



Department of Planning and Community Development

DPCD REF:

CMIN021306

PLANNING AND LOCAL GOVERNMENT

FILE REF:

10/014159-01

REQUESTED ☒ VOLUNTARY ☐
FOR DECISION

CRITICAL DECISION DATE: **As soon as practicable**

MINISTER FOR PLANNING

SUBJECT: EES REFERRAL – HATTAH LAKES ENVIRONMENTAL FLOWS PROJECT

DATE: 14 September 2010

	Name	Position	Phone
Prepared by	Moira Lavery	Senior Environmental Assessment Officer	9637 9077
Reviewed by	Geoff Ralphs	Deputy Chief Environmental Assessment Officer (A)	9637 9547
Approved by	John Ginivan	Acting Executive Director - Planning Policy and Reform	9637 8045
Endorsed by	David Hodge	Acting Deputy Secretary, Planning and Local Government	9637 9485

RECOMMENDATIONS

That you:

- a) Sign the attached 'Statement of Decision' (**Attachment 1**) to decide under section 8B(3)(b) of the *Environment Effects Act 1978* (EE Act) that an Environment Effects Statement (EES) is not required for the Hattah Lakes Environmental Flows project, subject to certain conditions, for the reasons set out in the attached 'Reasons for Decision' (**Attachment 2**). ☒ Approved
☐ Not Approved
- b) Sign the attached letters to Goulburn Murray Water, the Minister for Environment and Climate Change, the Rural City of Mildura, the Department of Primary Industries and the Mallee Catchment Management Authority, advising your decision that an EES is not required. ☒ Approved
☐ Not Approved


JUSTIN MADDEN MLC
Minister for Planning

5 OCT 2010

PURPOSE

1. To seek your decision on the need for an Environment Effects Statement (EES) under the *Environment Effects Act 1978* (EE Act) for the Hattah Lakes Environmental Flows Project.

BACKGROUND

2. **Proposal.** Goulburn Murray Water (with funding from the Murray Darling Basin Authority (MDBA)) propose a package of works to enable controlled delivery of environmental flows to over 5000 hectares (ha) of wetlands and floodplains at the Hattah Lakes Ramsar site in the Hattah-Kulkyne National Park (the 'Park'). The project is part of the national '*The Living Murray*' initiative.
3. Infrastructure and works include:
 - a pump station and short pipeline adjoining the Murray River (at one of two locations) to enable delivery of environmental flow allocations;
 - lowering of sills in Chalka Creeks to reduce the threshold at which natural high flow events in the Murray River enter the Hattah Lakes system;
 - three stop banks, plus three new regulators and refurbishment of a fourth, to control delivery to and retention of floodwaters within the project area;
 - upgraded and new 22kv powerlines to supply electricity to the pump station; and
 - upgraded or new access tracks to access construction sites.
4. The Hattah Lakes have not received natural inflows since 2000. Under climate change modelling undertaken by the MDBA, natural inflows are now only expected every 12 years. The proposed infrastructure can be operated in a number of ways to replicate the historical watering regime, protecting the lakes and surrounding floodplain during periods of drought. The operational regime is likely to involve low level flooding approximately every three years in ten (targeting wetlands and fringing River Red Gums), with larger scale flooding one year in eight.
5. **Required approvals.** Permits will be required under the Mildura Planning Scheme for native vegetation removal and works within a National Park. Consent under the *National Parks Act 1975* is also needed. An extraction permit under the *Extractive Industries Development Act 1995* is needed for the borrow pits, and a 'works on waterways' permit under the *Water Act 1989* is needed for regulators, stop banks and the pump station.
6. **Referral timing.** The referral was accepted on 4 June 2010, so a decision to meet the 20 business day target for EES referrals in the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (the 'Ministerial Guidelines') was due on 2 July 2010. However, the need to await detailed advice from the Department of Sustainability and Environment (DSE) on biodiversity matters initially delayed finalisation of this briefing.
7. Further to this, in mid-July the proponent advised that it was considering a refinement to the project scope and that consideration of the referral should be placed on-hold until the matter was resolved. The proponent subsequently provided further information in relation to a number of infrastructure options on 19 August 2010.

ISSUES/COMMENTS

8. **Potential impacts.** A detailed analysis of the potential environmental effects of the project against the criteria identified in the Ministerial Guidelines is provided in **Attachment 3**, and the key matters are summarised below.

9. Biodiversity. Removal of 10 to 12 hectares (ha) of native vegetation, likely to be classified as being of high or very high conservation significance (the latter requiring approval from the Minister for Environment and Climate Change prior to removal), will be required across the 14 to 16 different construction sites. This includes up to 50 Large Old Trees (LOTs), which provide habitat for hollow-dependant fauna. Field surveys have identified the presence of Pop Saltbush (listed under the *Flora and Fauna Guarantee Act 1988* (FFG Act)) at one of the construction sites, and a further 15 species listed on the *Advisory List of Rare or Threatened Plants in Victoria* (VROT) across a number of the sites. It is highly likely that some individuals will be removed as part of the required vegetation clearance. Advice from DSE suggests that this adverse impact will be of local significance only, given that all species are widely distributed within the Park.
10. The Regent Parrot, listed under both the FFG Act and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), has previously been recorded at all construction sites, and was observed breeding at two of the regulator sites and along Chalka Creek during recent field surveys. Construction activities will result in direct habitat loss for this species, with two known River Red Gum nesting trees (out of 60 known nests within the Park) and up to a further six suspected River Red Gum nesting trees to be removed to accommodate proposed infrastructure. In addition to the direct loss of nesting hollows, it is possible that noise and human activity associated with construction activities may create sufficient disturbance to cause parrots to abandon nesting activities in remaining nesting trees located within the work sites. Other FFG-listed hollow-dependant fauna, including the Greater Long-eared Bat (also protected under the EPBC Act), Major Mitchell's Cockatoo, Inland Carpet Python and Lace Monitor, will also be effected by the loss of River Red Gums, though the impact is not expected to be as significant as that on the Regent Parrot since these species are not so attached to particular nesting hollows and also utilise hollows in a range of other tree species.
11. There is some minor potential for migratory EPBC-listed bird species known to frequent the Hattah Lakes to be disturbed by construction works where works are in close proximity (the nearest construction area is 130m away from one of the lakes), though this is likely to be minimal due to the intermittent nature (either seasonal or water-dependant) of visitation.
12. Access tracks and set down areas within some construction sites contain suitable rocky, grassy habitat for the FFG-listed Eastern Hooded Scaly-Foot, though there are no previous records of the species within the Park and it was not located during targeted nocturnal surveys, so a significant impact is considered unlikely. The Growling Grass Frog (FFG and EBPC-listed) is also predicted to occur, though again a significant impact is considered unlikely as construction activities in Chalka Creek will be undertaken when the system is largely dry and therefore lacking in suitable habitat.
13. Waterways and aquatic/floodplain ecology. Construction of the pumping station will require excavation of the Murray River bed and bank (NSW jurisdiction), with associated risks of sedimentation and instability. Impacts on aquatic fauna (such as the FFG and EBPC-listed Murray Cod) as a result of operation of the pumps are expected to be minimal, with fish screens to be used to avoid entrainment of large fish while allowing larvae to pass through. Downstream ecological impacts in the Murray River resulting from water being taken for the Hattah Lakes will be negligible as all water to be pumped for planned inundation events will be allocated environmental entitlements, specifically delivered from upstream storages (Hume, Eildon and Dartmouth). There will be a slight increase in river flows upstream of Hattah during the transfer period, which may offer some additional environmental benefit for the affected stretch of river.

14. Modelling suggests that the reinstatement of large-scale flooding events as part of the operational phase of the project will result in the groundwater table across a large area of the Hattah Lakes system rising above the level of the Murray River, increasing the rate of outfall to the river. As there are currently no groundwater observation bores within the Hattah Lakes floodplain or surrounding areas, there is a considerable degree of uncertainty about both the likelihood and extent of groundwater change, and resulting salinity impacts on aquatic ecology and beneficial uses in both the lakes and the Murray River. Under a worst-case scenario, the proposed operational regime could have a significant impact on salinity in the Murray River and across the floodplain (up to 4.22 EC increase, assuming groundwater salinity of 36,400 mg/L). However, if groundwater salinity is much lower (<5000 mg/L) as anticipated, the impacts on salinity levels in the Murray River will also be much lower.
15. The excavation of Chalka Creek (over an area of 1.3km) will involve the removal of a small number of natural undulations in the creek bed, eliminating potential pools, as well as the removal of tree roots and logs which would provide snag habitat for fish, algae and macroinvertebrates when the creek is flood. Habitat reinstatement, including re-snagging, is not currently proposed.
16. Aboriginal cultural heritage. There are 17 previously recorded, plus a further 92 previously unknown Aboriginal Places within the construction areas, comprising shell deposits, scar trees, artefact scatters and burials. Thirteen sites will be directly impacted by construction activities, and a further burial site will be exposed to inundation during watering events. One of the pump station siting options is likely to impinge upon the extensive riverbank midden along the Murray River, though this can be avoided if the alternative pump station location is pursued.
17. **Key Issues.** The key issues and complexities arising from the proposal are:
- Uncertainty about the impact of habitat loss on Regent Parrot population dynamics and the likely success of proposed mitigation and offset measures; and
 - The acceptability of known impacts in the context of an overall net environmental benefit.
- These are discussed in turn below.
18. Regent Parrot. The impact of the known habitat loss on the Regent Parrot as characterised in the referral is largely anecdotal. While it is possible that the parrots will continue to breed using remaining trees within the sites impacted by construction activities, there remains a risk that breeding attempts could be disrupted or abandoned despite the provision of artificial nesting boxes to offset habitat trees to be removed (as is proposed), and the availability of alternative trees with hollows within close proximity. Given the colonial breeding nature of the species (up to 25 nests in a colony), the loss of two known and six suspected nesting trees (potentially with multiple nests in each tree) could result in an adverse impact upon an entire colony if this scenario were to eventuate. The wider implications of this on the population dynamics of the species, which is currently thought to number 450 breeding pairs in Victoria, has not been assessed.
19. The Department of Sustainability and Environment (DSE) considers that though a short-term impact on the local population is likely, in the longer-term the project will not have a significant adverse effect. This is largely due to the improved habitat viability arising from the proposed hydrological regime for the Hattah Lakes, which will improve the health of existing habitat trees and increased recruitment of new trees. This is very likely to assist in the conservation of the species in the long-term. However, DSE also concedes that given the uncertainty associated with the claims in the referral, monitoring of the local breeding population over a five year period to establish both the impact of works and the success of proposed mitigation measures is needed.
20. Further, while *Victoria's Native Vegetation Management: A Framework for Action* (NVMF), together with the permit process under the FFG Act, is considered sufficient for managing potential impacts to native vegetation and threatened flora, it is not a framework for fully assessing or mitigating related impacts on threatened fauna, including

the Regent Parrot. Therefore a mechanism to address this environmental risk is necessary.

21. **Environmental benefit.** It is clear that there will be some unavoidable construction-related impacts on remnant native vegetation (including habitat for threatened hollow-dependent fauna and individual plants of listed flora) and aboriginal cultural heritages sites, and operational impacts on groundwater of an uncertain scale with an associated risk of rising salinity. The acceptability of these impacts, in terms of their extent and magnitude, is heavily influenced by the fact that once operational, the project is likely to deliver a sustained, long-term net environmental benefit to ecological values across the Hattah Lakes. Indeed, the proponent argues that without appropriate watering, the quality and extent of suitable habitat for aquatic, migratory, hollow-dependant and terrestrial fauna species will continue to rapidly decline due to the degradation of the Lakes.
22. **EES not needed.** Having regard to the potential for significant environment effects, it is concluded that an EES is not warranted subject to specific conditions, for the following reasons:
 - With the exception of potential construction-related effects on the Regent Parrot and operational impacts on groundwater and salinity (including associated risks to aquatic ecology and beneficial uses), the environmental effects of the project are unlikely to be of high complexity or significance, and can therefore be addressed through normal statutory processes, including under the *Planning and Environment Act 1987* and *Aboriginal Heritage Act 2006*.
 - While some adverse effects on threatened species and native vegetation as a result of construction activities are likely, these have been minimised through infrastructure siting and design. Furthermore, providing that a detailed Environmental Management Plan is implemented, residual effects can be appropriately managed and mitigated.
23. **Proposed conditions.** In light of the above reasons and other matters discussed throughout this brief, it is recommended that a decision be made in accordance with s. 8B(3)(b) of the EE Act to not require an EES, subject to the following condition:

Prior to the commencement of works, the proponent is to prepare an Environmental Management Plan (EMP) to the satisfaction of the Secretary to the Department of Sustainability and Environment (DSE) which includes, but is not limited to:

 - (i) *A threatened species management plan to monitor, mitigate, and offset construction-related impacts on fauna listed under the Flora and Fauna Guarantee Act 1988, including the Regent Parrot (*Polytelis anthopeplus*);*
 - (ii) *A plan for the protection of native vegetation that complies with Victoria's Native Vegetation Management: A Framework for Action (2002);*
 - (iii) *A program for long-term monitoring of groundwater and salinity impacts affecting the lakes and Murray River; and*
 - (iv) *Measures to minimise and reinstate in-stream habitat loss in Chalka Creek.*
24. **EPBC Act.** The proponent has advised that a referral under the EPBC Act for a decision on whether the project constitutes a 'controlled action' is imminent. If the Commonwealth were to require assessment and approval of the project, the threatened species management plan required as part of the recommended "No EES condition" could potentially serve to meet any conditions imposed through that process. However, this is not able to be determined until an EPBC Act referral has been lodged and a decision is made.

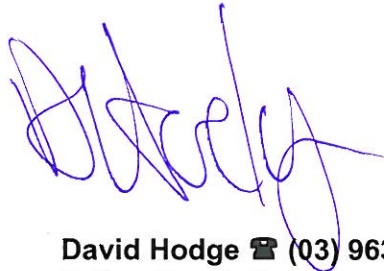
CONSULTATION

25. DSE (Biodiversity and Ecosystem Services) has been consulted in the preparation of this referral response.



John Ginivan ☎ (03) 9637 8045
Acting Executive Director
Planning Policy and Reform

Date...14/9/10.....



David Hodge ☎ (03) 9637 9485
Acting Deputy Secretary
Planning and Local Government

Date...15/9/10.....

Attachment 1

PROJECT: Hattah Lakes Environmental Flows Project
Decision under Section 8B(3)(a) of the *Environment Effects Act 1978*

1. In accordance with section 8B(3)(b) of the *Environment Effects Act 1978*, assessment though an Environment Effects Statement (EES) is not required subject to specified conditions, for the reasons set out in the attached Notice of Reasons for Decision.
2. The decision that an EES is not required is subject to the following conditions:
Prior to the commencement of works, the proponent is to prepare an Environmental Management Plan (EMP) to the satisfaction of the Secretary to the Department of Sustainability and Environment (DSE) which includes, but is not limited to:
 - (i) A threatened species management plan to monitor, mitigate, and offset construction-related impacts on fauna listed under the *Flora and Fauna Guarantee Act 1988*, including the Regent Parrot (*Polytelis anthopeplus*);
 - (ii) A plan for the protection of native vegetation that complies with *Victoria's Native Vegetation Management: A Framework for Action* (2002);
 - (iii) A program for long-term monitoring of groundwater and salinity impacts affecting the lakes and Murray River; and
 - (iv) Measures to minimise and reinstate in-stream habitat loss in Chalka Creek.
3. The following parties (proponent and relevant decision-makers) are to be notified of this decision under sections 8B(4) and 8B(6) of the *Environment Effects Act 1978*:
 - Goulburn Murray Water (proponent)
 - Rural City of Mildura (decision-maker)
 - Department of Primary Industries (decision-maker)
 - Minister for Environment and Climate Change (decision-maker)
 - Mallee Catchment Management Authority (decision-maker)



JUSTIN MADDEN MLC
Minister for Planning

Date:

- 5 OCT 2010