

## 9.5. Update regarding Acid Sulphate soils investigation - Long Bay, Cammeray

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| <b>AUTHOR</b>      | Gary Parsons, Director Open Space & Infrastructure  |
| <b>ENDORSED BY</b> | Therese Cole, Chief Executive Officer   |
| <b>ATTACHMENTS</b> | Nil   |
| <b>CSP LINK</b>    | <b>Outcome 1 – A healthy environment with thriving ecosystems and strong climate resilience</b><br>E1. Restore and protect diverse ecosystems<br>E5. Maintain healthy and clean waterways and public spaces |

### PURPOSE:

This report responds to a Council resolution of 26 May 2025, regarding the source of contamination at Long Bay, Cammeray.

### EXECUTIVE SUMMARY:

- Preliminary investigations undertaken by the Department of Climate Change, Energy, Environment, and Water (DCCEEW) have identified multiple indicators consistent with active coastal acid sulfate soils (ASS) at Long Bay, Cammeray.
- Data collected from monitoring wells indicates that groundwater movement at Tunks Park is influenced by both tidal pumping and rainfall recharge. However, further investigation is required to inform the design of the necessary remediation.
- The proposed investigation will be led by the DCCEEW in partnership with North Sydney Council, Southern Cross University (SCU), and The University of New South Wales Water Research Laboratory (UNSW WRL).
- An exemption is sought using the extenuating circumstances provisions within s55(3)(i) of the Local Government Act 1993 to engage DCCEEW for this investigation.

### RECOMMENDATION:

- 1. THAT** Council note the contents of this report regarding the ongoing testing in relation to Acid Sulfate Soil at Long Bay / Tunks Park, Cammeray.
- 2. THAT** Council, under the provisions within s55(3)(i) of the Local Government Act 1993 and due to the extenuating circumstances outlined in this report, authorise the Chief Executive Officer to engage the NSW Department of Climate Change, Energy, Environment and Water (DCCEEW) at a cost of \$328,384 (excl GST) to lead further investigations and provide advice in relation to Acid Sulfate Soil at Long Bay / Tunks Park, Cammeray.

**3. THAT** Council note that an additional \$150,000 will need to be allocated to the project in the 2026/27 budget to fund the further investigations into Acid Sulfate Soil at Long Bay / Tunks Park, Cammeray.

**4. THAT** Council note that any mitigation or remediation measures identified for Tunks Park are currently not budgeted and further funding will need to be identified to undertake these necessary works.

## Background

At its meeting of 26 May 2025, Council resolved:

- 1. THAT Council notes the contents of this report in response to the Resolution of Council regarding water contamination issues raised in relation to Long Bay.*
- 2. THAT Council continues to work with the Environmental Protection Authority and the Department of Climate Change, Energy, the Environment & Water in relation to potential sources of pollution in Long Bay.*
- 3. THAT Council notes that a further report will be brought back to Council once the results of soil tests taken from Tunks Park have been analysed.*

This report responds to item 3 of the above Resolution.

## Report

Preliminary investigations undertaken by the Department of Climate Change, Energy, Environment and Water (DCCEEW) have identified multiple indicators consistent with active coastal acid sulfate soils (ASS) at Long Bay, Cammeray.

Historical site modification, landfill placement, culverting of Flat Rock Creek, and land reclamation has likely exposed ASS layers beneath the Tunks Park playing fields.

In conjunction with Council, DCCEEW has installed several ground water monitoring wells across Tunks Park, which are being monitored monthly by Water, Wetlands, and Coastal Science (WWCS) to map the ground water and infiltration of seawater.

Data collected from monitoring wells indicates that groundwater movement at Tunks Park is influenced by both tidal pumping and rainfall recharge. However, the relative importance of each pathway remains unresolved. Further investigation and testing are required to understand whether contaminants are reaching Long Bay via the stormwater culvert or via shoreline seepage, to inform the design of the necessary remediation.

DCCEEW have recommended the following:

1. further investigations to improve the understanding of the groundwater dynamics;
2. develop a conceptual model of groundwater dynamics, with the available data to determine the drivers of ASS discharges and spatial variation in groundwater properties across the site;
3. develop and discuss the potential options for future management to reduce the discharge of contaminants into Long Bay, and recommendations for next steps.

The outputs will directly inform the design, prioritisation, and optimisation of remediation works and provide a defensible scientific basis for regulatory and funding discussions.

The project scope has been codesigned through a workshop held on 1 September 2025, where representatives from the previously mentioned organisations provided advice to

Council officers. This collaborative process directly informed the final Scope of Works prepared by DCCEEW, further embedding these organisations' methodologies and expertise into the project design.

The costs to undertake these works are as follows:

| <b>Activity</b>                  | <b>Operational Cost</b> | <b>Material/Analysis cost</b> | <b>Subtotal (ex GST)</b> |
|----------------------------------|-------------------------|-------------------------------|--------------------------|
| Section 1                        | \$174,613.00            | \$35,800.00                   | \$210,413.00             |
| Section 2                        | \$54,470.00             | \$19,883.00                   | \$74,353.00              |
| Section 3                        | \$43,618.00             |                               | \$43,618.00              |
| <b>Total due (excluding GST)</b> |                         |                               | <b>\$328,384.00</b>      |

The proposed approach would be to engage DCCEEW as the lead consultant who would engage and coordinate the following consultants as the technical working group:

- Southern Cross University (SCU) – providing nationally recognised expertise in coastal acid sulfate soil characterisation and geochemical modelling;
- UNSW Water Research Laboratory (WRL) – providing specialist capability in coastal processes, groundwater–tidal interactions, and hydrodynamic conceptual modelling; and
- NSW DCCEEW (WWCS team) – providing specialist environmental monitoring, long-term datasets, regulatory context, and operational expertise in logger deployment and interpretation.

The technical working group would report to a project team including Council officers, providing updates on analysis and recommendations in relation to potential approaches for mitigation and remediation.

### **Cost and Funding**

Funding of \$200,000 was reallocated from the 2025/26 Capital Works Program to cover the installation of groundwater sampling and initial investigations. The balance of these funds will be sufficient to keep the project progressing, however an additional \$150,000 will be required in 2026/27 to complete the investigation as outlined above.

Under s55 of the NSW Local Government Act 1993, Councils are required to invite public tenders for contracts involving estimated costs of \$250,000 (incl GST). The proposed fee exceeds this threshold.

Section 55(3)(i) of the Local Government Act 1993 permits a council to dispense with the requirement to invite tenders where, because of extenuating circumstances, a satisfactory result would not be achieved by inviting tenders.

In this case, the engagement of the NSW Department of Climate Change, Energy, the Environment, and Water (DCCEEW) is justified on the basis that the contamination issue presents an urgent environmental risk requiring coordinated, specialist regulatory and

technical oversight. DCCEEW possesses unique statutory expertise, access to accredited environmental specialists, and established investigative frameworks that cannot be readily replicated through a standard competitive procurement process within the timeframe required.

Undertaking a public tender would introduce delay, duplication and potential fragmentation of responsibility in circumstances where swift, integrated and regulator-aligned action is necessary to protect community health and the environment. Accordingly, the extenuating circumstances provision appropriately applies.

### **Consultation requirements**

There is no community engagement required in relation to this report.

### **Legislation**

- NSW Protection of the Environment Operations Act 1997
- Local Government Act 1993