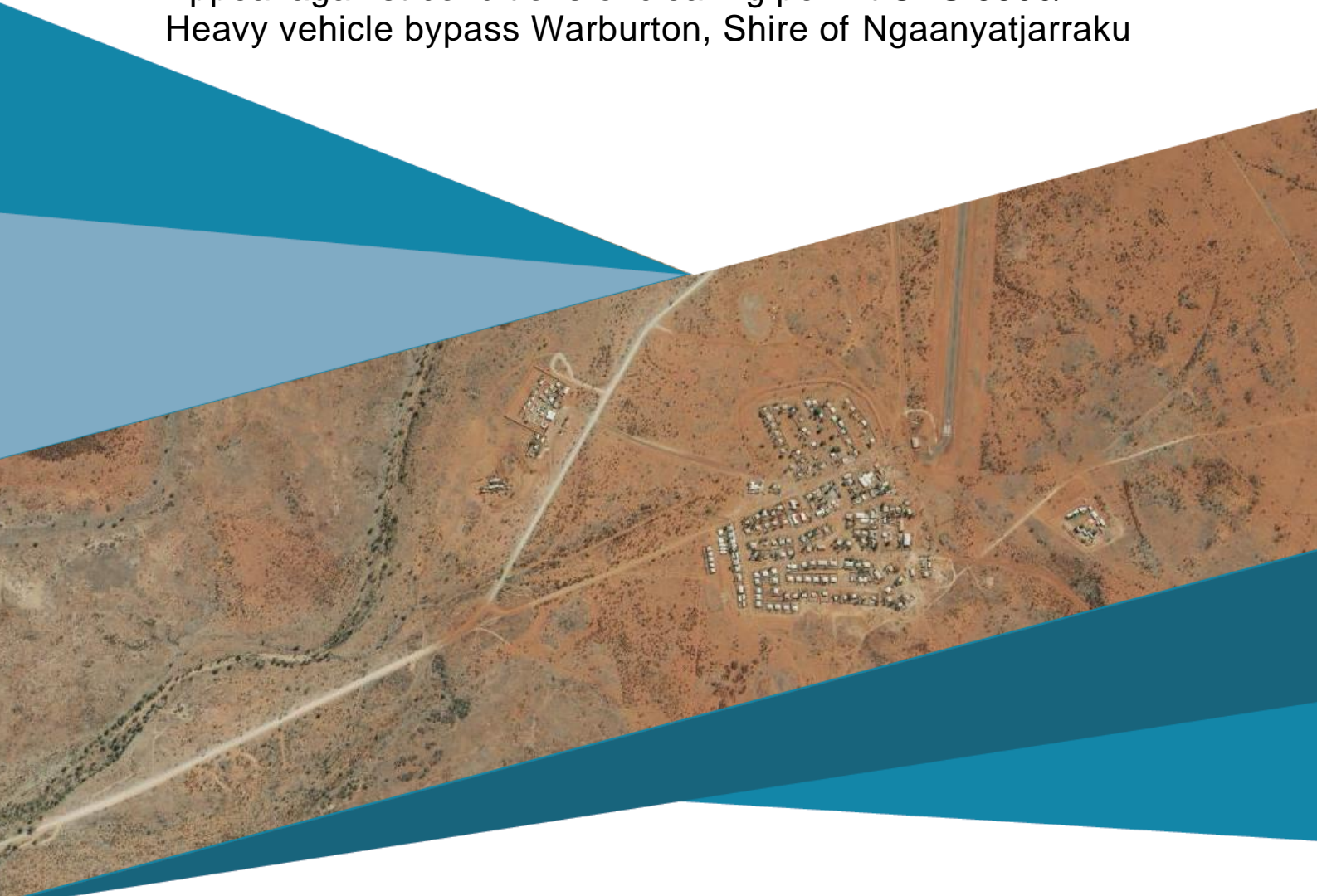




Government of **Western Australia**
Office of the **Appeals Convenor**
Environmental Protection Act 1986

Appeals Convenor's Report to the Minister for Environment

Appeal against conditions of clearing permit CPS 9300/1 –
Heavy vehicle bypass Warburton, Shire of Ngaanyatjarraku



Appellant	Wildflower Society of Western Australia (Inc.)
Permit holder	Shire of Ngaanyatjarraku
Authority	Department of Water and Environmental Regulation (DWER)
Appeal No.	006 of 2022
Date	May 2022

Office of the Appeals Convenor

08 6364 7990 or TTY 13 36 77 (National Relay Service)

admin@appealsconvenor.wa.gov.au

www.appealsconvenor.wa.gov.au

221 St Georges Terrace
Perth WA 6000

Appeals Convenor

Emma Gaunt

Investigating Officer

Carly Bishop

Jean-Pierre Clement

This report

© 2022 Office of the Appeals Convenor, Western Australia.

All rights reserved. This material may be reproduced in whole or in part provided the source is acknowledged.

Cover image from [WA Now Mosaic \(LGATE-320\) - Datasets - data.wa.gov.au](https://data.wa.gov.au/datasets/LGATE-320)

Please contact us if you need the report in a different format.

Acknowledgement of Country

The Office of the Appeals Convenor acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community.

We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders past, present and emerging.

Contents

1	Executive summary	1
1.1	Decision under appeal	1
1.2	Grounds of appeal and appellant concerns	2
1.3	Conclusions	2
1.4	Recommendation to the Minister	3
2	Reasons for recommendation	4
2.1	Larger buffers and targeted surveys are not required	4
2.2	Control of existing weeds is not required	6
2.3	Dust impacts not significant	6
2.4	Altered hydrology not significant	7
2.5	Rehabilitation and further surveys are not required	8
Appendix 1	Appeal process	10

1 Executive summary

1.1 Decision under appeal

This is an appeal by the Wildflower Society of Western Australia Inc. (appellant) against the conditions applied to a clearing permit issued to the Shire of Ngaanyatjarraku (permit holder) by the Department of Water and Environmental Regulation (DWER) for the construction of a bypass road around the remote Warburton Community.

The Warburton Community is located 1,500 kilometres (km) north-east of Perth on the edge of the Gibson Desert. The closest town is Laverton which is 560 km south-west of the proposed clearing along the Great Central Road.

The total area of authorised clearing is 60.32 hectares (ha) as shown in Figure 1.

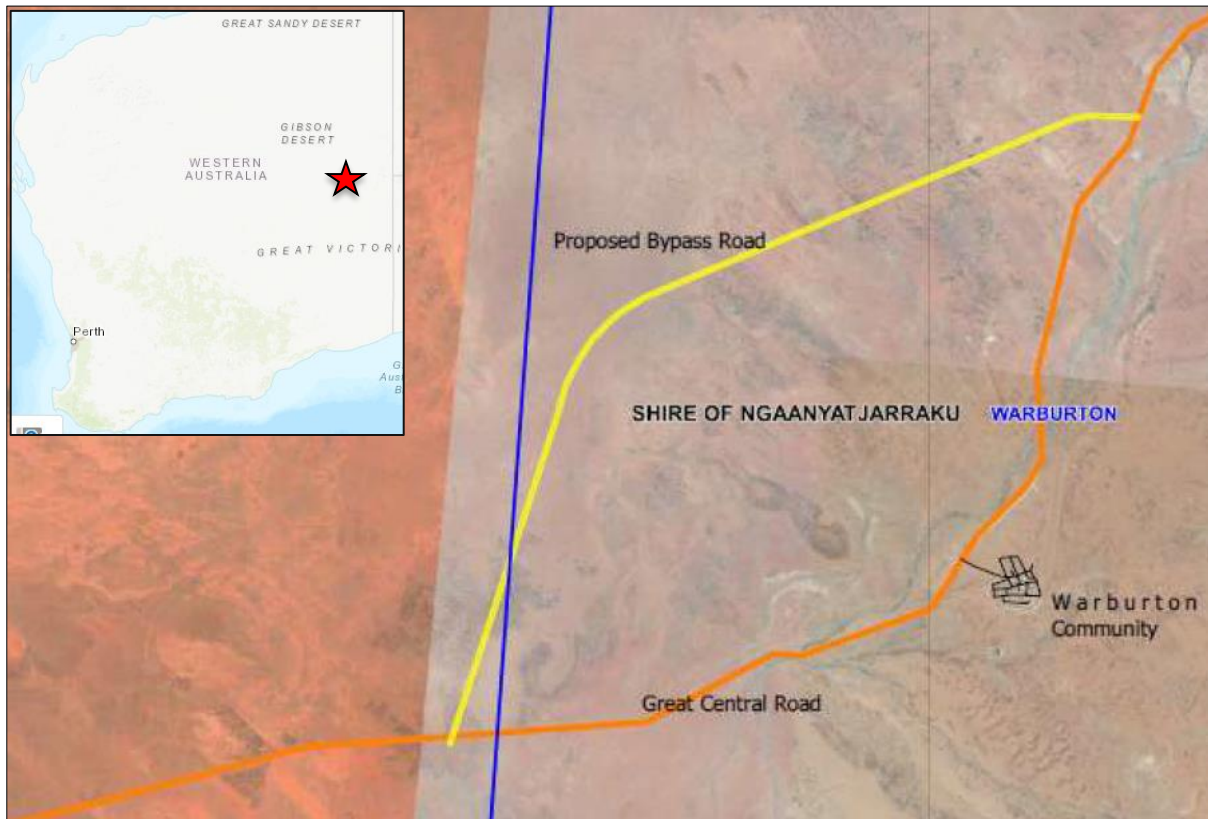


Figure 1 Proposal location with area to be cleared in yellow

A separate appeal against the conditions was submitted by the Shire of Ngaanyatjarraku. However, this was subsequently withdrawn and is not considered in this report.

1.2 Grounds of appeal and appellant concerns

The appellant raised several concerns about the permit conditions, which are summarised in Table 1.

Table 1 Grounds of appeal

Ground	Main concerns the appellant submitted
1	Buffers around threatened and priority flora species should be increased from 10 metres (m) to 50 m. Targeted surveys are required
2	Three species of weed identified as likely within the new road corridor should be controlled to prevent further spread
3	Dust management plan required to protect vegetation within 500 m of the road
4	Drainage management plan required to protect <i>Triodia</i> spp. and mulga vegetation communities
5	Rehabilitation requirements to be strengthened in relation to borrow pits, temporary clearing areas etc. Topsoil should be used in adjacent degraded areas.

1.3 Conclusions

Should larger buffers and targeted flora surveys be required?

Our conclusion is that neither larger buffers nor targeted flora surveys are required for conservation significant flora found in the application area.

For *Seringia exastia* (Threatened) this is because the species is anticipated to be de-listed. The Department of Biodiversity, Conservation and Attractions (DBCA) advised that a nomination for de-listing the species is being prepared based on recent taxonomic review. The review concluded that *S. exastia* is the same as (former) *S. elliptica* which is widespread across the state. For this reason, neither buffers nor further surveys are required.

For *Goodenia virgata* (Priority 2), habitat for the species is widespread and DBCA advised that the loss of three plants is unlikely to be significant to the overall conservation of the species. The species is currently known from seven recorded populations in the Shires of East Pilbara, Wiluna and Ngaanyatjarraku, including one in the Warburton area.¹ Of the three records within the application area, the permit holder has committed to retain two and place 10 m buffers around them.

While we understand that there is some uncertainty as to whether a 10 m buffer is adequate to protect the records from the indirect impacts associated with an unsealed road, we accept DBCA advice that given habitat for the species is relatively widespread, the loss of three plants is unlikely to be significant to the overall conservation of the species.

We similarly conclude that additional surveys are not required for *G. virgata* given only one specimen is to be directly impacted and DBCA advice that habitat is widespread.

¹ Western Australian Herbarium (1998-). *Florabase – the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions. URL: <https://florabase.dpaw.wa.gov.au/>

Should controls be applied in respect to existing weeds?

The permit includes a condition to minimise the risk of weed introduction and spread, with recording and reporting of the actions taken required to be reported to DWER.

We agree with DWER that it is unreasonable to require the permit holder to eradicate weeds within the 60.23 ha footprint prior to clearing as it is unclear that has any connection with the clearing of native vegetation.

While DWER acknowledged that the proposed clearing may spread weeds, we consider that the risk of the introduction and spread of weeds has been adequately addressed, minimised and mitigated by the existing weed condition.

Should the permit include dust management conditions?

We consider that additional dust management controls are not required for this permit.

We come to this conclusion on the basis that while dust may adversely affect vegetation near the road during construction and operation of the road, the local area and the Central Ranges IBRA bioregion retains more than 99 per cent of original vegetation cover. Given this, and the linear nature of the proposed clearing we anticipate that the impacts to the adjacent vegetation from dust because of the proposed clearing will be limited in both extent and magnitude.

In addition, we accept that the ability to control dust in this location is limited, due to the scarce availability of water.

Should the permit include drainage management conditions?

We consider that additional drainage management conditions are not required for this permit.

We come to this conclusion on the basis that while the new road will alter surface water hydrology, the works are occurring within a largely uncleared area, are being carried out with assistance and guidance of Main Roads and drainage changes are not expected to be significant.

Should rehabilitation and further surveys be required?

We note that the permit holder proposes that all of the areas proposed to be cleared under the permit will form the new road. Given there is no 'temporary clearing' nor a significant environmental impact, we consider that rehabilitation is not required. Also, we agree with DWER that it is unreasonable to require the permit holder to rehabilitate degraded areas outside of the application area with topsoil from the clearing footprint.

Regarding further flora surveys and rehabilitation of the material pits, we consider this not required. The materials for the new road are being taken from existing material pits.

1.4 Recommendation to the Minister

Dismiss the appeal.

2 Reasons for recommendation

2.1 Larger buffers and targeted surveys are not required

Our conclusion is that neither larger buffers nor targeted flora surveys are required for conservation significant flora found in the application area. We explain our reasoning below.

***Seringia exastia* (Critically Endangered) has been nominated for de-listing**

Of the *Seringia* taxa, *S. exastia* and (former) *S. elliptica* are the most common in Western Australia. *Seringia exastia* and *S. elliptica* are now considered one species, following a taxonomic revision that assessed their genomic and morphological characters². Prior to this review, *S. elliptica* was a widespread species recorded throughout the Goldfields, Midwest, Pilbara and Kimberley regions and *S. exastia* was thought to only occur in the Kimberley region, approximately 900 km northwest of the application area.

Due to the distance between the application area and the Kimberley populations of *S. exastia*, DBCA³ advised DWER that the identification of the species collected from the applicant's flora survey⁴ needed to be verified. DWER⁵ advised that the specimen of *Seringia* collected from the flora survey was sent to the Western Australian Herbarium (WA Herbarium) of DBCA for further identification. The Senior Identification Botanist with the WA Herbarium confirmed the identity of the specimen as *S. exastia*⁶. Regardless, we note that both groups are now synonymised and listed as the same species.

DBCA further advised DWER that:

...a nomination to delist *S. exastia* due to no plausible significant threats to the species has been prepared and considered by the WA Threatened Species Scientific Committee (TSSC). DBCA anticipates that at the next TSSC meeting, recommendations will be made to the Minister to delist the species. Although some loss of plants is likely to have occurred and will continue to occur during mining and road works in some parts of the species' distribution, DBCA does not expect it to be significant in the context of the entire population. Therefore, DBCA determined that the level of impact on the threatened species is likely to be negligible.

Notwithstanding the anticipated delisting of the species, until changes are officially made to the threatened species list, *S. exastia* is still listed as threatened flora, and removal of individuals will still require an authorisation under section 40 of the *Biodiversity Conservation Act 2016*. DWER⁷ advised that the permit holder has applied to DBCA for this authorisation. DBCA advised that it does not see impediments to granting authorisation and confirmed targeted surveys are not required to be undertaken to inform the threatened flora authorisation impact assessment for *S. exastia*.

Given the above, we consider it was reasonable for DWER to conclude that the loss of up to 138 *S. exastia* individuals will not significantly impact on the conservation and the maintenance of the species, in the context of the entire population, and having had regard to

² Binks, R.M., Wilkins, C.F., Markey, A.S., Lyons, M.N. and Byrne, M. (2020), Genomic data and morphological re-assessment reveals synonymy and hybridisation among *Seringia* taxa (Lasiopetaleae, Malvaceae) in remote north-western Australia. TAXON, 69: 307-320.

³ Department of Biodiversity, Conservation and Attractions (DBCA) (2021) Species and Communities Branch flora advice for clearing permit application CPS9300/1, received 20 September 2021. DWER Ref: A20949350.

⁴ GHD (2021) Warburton Flora and Vegetation Survey. Report for Shire of Ngaanyatjarraku. GHD, Perth.

⁵ DWER response to appeal 006/22, received 16 March 2022, page 3.

⁶ GHD (2021) Email from Western Australian Herbarium confirming flora identification. Received 20 October 2021. DWER Ref: A2058249.

⁷ DWER response to appeal 006/22, received 16 March 2022, page 3.

its taxonomic status and anticipated delisting. As a result, we conclude that there is no justification for a buffer around remaining plants or for further targeted flora surveys.

***Goodenia virgata* (Priority 2) habitat is widespread**

G. virgata is listed as Priority 2 by DBCA. Priority 2 flora are described as:

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

DBCA⁸ advised DWER that *G. virgata* is known from nine records in WA and the Northern Territory (NT). It has been recorded across the arid interior, including the Little Sandy Desert, the Great Sandy Desert, the Gibson Desert and the Gascoyne IBRA bioregions. DWER⁹ noted that the species was recorded on vegetation types that are well represented in the application area and the local area. Given the broad distribution of the species, DBCA considers it highly likely to be under-surveyed. It is noted that the records from the flora survey represent a range extension, with no collections from the Central Ranges IBRA bioregion previously. DBCA recommended, if possible, avoidance of *G. virgata* individuals as they represent the only records within the Central Ranges IBRA bioregion.

Noting DBCA's advice, DWER sought clarification from the permit holder as to whether the three individuals recorded within the application area could be avoided. The permit holder advised that two out of the three plants could be avoided. DWER¹⁰ concluded that the removal of one out of the three known *G. virgata* individuals within the application area will not significantly impact the conservation status of the species.

Additional advice from DBCA on risks to *G. virgata*

To better understand the risks posed to *G. virgata* from the implementation of the proposal, we sought additional advice from DBCA. In response, it advised:

It is possible there may be some variation between the subpopulation within the CPS 9300/1 application area and the broader distribution of this species. As the extent of the subpopulation is not known, it is difficult to determine the expected impact, however given its relatively wide range, the loss of 3 plants is unlikely to be significant to the overall conservation of the species. However, given the plants within the application area represent the only known location within the Central Ranges IBRA Region, it is recommended impacts be minimised where feasible. A buffer may assist in reducing possible secondary impacts, such as dust, weed invasion and altered hydrology. The size of the buffer recommended would depend on the level of risk posed by secondary impacts. It is difficult to determine this from the information provided. It may be appropriate to reduce the size of the buffer if the secondary risks are adequately mitigated.¹¹

Additional buffer area and surveys for *G. virgata* not required

We do not consider the appellant's request for additional surveys and extended buffer for *G. virgata* is required. We consider that the applicant's flora survey was adequate to identify conservation significant flora and vegetation within the application area. Given there is

⁸ Department of Biodiversity, Conservation and Attractions (DBCA) (2021) Species and Communities Branch flora advice for clearing permit application CPS9300/1, received 20 September 2021. DWER Ref: A20949350.

⁹ DWER response to appeal 006/22, received 16 March 2022, page 3.

¹⁰ Ibid

¹¹ DBCA, email to Appeals Convenor, 10 March 2022.

widespread habitat for *G. virgata* in the local area and across multiple IBRA bioregions, we consider that additional targeted flora surveys are not required.

In relation to the buffer, DWER based its view on the adequacy of 10 m on a study which found that dust had no significant impacts on a *Tetradlea* species at Windarling Range and also no impact on the floristic composition on Barrow Island.¹² While the relevance of these studies to *G. virgata* is open to question (noting the research was conducted on a morphologically different flora species and different vegetation communities a substantial distance from the application area), we accept DBCA's advice that the loss of three plants is unlikely to be significant to the overall conservation of the species.

In addition, we also accept that heavy vehicle traffic is expected to increase substantially with the commencement of a new mining project in the area, and that the construction of the new road will improve the safety in the Warburton Community.

2.2 Control of existing weeds is not required

Our conclusion is that risk of introducing or spreading weeds has been adequately addressed, minimised and mitigated by the permit conditions and that further conditions are unnecessary. We explain our reasoning below.

The flora survey identified three introduced flora in the survey area, namely *Bidens bipinnata*, *Rumex vesicarius* and *Cenchrus ciliaris* (buffel grass). Noting the proximity of the application area to the Great Central Road that has been traversed by heavy and small vehicles for an extended period, DWER considered it unreasonable to require the permit holder to eradicate all weeds within the 60.23 ha footprint prior to clearing.

DWER¹³ acknowledged that the proposed clearing may spread the seeds and vegetative parts of weed species in soil or other material into other areas. To minimise the risk of introduction and spread of weeds, the clearing permit (condition 5) includes the requirement to:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known weed-affected soil, mulch, fill, or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

In addition, condition 9(1) of the clearing permit requires the permit holder to record and report the actions taken to minimise the risk of the introduction and spread of weeds.

We consider that the risk of introducing or spreading weeds has been adequately addressed, minimised and mitigated by the permit conditions. Further, we consider that any existing weeds in the application area are not connected with the clearing of native vegetation. As such, we consider it unnecessary to apply any additional conditions.

2.3 Dust impacts not significant

Our conclusion is that risks from dust during construction and operation of the road are acceptable in the local and regional context. We explain our reasoning further below.

¹² Matsuki, M. *et al.* (2016). [Impacts of dust on plant health, survivorship, and plant communities in semi-arid environments](#). *Austral Ecology*. February 2016.

¹³ DWER response to appeal 006/22, received 16 March 2022, page 5.

Dust may impact vegetation

In response to the appeal, DWER accepted that dust from the construction and operation of the road (which will be unsealed) may cause adverse impacts to adjacent native vegetation.

The permit holder advised that given the location of the proposal, it is considered likely that the vegetation would be adapted to dry, hot and dusty conditions. It also noted that the Warburton community was extensively cleared by cattle grazing in the 1980s, with rangeland revegetation and reseeded undertaken by the Warburton Community Inc and Pitjantjatjara Council Land Management in an arid and highly dusty landscape.

Water scarcity necessitates dry construction

Dust from construction activities is unavoidable due to lack of water.

The permit holder acknowledged that the preparation of dust management is typically required for road projects, particularly those undertaken by Main Roads, there is very little water in bores and due to its scarcity, is typically not utilised for non-potable purposes.

The permit holder stated that it is in consultation with Main Roads regarding dust control during construction.

Dust impacts not considered to be significant

In response to the appeal, DWER noted that while dust may impact on neighbouring vegetation, that must be seen within the context of the proposal being within the Central Ranges IBRA bioregion which retains more than 99 per cent of original vegetation cover. In addition, DWER advised that the linear nature of the proposed clearing (in comparison to clearing of an expansive and wide area for mining, for example) means the risk of impacts to the vegetation associated with dust to be limited in both extent and magnitude.

2.4 Altered hydrology not significant

We consider that while the construction of the road following clearing may alter surface water hydrology, but that in a local and regional context, these changes are not significant. We explain our reasons below.

Construction of a road will alter surface water flows

In response to the appeal, DWER acknowledged that altered hydrology caused by the road may result in impacts to the health and composition of nearby vegetation.

In its response to the appeal, the permit holder noted that the current roads around the Warburton community are gravel roads with offshoot drains that are designed to divert water from the road surface and prevent potholes and corrugations. It submitted that the condition of roadside vegetation adjacent to existing roads (good or better condition) demonstrates that roads do not have a significant effect on this vegetation.

The permit holder also observed that the soils within the application area comprise red sandy earths that have high levels of infiltration, and that as a result, runoff from roads is unusual and typically absorbed before it can leave the offshoot drains. The permit holder submitted that where rainfall is sufficient, runoff in the area generally drains as sheet flow and that the new road and associated drainage is not expected to significantly impact the viability of surrounding vegetation communities or their access to water.

Vegetation in area is well represented

The project is in the Mann-Musgrave Block IBRA sub-region of the Central Ranges bioregion. This landscape consists of sandplains which support low open woodlands of either Desert Oak or Mulga over *Triodia basedowii* hummock grasslands.

The permit holder noted that these communities are not threatened or conservation significant, and given the sporadic nature of rainfall in the area, with porous soils, offshoot drains are considered to be suitable for the climate and landscape.

DWER provided similar advice.

Impacts from changes to hydrology not significant

Based on the information available on appeal, while the construction of the road will cause an alteration to local hydrology (surface water flows), the impacts are expected to be limited. Noting also the regional context of being within a largely uncleared area, and works being carried out with assistance and guidance of Main Roads, drainage changes are not expected to be significant and no additional conditions are recommended.

2.5 Rehabilitation and further surveys are not required

Our conclusion is that rehabilitation is not required as the cleared area will become road. We also consider flora and fauna surveys of the material pits are not required, and that topsoil is not required to be used. We explain further below.

No rehabilitation required

The permit holder advised DWER that there will be no 'temporary clearing' and that the whole application area will be utilised as a road¹⁴. Given this, there would be no areas to rehabilitate.

Regarding a rehabilitation or offset requirement, DWER advised that:

After consideration of available information, including the proposal description, the extent of clearing within the context of 99 per cent vegetation cover and the avoidance and mitigation measures proposed by the Permit Holder, the Department considered the residual impact to be low and that it did not trigger a rehabilitation or offset requirement.

Material pit already exists

In relation to material pits and the appellant's request for flora and fauna surveys to be undertaken, DWER advised that the source of basic raw material used for the proposed roadworks was beyond the scope of the assessment. The application is for clearing of the road alignment only and not for clearing any material pits.

We note that materials for the new road will be taken from an existing pit. As submitted by the permit holder:

The raw materials for this project will come from an existing adjacent pit already in use. Thus, no new raw material pits are anticipated. If the need arises a clearing permit application will be submitted prior to clearing as is standard practice for the Shire.¹⁵

Impacts of transport and movement of soils and basic raw materials within the application area have been addressed within the context of weed control. Condition 5 of the permit

¹⁴ DWER response to appeal 006/22, received 16 March 2022, page 7.

¹⁵ Permit holder response to appeal, received 4 March, page 4.

requires the permit holder to ensure that no known weed-affected soil, mulch, fill, or other material is brought into the area to be cleared or exported to other areas.

Topsoil not required to be used

The appellant submitted that the topsoil could be used to rehabilitate degraded areas outside of the application area.

We consider a requirement for the permit holder to rehabilitate degraded areas unrelated to the proposed clearing is not warranted due to no significant impacts and that cleared areas will form the new road.

Appendix 1 Appeal process

The Minister assesses the merits of a decision

Environmental appeals follow a merits-based process. This means the Minister can consider all the relevant facts, legislation and policy aspects of the decision and decide whether it was correct and preferable.

For clearing permits, the Minister can overturn the original decision to grant the permit if this was the basis of the original appeal submission. Alternatively, if the appeal submission was against the conditions of the permit, the Minister may modify the conditions only.

The appeal investigation will consider the extent to which conditions can address the issues raised, as well as any new information that may not have been available at the time of the original decision.

While process issues can be raised in an appeal, the focus of investigations will be on the substantive environmental matters relevant to DWER's conditions.

Appeals Convenor and DWER report to the Minister

To decide an appeal's outcome, the Minister for Environment must have a report from both:

- the Appeals Convenor [see section 109(3) of the EP Act], and
- the authority that originally made the decision under appeal [see section 106(1)].

To properly advise the Minister in our report, our investigation included:

- reviewing DWER's decision and appeal reports
- meeting with the appellant
- meeting with the permit holder
- reviewing the permit holder's response to the appeal
- reviewing other information, policy and guidance as needed.

Table 2 Documents we reviewed in the appeals investigation

Document	Date
DWER clearing permit and decision report for CPS 9300/1	19 January 2022
Shire of Ngaanyatjarraku appeal submission	3 February 2022
Wildflower Society appeal submission	9 February 2022
Permit holder response to Wildflower Society appeal submission	4 March 2022
Permit holder withdraws its appeal	4 March 2022
DBCA advice on flora issues	10 March 2022
DWER appeal response	16 March 2022