ESC Fact Sheets	
Title	**Description**
Block & aggregate drop inlet protection	Block & Aggregate Drop Inlet Protection systems consist of a ring of hollow, concrete blocks secured (ie. staked) around a stormwater inlet with at least one block on each side turned sideways to allow water to flow through the void. Wire mesh is secured over the open voids, then clean aggregate is placed around the blocks as a filter medium.
Bonded fibre matrix	A form of erosion control, Bonded Fibre Matrix (BFM) is the application of wood fibre, and/or recycled paper, and/or bagasse, and/or sugarcane toppings, and/or milled straw through a hydro-seeder.
Buffer zone	Buffer Zones are corridors of vegetation that separate disturbed land from an adjacent watercourse, protected bushland or other sensitive areas. Typically used as a supplementary sediment control measure down-slope of construction activities, stockpiles, access roads and other forms of strip construction.
Catch drain	Catch drains are small open channels formed at regular intervals down a slope, or immediately up-slope or down-slope of a soil disturbance.
Cellular confinement system	A channel and chute surface lining consisting of expandable, three-dimensional, open honeycomb-like mesh manufactured from a synthetic material and filled on-site with soil, sand, small rocks, or low slump concrete.
Check dam	Check dams may be constructed from semipervious or impervious materials, typically rock or sandbags filled with a variety of porous materials.
Check dam sediment trap	Check Dam Sediment Traps may be constructed from either semipervious or impervious materials typically, medium size rock, sandbags, or compost-filled socks.
Chute	A steep, open channel drain passing down an embankment with a gradient usually steeper than 10%.
Coarse sediment trap	Two of more aboveground, sediment stilling chambers formed from Sediment Fence, often used to tap bulk sediment at a low point in a Sediment Fence.
Cofferdams	Cofferdams are usually small earth or sandbag dams constructed across the bed of a channel or stream; however they can also be large deepwater structures.
Compost berm	A sediment-trapping system that utilises a small self-supporting embankment of well-composed organic matter to both pond (i.e. gravity settlement) and “filter” sediments from approaching sheet flow.
Compost blanket	A form of erosion control consisting of surface applied high-grade compost containing selected plant seed, soil ameliorants, tackifiers, soil wetting agents, and bacteria and fungi foods.
Compost-lined filter tube	High permeability filter tube of varying lengths and diameters filled with a high quality composted material. The filter tube may be biodegradable or non-biodegradable depending on desired service life.
Construction access roads	A general fact sheet of the management of temporary construction access roads.
Construction equipment	A general fact sheet identifying various construction equipment.
Construction exit	Rock Pads consist of segment of roadway covered with crushed rock which is located at the entrance of a site access road for the purpose of trapping sediment from vehicle types.
Diversion channel	Diversion channels are formally designed temporary or permanent excavated drainage channels usually with well-defined bed and banks.

Dispersive soils	A general fact sheet summarising the problems associated with dispersive soils and their management on construction sites.
Drainage control - general	A fact sheet summarising the principles of temporary construction site drainage control.
Dust control	Dust control involves the suppression of dust particles generally in the range 0.001 to 0.1mm (1 to 100 microns).
Energy dissipation	Energy dissipation is usually required to control of bed scour immediately downstream of the structure, and/or control of bank erosion well downstream of the structure caused by an “outlet jet”, if such jetting is possible at the structure.
Erosion control blanket	A biodegradable or synthetic blanket placed (rolled) on the surface of an erodible material. Blankets form part of the generic product range termed “Rolled Erosion Control product” (RECP).
Erosion control - general	A fact sheet summarising the principles of temporary construction site erosion control.
Erosion control mats	A channel and chute surface lining consisting of either a synthetic reinforced fabric or a biodegradable mesh made from jute or coir.
Excavated drop inlet protection	Excavated Drop Inlet Protection systems consist of an excavated pit formed around a stormwater drop inlet (field inlet) with temporary de-watering holes drilled into the drop inlet to allow the pit to freely drain.
Fabric drop inlet protection	Fabric Drop Inlet Protection systems consist of sediment fence fabric staked around the stormwater inlet structure.
Fabric wrap drop inlet protection	Fabric Wrap Drop Inlet Protection systems consist of filter fabric wrapped around the stormwater inlet grate. It is essential for the inlet grate to be completely covered with fabric and that all other flow entry points are also fully protected with filter cloth.
Fibre roll	Straw, cane mulch, or other similar fibrous materials bound into a tight tubular roll. Typically used to filter sediment from minor sheet flow.
Filter bag	Large porous geotextile bags or long tube into which sediment-laden water is pumped for the purpose of filtering medium to coarse sediment from the water.
Filter fence	A filter barrier, in the form of a fence, placed down-slope of a stockpile of material being de-watered, or down-slope of a de-watering pump outlet.
Filter pond	An enclosed sediment trap into which sediment-laden water is pumped during de-watering operations.
Filter sock	Straw, cane mulch, or other similar fibrous materials bound into a tight tubular roll. Typically used to trap sediment at stormwater inlets.
Filter tube	A long geotextile filter tube sealed at the downstream end and into which sediment-laden water is pumped during de-watering operations.
Filter tube barrier	A long geotextile filter tube sealed at the downstream end and connected to a solid open pipe installed through either an earth embankment or semi-permeable weir or embankment placed across the stream bed. Sediment-laden low-flows are directed into the open end of the pipe and then allowed to filter through the geotextile Filter Tube.
Filter tube dam	One or more parallel Filter Tubes attached to an earth dam or prefabricated distribution tank and used to filter sediment and other particulate matter from water pumped into either a dam or tank.
Floating silt curtain	Geotextile filter fabric (silt curtain) suspended vertically in a water body to separate areas of contaminated and uncontaminated water.
Flow control berms	Flow control berms typically consist of minor earth, compost or sandbag embankment placed in a manner to collect and divert minor flows.
Flow diversion bank	Flow diversion banks typically consist of a raised earth embankment normally placed along level or near level ground. Minor flow diversion berms can also be formed from tightly packed sandbags, or compost.
Geo log	Large diameter, biodegradable jute or coir log used for flow diversion and/or the protection of soil from minor wave erosion during the revegetation phase.
Geosynthetic lining	Geosynthetic linings provide protection to both temporary earth drains, and permanent vegetated and non-vegetated drainage channels and chutes.
Grass filter bed	Large areas of grass used to infiltrate and filter water pumped from de-watering operations.
Grass filter strip	One or more parallel strips of turf placed along the edge of impervious surfaces, or carefully placed and anchored (pegged) along the contour on earth

	embankments.
Grass lining	A channel and chute surface lining used for temporary and permanent channels and short, low-velocity chutes.
Gravelling	The stabilisation of broad, low gradient, earth surfaces using a mixture of relatively small size rock approximately 20 to 75mm in diameter.
Gully bag	A Gully Bag Sediment Trap is a removable, high strength, filter bag installed beneath the grate of a roadside gully inlet or field (drop) inlet.
Hard armouring	A variety of products exist including `stone pitching, concrete, bitumen and interlocking concrete armour units.
Heavy mulching	An erosion control technique consisting of the application of a thick blanket of organic matter to the soil surface sufficient in thickness to suppress weed growth.
Instream erosion control	Fact sheet summarising the forms of bank erosion and instream erosion control practices.
Isolation barrier	Isolation Barriers may consist of either a pervious or impervious barrier placed around an instream work area or other soil disturbance to reduce bed and bank erosion and water contamination.
Kerb inlet trap - on-grade inlets	An “on-grade” kerb inlet is an in-kerb stormwater inlet located on a part of a roadway that has a positive gradient such that water would flow past the inlet if the inlet was blocked or sealed.
Kerb inlet trap - sag inlets	A “sag” kerb inlet is an in-kerb stormwater inlet located at a low point in a roadway were water would collect and otherwise pond if the inlet was blocked or sealed.
Level spreader	Level spreaders consist of a level, grassed, side-flow weir (i.e. water discharges at 90 degrees to the inflow direction) constructed along the contour.
Light mulching	A form of temporary erosion control consisting of the application of a protective blanket of straw or other plant residue to the soil surface.
Mesh & aggregate drop inlet protection	Mesh & Aggregate Drop Inlet Protection systems consist of a wire mesh staked around a stormwater inlet with an embankment of clean aggregate placed against the mesh fence.
Modular sediment barrier	A solid instream filtration barrier formed from modular units wrapped in filter cloth and anchored to the channel bed.
Modular sediment trap	A solid instream filtration barrier formed from modular units wrapped in filter cloth and anchored to the channel bed.
Mulch berm	A sediment control berm formed from site-generated green mulch. Generally constructed along the contour to allow the even filtration (passing) of sediment-laden sheet runoff; however, the berms can also allow limited longitudinal flow.
Mulch tackifiers	A fact sheet summarising the use of tackifiers for the temporary stabilisation of loose mulch.
Outlet structure	Outlet Structures include wide range of outlet control devices including rock pads, rock mattress aprons, and various impact-type energy dissipaters.
Polyacrylamide	Polyacrylamide (PAM) is a polymer-based chemical surface stabiliser used for erosion control, chemical flocculation, and as a soil binder.
Portable sediment tank	A prefabricated tank usually containing one or more compartments that trap sediment and allow chemical dosing.
Recessed rock check dam	A rock check dam recessed below the surrounding ground surface.
Revegetation	The establishment of temporary or permanent vegetation over exposed soil surfaces.
Rock & aggregate drop inlet protection	Rock & Aggregate Drop Inlet Protection systems consist of a ring of large support rock placed around the stormwater inlet with a layer of either clean aggregate or filter cloth placed on the outer face of the rock doughnut as a filter medium.
Rock check dam	Check dams may be constructed from semipervious or impervious materials, typically rock or sandbags filled with a variety of porous materials.
Rock filter dam	A Rock Filter Dam consists of a rock embankment usually constructed from large uniform-sized rocks, with a filter medium placed on the upstream face of the rock embankment. The filter medium typically consists of either one or more layers of filter cloth, and/or a layer of aggregate.
Rock filter dam - instream	A rock dam constructed across a drainage channel or small watercourse. The dam is formed primarily from coarse rock with a filter layer on the upstream face.

Rock lining	A form of scour protection used on the bed and banks of drainage channels, chutes, and spillways.
Rock mattress lining	A channel and chute surface lining used in high flow velocity locations such as sediment basin spillways, permanent drainage chutes, and energy dissipaters.
Rock mulching	Rock mulching is the application of a thick blanket of rocks, aggregate or gravel on the soil surface used for weed and soil-moisture control in garden beds and for the stabilisation of overland flow paths passing through garden beds.
Rock pad	Rock Pads consist of segment of roadway covered with crushed rock which is located at the entrance of a site access road for the purpose of trapping sediment from vehicle types.
Sandbag check dam	Check dams may be constructed from semipervious or impervious materials, typically rock or sandbags filled with a variety of porous materials.
Sediment basin	Sediment basins are used to settle sediment from contaminated water. They can be permanent or temporary structures and are usually placed at or near the lowest area of disturbance as the last line of defence for sediment control.
Sediment control - general	A fact sheet summarising the principles of temporary construction site sediment control.
Sediment fence	A sediment fence consists of specially designed and manufactured woven fabric attached to support posts and used to temporarily pond sediment-laden, sheet flow runoff to induce gravitational settlement of the entrained sediment.
Sediment fence isolation barrier	Double sediment fence staked around the disturbance in a streamlined manner forming a quiescent water chamber suitable for the settlement of fine sediment particles.
Sediment filter cage	Filter Cages consist of a prefabricated steel frame and wire mesh cage anchored to the bed of a channel and filled with filter material such as straw bales.
Sediment trap	General name given to a Type-2 excavated sediment containment systems, incorporating most Rock Filter Dams, Settling Ponds, Sediment Weirs and Sediment Trenches.
Sediment trench	A Sediment Trench primarily consists of an excavated sediment collection pit. The pit may be free draining in which case the outflow structure usually consists of either a Rock Filter Dam or Sediment Weir.
Sediment weir	Sediment Weirs consist of two or more parallel wire mesh fences supporting a filter medium such as clean aggregate or straw bales. Typically used as a Type-2 sediment trap, but may, in exceptional circumstances, act as an outlet structure for a Type-1 “dry” sediment basin.
Sediment weir - instream	Sediment Weirs are formed by constructing two or more parallel wire mesh fences across the channel, placing a flow control filter medium between the fences, then lining the upstream fence with filter cloth or an aggregate filter.
Settling pond	Typically a temporary, free-draining above-ground pond formed by an earth embankment, however it can be set below ground effectively making it similar to a dry Sediment Basin.
Site management	A fact sheet summarising the general priciples of site management with respect to erosion and sediment control.
Slope drain	Slope drains (also known as Drop Pipes) consist of a flexible, prefabricated, solid-wall or lay-flat pipe, anchored to the side of an embankment, with a stabilised inlet and outlet (Outlet Structure).
Soil binders	Soil binders are a form of chemical surface stabiliser and/or soil-bonding agent applied to exposed soil surfaces to control erosion.
Stiff grass barrier	A coarse sediment trap formed by the establishment of a row or several rows of tall, stiff grass plants across a drainage channel or overland flow path.
Stilling pond	Typically a temporary, non-free-draining above-ground pond formed by an earth embankment, however it can be set below ground effectively making it similar to a wet Sediment Basin.
Stockpile management	A fact sheet on the general management of soil stockpiles.
Straw bale barrier	Straw bales (not hay or lucerne) staked tightly and wrapped in filter cloth to form a permeable barrier across a drainage channel.
Structural soil	A manufactured aggregate-soil mixture that produces a soil profile resistant to compaction caused by light traffic movement.
Sump pit	An excavated pit used to collect and filter contaminated runoff. A perforated vertical standpipe is placed in the centre of the excavated pit prior to

	backfilling with clean aggregate. Filtered water can then be pumped from inside the standpipe to a suitable discharge point.
Surface roughening	The roughening of exposed soil slopes with horizontal groves running across the slope. It is different from “contour furrowing” and “contour ripping”, which are often used as a land management tools in rural areas.
Temporary bridge crossing	A temporary bridge crossing consisting of suspended beck or floating pontoon used to provide all weather access across a watercourse or drainage channel, or to provide a trafficable bypass route during the replacement of an existing watercourse crossing.
Temporary culvert crossing	Temporary culvert crossings are commonly formed from recycled concrete or steep pipes used to provide dry weather access to a construction site, or to provide a traffic bypass route during construction of a permanent crossing.
Temporary downpipe	Temporary solid or flexible pipe connected to the roof gutter.
Temporary ford crossing	A ford is a shallow place in a stream where the bed may be crossed by traffic, typically used to provide very low traffic volume, dry weather access to a construction site. Fords are generally impassable during wet weather.
Triangular ditch check	A check dam formed from free-standing porour plastic mesh.
Turf reinforcement mat	Turf Reinforcement Mats (TRMs) usually consist of either a two-dimensional or three-dimensional mesh made from synthetic materials, or a combination of both synthetic and biodegradable materials. They can be either laid on the surface of the channel or buried just below the surface.
Turfing	The use of pre-grown turf (sod) to establish a grassed surface.
U-shape sediment trap	A U-shaped sediment trap formed from sediment fence fabric and used to trap sediment in minor drains and roadside table drains.
Vibration grid	Vibration Grids typically consist of prefabricated metal grids or an in-situ “Cattle" grid arrangement used to prevent sediment being released onto public roads via the entry or exit road.
Wash bay	Excavated, concrete lined, water filled pond of sufficient length to allow at least one rotation of truck wheels used to prevent sediment being released onto public roads via the entry or exit road.