

# DRAFT COFFS HARBOUR DEVELOPMENT CONTROL PLAN 2012

## COMPONENT D1 EROSION AND SEDIMENT CONTROL REQUIREMENTS

### Applies to

All development within the Coffs Harbour Local Government Area that involves or could involve:

- disturbance of earth, or placing fill on the soil surface, and / or changes to the contours of the land;
- change in the rate and/or volume of storm water runoff flowing over land, and directly or indirectly entering receiving waters.

### Date adopted by Council

Day Month 2012

### Effective Date

Effective upon gazettal of Coffs Harbour Local Environmental Plan 2012

### Amendments

Date and description of amendments

### Disclaimer

The hyperlinks to various State or Federal Government legislation have been included in this Development Control Plan in good faith and were current at the time that this document was prepared.

Applicants, landowners and any person(s) using the hyperlinks should ensure that the relevant legislation or policy is the most up-to-date version. This information may be obtained from the relevant government authority administering the legislation.

*This Component provides the detailed relevant requirements for erosion and sediment control on development sites in the Coffs Harbour Local Government Area.*

### D1.1 INTRODUCTION

This Component of the Development Control Plan (DCP) should be read in conjunction with Component C6 Minor Earthworks Requirements, as well as Component C8 Natural (Integrated) Water Cycle Management Requirements.

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## D1.2 EROSION AND SEDIMENT CONTROL FOR RESIDENTIAL, COMMERCIAL, INDUSTRIAL AND PUBLIC USE DEVELOPMENT

### D1.2.1 Objectives

1. To minimise the potential for sediment and erosion associated with the development of land.
2. To ensure that the quality of stormwater discharged from a development does not impact on the environment and receiving waters in terms of sedimentation, water pollution and other impacts.

### D1.2.2 Controls

#### a) General

- i) Proponents of the abovementioned development are to ensure compliance with the minimum erosion and sediment control requirements outlined in Table 1 below.
- ii) Erosion and Sediment Control Plans are to be prepared for submission with the development application (DA). The Plan must be prepared to scale.

**TABLE 1 - MINIMUM EROSION AND SEDIMENT CONTROL (DURING CONSTRUCTION) REQUIREMENTS**

Area likely to be disturbed by the proposal (m <sup>2</sup> )	Minimum Requirements	Details
< 800m <sup>2</sup> of disturbed area	Basic Control Plan	Council requires a plan of proposed works and control measures. This plan must be prepared in accordance with Landcom's Managing Urban Stormwater (2004) otherwise known as 'The Blue Book'. See section D1.3.2 below for specific requirements.
800m <sup>2</sup> - 2,500m <sup>2</sup> of disturbed area	Erosion and Sediment Control Plan (ESCP)	This must be prepared in accordance with Landcom's Managing Urban Stormwater (2004) otherwise known as 'The Blue Book'. See section D1.3.3 below for specific requirements.
>2,500m <sup>2</sup> of disturbed area	Soil and Water Management Plan (SWMP)	This must be prepared in accordance with Landcom's Managing Urban Stormwater (2004) otherwise known as 'The Blue Book'. See section D1.3.4 below for specific requirements.

## b) Basic Control Plan Requirements – for Disturbed Areas less than 800m<sup>2</sup> in Area

- i) For disturbed areas less than 800m<sup>2</sup>, the minimum erosion and sediment control treatment methods required are:
- runoff and erosion controls must be implemented to prevent soil erosion, water pollution or the discharge of loose sediment on the surrounding land by providing:
    - three strips of turf parallel to, and against, the kerb;
    - coarse gravel to define a single construction access no more than three metres wide;
    - install sediment fence:
      - along the road frontage immediately upslope of the turf strips or around the low side of the area of construction if the site slopes away from the road;
      - around the low side of stockpiles; and
      - with the ends of the fences turned upslope;
    - all stockpiles of topsoil, sand, aggregate, spoil, vegetation or other material capable of being moved by running water shall be stored clear of any drainage lines, easements or natural watercourses, footpath, kerb or road surface;
    - before roofing material is laid, temporary or permanent guttering and downpipes shall be installed and connected to an approved stormwater disposal system; and
    - all disturbed areas are to be rendered erosion resistant by re-vegetation or landscaping within four weeks of building activities being completed or suspended.

See Figure 1 for best practice site management techniques.

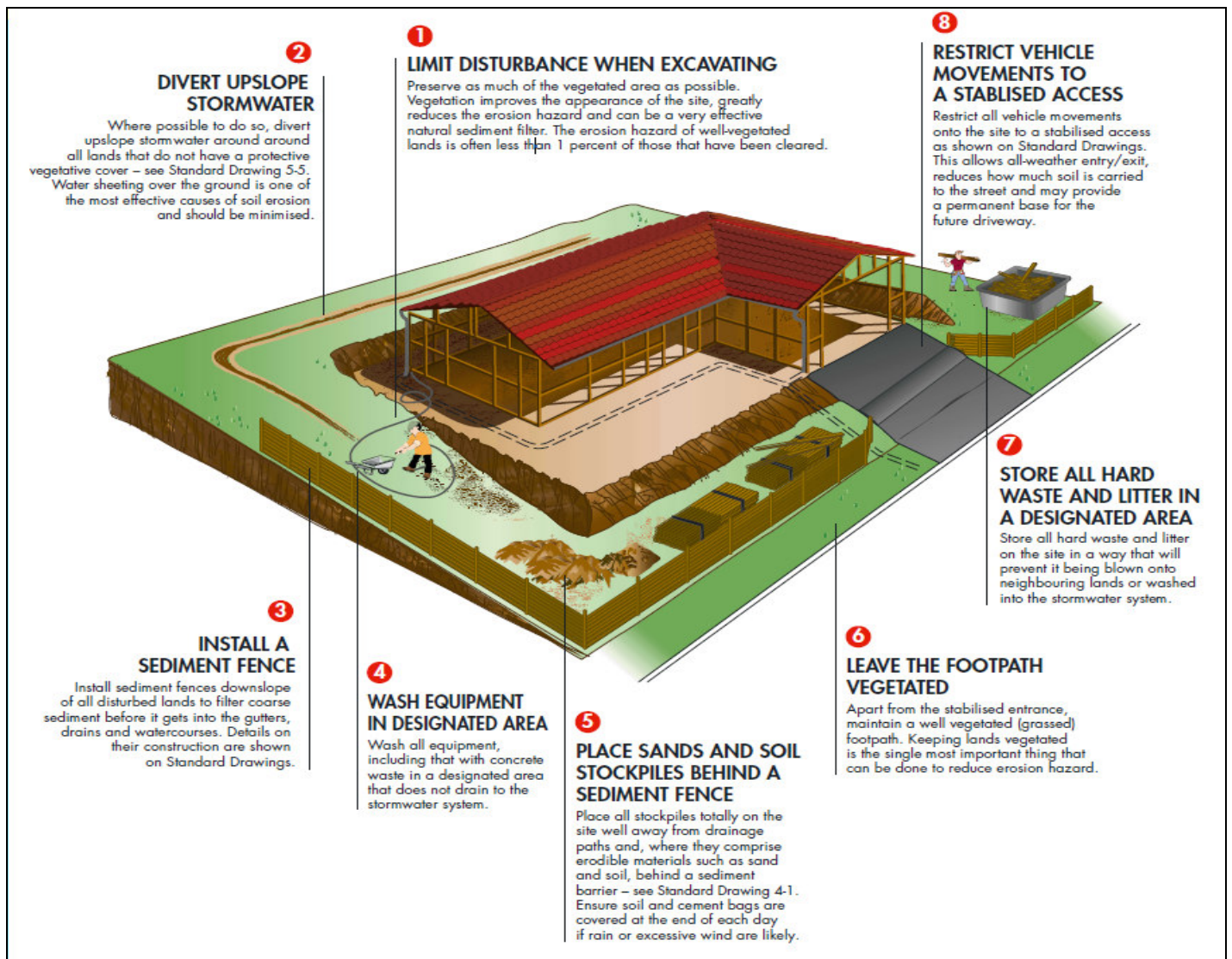
This plan is to be prepared for submission with the DA. The plan must be prepared to scale.

## c) Erosion and Sediment Control Plan – for Disturbed Areas of 800m<sup>2</sup> – 2,500m<sup>2</sup> in Area

- i) For disturbed areas between 800m<sup>2</sup> and 2,500m<sup>2</sup> in area, an Erosion and Sediment Control Plan must be submitted for approval during the DA stage of the development. The Plan must be updated continually as the design and development process evolves and again when a contractor has been appointed, or where changes to site conditions require such review.
- ii) All Erosion and Sediment Control Plans are to be of scale 1:500 or larger and must include the following information:
- Natural features:
    - existing contours;
    - location and description of existing vegetation;
    - all drainage lines, creeks and other water bodies; and
    - catchment area boundaries.
  - Site data and assessment:
    - existing improvements;
    - site boundaries and roads;
    - location of discharge points of the site and description of receiving environment;
    - description of soil materials to be exposed or disturbed (i.e. texture, irritability, permeability, dispersion);
    - assessment of the cumulative impact of the development on the catchment's hydrology and morphology; and
    - location and assessment of "critical" areas (e.g. unstable slopes, floodplains, seasonally wet areas).

**FIGURE 1 - BEST PRACTICE SITE MANAGEMENT FOR SMALL AREAS OF DISTURBANCE**

Source: LANDCOM Urban Stormwater Flyer



- Proposed development works:
    - vegetation removal and protection proposals;
    - cut and fill details;
    - final contours;
    - location of all earthworks;
    - stockpile details (including topsoil storage, protection and reuse methodology);
    - construction materials, storage and handling area;
    - location of all impervious areas (roads, car parks, other impervious areas);
    - proposed drainage patterns;
    - stormwater management system; and
    - relevant permits and approvals (e.g. vegetation removal, activities near waterways).
  - Erosion and Sediment Control Strategy:
    - location and design of temporary and permanent erosion and sediment control structures;
    - proposed vegetated buffer strips;
    - diversion of clean upslope runoff around work site(s) to an appropriate and safe disposal point;
    - revegetation program;
    - streambank rehabilitation near permanent roads and temporary crossings;
    - details of timing of erosion works and project staging;
    - site access controls and treatment;
    - identification of opportunities to obtain environmental improvements;
    - final landscaping and rehabilitation; and
    - maintenance program.
  - Long-term stormwater issues:
    - a statement of how the scheme relates to any existing stormwater management plan or catchment plan;
    - justification of practices with low capital costs and high ongoing costs;
    - clear identification of developer and Council funding requirements and obligations (particularly operations and maintenance costs);
    - recommendations for any further studies or investigations, if necessary; and
    - a monitoring program which includes mechanisms for incorporating the results of the program into revisions of the scheme to be undertaken at a later date by Council, or by the developer if the project has a long duration (the organisations responsible for the monitoring should be clearly identified).
- d) Soil and Water Management Plans – for Disturbed Areas greater than 2,500m<sup>2</sup>**
- i) For disturbed areas greater than 2,500m<sup>2</sup>, a Soil and Water Management Plan must be prepared for submission at the DA stage and executed in accordance with the requirements of the publication entitled - Landcom Managing Urban Stormwater 2004 (the Blue Book).
  - ii) In addition to the data requirements for an Erosion and Sediment Control Plan (as listed in section D1.3.3), the following further requirements for the Soil and Water Management Plan include:
    - location of - allotments, public open space, stormwater drainage systems, an assessment of potential public safety risk;

- existing site contours (recommended contour interval is 0.5 metres on gradients of <15%, one metre on gradients of 15 to 30% and two metres for slopes >30%);
- all necessary erosion and sediment control best management practices (location and general diagrammatic representations);
- engineering details with supporting design calculations for all necessary sediment basins. This is to include soil testing to determine the type of basin required and whether flocculation will also be required;
- basic details of any other facilities proposed to be included as part of the development or works including:
  - constructed wetlands;
  - gross pollutant traps;
  - trash racks or trash collection/ separator units;
  - "water sensitive" stormwater treatment measures such as bioretention systems; and
  - vegetated swales and infiltration measures;
- inspection and test plans should also be presented as an element of the SWMP identifying:
  - the activity to be undertaken;
  - the standard or specification compliance that is being sought;
  - the relevant acceptance criteria the method of inspection and/or test and the frequency at which it is to be performed;
  - who is responsible for carrying out the inspection and/or test; and
  - what documentation is to be produced as a record of the inspection and/or test;
- any "witness" or "hold points" that are required during the works should also be identified.

- iii) The procedures for preparing Soil and Water Management Plans are quite involved and guidelines are set out in Landcom's publication entitled "Managing Urban Stormwater, 2004" (the Blue Book), and must be prepared by a suitably experienced and qualified person.

**Note 1: Any materials or waste being delivered to or from the site must be stored within the confines of the site itself. If for some reason, materials or waste are required to be stored on Councils road reserve or any other adjacent public reserve, a lease will need to be obtained from Council prior to using the reserve.**

**Note 2: All development is to also comply with the provisions of Components C6 (Minor Earthworks Requirements) and C8 (Integrated (Natural) Water Cycle Management) of this DCP.**

#### e) Erosion and Sediment Control for Development on Rural Lands

- i) A range of significant environmental issues may occur as a consequence of changes in rural land use, particularly where these changes occur on constrained lands. An agricultural use, for example that involves the construction of buildings located on or adjacent to steep lands may be prone or subject to erosion, particularly if the land is part of an erosional landscape.
- ii) Dwellings, hothouses, igloos and other major buildings, and access roads within properties are to be suitably located to minimise environmental disturbance and avoid recognised hazards.
- iii) The location of dwellings so that all weather access is available from the road to the dwelling.

- iv) Any agricultural activities are to be undertaken in a manner that minimises the potential for erosion and sediment to occur on the subject lands as well as any neighbouring properties.

*Note: Council encourages all landholders with land having recognised erosion hazards and/or being affected by degradation (e.g. gully erosion) to contact the NSW Soil Conservation Service for advice on suitable forms of mitigation and rehabilitation, prior to the lodgement of a DA, or the commencement or continuance of an activity. This advice should be stated in the DA (if required) and will be considered in the DA assessment process by Council. Using this advice will be of benefit to all landholders particularly as it may avoid costly and damaging mistakes; and minimise conflict between neighbours.*

- v) Many agricultural activities do not require development consent e.g. intensive plant agriculture; however certain landform modification undertaken in association with the agricultural activity may require development consent (see Component C6 of this DCP). Therefore, in some instances agricultural activities may require additional soil erosion and sediment control considerations and one or more of the following mechanisms may be appropriate. In all cases the maintenance of the controls is critical to their effective functioning.
- vi) If there is existing vegetation on the site, a vegetation buffer (minimum two metres wide) should be maintained down-slope of the activity. If this vegetation buffer is endemic bushland, or the site adjoins bushland, care is to be taken to ensure that any plants being cultivated as part of the agricultural activity do not spread into the bushland (refer to Component B8 of this DCP for vegetation use limitations).

- vii) Where there is no existing and effective vegetation buffer, turf strips (minimum two metres wide) placed along the down-slope boundary of the agricultural activity to aid in filtering stormwater runoff may provide a satisfactory alternative, depending on site slope conditions. In areas adjoining bushland, care is necessary to ensure that turf grasses or hydro-mulch material do not spread into the bushland - either local species or sterile seed/grass stock should be used.

- viii) Appropriate sediment traps are to be provided as necessary so that no soil leaves the site.

## D1.3 STORMWATER

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### D.1.3.1 Objectives

1. To maintain stormwater runoff in its natural catchment by the most direct and appropriate route.
2. To protect adjacent properties from the impacts of excessive stormwater runoff.

### D1.3.2 Controls

- i) All stormwater is to be directed to the street drainage system or to an inter-allotment drainage easement where available.
- ii) Surface water is not to be concentrated and directed to neighbouring properties.
- iii) Stormwater to kerb connections are to be via kerb adapter units.
- iv) Fencing should not obstruct overland flows of water.

**Notes:**

1. All development is to also comply with the provisions of Coffs Harbour City Council's Water Sensitive Urban Design Policy and Components C6 and C8 of this DCP.
2. When providing for new development, inter-allotment drainage via easements may be required.