

# Planning and Development (Environmental Significance Opinion – Corin Dam Wall Repair Works on Block 18 Cotter River) Notice 2014 (No 1)

Notifiable Instrument NI2014–583

Made under the

Planning and Development Act 2007 s 138AD (Requirements in relation to environmental significance opinions)

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## 1 Name of instrument

This instrument is the *Planning and Development (Environmental Significance Opinion – Corin Dam Wall Repair Works on Block 18 Cotter River) - Notice 2014 (No 1)*.

## 2 Commencement

This instrument commences on the day after notification.

## 3 Environmental Significance Opinion

An Environmental Significance Opinion has been prepared by the Conservator of Flora and Fauna.

The text of the opinion is shown at Annexure A.

*Note:* A copy of the opinion may be obtained from the Environment and Planning Directorate website:

[http://www.planning.act.gov.au/topics/design-and-build/assessment\\_of\\_dev/environmental\\_assessment/environmental\\_significance\\_opinions](http://www.planning.act.gov.au/topics/design-and-build/assessment_of_dev/environmental_assessment/environmental_significance_opinions)

## 4 Completion

The environmental significance opinion and this notice including the text of the opinion expire 18 months after the day the notice is notified.

Dorte Ekelund  
Director-General  
Environment and Planning Directorate

18 November 2014



**ACT**  
Government

Environment and Planning

Ms Dorte Ekelund  
Chief Planning Executive  
ACT Planning and Land Authority  
Dame Pattie Menzies Building  
DICKSON ACT 2602

Dear Ms Ekelund

This is to advise of my decision, under s.138AB(4) of the *Planning and Development Act 2007*, on the request for an environmental significance opinion for repair works on Corin Dam Wall to reduce the risk to the principal safety of the dam by reconstructing part of the spillway bridge and the adjoining dam core.

The proposal is not likely to have a significant adverse environmental impact on a land reserved under s. 315 for the purpose of a wilderness area, national park, nature reserve or special purpose reserve.

Please find attached the Environmental Significance Opinion and a Statement of Reasons for the decision.

Yours sincerely

Ann Lyons Wright  
Conservator of Flora and Fauna

30 October 2014

## **ENVIRONMENTAL SIGNIFICANCE OPINION**

In accordance with section 138AB(4) of the *Planning and Development Act 2007*, I provide the following environmental significance opinion:

### **PROPONENT**

Ms Lara O'Dell, Environment and Catchment Protection Strategy Officer, ACTEW Water.

### **LOCATION**

Within Namadgi National Park on the dam infrastructure of Corin Dam Wall, Block 18 District of Cotter River.

### **DEVELOPMENT PROPOSAL**

The project involves repair works on the Corin Dam Wall to reduce the risk to the principal safety of the dam by reconstructing part of the spillway bridge and the adjoining dam core.

The proponent wants the application for the development approval assessed for an environmental significance opinion on the grounds that the proposal is not likely to have a significant adverse environmental impact, and has applied to the Conservator of Flora and Fauna to that effect.

### **OPINION**

The proposal is not likely to have a significant adverse environmental impact provided works are in accordance with the following conditions:

1. All works to be in accordance with an approved Construction Environmental Management Plan (CEMP)
2. The CEMP to be approved prior to commencement of works onsite.
3. Any site disturbance encompassed by the extent of this construction zone to be rehabilitated to pre-construction conditions, as a minimum.
4. All erosion and sediment control structures to be removed once natural soil stability has been achieved.

Attached is a Statement of Reasons for the decision.



Ann Lyons Wright  
Conservator of Flora and Fauna

30 October 2014

## STATEMENT OF REASONS FOR THE DECISION

The proposed development is a proposal mentioned in Schedule 4 of the *Planning and Development Act 2007* – Development proposal for an activity requiring an EIS Schedule 4,

The development proposal is mentioned in Schedule 4, part 4.3, item 3, being development on land reserved under s. 315 for the purpose of a wilderness area, national park, nature reserve or special purpose reserve.

The proposed works are within an area reserved as public land national park within the Namadgi National Park.

The proponent wants the application for the development approval assessed in the merit track on the grounds that the proposal is not likely to have a significant adverse environmental impact and has applied to the Conservator of Flora and Fauna for an environmental significance opinion (ESO) to that effect.

### **Meaning of *significant* adverse environmental impact**

An adverse environmental impact is *significant* if—

- (a) the environmental function, system, value or entity that might be adversely impacted by a proposed development is significant; or
- (b) the cumulative or incremental effect of a proposed development might contribute to a substantial adverse impact on an environmental function, system, value or entity.

In deciding whether an adverse environmental impact is *significant*, the following matters must be taken into account:

- (a) the kind, size, frequency, intensity, scope and length of time of the impact;
- (b) the sensitivity, resilience and rarity of the environmental function, system, value or entity likely to be affected.

In deciding whether a development proposal is likely to have a significant adverse environmental impact it does not matter whether the adverse environmental impact is likely to occur on the site of the development or elsewhere.

It has been determined that the proposal is unlikely to have a significant environmental impact, based on the documentation submitted and known values of the sites.

### **Project description**

During construction of a crest wall on Corin Dam in 1998, it was noticed that a gap approximately 50 mm wide was arising from subsidence which is separating the core of the dam from the concrete encompassing the spillway right abutment. Cement based grout was placed in the gap, and a settlement plate was installed to monitor the continued vertical settlement adjacent to the bridge abutment. A subsequent risk assessment undertaken in 2007 identified the risk of piping through the gap to be the principal risk to the safety of the dam.

Failure of Corin Dam would in turn place both Bendora and Cotter Dams at risk of failure resulting in catastrophic damage to the riparian zone and river ecology. ACTEW Water considers it prudent to reduce the risk of failure by reconstructing part of the spillway bridge and the adjoining dam core.

Construction works will be confined to the dam infrastructure and there will be a site compound and office, and a laydown area, to support the construction. The existing Corin Dam Road will be used as a haul road between the laydown area and the dam wall.

The construction laydown area will be situated on an old construction camp 1.2 km from the dam that has been cleared since at least 1998. A power line traverses the site.

The site compound and office is to be located on the existing bitumen surfaced carpark to the left of the entry to the dam.

Works will be conducted in two stages with the first stage involving the lowering of the water level in the reservoir to prevent inundation of the construction site. A portion of the top deck of the spillway bridge and underlying girders will then be removed. The concrete deck will be lifted and placed into skips, then transported to the construction laydown area for temporary storage until disposal. The underlying girders will be cut into sections, lifted by crane and placed onto a flatbed truck for removal. These works will permanently narrow the spillway bridge to a width of approximately 4m.

The second stage of the works will entail a shallow excavation of dam core material (approximately 3m in depth), where the dam abuts the spillway bridge. Core materials of clay, sand and rock will be placed in a skip and transported to the construction laydown area for temporary storage. These materials will be re-used and kept separate from any additional materials required. The excavation provides access to a further portion of the spillway bridge structure (a reverse slope of concrete materials). This will be cut and removed to eliminate the cause of the problem of the original gap formation. The dam core will then be rebuilt utilising the removed material as well as additional clay and sand material that is to be imported

to the site. Completion of the project will involve finishing the final road surface and replacement of the existing pedestrian safety barriers across the bridge

In order to remove the reverse slope, the road bridge across the top of the spillway will be permanently narrowed (to a width of approximately 4m) for a distance of approximately 20m. The minimum lane width has been reached in agreement with the Parks and Conservation Fire Unit to ensure adequate access for emergency response vehicles.

### **Documentation Submitted**

Report titled:

- Corin Dam Spillway remediation Environmental Significance Report (03 October 2014) by ACTEW Water; and
- ESO Application Form 1M.

### ***Natural conservation values present***

The Report notes “The vegetation directly surrounding the portable building and laydown area is modified and reveals a history of clearing. Due to the overhead power lines, the tree layer has been removed and where vehicle access is required to maintain the power lines, the shrub layer has been removed leaving a grass and forb stratum. The forest type surrounding the site can be described as Mountain Gum Montane Forest, which is a widespread forest type in Namadgi at intermediate altitudes on all but sheltered aspects.

The perimeter of the clearing supports patches of native grasses amongst patches of shrubs surrounded by a large expanse of dense native forest. This mixed structure offers unique habitat opportunities in this vicinity. The lack of tall growing gums allows the site resources to be utilised by other plants. This accounts for the current vigour and dense cover of the shrub layer. Cleared areas in forests also provide unique foraging opportunities for native animals. Birds and insects would take advantage of the healthy shrubs which would flower heavily, whilst grazing animals would take advantage of the grassy patches.

Visual and aural observation of many small bird and insect species indicated that the local forest is valuable habitat supporting fauna diversity at site 1. Native herbivore and rabbit scats were observed across the grassed areas and the track of site 1.

The desktop study did not find any recordings of terrestrial fauna of significance dependent on the site per se, although a number of species are likely present in the broader area. It can be assumed that the intact forest surrounding the site is likely to provide habitat for threatened fauna. The 2010 GHD report found no significant species or communities within the vicinity of the clearing at this site.”

No flora species protected under the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)* or vulnerable or endangered species under the *ACT Nature Conservation Act 1980 (ACT)* were observed during the survey.

A faunal survey was not undertaken.

The Site Office Compound will utilise the existing bitumen surfaced carpark to the left of the entry to the dam that is overlooked by the Rangers cottage. The hardstand area is equipped with power supply and the means to maintain communication. The site office compound will be erected within this area consisting of a site office, ablutions block and shipping containers. The area provides no fauna habitat or flora species. Aspects of environmental impact from this site to be managed will be around control of water runoff. Additionally a dedicated refuelling location will be established with suitable bunding and spill kit.

***Impact of development on these values (including offsite impacts)***

The laydown area to be used for storage of dam core material currently contains a portable building that will be removed. Temporary fencing to delineate the stockpile and areas for vehicle movement will be erected. Some pruning of encroaching shrubs along the existing track will be undertaken in order to allow for vehicle movement. Sediment and erosion control structures will be erected around stockpiles of mobile material. To minimise mud tracking and prevent wheel rutting damage on the site, the entrance track may be hardened using coarse aggregate.

No mature trees are proposed for removal. The proposed construction will not directly impact any core fauna habitat. The effect of using a small clearing amongst forest, which has been maintained this way for a number of years, is expected to have negligible impact to existing habitat functions.

Fauna grazing on the grasses may be excluded through the temporary fencing though fauna movement through the site will not be impeded. No construction will be occurring after nightfall therefore there will minimal impact on nocturnal fauna movement and foraging.

The proposed site office compound will utilise the existing bitumen carpark. The area provides no fauna habitat or flora species. Management of water runoff will be addressed as part of the Construction Environment Management Plan (CEMP) that is required under the provisions of ACTEW's exiting Water Way Works Licence. Additionally a dedicated refuelling location will be established with suitable bunding and spill kit

While the broader area of Namadgi National Park has very high natural conservation values, the site of the proposed installation has been highly disturbed by the

construction of Corin Dam and works are to be located on areas of previously disturbed ground.

There is a cleared, all weather access road to the dam and no clearing is required to facilitate the works.

The Cotter River is known to support the Macquarie Perch (endangered under the *Environment Protection and Biodiversity Conservation Act 1999* and the *Nature Conservation Act 1980* (NCA)) and Two-spined Blackfish (vulnerable under the NCA), however the area of the river where the works are to occur has been significantly modified through the construction of the dam, spillways and stilling basins, as well as modification of the natural flow regime through the disruption of normal flows by the dam.

Indirect impacts of the construction works such as runoff, suspended solids or disturbance from light and noise/vibration will be addressed in more detail through implementation of measures in the Construction Environment Management Plan (CEMP) to be developed.

### **Potentially Significant Environmental Impacts**

The lowering of the water level of the dam and the implementation of a CEMP will mitigate impacts on water quality within the Cotter River so that no significant impacts on water quality or threatened fish species (such as the Macquarie Perch or Two-spined River Blackfish) are anticipated.

There will be a very minor visual impact which will diminish as time goes on.

As maintenance requirements are minimal, there is unlikely to be any ongoing detrimental impacts from the works.

It has been determined that the potential for a significant environmental impact is low provided works are in accordance with the conditions as imposed.