



SEDIMENT TASK FORCE - FOR LOCAL GOVERNMENT

SEDIMENT MANAGEMENT IN WA - THE ROLE OF LOCAL GOVERNMENT



Department of Biodiversity,
Conservation and Attractions



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Sediment Management in WA - The Role of Local Government

Local Governments in Western Australia are tasked to enact local laws and ensure compliance with State legislative requirements to effectively manage erosion and sediment loss on subdivision, building and construction sites. This is primarily achieved by:

- Including planning approval/building licence requirements (conditions) requiring developers and builders to control and mitigate erosion and sediment loss during urban development.
- Issuing erosion and sediment control advice in compliance actions.

Why does preventing sediment loss matter?

Builders sand and other materials escaping development and construction sites can cause significant damage to the environment when it escapes a site and enters the stormwater system.

In addition to creating blockages which can lead to localised flooding in the stormwater system, the combined materials become sediment, causing further damage once they reach our waterways, smothering bottom-dwelling plants and animals and accumulating in deep, permanent pools in rivers, destroying critical habitat.

Fine sediment can clog the gills of fish, and reduce the available light required for photosynthesis in aquatic plants, causing ecosystem collapse. Sediment can also contain high levels of introduced nutrients, promoting toxic algal blooms and nutrient enrichment of our waterways.

Taking basic sediment control measures on site can reduce the amount of materials entering the environment by up to 90%, making environmental management a simpler and more cost-effective task, while protecting the environmental, social and cultural values of your local waterways.

What are our goals?

Local Government is uniquely positioned to work with residents, developers and builders to implement erosion and sediment control measures to achieve the following outcomes:

- Help maintain stormwater management systems such as biofilters, pervious paving, infiltration cells and tree pits that are critical to protecting our rivers, wetlands, marshlands and oceans.
- Protect hydrological functions of rivers, wetlands and other waterways.
- Prevent sediment from smothering the reeds, plants and seagrasses that keep our rivers, wetlands and oceans healthy.
- Ensure river pools continue to provide a vital refuge for fauna during long hot summers and dry seasons.
- Protect aquatic invertebrates and benthic algae populations, whose presence is necessary for water ways to remain healthy ecosystems.
- Prevent fish, prawns, crabs and other aquatic wildlife being killed due to the detrimental effects of sediments entering ecosystems.
- Reduce nutrient enrichment of waterways and associated algal blooms.
- Prevent sediment from covering grass in parks that receive stormwater runoff.
- Prevent the creation of breeding grounds for pest and potential disease-causing mosquitoes and midges and protect public health from mosquito-borne diseases and pathogens.
- Reduce the risk of houses and roads flooding as a result of blocked stormwater drains.
- Reduce the risks of accidents on roads and paths.

As local government officers, it is easy to see how improper management of sediment runoff can eventually cause issues across the entire organisation due to the negative impacts on public safety, environmental health, maintenance, operations and civil works.

Research undertaken by the Sediment Task Force and the University of Western Australia has shown that improper sediment management can cost local governments upward of \$2,182 per hectare of land developed in dredging costs alone (see [Key Findings of the Economic Cost of Erosion And Sediment Loss From Construction Sites Report](#)).

Alternately, implementing erosion and sediment control (ESC) measures can be relatively inexpensive.

The Sediment Task Force has developed a wide range of resources to assist you in communicating best practices and strategies to residents, developers, builders and the general public, including case studies, checklists, fact sheets and more.

These resources can be found here: <https://www.perthnrm.com/resource/sediment-management/>

Who needs to know?

Approvals – Planning and development applications are the first line of defence. Your knowledge of development sites within your area will make it easier to include appropriate ESC requirements into the approvals process.

Policy and Strategy – The primary legislation dealing with the impacts of erosion and sediment loss due to construction and land development are the Environmental Protection (Unauthorised Discharges) Regulations 2004. However, some councils are introducing their own guidelines or local laws to help prevent the problems occurring in the first place. The Shire of Augusta-Margaret River, the Shire of Jerramungup, the City of Nedlands and the Town of Claremont have all developed local laws regarding Site Erosion and Sand Drift.

Compliance – Currently, local governments are often reacting to complaints about the visible results of sediment entering our waterways. Providing an information session for your rangers, parking inspectors etc can provide an ‘eyes on the street’ approach, allowing local governments to deal with issues at the source before sediment leaves the site and becomes a problem.

Operations – Ensure that any civil works undertaken by your local government implement best management practices. This also applies to the gardeners and landscape architects responsible for maintaining our public places.

Community Services – Many local governments are supporting their community to transform grass verges to waterwise verges by providing advice and/or incentive schemes. Local workshops can increase awareness of the issue and empower the community to find its own solutions to these long-standing problems.

Please refer to another Info Sheet in this series, Empowering Staff is Key to Managing Sediment Loss (STF IS-LG-3) for examples of ‘whole of organisation’ approaches to challenging problems.

Further Information

Including STF On-Site Compliance Checklist for Local Government Officers

[Perth NRM: Sediment Taskforce](#)

[IPWEA - Local Government Guidelines for Subdivisional Development](#)

[Healthy Land and Water](#)

[IECA \(Australasia\) - Resources](#)

[IECA \(Australasia\) - Best Practice Erosion and Sediment Control \(BPESC\) Document](#)

[Creating a Waterwise Verge \(Water Corporation\)](#)



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