

Sunfield Fast-track

Auckland Council Specialist Memo

Annexure 4:

Stormwater (Regional Discharge Permit)

Martin Meyer

4 August 2025

Stormwater (Regional Discharge Permit) Memo

Prepared by: Martin Meyer, Stormwater Specialist, Stormwater, Wastewater & Industrial Trade Activities Team, Auckland Council

Date: 4 August 2025

1. This memorandum addresses the stormwater aspects of the Sunfield proposal that require a regional discharge permit.

Qualifications and Relevant Experience

2. I hold the qualification of Bachelor of Science and Post Graduate Diploma of Science. I have prepared expert evidence and technical assessments for resource consent and fast-track applications.

Code of Conduct

3. I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**) and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Documents Reviewed

4. I have reviewed the following documents in preparing this memorandum:
 - Sunfield Planning Report, dated 31st March 2025, prepared by Tattico Limited
 - Conditions of Consent, dated 11th February 2025
 - Three Waters Strategy Report, dated 7th February 2025
 - Infrastructure Report, dated 7th February 2025
 - Stormwater Management Plan, dated 7th February 2025
 - Sunfield Engineering Plans
 - Sunfield Scheme Plans
 - Soil Assessment, dated 25th November, 2024
 - Stormwater Strategy Technical Review, dated 20th February 2025
 - Stormwater Management – Proof of Concept Review, dated 10th February 2025
 - 3 Waters Review, dated 24th January 2025
 - Awakeri Wetlands Stages 2 and 3 Construction, dated 25th March 2025
 - Sunfield Baseline Ecological Assessment, dated 2nd December 2024.

Specialist Assessment

Overview

5. Within the Future Urban Zone (**FUZ**) and Mixed Rural Zone, stormwater discharge and diversion requires authorisation under E8.4.1(A10). The applicant has provided assessment against the regionwide network discharge consent (**NDC**), this proposal will not be authorised by the NDC at the commencement of discharge.
6. The future state of a large residential/mixed use development that is adjacent to an urban area may in future become part of the NDC, however the stormwater management plan is not in its current state accepted by Healthy Waters (as network operator), and neither can FUZ land be authorised under the NDC. Refer to Mr Chin's memorandum for further discussion.
7. Approval under E8.4.1(A10) for stormwater diversion and discharge will be required as a private discharge consent, and new stormwater assets cannot be assumed to be vested to Auckland Council until authorised under the NDC. If stormwater management is not accepted in future, remedial works at significant cost will need to be undertaken prior to any acceptance into the NDC or continuation of the discharge under a private consent will be required. The preference is to seek a design acceptable at an early stage for the NDC, despite approval under a private discharge consent.
8. This specialist memo should be read in conjunction with the development engineering, Healthy Waters and Auckland Transport memos on matters surrounding stormwater. This assessment will not cover aspects including pipe capacities, overland flowpaths or flooding.

Peat Soils

9. The soil assessment has found the western portion of the site to have peat soils being Ardmore peaty loam and Clevedon soils with a peat influence. Underlying peat soils must be managed appropriately to maintain levels of hydrology that prevent soil consolidation. Peat soils should be managed in accordance with Guideline Document 2021/007 Version 1 (GD07), any significant impervious areas placed on these soils must be compensated with appropriate recharge areas to maintain the soils. The stormwater management plan specifies peat will be managed against GD01; the earth works planned do not appear to adequately manage the drawdown effect and possibility of soil consolidation.
10. Documentation appears to outline that groundwater levels may be lower post-development. This would indicate a risk to the peat soils and to consolidation. The consolidation of peat soils has a risk of creating subsidence in these areas potentially leading to instability and failure of infrastructure.

Wetlands, Dam, Dry Ponds, Detention, Retention and Water Quality Treatment

11. Significant catchment diversion is proposed (please refer to groundwater memo and Healthy Waters memo). The Awakeri Wetlands are proposed to be utilised to help attenuate the

additional flows created from the Sunfield development. The McLennan Wetlands are also proposed to attenuate flows, with a larger catchment area directed to the McLennan dam.

12. Refer to Healthy Waters memo for further detail. The Awakeri wetlands were sized for the FUZ within their catchment and it is not supposed to provide for any additional capacity. There is concern that the flows from Sunfield proposed would be over the hydraulic and water quality capacity of these wetlands. The McLennan Wetlands are also unknown to have additional capacity. A further assessment of these wetlands should be undertaken and/or alternative design proposed to adequately treat the proposed stormwater quantity and quality. Similarly, the effects of the additional catchment diversion to the McLennan dam are unclear.
13. Dry ponds are proposed centrally to the development, to aid in stormwater detention/retention and meet the SMP objective of preventing an increase in peak flows post development. While the site is not within a SMAF zone, pipe/drain capacities (in particular farm drains to the north) and potential nuisance flooding that already occurs during 2-year events may limit the amount of flows that may be discharged from site. It is unclear from the proposal whether these areas will be negatively affected. A flood modelling assessment is necessary to determine these issues and has been requested (s67). Pond sizing (1-4) appears to be for the 10% and 1% AEP events, sizing and further information on pond 5 and 6 are missing.

E9 High Contaminant Generating Roads and Carparks

14. Tattico has provided confirmation in the s67 response that 21,000m² of high contaminant generating carparks will be created within the development. They have assessed this a **controlled activity** under E9.4.1(A6). Technical details surrounding the high contaminant generating carparks have not been provided, and it is unclear which devices will be used to treat which proportions of the contaminants generated. Limitations of the downstream devices proposed to be used communally (such as Awakeri wetlands) cannot be assumed to have sufficient water quality treatment capacity if these were to be utilised. If they do have sufficient capacity this activity would not trigger a consent, and would be assessed as a **permitted activity** under E9.4.1(A1).

Application Support

15. At this stage this proposal is not supported from an E8 – Stormwater Diversion and Discharge perspective. The current stormwater management regime does not adequately assess potential effects to downstream flooding, capacity issues and water quality capacity. The management of the proposed assets (which will be privately owned until vestment) has not been specified.

Comment on Proposed Conditions

16. The proposed conditions do not include any requirements for a stormwater discharge consent, however a stormwater discharge consent will be required under E8.4.1(A10). In particular as assets will remain privately owned until an unknown vesting date, details of the proposed ownership model must be provided for. Conditions should address details on the stormwater management works, the operation and maintenance plans, and a duration of consent.
17. The below standard conditions should be at a minimum included within a stormwater discharge consent.

1. 'Stormwater Management Works'

Note this is a description of what the condition table recommends: Specify each treatment device, outfalls, raingardens proposed should be included within the discharge consent, this should include the catchment area impervious proposed for each device, and the design requirements of these devices (eg GD01). It is recommended this table could also display the assets to remain private and those which aim to be vested in future.

2. 'Operation and Maintenance Plan'

An Operation and Maintenance Plan must be provided to and certified by the council prior to the commencement of the discharge authorised by this consent.

The plan must include

- a. Details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure which will support this process;
 - b. A programme for regular maintenance and inspection of the stormwater management system;
 - c. A programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;
 - d. A programme for post-storm inspection and maintenance;
 - e. A programme for inspection and maintenance for the outfalls
 - f. General inspection checklists for all aspects of the stormwater management system, including visual checks;
 - g. A programme for inspection and maintenance of vegetation associated with the stormwater management devices.
3. 'Operation and Maintenance Plan implementation'

The stormwater management system must be managed in accordance with the final Operation and Maintenance Plan prepared in accordance with Condition 2.

4. 'Amendments to the Operation and Maintenance Plan'

Any amendments alterations to the Operation and Maintenance Plan must be submitted to the council for confirmation, in writing prior to implementation.

The Operation and Maintenance Plan must be updated and submitted upon request to the council for confirmation.

5. 'Maintenance Record'

Details of all Maintenance Records (including inspections, servicing and maintenance) for the stormwater management system must be retained by the consent holder for a minimum of the preceding three years.

A maintenance record must be provided to the council on request.

6. 'Contents of maintenance record'

- a. Details of any maintenance undertaken; and
- b. Details of any inspections, servicing and maintenance completed

7. 'Maintenance Responsibility'

At the time of issue of the Certificates of Title for the units, a Covenant or other legal instrument to the satisfaction of the Council shall be registered on the titles of the units requiring that the long-term operation and maintenance of the stormwater management devices will remain the joint responsibility of the owner of the units.

Advice Note:

If a Body Corporate or similar legal entity is formed with responsibility for the ongoing operation and maintenance of the stormwater management system, consent DISXXXXXXX for the diversion and discharge of stormwater should be transferred to this entity.

8. 'Maintenance Responsibility'

At the time of issue of the Certificates of Title for Lots (to be specified), a Covenant or other legal instrument to the satisfaction of the Council shall be registered on the titles of Lots (to be specified), requiring that on-site stormwater management works shall be undertaken to comply with the following:

- a) Rain tanks sized for roof runoff from each individual lot shall be designed and constructed to achieve hydrology mitigation in accordance with standard E8.6.3.1(1).
- b) At the time of application for Building Consent, detailed design for the proposed stormwater tank shall be submitted to and approved by the Council.
- c) The rain tanks shall be maintained to ensure the tanks continue to operate as a stormwater attenuation device. In particular, the owner shall not block or remove the part of the tank to be reserved for stormwater management.
- d) The stormwater management devices on each of the individual lots, are to be maintained by the owners of the lots in accordance with the Operation and Maintenance Plan as outlined in **Condition 2 (final number to be inserted by lead planner)** above [to be attached, prepared in accordance with Auckland Council Consent DISXXXXXX].

The Council's Solicitor will prepare the Covenant or other legal instrument at the consent holder's expense.

9. 'Stormwater Management System Maintenance'

At the time a Body Corporate, Residents' Association, covenant, or other legal entity is established, the following requirement must be registered:

- a. The stormwater management systems must be maintained in accordance with the Operation and Maintenance Plan referenced in Condition 2.

The Consent Holder must notify the Council in writing within 20 working days of the legal entity being established.

10. 'Duration of Consent'

Stormwater diversion and discharge permit **[Insert consent no.]** shall expire on **[date to be inserted; 35 years from decision date]** unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.