Overview of ESC Best Practice Documents

MISCELLANEOUS TOPICS

Introduction

The following is an overview of the Best Practice Erosion and Sediment Control documents published by the Australasian Chapter of the International Erosion Control Association (IECA).

A total of 6 books make up the full suite of documents, those being:

Book 1: Chapters (hard copy for purchase)

Book 2: Appendices A to G (hard copy for purchase)

Book 3: Appendices H to N (hard copy for purchase)

Book 4: 136 individual fact sheets on various ESC techniques (electronic PDF files)

Book 5: Erosion and Sediment Control – A Field Guide for Construction Site (free PDF file)

Book 6: 136 individual A4 standard drawings of various ESC techniques (free PDF files)

The publication has been divided into 6 books to allow individual practitioners to readily access the information relevant to their working conditions, and to allow for the review and updating of individual sections without having to review the whole document.

Each book has been developed for a particular audience. The following table outlines which books are likely to be of most relevance to various professional groups.

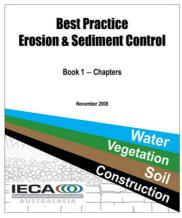
Profession	Books likely to be of most relevance
Governments	 Book 1, Ch-4 for the setting of design standards Books 2 & 3, App-G, H, I & L for model codes of practice
Planners	Book 1, Ch-3 for planning issues and data collection
Designers of ESC Plans	 Book 1 for ESC principles and default design standards Book 2 for specific design procedures and guidelines Book 3 for the application of ESC to specific site conditions Book 4 fact sheets for design principles and selection of appropriate ESC techniques for specific site conditions Book 6 standard drawings for attachment to contracts
Project Managers and Construction Industry Personnel	 Book 1, Ch-2 & 6 for principles of ESC and site management Book 4 fact sheets listed under the "Miscellaneous" heading Book 5 field guide for 'preliminary' advice on issues not adequately addressed within the ESC plan Book 6 standard drawings for materials, installation, maintenance and removal specifications on ESC techniques
Building Industry	 Book 3, App-H for design guidelines and model code of practice Book 4 building site fact sheets listed under "Miscellaneous" Book 6 standard drawings ESC-1, ESC-2, ESC-3, ESC-4 & ESC-5 for installation specifications on ESC techniques
Service Installers Site inspectors &	 Book 1, Ch-2 for principles of ESC Book 3, App-L for design guidelines and model code of practice Book 4 fact sheets listed under the "Miscellaneous" heading Book 5 field guide for 'preliminary' advice on issues not adequately addressed within the ESC plan Book 6 standard drawings for materials, installation, maintenance and removal specifications on ESC techniques All books
Regulators	■ All DOOK2

Books 1 to 3

Books 1 to 3 are available only as hard copy documents, they are referenced as:

IECA 2008, "Best Practice Erosion & Sediment Control". International Erosion Control Association, (IECA) Australasia Chapter, Picton, NSW. ISBN: 978-0-9806146-0-2

The three books are sold as a set and can be purchased from IECA (Australasia). An order form can be downloaded from: www.austieca.com.au



IECA (2008) - Book 1

Pages = 269

Figures = 23

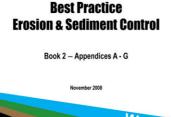
Book 1: Chapters

- 1. Introduction
- 2. Principles of erosion and sediment control
- 3. Site planning
- 4. Design standards and technique selection
- 5. Preparation of plans
- 6. Site management
- 7. Site inspection
- 8. Bibliography

Available for purchase from IECA www.austieca.com.au

Tables = 75

Photos = 0





IECA (2008) – Book 2

Pages = 251

Figures = 81

Book 2: Appendices

- A. Construction site hydrology and hydraulics
- B. Sediment basin design and operation
- C. Soils and revegetation
- D. Example plans
- E. Soil loss estimation
- F. Erosion hazard assessment
- G. Model code of practice

Available for purchase from IECA www.austieca.com.au

Tables = 98

Photos = 0

Best Practice Erosion & Sediment Control

Book 3 - Appendices H - N



IECA (2008) - Book 3

Pages = 213

Figures = 109

Book 3: Appendices

- H. Building sites
- I. Instream works
- J. Road and rail construction
- K. Access tracks and trails
- L. Installation of services
- M. Erosion processes
- N. Glossary of terms
- X. Index (Books 1 to 3)

Available for purchase from IECA

www.austieca.com.au

Tables = 41

Photos = 0

Various sections of Books 1 to 3 are available in WORD format for free download from the IECA web site (www.austieca.com.au) to assist designers in the development of ESC plans, and to assist regulators in the development of policies and codes of practice.

The following documents are available as free downloads:

- Best Practice E&SC Order Form
- Index for Books 1 to 3
- ESC Standard Symbols (white background)
- ESC Standard Symbols (transparent background)
- Example Inspection and Test Plan
- Example Non-Conformance Report
- Plan Checklist
- Sediment Basin Construction Certification
- Sediment Basin Construction Specification
- Site Inspection Checklist Building Site
- Site Inspection Checklist Detailed Inspection
- Site Inspection Checklist Weekly Inspection
- Site Planning Checklist
- Example Site-Based Stormwater Quality Management Plan

The following documents are only available for those that have purchased Books 1 to 3 (see 'Log in' link bottom right of screen):

- Erosion Hazard Assessment Form
- Example Development Approval Conditions
- Example ESCP Technical Notes
- Model Code of Practice Building Sites
- Model Code of Practice General Works
- Model Code of Practice Instream Works
- Model Code of Practice Service Providers

Book 4: ESC Technique Fact Sheets

The fact sheets have been developed specifically for those involved in the design and specification of ESC techniques, and development of Erosion and Sediment Control Plans.

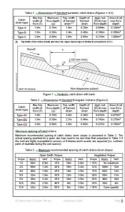
Initially, the fact sheets will be released as 'Catchments & Creeks Pty Ltd' publications, available for purchase from:

www.catchmentsandcreeks.com.au

The intent is for each fact sheet to eventually become available for download from the IECA web site (free to those that purchase Books 1 to 3) once each fact sheet has been reviewed by IECA (Australasia).

www.austieca.com.au





136 fact sheets are grouped under the following categories:

Drainage control measures

Erosion control measures

Sediment control measures

De-watering sediment control measures

Instream flow and sediment control

Miscellaneous topics

Pages = 861

Figures = 444

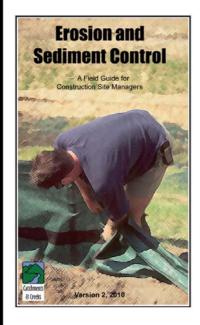
Tables = 405

Photos = 789

Book 5: Erosion and Sediment Control – A Field Guide for Construction Site Managers

The field guide has been developed as an easy-to-use pictorial guide to the application of erosion and sediment control measures on typical construction sites. It is an essential reference document for all site inspectors, project managers and leading hands.

Book 5 is currently available as a free PDF download from both the IECA (Australasia) and Catchments & Creeks' web sites. A high quality version (suitable for printing) is available on request from Catchments & Creeks Pty Ltd.





Contents:

Impacts of soil erosion and sediment runoff
Site management
Site inspection and monitoring
Vegetation management
Soil management
Management of dispersive soils

Management of temporary access roads
Temporary site shutdowns
Site rehabilitation
Drainage control measures
Erosion control measures
Sediment control measures
De-watering sediment control
Glossary of terms

Pages = 84 Figures = 41 Tables = 24 Photos = 201

Book 6: Standard Drawings

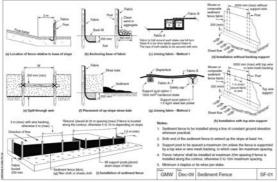
Book 6 consists of 136 individual A4 standard drawings of various ESC techniques. The standard drawings consist of diagrams displaying typical installation layout and dimensions (e.g. below left), and specifications for the materials, installation, maintenance and removal (e.g. below right). Standard drawings are available for 92 different ESC techniques.

Initially, the standard drawings will be released as 'Catchments & Creeks Pty Ltd' documents available as free PDF files from:

<u>www.catchmentsandcreeks.com.au</u>

The intent is for the standard drawings to eventually become available for free download from the IECA web site once each standard drawing has been reviewed by IECA (Australasia).

www.austieca.com.au







Tables = 4 Photos = 0

Pages = 136

Listing of Book 4 ESC Fact Sheets:

Drainage Control Techniques:

Sub-category	Code	Title
Chute & Channel Lining	CCS	Cellular Confinement Systems
	ECM	Erosion Control Mats
	GC	Grass Linings
	GEO	Geosynthetic Linings
	HA	Hard Armouring
	RM	Rock Mattress Linings
	RR	Rock Linings
	TRM	Turf Reinforcement Mats
Catch Drains & Chutes	CD1	Catch Drains Part 1: General Information
	CD2	Catch Drains Part 2: Earth-lined
	CD3	Catch Drains Part 3: Grass-lined
	CD4	Catch Drains Part 4: Geotextile-lined
	CD5	Catch Drains Part 5: Rock-lined
	CH1	Chutes Part 1: General information
	CH2	Chutes Part 2: Synthetic linings
	CH3	Chutes Part 3: Grass-lined
	CH4	Chutes Part 4: Rock mattress linings
	CH5	Chutes Part 5: Rock-lined
Other Drainage Structures	DCG	Drainage Control - General
	RCD	Check Dams
	DC	Diversion Channels
	ES	Emergency Spillways (sediment basins)
	ED	Energy Dissipaters
	СВ	Flow Control Berms
	DB1	Flow Diversion Banks Part 1: General
	DB2	Flow Diversion Banks Part 2: Earth slopes
	DB3	Flow Diversion Banks Part 3: Grass slopes
	LS	Level Spreaders
	os	Outlet Structures
	SD	Slope Drains
	TBC	Temporary Watercourse Crossing: Bridges
	TCC	Temporary Watercourse Crossing: Culverts
	TD	Temporary Downpipes
	TFC	Temporary Watercourse Crossing: Fords

Erosion Control Techniques:

Sub-category	Code	Title
Natural Materials	IEC	Instream Erosion Control - General
	Gravel	Gravelling
	MH	Heavy Mulching
	M	Light Mulching
	R	Revegetation
	MR	Rock Mulching
	SX	Structural Soils
	SR	Surface Roughening
Synthetic Products	EC	Erosion Control - General
	BFM	Bonded Fibre Matrix
	E-CCS	Cellular Confinement Systems
	CBT	Compost Blankets
	Dust	Dust Control
	ECB	Erosion Control Blankets
	MT	Mulch Tackifiers
	Poly	Polyacrylamide
	SBS	Soil Binders

Sediment Control Techniques:

Sub-category	Code	Title
Entry-Exit Controls	Exit	Construction Exits - General
	R-Exit	Construction Exits - Rock Pads
	V-Exit	Construction Exits - Vibration Grids
	W-Exit	Construction Exits - Wash Bays
Sheet Flow Controls	SCS	Sediment Control Systems for Sheet Flow
	BZ	Buffer Zones
	CFB	Compost Filter Berms
	FF	Fence Filter
	FR	Fibre Rolls
	GFS	Grass Filter Strips
	MB	Mulch Filter Berms
	SF	Sediment Fence
Minor Concentrated Flow	SMC	Sediment Traps for Minor Concentrated Flows
Controls	OX	Stormwater Outlet Sediment Traps
	CDT	Check Dam Sediment Traps
	CST	Coarse Sediment Traps
	EST	Excavated Sediment Traps
	FTD	Filter Tube Dams
	MST	Modular Sediment Traps
	SGB	Stiff Grass Barriers
	SBB	Straw Bale Barriers
	UST	U-Shaped Sediment Traps
Stormwater Inlet Controls	SIS	Stormwater Inlet Sediment Traps
	PC	Pipe and Culvert Inlet Sediment Traps
	BA	Block & Aggregate Inlet Protection
	CFS	Compost-Filled Filter Socks
	EX	Excavated Drop Inlet Protection
	FD	Fabric Drop Inlet Protection
	FW	Fabric Wrap Drop Inlet Protection
	FS	Filter Socks
	GB	Gully Filter Bags
	OG	Kerb Inlet Sediment Traps - On-grade inlets
	SA	Kerb Inlet Sediment Traps - Sag inlets
	MA	Mesh & Aggregate Drop Inlet Protection
	RA	Rock & Aggregate Drop Inlet Protection
Type 1 & 2 Controls	SCC	Sediment Control Classification System
	STG	Type 1 & 2 Sediment Traps - General
	RFD	Rock Filter Dams
	SBR	Sediment Basin Riser Pipe Outlets
	SB	Sediment Basins
	SS	Sediment Trench
	SW	Sediment Weirs

De-Watering Sediment Control Techniques:

Sub-category	Code	Title
Filters	BF	Bag Filters
	CF	Cartridge Filters
	FB	Filter Bags and Filter Tubes
	D-FF	Filter Fence (De-watering)
	FP	Filter Ponds
	D-FTD	Filter Tube Dams (De-watering)
	GFB	Grass Filter Beds
	SP	Sump Pits
Ponds & Tanks	DW	De-watering Overview
	MTU	Mobile Treatment Units
	PST	Portable Sedimentation Tanks
	SEP	Settling Ponds
	STP	Stilling Ponds

Instream Flow and Sediment Control Techniques:

Sub-category	Code	Title
Flow Diversion Measures	IFC	Instream Flow Controls
	Dam	Cofferdams
	FSC	Floating Silt Curtains
	Log	Geo Logs (coir logs)
	IB	Isolation Barriers
	SFB	Sediment Fence Isolation Barriers
Sediment Control	ISC	Instream Sediment Control Systems
Measures	I-FTB	Filter Tube Barriers (instream)
	I-MSB	Modular Sediment Barriers (instream)
	I-RFD	Rock Filter Dams (instream)
	SFC	Sediment Filter Cage
	I-SW	Sediment Weirs (instream)

Miscellaneous Topics:

Sub-category	Code	Title
Miscellaneous Topics	D	Conditions of Use of Fact Sheets
·	Key	Discussion on Fact Sheet Title Box Headings
	LFS	Listing of Fact Sheets
	LSD	Listing of Standard Drawings
	BS1	Building Sites Part 1: General
	BS2	Building Sites Part 2: Hazard Assessment
	BS3	Building Sites Part 3: Site Inspection Form
	BS4	Building Sites Part 4: Standard Drawings
	CE	Construction Equipment
General Construction	BC	Bridge and Culvert Construction
Practice	CR	Construction Access Roads
	IS	Installation of Services
	MHG	Material Handling
	OST	On-site Soil Testing
	SM	Site Management
	Soil	Soil Management
	SPM	Stockpile Management
	VM	Vegetation Management