

8. Modifications to the Proposal

The submissions received during the exhibition period have been reviewed by Hunter Water as detailed in this report. In response, a number of modifications to the Project are proposed to address several key issues raised within both public and NSW Government agency submissions.

These modifications are reflected in the final Statement of Commitments for the Project (refer Section 10). The final design stage, construction and operational stages of the Project will be undertaken in accordance with those commitments together with the conditions of approval.

The proposed modifications relate to various key areas of the Project namely:

- Biodiversity conservation
- River management
- Roads and infrastructure
- Recreational access to the storage
- Management and mitigation of socioeconomic impacts
- Management of cultural heritage management
- Monitoring.

These modifications are described in more detail as follows.

8.1 Provision of land for future national park

On the basis of the submissions received by DECCW, HCR–CMA Authority and the public a significant revision has been made to the proposed carbon offset and biodiversity corridor.

Investment in riparian tree planting downstream of the dam would not occur due to the uncertainty of giving effect to appropriate on-ground works through a sponsorship program.

The proposed offset would instead be reconfigured to concentrate on consolidating available land for the carbon and biodiversity offset to the north-east of the storage. The nominal 50 metre wide buffer zone around the storage would be retained.

To compensate for the adjustments, the corridor would be expanded by including as part of its contiguous alignment, the area between the proposed dam and the existing dam at Chichester as shown in Figure 8.1. This land would be designated as a national park. It is noted that Hunter Water has received correspondence from DECCW providing concurrence to this proposal.

This would increase the amount of land dedicated to carbon and biodiversity offsetting to 2,800 ha. This would therefore provide an additional 1,000 ha dedicated to the offsetting proposal beyond that originally detailed in the draft Statement of Commitments.

The advantage of taking this approach is that it would ensure that the Project includes a like-for-like offset for riparian and river flat vegetation of a substantially similar nature. Further, it would produce a better conservation outcome by contributing to the NSW Government's other management goals through consolidating conservation lands in the vicinity of Barrington Tops National Park which is a declared wilderness area and the designated world heritage area.

The dedication of an additional 1,323 ha of land that would become part of the national park estate also promotes other government initiatives, such as the Great Eastern Ranges Initiative (GERI, formerly known as the Atherton to Alps initiative). This aims to provide a climate change biodiversity retreat corridor along the entire eastern seaboard. The reconfigured corridor and national park would be an important contribution to this initiative.

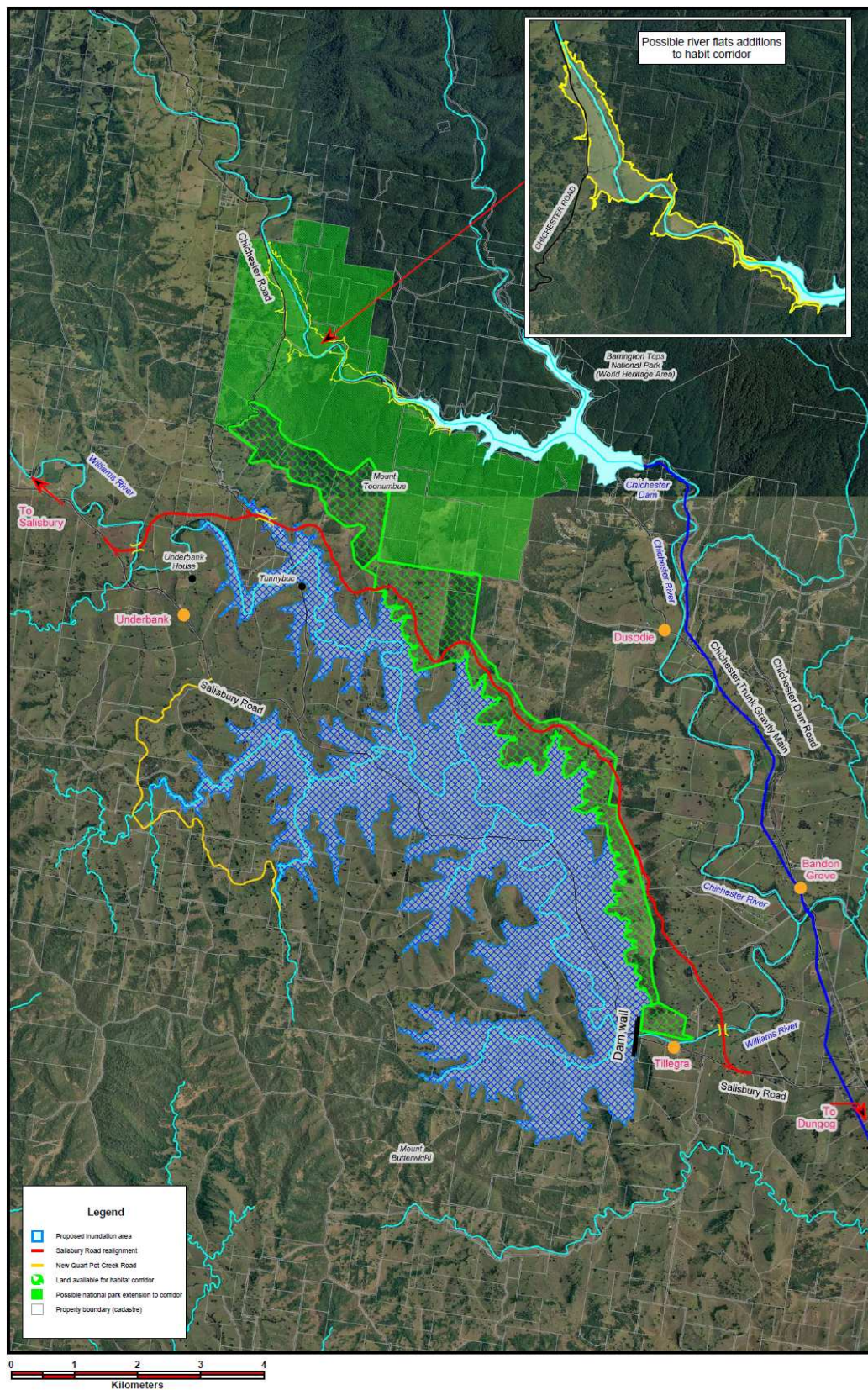


Figure 8.1 Proposed changes to carbon offset/biodiversity corridor and addition of national park



8.2 Maintenance of Chichester Dam Road and Salisbury Road

Given that Hunter Water would be the predominant user of the route between Dungog and Underbank during construction, Hunter Water acknowledges that it would be appropriate to commit to undertaking all necessary maintenance works during the construction period to provide an adequate level of safety for all road users.

Hunter Water would, with the permission of Council, take responsibility for the maintenance of Chichester Dam Road from the outskirts of Dungog to the intersection of Salisbury Road, and for Salisbury Road from its intersection with Chichester Dam Road through to Underbank in the vicinity of intersection with the replacement section of Salisbury Road.

A detailed road dilapidation survey would be conducted to identify any necessary remedial works at the completion of construction so as to return the route to Council in the same or better condition than currently exists.

As a concluding comment, and acknowledging the potential impacts of construction traffic on shire roads, Hunter Water has also agreed to contribute an additional \$1 million as part of the NSW Government's \$2 million package of road and bridge maintenance works for Dungog Shire Council, beyond that originally proposed in the draft Statement of Commitments.

8.3 Construction workforce accommodation

Following discussion with Dungog Shire Council, Hunter Water would commit to requiring the construction contractor, through the construction contract, to establish a camp to provide accommodation for construction employees.

The preferred site for the construction camp is to be on the southeast outskirts of Dungog at Melbee Circuit on land owned by Dungog Shire Council. Landowner's consent and a separate development application would need to be lodged by the construction contractor with Dungog Shire Council as the relevant consent authority.

The advantages of siting the construction camp at this location is that following construction, the infrastructure required for the camp (access, power, water and sewer) could be retained to facilitate future creation of residential allotments. Council would then be able to sell these to recover capital currently held within the land (and increase its future rate revenue stream).

As a contingency measure in the event that this site is not available, the construction camp would be established at Munni within the proposed recreation precinct on Hunter Water-owned land. As with the 'Melbee' site, infrastructure installed for the camp could be retained for use in the recreation facilities that would be provided at this site. The area is cleared pasture and part of the area covered by the environmental assessment documented in the EA Report. There would be no significant impacts with this option.

8.4 Location of Bendolba RFS Station

During exhibition of the EA Report, members of the Bendolba RFS brigade met to further discuss the site for the new fire station as proposed in the EA Report. The RFS had previously been consulted with respect to this location.

The RFS brigade has subsequently expressed a preference for an alternative site located near Moolee Creek (refer Figure 8.2). Currently, this site is cleared pasture on Hunter Water-owned land adjacent to the existing Upper Chichester Dam Road.

The location of the fire station would be changed as requested. No additional or different environmental impacts are considered likely to occur beyond those which would have been experienced at the previous site (and which were identified in the EA Report as negligible). Locating the fire station at this site has some additional benefit in terms of being near other properties thereby providing increased security.

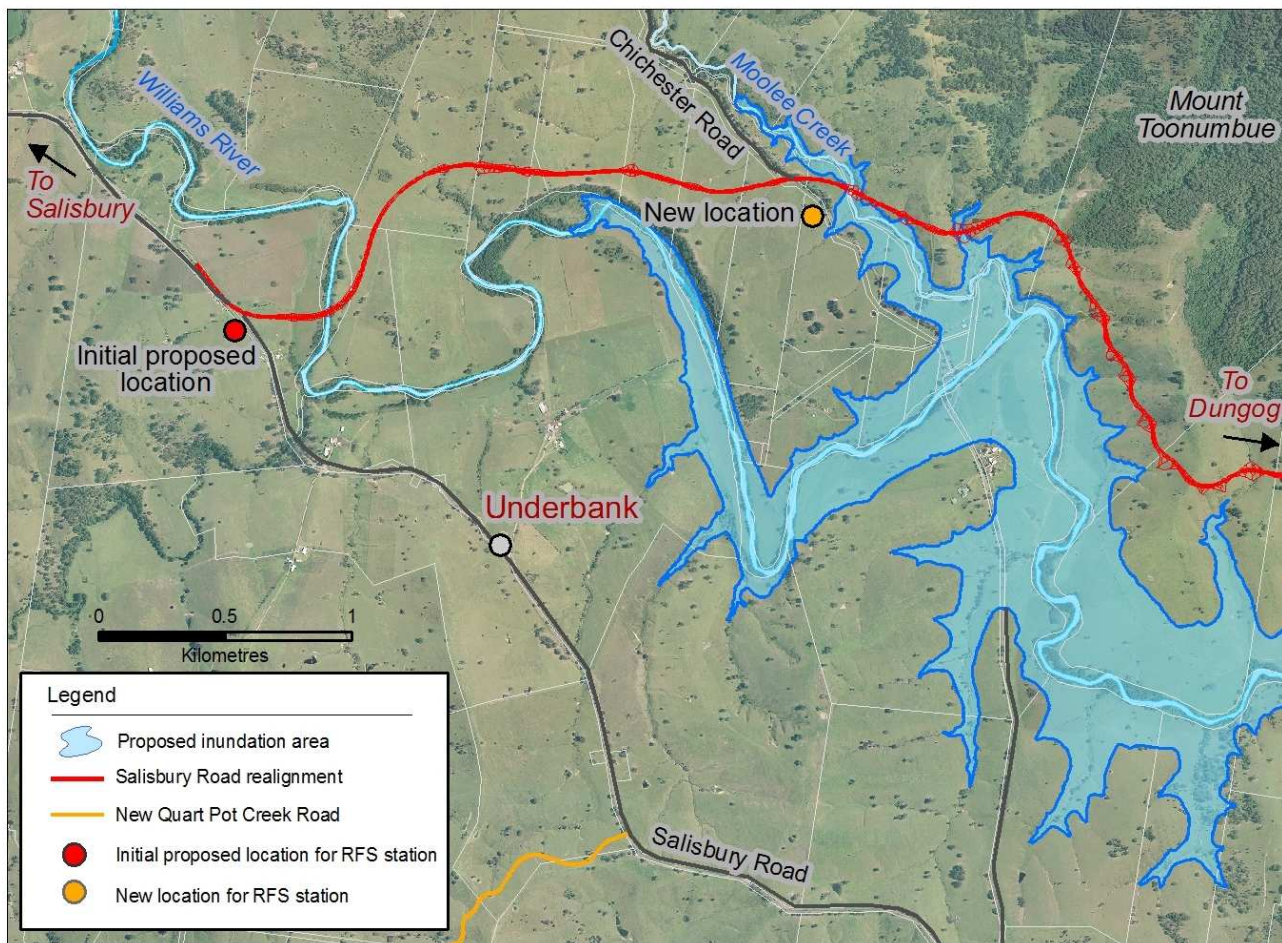


Figure 8.2 New location for Bendolba RFS station

8.5 Additional access for recreational anglers

Several submissions from recreational fishing groups and the public raised the issue of allowing access to the western embayment (ie generally to the immediate west of the dam wall) of the storage. In the EA Report, this had been identified as a 'no go' zone, principally in relation to safety considerations and to reducing risk to dam infrastructure.

In response Hunter Water would provide vehicle access to the storage near the right abutment of the dam wall. The exclusion zone proposed for the multi-level offtake tower and spillway as shown in the draft Integrated Land Use Plan would be adjusted and basic visitor facilities would be installed.

Access to the storage would be provided to allow the launching of small watercraft such as canoes, kayaks and small aluminium car topping vessels. Parking and an area to launch such craft would be provided.

A formal boat ramp and launching facility suitable for large fibreglass boats would not be provided at this location due to the steepness of the local topography. This notwithstanding, the access would be of a suitable standard to support the activities referred to in submissions.

8.6 Environmental contingency allowance

Hunter Water has currently committed to releasing fully transparent flows from Tillegra Dam for 70% of the time on an annual basis. Outside of this, releases would still occur but would be capped at 100 ML/d unless a transfer of water is made between Tillegra Dam and Grahamstown Dam. Effectively, all low and moderate flows entering the dam would be released as soon as they occur upstream. High flood flows would be captured and stored for release after the event has occurred. The water from these flows would, however, still be released to the river at some stage (during transfers) and would therefore still be able to provide an environmental benefit to the river. It is noted that Hunter Water has also committed to increasing flows from Chichester Dam from a maximum of 14 ML/d to 20 ML/d.

Releases of bulk water from Tillegra Dam would be made in a manner that mimics natural flow events. This was a fundamental consideration in the development of the preferred operating strategy as was documented in the EA Report and Working Paper D, and has been variously noted elsewhere in this submissions report.

The preferred operating strategy provides for release of a minimum of six moderate to high flows annually from the dam. A 270 ML 'fresh' release flow has been proposed in this regard.

Hunter Water would improve the connectivity of the Williams River to the estuary through upgrading the Seaham Weir fishway. This would involve replacement of the existing structure with a vertical slot fishway. This would also increase the movement of water between the weir pool and the estuary in the low flow class by about 20 ML/d.

Following consideration of issues raised in submissions from the NSW Office of Water, DECCW, I&I NSW, Hunter-Central Rivers CMA as well as several from the public, a minimum of an additional 2,500 ML of water annually within the storage would be reserved as an environmental contingency allowance (ECA) for use for environmental purposes.

The reservation of this volume is comparable to other ECAs held within NSW State Water storages for use for environmental flow purposes. For example, Lostock Dam on the Paterson River currently holds an allocation of 2,000 ML of water for use for critical environmental events.

Hunter Water would continue to work cooperatively with the NSW Office of Water and I&I NSW in refining the operating strategy to ensure the highest benefit is obtained from water specifically allocated for environmental purposes.


Conceivably the water could be used to increase transparent or translucent flows across Seaham Weir, or through its release as a flushing high flow event to target a particular river management issue. Hunter Water would take the advice of both government agencies to ensure that the ECA provides the best outcome for the river, downstream wetlands, the estuary and the community.

Currently the *NSW Water Management Act 2000* provides for an adaptive management approach to be taken for water resource use and sharing within an adaptive management framework. Hunter Water would continue to work within this framework to ensure that the environmental health of the Williams River is maintained.

It is noted that commencement dates, operational rules for release, carry over provisions and general management arrangements would be statutorily binding under the *Hunter Unregulated and Alluvial Water Sharing Plan*.

8.7 Relocation of Munni House

In the EA Report, Hunter Water committed to moving the high value portion of Munni House and at least one of the two wooden outbuildings. A number of submissions questioned the value of this action and suggested alternative courses of action considered to give better outcomes from both heritage and community perspectives.



As noted in Section 5.6.2, Hunter Water acknowledged the merit of further consideration of this particular matter. From this, it is now proposed that Hunter Water would:

- Fund the establishment of a visitor centre downstream of the dam
- Assist Dungog Shire Council with its community facilities
- Assist the Dungog Historical Society with the conservation of heritage resources in the Dungog LGA.

Guidance from DoP would be sought as to which offsetting proposal should be ultimately implemented. Either proposal could be facilitated by Hunter Water through a condition of approval.