



Environment and Heritage Expertise

Technical Guideline

TG 0875.34 – Sediment, erosion and stormwater

Version: 1.0.

Date: 28 August 2025.

Status: Final.

Document ID: SAWG-ENV-0875.34

Confidentiality: OFFICIAL



**Government of
South Australia**

© 2025 SA Water Corporation. All rights reserved. This document may contain confidential information of SA Water Corporation. Disclosure or dissemination to unauthorised individuals is strictly prohibited. Uncontrolled when printed or downloaded.

Issue & version number

Only the current version of the Technical Standard should be used. Earlier versions of this Technical Standard are superseded and must not be used.

This Technical Standard document is not controlled when printed or downloaded. Only online versions from the SA Water website may be used.

Copyright and intellectual property

© SA Water. All rights reserved.

This Technical Standard has been produced by the South Australian Water Corporation (SA Water). SA Water owns the copyright to all material produced by SA Water.

No part of this Technical Standard may be reproduced, copied or transmitted in any form or by any means, except with the express written consent of SA Water.

Where any material is extracted from this Technical Standard, which may occur only with express written consent of SA Water, that material must be attributed to SA Water as:
© SA Water.

Intellectual property

Where any material is extracted from this Technical Standard, which may occur only with express written consent of SA Water, that material must be attributed to SA Water as:
© SA Water.

Unless indicated expressly to the contrary, SA Water (and/or any third-party licensors of SA Water) own the copyright and other intellectual property rights, which is contained in the text, graphics, information, designs, data and other content in this Technical Standard.

This Technical Standard may not, without consent in writing from SA Water, or otherwise except to the extent permitted under the *Copyright Act 1968* (Cth), be reproduced for any purpose, including particularly: purposes associated with government operational activities, commercial activity, or education.

SA Water is committed to upholding the rights of owners of copyright and intellectual property, and SA Water will make every effort to contact copyright owners and request permission to reproduce and make available copyright material. If you believe that any content in this Technical Standard may infringe your copyright or other intellectual property rights, please contact us at legal@sawater.com.au and we will investigate the position, and if appropriate, endeavour to correct the situation.

If you have access to this Technical Standard and the Technical Standard is used by you or any other entity, for purposes other than to progress SA Water's statutory functions, you could be infringing SA Water's copyright, and or SA Water's intellectual property, and you may face penalties under the *Copyright Act 1968* (Cth), otherwise under law, or under any other policy of SA Water or the South Australian Government that may apply.

Technical Standards are only applicable for intended use

This Technical Standard may be used by only: SA Water staff, SA Water contractors and persons expressly authorised in writing by SA Water to do so.

This Technical Standard may be used only for application to progress activities associated with SA Water's statutory functions described particularly within the *Water Industry Act 2012* (SA), the *Water Industry Regulations 2012* (SA) and the *South Australian Water Corporation Act 1994* (SA). This Technical Standard may not be used for any other activity outside of the scope of the functions described in that legislation.

If you have access to this Technical Standard, and the Technical Standard is used by you or any other entity, for purposes or activity other than to progress SA Water's statutory functions, the Technical Standard may not be applicable to that other purpose or activity, in which you or that other entity intend to engage, and you could be misinterpreting the contents and you may not correctly apply the Technical Standard. This may result in loss or damage to you, the entity or to other parties, and must be avoided.

This Technical Standard has been prepared to address general and not particular circumstances. This Technical Standard is intended to be used in conjunction with designs and project instructions that are prepared in response to particular circumstances and toward particular objectives. Any user of this Technical Standard must ensure, by independent verification, that the application of the Technical Standard is suitable to any design for any particular project, and to ensure that the Technical Standard is in accordance with the latest relevant Australian standards, legislation, regulations and codes and also with any relevant and applicable policy.

SA Water does its best to provide accurate and up-to-date information in the Technical Standards we prepare, but you should use your own skill and judgement before you rely on it. SA Water does not guarantee or warrant the accuracy, completeness, or currency of the information provided. SA Water recommends that you ask for professional advice from your own advisors on any aspect of your own circumstances.

Liability disclaimer

This Technical Standard may be used by only: SA Water staff, SA Water contractors and persons expressly authorised in writing by SA Water to do so.

To the extent that the use of the Technical Standard constitutes you acquiring goods or services from SA Water, as a consumer within the meaning of the Australian Consumer Law set out in the *Competition and Consumer Act 2010* (Cth) sch 2, as amended or replaced from time to time, you may have certain rights and remedies (including: consumer guarantee rights) that cannot be excluded, restricted or modified by agreement.

Nothing in this disclaimer operates to exclude, restrict or modify the application of any implied condition or warranty, provision, the exercise of any right or remedy, or the imposition of any liability under the Australian Consumer Law or any other statute, where to do so would contravene that statute or cause any term of this agreement to be void.

You acknowledge and agree that:

- Except for any non-excludable obligations, SA Water gives no warranty (express or implied) or guarantee that information, services and materials contained in this Technical Standard are accurate, complete, current, or fit for any use whatsoever.
- All such information, services and materials are provided "as is" and "as available" without warranty of any kind. This means, for instance, that you should not rely on the accuracy or completeness of any information displayed within this Technical Standard and its suitability for application to your particular circumstances, and furthermore it is your responsibility to contact an appropriate member of our staff if you have any questions about suitability of the Technical Standard to any particular circumstance, before your use of the Technical Standard.

To the maximum extent permitted by law and subject to any non-excludable obligations, SA Water excludes all liability for any loss or damage arising out of access to, use of, or reliance upon information, services and materials contained within this Technical Standard.

Significant/major changes incorporated in this edition

Not applicable - this is the first edition of the Technical Guideline.


Document controls

Version history

Version	Date	Author	Comments
1.0	28 August 2025	Various	Issued for Use

Template: Technical Guideline Version 8.1, 30 September 2024

Approvers

Approver Name	Approver Role	Signature
Tim Kildea	Manager Environment and Heritage Expertise	<div>16/09/2025</div> <div>X </div> <div>Tim Kildea Manager Environment and Heritage Expertise Signed by: KI000359</div>
Brooke Swaffer	Manager Environment and Recreation	<div>16/09/2025</div> <div>X Brooke Swaffer</div> <div>Brooke Swaffer Manager Environment and Recreation Signed by: SW001471</div>

Reviewers

Name	Role	Version	Review Date
Environment and Heritage Expertise Team	Team review of guidelines.	1.0	28-08-2025

1 Introduction

This guideline relates to the control and management of sediment (terrestrial and aquatic), erosion and stormwater pollution which may be encountered, created or worsened during a project's planning, construction, operations or maintenance activities.

It forms part of the TG 0875 - Environment and Heritage Technical Guidelines and is designed to provide insight into regulatory obligations associated with vegetation, as well as suggested approaches to manage risk.

Note the guideline is not exhaustive, and additional requirements may be necessary based on project- or site-specific activities, geographical location, or approval conditions.

1.1 Environment and Heritage Technical Guidelines Suite

The SAWG-ENV-0875 Environment and Heritage Technical Guidelines suite includes:

- TG 0875.00: General requirements
- TG 0875.11: Aboriginal heritage and Native Title
- TG 0875.12: Non-Aboriginal heritage
- TG 0875.21: Vegetation
- TG 0875.22: Fauna
- TG 0875.23: Weed hygiene
- TG 0875.24: Phytophthora
- TG 0875.31: Surface water
- TG 0875.32: Groundwater
- TG 0875.33: Recycled water
- **TG 0875.34: Sediment, erosion and stormwater (this guideline)**
- TG 0875.35: Dewatering, dredging and earthworks drainage
- TG 0875.41: Site contamination
- TG 0875.42: Acid sulfate soils
- TG 0875.43: Hazardous substances
- TG 0875.51: Dust
- TG 0875.52: Odour
- TG 0875.53: Noise and vibration
- TG 0875.61: Spoil management
- TG 0875.62: Recycling
- TG 0875.63: Waste management

This guideline must be read in conjunction with TG 0875.00: General requirements

1.2 General requirements

TG 0875.00: General requirements apply to all aspects of the work:

1. Purpose
2. Application
3. Scope
4. Statutory obligations
5. Strategic alignment
6. Terms and abbreviations

2 Sediment, erosion and stormwater

2.1 Overview

MANAGEMENT	
Commitment	Effective sediment, erosion and stormwater control measures are important in protecting our natural resources and receiving environments.
Strategic objective	<ul style="list-style-type: none"> Environment Corporate Strategy: <ul style="list-style-type: none"> Our culture creates empowerment, increased accountability for environmental decisions and demonstrates proactive leadership. Asset Management Corporate Strategy: <ul style="list-style-type: none"> An integrated approach enables the sustainability outcomes our customers, community and owner expect.
Key Performance Indicator	<ul style="list-style-type: none"> KPI 1: Effective sediment, erosion and stormwater control structures are implemented across the project site / activity. KPI 2: No environmental incidents impacting receiving environments either on, adjacent to, upstream or downstream from the project site / activity.
Legislation	<ul style="list-style-type: none"> Biodiversity Act 2025 (SA) Environment Protection (Water Quality) Policy 2015 (SA) Environment Protection Act 1993 (SA) – EP Act Landscape South Australia Act 2019 (SA) Local Government (Stormwater Management Agreement) Amendment Act 2016 (SA) Local Nuisance and Litter Control Act 2016 (SA) Planning, Development and Infrastructure Act 2016 (SA)
Regulatory approvals	<ul style="list-style-type: none"> Water Affecting Activity permit Dredging licence Earthworks Drainage licence Development Approval (if applicable)
Statutory obligations	<ul style="list-style-type: none"> <i>Environment Protection Act 1993 (SA)</i>, Section 25: A person must not undertake an activity that pollutes, or might pollute, the environment unless the person takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm. <i>Landscape South Australia Act 2019 (SA)</i>, Section 8: A person must act reasonably in relation to the management of natural resources within the State. <i>Biodiversity Act 2025 (SA)</i>, Section 11: An entity must not undertake an activity that harms or has the potential to harm biodiversity unless the entity takes all reasonable and practicable measures to prevent or minimise any resulting harm. <i>Environment Protection (Water Quality) Policy 2015 (SA)</i>, Clause 10 & 11: A person must not discharge pollutants listed in Schedules 2 and 3 of the Policy into any waters. Furthermore, those pollutants known as Class 1 and listed in Schedule 2 must not be deposited onto land where they are likely to enter waters.

MANAGEMENT	
Reference material	<ul style="list-style-type: none"> • Catchments and Creeks: Erosion & Sediment Control (ESC) Field Guides • DEW (SA): Water affecting activity permits • DEW (SA): Water Allocation Plans relevant to the landscape region • EPA (SA) Listed pollutants (class 1 & 2) • EPA (SA): Guidelines – Liquid storage, Bunding and spill management • EPA (SA): Stormwater pollution prevention - Code of practice for local, state and federal government • EPA (SA): Stormwater pollution prevention - Code of practice for the building and construction Industry • Green Adelaide: Erosion management guideline Managing erosion in waterways • IECA: Best Practice Erosion and Sediment Control (BPESC) document • Water Sensitive SA: Guideline WSUD 01 - A Guide for Water Sensitive Urban Design • Water Sensitive SA: Technical manual for water sensitive urban design in Greater Adelaide
Related guidelines	<ul style="list-style-type: none"> • TG 0875.31 Surface water • TG 0875.32: Groundwater • TG 0875.35: Dewatering, dredging and earthworks drainage • TG 0875.41: Site contamination • TG 0875.51: Dust • TG 0875.61: Spoil management

2.2 Planning and design

MITIGATION MEASURES	STAKEHOLDERS
<p>A Preliminary Assessment must be undertaken to identify:</p> <ul style="list-style-type: none"> • Any potential erosion or sediment risks and constraints including location of water bodies, erosion prone areas, receiving environments or ecologically sensitive areas. • The benefit of any Gross Pollutant Traps that could be installed for the long-term management of the site, which can be captured as an asset that requires maintenance. 	<p>Environmental Officer Asset Planner</p>
<p>Potential erosion and sediment minimisation options must influence options and design, such as minimising topsoil disturbance, sediment basins, vegetation stabilisation, gabion rock structures. Any proposed materials must not breach the EP Water Quality Policy.</p>	<p>Environmental Officer Project Manager Design Manager</p>
<p>Implementation of opportunities for Water Sensitive Urban Design (WSUD) within urban projects should be considered such as biofiltration systems, rainwater harvesting, rain gardens and permeable paving.</p>	<p>Design Manager Project Manager Environmental Officer</p>
<p>Any Water Sensitive Urban Design devices intended to slow water movement and capture sediment must recognise ongoing maintenance requirements and budgets post-construction.</p>	<p>Environmental Officer Project Manager Design Manager</p>

MITIGATION MEASURES	STAKEHOLDERS
Ensure all stormwater management is line with any pre-existing stormwater management plans (Council or Stormwater Management Authority), EPA licence conditions or Water Allocation Plans.	Environmental Officer Project Manager Design Manager
Any sediment to be disturbed must be assessed for contamination prior to disturbance to ensure appropriate management measures are implemented. Refer to the Spoil Management Guideline.	Environmental Officer Project Manager
Reasonable measures must be taken to divert upstream runoff and install clean water diversions. Determine whether a Water Affecting Activity permit or Development Approval is required, and whether an assessment of the downstream receiving environment is necessary.	Environmental Officer Project Manager

2.3 Construction

MITIGATION MEASURES	STAKEHOLDERS
<p>A Soil Erosion and Drainage Management Plan (SEDMP) must be prepared where:</p> <ul style="list-style-type: none"> There is a high risk of sediment pollution to adjoining land or receiving waters; or The total area to be disturbed or left disturbed at any one time exceeds 0.5 ha. <p>The SEDMP must be prepared in accordance with the EPA (SA): Stormwater pollution prevention - Code of practice for the building and construction Industry.</p>	Contractor
Minimise ground disturbance wherever possible and stabilise disturbed areas progressively.	Contractor
Wherever possible, stormwater from the construction footprint should be retained onsite to prevent stormwater pollution e.g. through transport of sediment, construction wastewater, wash down water, concrete and cleaning waste etc.	Contractor
Locate portable site amenities, chemical storage, and stockpiles of erodible materials away from watercourses, drainage lines, and flood prone areas.	Contractor
Manage stockpiles efficiently to minimise loss of material. Refer to the Spoil Management Guideline.	Contractor
Bund potential contaminants and ensure contaminant storages are robust and located away from watercourses, drainage lines, and flood prone areas. Bunding must be in line with the EPA's Bunding and Spill Management Guideline.	Contractor
Effective erosion and sediment controls must be implemented and maintained where activities include soil disturbance works, in both terrestrial and aquatic environments.	Contractor
Consider existing soil conditions and weather forecasts through the Bureau of Meteorology prior to undertaking excavation or disturbance works to minimise sedimentation and erosion risk.	Contractor
Ensure management plans include appropriate detail on management of stockpiles as well as soil disturbance works.	Contractor

MITIGATION MEASURES	STAKEHOLDERS
Ensure management plans include appropriate detail on the type and location of all sediment and erosion control and stormwater pollution prevention measures to be implemented.	Contractor
Stop work and incident notification procedures should be included in management plans for disturbance and/or excavation works during times of heavy rainfall, waterlogged conditions, evidence of soil erosion, and soil contamination.	Contractor
Site access and vehicle pathways should limit or prevent vehicles from entering sensitive areas, preventing excess traffic over disturbed soil, or to prevent vehicles from traversing any waterways on the site. There should be rumble grids or other appropriate controls used on site access points to prevent vehicle drag out of sediment.	Contractor
For dredging requirements relating to sediment/spoil management refer to the Dewatering, Dredging and Earthworks Drainage Guideline.	Contractor

2.4 Monitoring requirements

DESCRIPTION	METRIC	FREQUENCY	ACCOUNTABILITY
Erosion and sediment control structure(s) and Site Environmental Management Plan	Visual inspection	Weekly	Contractor
Erosion and sediment control structure(s) – Rain event	Visual inspection	During working hours: <ul style="list-style-type: none"> • Within one hour of any runoff caused by rainfall • Every four hours during periods of continuous rain • Within 12 hours of a rain event outside working hours 	Contractor
Water quality monitoring in receiving aquatic environments	Turbidity (NTU)	Continuous	Contractor