

Appendix D: Stormwater Management Plan (SMP)

This Stormwater Management Plan (SMP) forms part of the EMPr for Erf 385, Hoekwil. It sets out measures to ensure stormwater is managed to prevent contamination of watercourses, protect ecological integrity, and comply with relevant environmental legislation.

1. Objectives

- Prevent contamination of watercourses from sediment, fertilisers, pesticides, hydrocarbons.
- Ensure clean and contaminated water separation.
- Protect wetlands, rivers, and the Wilderness Lakes Ramsar site.
- Comply with the National Water Act (36 of 1998) and NEMA (107 of 1998).

2. Design Principles

- Separate clean and contaminated flows.
- Slow, spread, and filter: via swales, filter strips, buffer zones.
- Retention/infiltration: via sediment traps, settlement ponds, trenches.
- No direct discharge into watercourses.
- Maintain wetland (30 m) and forest (50 m) buffers.

3. Infrastructure and Measures

3.1 Diversion Structures: Berms and contour drains to direct clean water around cultivated blocks.

3.2 Contaminated Stormwater Controls: Swales, filter strips, settlement basins.

3.3 Construction Phase: Temporary silt fences, straw bales, diversion berms.

3.4 Operational Phase: Permanent cover in inter-rows, controlled fertiliser use, banded storage areas.

4. Monitoring & Maintenance

- Monthly inspections of berms, drains, swales, sediment traps.
- Inspections after rainfall.
- Records kept of inspections and corrective action.
- ECO review.

5. Roles and Responsibilities

- Farm Manager: Daily implementation.
- ECO: Independent monitoring.
- Contractor: Construction-phase erosion/sediment control.

6. Emergency Measures

Spills: contain with berms/absorbents, remove contaminated soil, dispose at licensed facility, report to ECO.

7. Reporting

Stormwater inspections logged. ECO compliance report to authorities.