

CHAPTER 13

Cultural Heritage

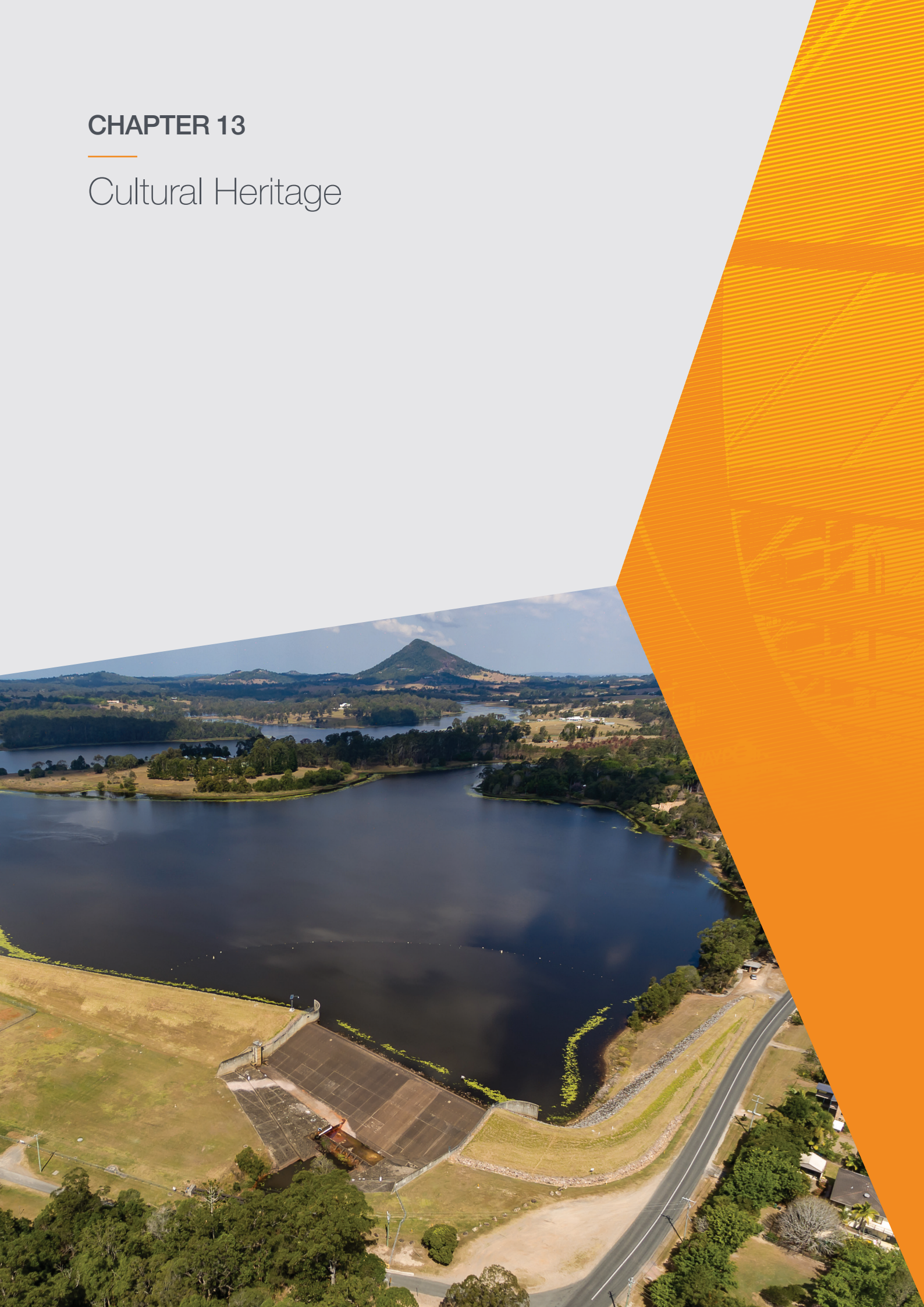


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13 Cultural Heritage

13.1 Background

Niche Environment and Heritage Pty Ltd (Niche) prepared a Historical Heritage Due Diligence Assessment (Niche 2018a) and Aboriginal Cultural Heritage Due Diligence Assessment (Niche 2018b) for the proposed Six Mile Creek Dam Safety Upgrade Project located at Lake Macdonald, Queensland. The reports are provided in Appendix L, and summarised in this chapter.

13.2 Legislative Framework

13.2.1 Historical Heritage

The Historical Heritage Assessment considered relevant National and State Legislation including:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- *Queensland Heritage Act 1992* (QH Act) and subsequent amendments
- Noosa Shire Council planning scheme (Noosa Plan),

This assessment also considered the outcomes of previous reports relating to the Project area including:

- Historical Cultural Heritage of Noosa Shire Report (Kerr et al. 2002)
- University of Queensland's Centre for Queensland Government Queensland Places (Lake Macdonald potential features) (University of Queensland 2018).

13.2.2 Aboriginal Cultural Heritage

The *Aboriginal Cultural Heritage Act 2003* (ACH Act) is the primary Queensland legislation which states that a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage (the 'cultural heritage duty of care'). The ACH Act aims to provide effective recognition, protection and conservation of Aboriginal cultural heritage. The fundamental principles underlying the ACH Act include:

- the recognition, protection and conservation of Aboriginal cultural heritage should be based on respect for Aboriginal cultural and traditional practices.
- Aboriginal people should be recognised as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage.
- it is important to respect, preserve and maintain knowledge, innovations and practices of Aboriginal communities and to promote understanding of Aboriginal cultural heritage.
- activities involved in recognition, protection and conservation of Aboriginal cultural heritage are important because they allow Aboriginal people to reaffirm their obligations to "law and country".
- there is a need to establish timely and efficient processes for the management of activities that may harm Aboriginal cultural heritage.

13.3 Methodology

13.3.1 Historical Heritage

The methodology for the Historical Heritage Assessment included desktop historical research and searches of registers, visual inspection, significance and impact assessment. The tasks undertaken included:

- Background literature review to develop an understanding of the history of the Noosa Water Treatment Plant (WTP) and broader precinct. The review included secondary and primary source research (where required) and the preparation of a basic chronology of the precinct.
- Searches of the Queensland Heritage Register and the Local Heritage Register
- Physical inspection of the Noosa WTP, Lake Macdonald, and Camp Cooroora to document historic heritage features and conduct a visual assessment. Recording was largely photographic, with notes taken in the field regarding potential significant features, issues and the condition of fabric.
- A significance assessment of the precinct and the preparation of a Statement of Significance.
- Presentation of recommendations for the ongoing management of the significance of the precinct and the likely impacts of the proposed Project activities on the area.

- Listing of features of the precinct that may require immediate attention or essential maintenance, possible conservation works, and additional assessments that could be considered.

13.3.2 Aboriginal Cultural Heritage

Niche undertook an Aboriginal Cultural Heritage Due Diligence Assessment in accordance with the Duty of Care Guidelines.

The assessment included:

- Desktop assessment which included a search of the Aboriginal Cultural Heritage Database and Register to identify reported Aboriginal cultural heritage sites within 500 m of the Project area, the relevant Aboriginal party, and the Cultural Heritage Body, as well as analysis of historic aerial imagery to determine the extent of past land use disturbance.
- Visual inspection of the Project area by an archaeologist on 18 July 2018 to confirm the desktop assessment findings.
- Duty of Care Guidelines categorisation and identification of recommendations.

The visible presence of any archaeological evidence or environmental indicators for surface and subsurface archaeological potential were considered during the visual inspection.

13.4 Existing Environment

13.4.1 Historical Heritage

Regional History

Non-Indigenous settlement began in the area from the 1860s. Following the discovery of gold at Gympie, the township of Cooran began in 1869 as a coach stop on the road between Tewantin and Gympie. Cooroy was established in the 1890s supported by timber getting, dairying, and the arrival of the railway. The first roadway system in the region was initiated in 1869 connecting Tewantin, Tuchekoi, and Skyring Creek with areas around the Mary River. A road to Brisbane was established in the 1880s, which ran to the east of Cooroy but west of Tinbeerwah Bluff and opened the area along the route to selectors (Kerr et al. 2002:3). Settlement of the area was directed mainly from Gympie before a railway was established to Brisbane in 1891. The railway opened the region to migration from the south and facilitated the transport of timber and dairy products to Brisbane. The establishment of this vital artery ensured the economic viability of the region.

With the establishment of the railway and abundant land for selection, the economic focus of the region shifted towards dairying, while maintaining strong links to the timber industry. The Cooroy Butter Factory was built in 1915 (a replacement was built in 1930, which still exists today) to service the burgeoning regional dairy industry.

The experimental planting of banana crops in 1911-12 was followed by an escalation in production during the 1920s. Banana production peaked in 1928 but was short lived. By 1935 the Gympie district only contributed 10.3% of Queensland banana production.

The downturn in the banana market in the 1930s coincided with depressed economic conditions globally. By the 1960s most of the original pioneers of the region had died and many of their children had left the district. The rate of development across the district accelerated through the 1970s and 80s with many beach side holiday properties demolished and subdivided to clear way for large scale tourist developments. This change in land use moved the focus of the Shire away from dairying and timber towards residential developments and tourism along the coast.

The Project Area

Lake Macdonald was formed in 1965 as a result of the damming of Six Mile Creek, north east of Cooroy. Between 1965 and 2012 the Project area went through multiple phases of construction and expansion. A basic chronology of the construction and expansion of the Project area is shown in Table 13-1.

Table 13-1: Basic chronology of the Project area

YEAR	EVENT
1965	Completion of the construction of Six Mile Creek Dam (Lake Macdonald)
1979	Dam raised to its current height being RL 95.32 m AHD
1993-2002	Open Kitchen and Dining Shed (Camp Cooroora), Caretaker's Residence (Camp Cooroora) built
1993-2010	Seqwater Offices and Workshop built

Databases, Registers and Inventories

A desktop search of the following databases, registers and inventories were undertaken including:

- The Australian Heritage Database – which includes places entered in the statutory World Heritage List (WHL), National Heritage List (NHL) and Commonwealth Heritage List (CHL), and the non-statutory archive the Register of the National Estate (RNE).
- The Queensland Heritage Register (QHR) – which lists all places entered for their State heritage significance under the *Queensland Heritage Act 1992*.

There are no listed heritage places, landscapes or precincts of historical value within or in proximity to the Project area. However, the University of Queensland's Centre for Queensland Government (2018) *Queensland Places* identify the following potential features around Lake Macdonald:

- On the northern and western shorelines of Lake Macdonald, the Cooroora Scout Camp (Camp Cooroora) and the Noosa Botanic Gardens, both dating from the 1980s.
- Fish hatchery between the water-treatment plant and Camp Cooroora on the lake's northern shoreline.
- Figtree and Frogmouth Bushland Reserves, south of Lake Macdonald on the Cooroy-Noosa Road.

Camp Cooroora and the fish hatchery, are both located within the Project area. Although not a heritage study, the *Queensland Places* study does identify these as places of note in the Lake Macdonald area.

Identified Heritage and Significance

The Project area as outlined in Figure 13-1, was inspected on 19 July 2018. The Noosa Water Treatment Plant, Camp Cooroora, Lake Macdonald brick structure with dedication plaque and the fish hatchery were inspected and assessed for heritage significance. Further detail is provided in Appendix L.

Noosa Water Treatment Plant

The Noosa Water Treatment Plant has four distinct areas – the early works area, the treatment area, the clear water area, and the recovery area.

The early works area contains the original buildings constructed in 1965 when the WTP was established. The following structures were identified to be of local heritage significance:

- Lime building
- Clarifier No. 1
- Backwash tank No. 1
- Dam wall and spillway.

No other structures of local significance were identified in the treatment area, clear water area and the recovery area.

The Noosa WTP will be segregated from the construction of the dam and off limits to the construction crew and activities. The WTP will remain online and operational throughout the construction period of the dam upgrade.

Camp Cooroora

The structures at Camp Cooroora were constructed during the 1980s and 1990s. These structures mainly relate to the use of the site by the Scout Association of Australia. An assessment of the following structures identified they were of local heritage significance:

- Scout activity centre
- Bush-style kitchen
- Rotunda
- Open air chapel
- Flagpoles
- Entrance gate and wall
- Fireplace.

The caretaker's residence and horse corrals were not considered to be of heritage significance.

Lake Macdonald brick structure

The Lake Macdonald brick structure was originally constructed to commemorate the opening of the dam in 1965. It appears later additions were added to the original structure. This structure as identified to be of local heritage significance.

Fish hatchery

The fish hatchery located between the Noosa WTP and Camp Cooroora has been present since the 1970s. The site consists of six earthen ponds and a single modern metal shed. The site is not of heritage significance.

13.4.2 Aboriginal cultural heritage

Previous Records

A search of the Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP) Aboriginal Cultural Heritage Database on 23 July 2018 identified one record of an Aboriginal heritage site adjacent to the Project area within the current inundation area. The site is identified as a cultural site/earthen arrangement (KC:G17 Six Mile Creek ceremonial ground). No additional information was provided in the database. The accuracy of the site's location is given as 'estimated' meaning the original recording did not include any accurate information as to the physical location of the site. The estimated site coordinates included in the Database entry place the site in proximity to the existing dam.

According to DATSIP, the original recording was based on a publication titled *In the Tracks of the Rainbow: Indigenous History and Culture of the Sunshine Coast* (Wells, 2002). However, no specific reference to the site was identified in this publication nor indicated on the region maps showing important cultural sites. No other information was available at the time of the assessment.

Aerial Imagery

An analysis of historic aerials from 1953, 1967, 1974, 1984, 1993, 2002, 2007 and 2017 was undertaken to identify the extent of surface disturbance and significant ground disturbance that has occurred. The analysis demonstrates vegetation clearance and earthworks occurred prior to and during the construction of the original dam wall and subsequent expansion of the water treatment plant. These past activities have caused significant ground and surface disturbance. The disturbance was confirmed at the visual inspection of the Project area.

Landscape Features

Remnant vegetation is located along Six Mile Creek adjacent to the Project area and north of Collwood Road. Remnant vegetation also occurs south of the left embankment, along Lake Macdonald Drive toward the Noosa Botanic Gardens.

There are no rock outcrops, caves, foreshore and coastal dunes, sand hills or areas of biogeographical significance present in the Project activity area.

The proximity to significant landscape features (remnant vegetation and a waterway) is an indicator of higher potential for Aboriginal cultural heritage. Some residual intangible cultural heritage may still exist in locations that have not been subject to significant disturbance within the Project area.

Aboriginal Parties

Kabi Kabi First Nation People are the Aboriginal Party for the Project Area. There is no Cultural Heritage Body for the Project area.

13.5 Impact Assessment

13.5.1 Historical Heritage

While no historic heritage registered places, landscapes or other features are located within the Project area, several features have been identified during the assessment as having potential local heritage significance. These are detailed in Table 13-2 below indicating potential for direct and indirect impact. Most of these features will not be directly impacted by the Project.

Table 13-2: Impact assessment

FEATURE	SIGNIFICANCE	IMPACT
Noosa Water Treatment Plant		
Lime building	Local	None
Clarifier No. 1	Local	None
Backwash tank No. 1	Local	None
Dam wall and spillway	Local	Direct
Camp Cooroora		
Scout activity centre	Local	Indirect
Bush-style kitchen	Local	Indirect
Rotunda	Local	Indirect
Open air chapel	Local	Indirect
Flagpoles	Local	Indirect
Entrance gate and wall	Local	Indirect
Fireplace	Local	Indirect
Other		
Lake Macdonald brick structure with dedication plaque near left embankment	Local	Direct

The existing dam wall and spillway and the Lake Macdonald brick structure with dedication plaque, located along the western shore of the lake, will be directly impacted. These structures will be removed as part of the Project. Indirect impacts may occur to other features of potential local heritage significance particularly at Camp Cooroora due to proximity to the Project area.

FIGURE 13-1: PROJECT AREA



<p>PROJECT NO: 30041832</p> <p>CREATED BY / DATE: BM14706, 10/01/2019</p> <p>VERSION: DRAFT C</p> <p>PAGE SIZE: A4</p> <p>DISCLAIMER: © SMEC Australia Pty Ltd 2017. All Rights Reserved. While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, this map contains data from a number of sources - no warranty is given that the information contained on this is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of all information prior to using it. This map is not a design document.</p>	<p>0 35 70 Metres</p> <p></p> <p>SOURCES: 1. Localities, Roads, LGA, Waterways, Waterbody, Protected Areas © QLD Spatial Catalogue, State of Queensland (Department of Natural Resources, Mines and Energy) 2018 2. Basemap © Nearemap, 2018</p> <p> seqwater WATER FOR LIFE</p>	<p>LEGEND</p> <ul style="list-style-type: none"> Local Roads Six Mile Creek Upgraded Dam Layout (after construction) 1 m Contour Interval Line 0.25 m Contour Interval Line Project Area 	<p>Local Places</p> <table border="0"> <tr> <td> Lake Macdonald Brick Structure</td> <td> Fireplace</td> </tr> <tr> <td> Dam Wall and Spillway</td> <td> Bush-style Kitchen</td> </tr> <tr> <td> Backwash Tank No.1</td> <td> Rotunda</td> </tr> <tr> <td> Lime Building</td> <td> Scout Activity Centre</td> </tr> <tr> <td> Clarifier No.1</td> <td> Flagpoles</td> </tr> <tr> <td> Entrance Gate and Wall</td> <td> Bush Chapel</td> </tr> </table>	Lake Macdonald Brick Structure	Fireplace	Dam Wall and Spillway	Bush-style Kitchen	Backwash Tank No.1	Rotunda	Lime Building	Scout Activity Centre	Clarifier No.1	Flagpoles	Entrance Gate and Wall	Bush Chapel	<p>OVERVIEW PROJECT AREA</p> <p>Main Map Extents</p> <p></p> <p>metres 0 125 250</p>
Lake Macdonald Brick Structure	Fireplace															
Dam Wall and Spillway	Bush-style Kitchen															
Backwash Tank No.1	Rotunda															
Lime Building	Scout Activity Centre															
Clarifier No.1	Flagpoles															
Entrance Gate and Wall	Bush Chapel															

Note: Cultural Heritage Party: QUD280/2013 Kabi Kabi First Nation

13.5.2 Aboriginal Cultural Heritage

The construction of permanent works for the spillway and embankment upgrades (removal and reinstallation) will cause ground disturbance in the Project activity area. As will the establishment of temporary works for the Project, such as a coffer dam and lake dewatering infrastructure, stock piles, laydown areas, and access roads. The installation of the original dam wall and associated infrastructure caused Significant Ground Disturbance in the past. Activities proposed for these areas are mostly consistent with previous ground disturbance.

The proposed activities have the potential to impact Aboriginal cultural heritage as listed below.

Reported Site

The accuracy of the site's location is given as 'estimated' meaning the original recording did not include any accurate information as to the physical location of the site. Further investigation is warranted to determine an accurate location for the site, if possible.

Based on information available, the estimated location of the site is now within the current inundation area of Lake Macdonald. If the site was located within the current dam footprint, it is probable there is no physical evidence left of the site. However, the former location of the ceremonial ground may still be considered of importance to Aboriginal people. Therefore, the proposed activities have the potential to impact the values associated with KC:G17

Remnant Vegetation

The area north of Collwood Road designated 'Area Available for Construction (if required)' is an area of previously identified remnant vegetation, indicating a higher risk for Aboriginal cultural heritage.

In addition to Collwood Road, some limited prior disturbance by construction of a now disused bridge / culvert and road approaches has occurred in the area on the western side of the project area, but outside the proposed project disturbance area. The amount of prior disturbance caused is limited to the former road alignment and culvert installation within the drainage line, however, this disturbance would constitute previous Significant Ground Disturbance as per the ACHA. The full area of disturbance could not be accurately confirmed by review of aerial imagery, however, it should be considered in detail during future Aboriginal cultural heritage assessments in this area. The remainder of the remnant vegetation north of Collwood Road appears to have not been disturbed.

Camp Cooroora Borrow Pit

The cleared area at Camp Cooroora is proposed to be used as a 'borrow pit' and between 30,000 and 40,000 m³ of clay materials may be removed from this site to be used in construction activities (refer to Chapter two – Project Description). While the area has been previously subject to surface disturbance due to some tree clearing, the location of Camp Cooroora in an elevated position in close proximity to a possible ceremonial ground located along the former major creek line (Six Mile Creek) suggests a higher potential for Aboriginal cultural heritage to still exist in the general area.

Duty of Care Guidelines – Activity Categories

The assessment categorised the relevant activities and locations in accordance with the Duty of Care Guidelines. Table 13-3 below summarises the assigned category. This is further discussed in Appendix L.

Table 13-3: Duty of Care Guidelines category

ACTIVITY/LOCATION	DUTY OF CARE CATEGORY	DESCRIPTION
Majority of Project area	Category 2 - Activities causing No Additional Surface Disturbance	Where an activity causes No Additional Surface Disturbance of an area it is generally unlikely that the activity will harm Aboriginal cultural heritage or could cause additional harm to Aboriginal cultural heritage to that which has already occurred.
Camp Cooroora borrow pit	Category 4 - Areas previously subject to	Where an activity is proposed in an area, which has previously been subject to Significant Ground Disturbance it is generally unlikely the activity will

ACTIVITY/LOCATION	DUTY OF CARE CATEGORY	DESCRIPTION
	Significant Ground Disturbance.	harm Aboriginal cultural heritage. In some cases, despite an area having been previously subject to Significant Ground Disturbance, certain features of the area may have residual cultural heritage significance.
<ul style="list-style-type: none"> • South of existing spillway near KC:G17 • Remnant vegetation north of Collwood Road • Remnant vegetation south of the left embankment • Remnant vegetation along Six Mile Creek (north of the spillway) 	Category 5 - Activities causing Additional Surface Disturbance.	A category 5 activity is any activity, or activity in an area, that does not fall within category 1, 2, 3 or 4. Where an activity is proposed under category 5 there is generally a high risk that it could harm Aboriginal cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

13.6 Impact Mitigation and Management

13.6.1 Historical Heritage

The following measures are proposed to mitigate direct impacts on features of potential local heritage significance:

- Undertake photographic recording of the dam wall and spillway prior to demolition
- Where possible, avoid impact on the Lake Macdonald brick structure with dedication plaque. If direct impact is unavoidable, undertake photographic recording of the brick structure with dedication plaque prior to demolition. Where possible, salvage the dedication plaque and reposition on a suitable structural feature or other location nearby.

To mitigate indirect impacts to significant features identified at Camp Cooroora, temporary exclusion flagging and/or fencing should be constructed around each item prior to works commencing at the borrow pit.

13.6.2 Aboriginal Cultural Heritage

A Cultural Heritage Management Plan will be developed and approval sought under Part 7 the ACH Act with the Kabi Kabi First Nation People.

The upgrade of Six Mile Creek Dam presents risks associated with the design, construction and operation phases of the Project as discussed above. The plan will explain how land use activities will be managed to avoid or minimise harm to Aboriginal cultural heritage, with associated mitigation and management measures to be detailed in the proposed Cultural Heritage Management Plan.

13.7 Summary

13.7.1 Historical Heritage

A review of existing literature identified no historical heritage places or landscapes have been registered or listed in local, State or other registers. A physical inspection of the Project area on 18 July 2018 identified several features of local heritage significance. These include several early structures associated with the first water treatment plant erected at this site (four structures). Several features within Camp Cooroora also have significance for their associations with the scouting movement and operations at the site (seven structures). A brick structure with dedication plaque (1960s) located on the western shores of Lake Macdonald which includes a dedication plaque to the construction of the dam and lake, also has significance.

Of the identified sites of local significance, the Project works will directly impact the original dam wall and spillway adjacent to the water treatment plant complex and the brick structure with dedication plaque located on the western shoreline of Lake Macdonald. Indirect impacts have been identified for the structures at Camp Cooroora due to their proximity to the works area.

The impacts on the original dam wall and spillway cannot be avoided as removal of these features is the primary reason for the Project works. However, it is recommended that photographic recording of the dam wall and spillway is undertaken prior to demolition. While there are no statutory obligations associated with Lake Macdonald brick structure with dedication plaque, if possible avoidance of the structure is recommended. If direct impact is unavoidable, it is recommended to undertake photographic recording prior to demolition.

To mitigate indirect impacts to significant features identified at Camp Cooroora, temporary exclusion flagging and/or fencing should be constructed around each item prior to works commencing at the borrow pit.

13.7.2 Aboriginal Cultural Heritage

A search of the DATSIP Aboriginal Cultural Heritage Database on 23 July 2018 identified one record of an Aboriginal heritage site within the Project activity area (KC:G17).

An analysis of historic aerials identified that vegetation clearance and earthworks occurred prior to and during the construction of the original dam wall and embankments. These past activities caused significant ground and surface disturbance.

Following an assessment of impacts, most of the Project area was assigned a Duty of Care Category 2 (activities causing no Additional Surface Disturbance). However, the Camp Cooroora borrow pit was assigned a Category 4 (areas previously subject to Significant Ground Disturbance) and the activities south of the existing spillway near KC:G17 and activities within or in proximity to the remnant vegetation were identified as Category 5 (activities causing Additional Surface Disturbance). A Cultural Heritage Management Plan will be developed with the Kabi Kabi First Nation People to manage Aboriginal cultural heritage risks.