposal does not release the proponent from its responsibilities under the EPBC Act.

RECOMMENDATION

For the reasons stated above, and consistent with advice received from the EPA in response to the appeals, it is recommended that given the uncertainty with respect to the significance of potential impacts to the hydrology and ecology of Lake Pollard, the Minister allows the appeals to the extent that, pursuant to section 101(1)(c) of the EP Act, the proposal the subject of the appeals is remitted to the EPA for assessment.

With regards to potential impacts to stygofauna, the EPA's view that subterranean fauna is unlikely to be significantly impacted by the proposal is supported.

In relation to the impacts to amenity from the proposal and relating to the upgrade of road infrastructure required to access the proposal area, it is considered that these matters can be adequately evaluated and managed through other statutory decision-making processes and it follows that the Minister dismiss this ground of appeal.

¹⁰ Environmental Protection Authority 2015. *Environmental Assessment Guideline for Application of a significance framework in the environmental impact assessment process. Focussing on the key environmental factors*, EAG 9, pp. 7-8.

Nothing in this recommendation should be taken to imply a particular view as to the environmental acceptability of the proposal. Rather, it is considered that there is sufficient uncertainty with respect to the environmental factors Hydrological processes and Inland waters environmental quality that it is appropriate for the proposal to be remitted for assessment.

Emma Gaunt
APPEALS CONVENOR

Investigating Officer:
Michael Power, Senior Environmental Officer