



Lake Parramatta Swimming Area

Review of Environmental Factors

City of Parramatta

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Project Number	22SYD3841
Project Manager	Courtney Blick
Prepared by	Courtney Blick, Alice Ridyard, Kate Storan and Jess Horton
Reviewed by	Rebecca Ben-Haim, Belinda Failes, Daniel McDonald, Karyn McLeod, and Peter Hancock
Approved by	Rebecca Ben-Haim
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Abbreviations

Abbreviation	Description
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
ASS	Acid Sulfate Soils
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
Biodiversity and Conservation SEPP	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>
Biosecurity Act	Biosecurity Act 2015
CAA	Controlled Activity Approval
CBD	Central Business District
CEMP	Construction Environmental Management Plan
DBYD	Dial Before You Dig
DCCEEW	Department of Climate Change, the Environment, Energy and Water
DPI	Department of Primary Industries
ELA	Eco Logical Australia
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning & Assessment Regulation 2021</i>
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environmental Protection License
FM Act	<i>Fisheries Management Act 1994</i>
Heritage Act	<i>Heritage Act 1977</i>
KFH	Key Fish Habitat
KTP	Key Threatening Process
LEP	Local Environmental Plan
LGA	Local Government Area
MNES	Matters of National Environmental Significance
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NSW	New South Wales
PCT	Plant Community Type
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
REF	Review of Environmental Factors
Resilience and Hazards SEPP	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>
RSWMP	Regional Strategic Weed Management Plan

Abbreviation	Description
SDS	Safety Data Sheet
SEMP	Sediment Erosion Management Plan
SEPP	State Environmental Planning Policy
SHR	State Heritage Register
SIS	Species Impact Statement
TEC	Threatened Ecological Community
Transport and Infrastructure SEPP	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
WIRES	NSW Wildlife Information, Rescue and Education Service Inc
WM Act	<i>Water Management Act 2000</i>
WoNS	Weeds of National Significance



Source: City of Parramatta Council

Executive Summary

The City of Parramatta Council (herein referred to as Council) are proposing to undertake upgrade works to the Lake Parramatta swimming area (the project). This Review of Environmental Factors (REF) has been prepared to support the application for approval of the project under Part 5 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The REF describes the project, considers potential environmental, social, and economic impacts of the Project, and outlines measures to minimise and avoid these impacts. The project will deliver a positive community benefit by upgrading the current swimming area for the City of Parramatta community and beyond. The current swimming area is steep and requires regular maintenance.

The proposed works will level out the steep entry to the lake, install retaining wall structures to minimise ongoing maintenance requirements, and provide user amenities in the form of multi-use stairs and tiered seating. Given its large volumes of users, the upgrade to the swimming area is considered essential for safety and accessibility. The design of the swimming area has been refined through community consultation and feedback and is representative of community needs and values.

This REF has been prepared by Eco Logical Australia Pty Limited (ELA) on behalf of the Council to support the approval of the Project. Council is to carry out a regulatory assessment and determine whether the Project should be approved and any conditions to be applied to the consent, should it be granted. A summary of the project and the REF findings is provided below.

What is the Project?

Council is proposing upgrades to the existing Lake Parramatta swimming area located at 28 Bourke Street, North Parramatta NSW, 2 km north of the Parramatta CBD. The current Lake Parramatta Swimming Area opened in 2015 and provides a unique experience for locals and visitors to enjoy swimming in a natural bushland setting. The works aim to provide enhanced amenities and safety measures for visitors, while protecting the natural environment from high visitation numbers, and will include enlarging the swimming area and improving access from land to the water. It will expand opportunities within the City of Parramatta local government area (LGA) for locals to be physically and socially active, improving health outcomes and enhancing liveability throughout the LGA.

The proposed upgrades will consist of the following elements:

- An enlarged swimming area;
- Improved access from the ‘beach’ into the swimming area, by installing retaining wall structures and levelling out the steep entrance;
- Reduced ongoing maintenance requirements; and
- Addition of environmentally sensitive amenities (steps, seating) around the swimming area

The works support several strategic plans that apply within the City of Parramatta by providing social infrastructure, protection of the health of waterways and biodiversity and to deliver high quality open space. On a larger scale, the works support the Greater Sydney Commission’s goals for the broader region and the city district, which are primarily to increase liveability and promote sustainability.

Statutory Requirements

The environmental assessment and determination of the Project has been undertaken in accordance with Part 5 of the NSW EP&A Act. For this proposal, Council is both a public authority and the determining authority. Council must examine and consider, to the fullest extent possible, all matters affecting or likely to affect the environment because of the proposed works. This assessment has been prepared in accordance with Section 171 of the *Environmental Planning & Assessment Regulation 2021*, (EP&A Regulation) which sets out a non-exhaustive list of environmental factors required to be assessed by public authorities. Consideration of Section 171 factors is provided in Section 6.1.

Land Ownership and Notification

The works are proposed wholly within NSW Crown Land (Reserves #59927 and #77695), with the Council managing the park areas as trustee. While Council is responsible for park management, it is recommended that Council consult with Crown Land as the landowner, prior to finalisation of this REF. A permit, lease, license, or other right to work under the *Crown Land Management Act 2016* (Crown Land Management Act) is required to proceed.

Assessment of Impacts

Landform, Geology and Soils

The study area is located on Hawkesbury sandstone geology, and Gymea soil landscapes. The proposed works have been assessed and informed by bathymetric and geotechnical studies, prepared by GBG (2023) and JK Geotechnics (2023). There is some potential for sediment, erosion, and changes to the lake hydrology to occur as a result of the proposed work. Mitigation measures have been recommended that, if implemented, will avoid, or minimise the potential for impacts to landform and soils.

Waterways, Wetlands and Aquatic Habitat

Part of the proposed works will be in-stream within Lake Parramatta, which is mapped as Key Fish Habitat (KFH). An aquatic flora and fauna assessment prepared by ELA found that KFH Type 2 is present within the study area, however due to the underlying sandstone substrate and overall turbidity of the water, limited potential for aquatic flora and fauna habitat occurs within the impacted area. Minor impacts to water quality, inflow of groundwater during excavation or introduction of invasive aquatic species have the potential to occur because of the proposed works. A Part 7 Permit under Section 200 of the *Fisheries Management Act 1994* (FM Act) is not required due to the Project being subject to the Crown Land Management Act, however consultation with Department of Primary Industries (DPI) Fisheries will still be undertaken. The final Concept Plan (City of Parramatta 2023, Appendix A) and this REF will be provided to DPI Fisheries for comment.

Biodiversity and Arboriculture

A Flora and Fauna Assessment (FFA) was prepared by ELA (2022). Vegetation within the study area was categorised into the following vegetation types:

- Native Plant Community Type (PCT), PCT 3592 Sydney Coastal Enriched Sandstone Forest in both Low and Moderate conditions
- Exotic grasses
- Aquatic plants
- Other areas including water, cleared land, and built environment.

No threatened ecological communities (TECs) listed under either the *Biodiversity Conservation Act 2016* (BC Act) or *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were found within the study area.

The project will result in the removal of 0.03 ha of native vegetation, in the form of PCT 3592. A further 0.06 ha of exotic grasses will be impacted. Grass impacted for the purposes of site access will be reinstated following completion of works.

Tests of Significance under the BC Act were completed for the following threatened species with the potential or likelihood to occur within the study area:

- Birds
 - *Calyptorhynchus lathami* (Glossy Black-Cockatoo) – Vulnerable

- *Daphoenositta chrysoptera* (Varied Sittella) – Vulnerable
- *Glossopsitta pusilla* (Little Lorikeet) – Vulnerable
- *Lathamus discolor* (Swift Parrot) – Endangered
- *Ninox connivens* (Barking Owl) – Vulnerable
- *Ninox strenua* (Powerful Owl) – Vulnerable
- Microbats
 - *Falsistrellus tasmaniensis* (Eastern False Pipistrelle) – Vulnerable
 - *Micronomus norfolkensis* (Eastern Coastal Free-tailed Bat) – Vulnerable
 - *Miniopterus orianae oceanensis* (Large Bent-winged Bat) – Vulnerable
 - *Myotis Macropus* (Southern Myotis) – Vulnerable
 - *Saccolaimus flaviventris* (Yellow-bellied Sheath-tail-bat) – Vulnerable
 - *Scoteanax rueppellii* (Greater Broad-nosed Bat) – Vulnerable
- Megabats
 - *Pteropus poliocephalus* (Grey-headed Flying-fox) – Vulnerable
- Snails
 - *Pommerhelix duralensis* (Dural Land Snail) – Endangered

Assessments of Significance in accordance with the EPBC Act were completed for the following threatened species:

- *Hirundapus caudacutus* (White-throated Needletail) - Vulnerable/Migratory
- *Lathamus discolor* (Swift Parrot) – Critically Endangered
- *Pommerhelix duralensis* (Dural Land Snail) – Endangered
- *Pteropus poliocephalus* (Grey-headed Flying-fox) – Vulnerable

The application of Tests of Significance under the BC Act, and Assessments of Significance under the EPBC Act, concluded that no significant impact to threatened flora and fauna is likely to result from the proposed works. Some removal of groundcover and trimming of vegetation is likely to occur as a result of construction and machinery access.

A Preliminary Tree Assessment (PTA) was also prepared by ELA (2023b), which included a visual tree assessment and recommended tree protection measures. No trees are proposed to be removed by Council, however impacts to trees were not assessed as part of the PTA due to the unknown nature of construction methods. An AQF Level 5 Consulting Arborist must be present at all stages of construction to ensure protection of trees and appropriate construction methods are in place for maximum retention of trees.

Aboriginal Heritage

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) resulted in the identification of fifty-six (56) Aboriginal sites within 1 km of the study area (Figure 3-23). No sites have previously been recorded as being within the study area. The closest site, AHIMS ID 45-6-2805, is located approximately 100 m to the south of the study area and will not be impacted by the proposed works.

An Aboriginal Heritage Due Diligence Assessment undertaken by ELA (2023) did not identify any new Aboriginal objects or areas of potential within the study area. The visual inspection revealed that most

of the study area had previously been disturbed in relation to the construction of and continued recreational use of the reserve, indicating a low likelihood for Aboriginal objects to be impacted by the proposed works.

Historic Heritage

The study area is located within the curtilage of one local heritage item listed on Schedule 5 of the Parramatta Local Environmental Plan 2023 (Parramatta LEP), being Lake Parramatta Reserve (LEP Item No. I305). The study area is also within 200 m of one State Heritage Register (SHR) item (Lake Parramatta Dam SHR listing No. 01879 / LEP Item No. I304).

The proposed works would introduce new visual elements within the Lake Parramatta Reserve heritage curtilage. Careful consideration has been taken in material and colouring choices including the use of sandstone and concrete, aligning with the existing setting and use of the area. Many of the proposed elements would be situated underwater and therefore not visible. The proposed works would not incur an indirect (visual) impact level above negligible within the Lake Parramatta Reserve heritage curtilage.

Lake Parramatta Dam (SHR Listing No. 01879 / LEP 2023 Item No. I304) is considered significant for its historic, associative, aesthetic, social, research potential, rarity, and representative value. As the Dam is located outside the study area, the proposed works would have no direct (physical) impact on the place or its curtilage. The Dam is located some distance from the proposed works, which would be partially obscured by vegetation, screening views to and from the proposed works. As such, the proposed works would have no indirect (visual) impact on the heritage item.

Evaluation

Overall, the identified potential environmental impacts associated with the proposed works can be adequately managed provided the design recommendations and mitigation measures outlined within this REF are adhered to.

The Project has been underpinned by principles to avoid and minimise environmental impacts where possible and has been developed through an iterative design and comprehensive assessment approach. This approach has resulted in significant environmental improvements and outcomes as described in the REF.

This REF has determined that the proposed works are not likely to have a significant impact on any aspect of the environment, subject to the implementation of recommended mitigation measures and safeguards. In addition, through the implementation of proposed mitigation measures, the REF found that the project could be undertaken without any significant long-term impacts on the local environment including on social and economic factors.

The works aim to provide an updated accessible and safe open space asset that meets the needs of the community and is in support of several planning priorities under local, regional and district strategic plans through the provision of a safe and enjoyable outdoor recreation asset. As such, the project is in the public interest, providing many benefits to the local Parramatta community and beyond.