

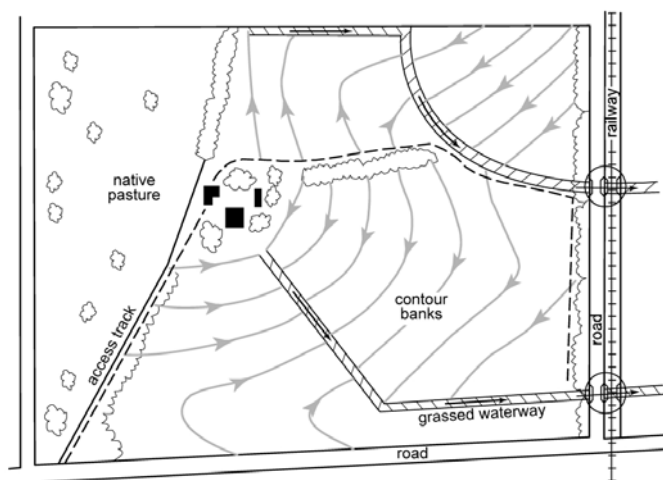
## Soil conservation planning in cropping lands

For the control of erosion in cropping lands important principles to consider are:

- to use land in accordance with its capability
- to protect the soil surface with a growing crop, stubble from the previous crop, or pasture
- to control runoff.

This fact sheet deals with the planning that is required to implement runoff control measures in cropping lands.

On sloping lands, contour banks are used to intercept overland flows and divert them into grassed waterways that safely carry runoff downhill until it reaches a natural drainage line. On flood plains subject to erosive flooding, strip cropping is used to reduce the velocity of flood flows by encouraging them to spread across the floodplain.



Contour bank layouts require careful planning

### Why is planning needed?

Implementation of an effective runoff control layout requires careful planning. This involves consideration of soil types, current use and management of the land and the existing paddock layout. The planning process also provides opportunities to improve the overall property layout to achieve greater efficiencies in managing the property.

A key element of a soil conservation plan is to determine how runoff flows through the catchment. This involves the coordination of flow from one property to another and across roads, railway lines and tramlines in sugar cane areas. Utilities such as pipelines and underground cables also need to be taken into account.

Soil conservation planning is based on the principle that a property should accept the runoff from higher land that it would receive under natural conditions. Situations

should be avoided where runoff is diverted to another property or along a road reserve away from the natural flow patterns.

While the above principle is generally easy to apply, there are occasions when the manner in which the land was originally subdivided may lead to some debate as to how runoff should be handled. Such situations are easily handled when neighbours are cooperative. However, the situation becomes more complex if neighbours are in dispute as to how runoff should be coordinated.

### Soil Conservation Act 1986

The *Soil Conservation Act 1986* allows for the approval of soil conservation property plans to ensure the coordination of runoff to control erosion.

The Act allows for two types of plans:

- property plans
- project plans.

### Property plans

An approved property plan is a plan approved under the provisions of the *Soil Conservation Act 1986*. The plan consists of a map and specifications for the soil conservation structures and practices necessary to control erosion. It may cover the whole of a property or just part of it.

The Act does not require that a plan be prepared and approved for any particular situation. However, it is recommended that a property plan be prepared for approval wherever proposed soil conservation works will have an effect on neighbouring property.

### Benefits

There are three principal benefits to having a property plan approved:

- runoff flow between adjoining properties is coordinated—the runoff pattern cannot be casually changed even if a property changes hands, however, formal amendment of a plan is possible
- objections from neighbours who do not agree with the proposed soil conservation measures can be dealt with through the plan approval process
- the Act provides that a landholder is not liable for any damage or injury that another party may claim is the result of soil conservation measures being implemented, as long as the measures are in accordance with the approved plan.

## Property plan approval process

A plan is developed in consultation with the landowner, neighbours affected by the plan and other relevant authorities such as those responsible for roads, railway lines and tramlines in sugar cane areas.

The Act defines where a proposed plan is deemed to affect other land. Generally, land is affected if the implemented plan will change or concentrate the runoff flow pattern between the land covered by the plan and adjoining land, or land separated from it only by a road.

After the plan has been finalised, the affected landholders and authorities may indicate their agreement by signing their acceptance of the plan that can then be approved.

If one or more landholders do not agree to the plan, it may be publicly advertised. The plan is opened for public inspection for a minimum of 21 days. Determinations are made on any objections that are submitted. Objectors may, within 21 days, lodge an appeal against such a determination with the Land Court. The plan may then be approved or rejected in accordance with the final ruling.

## Legal implications

Where runoff flow is not in accordance with an approved property plan, a runoff coordination notice may be issued requiring an owner to take appropriate action to discharge or receive runoff in accordance with the plan. Failure to comply with a notice can result in the issue of a court order to comply and/or a fine.

## Project plans

The project planning provisions of the Act are intended for the planning of a group of properties in a catchment. They are also used where key soil conservation works (community works) are proposed to be the responsibility of a statutory authority.

Project plans usually cover around 10 to 20 properties. Most project plans have been prepared for the eastern Darling Downs and cane growing districts in the Kolan and Isis shires near Bundaberg.

## Project plan approval process

A project plan is prepared in consultation with individual owners and representatives of local authorities and other relevant government agencies. The plan is opened for public inspection for a minimum of 21 days.

Determinations are made on any objections that are submitted. Objectors may, within 21 days, lodge an appeal against such a determination with the Land Court.

Depending on the outcome of any appeals, a project plan may then be submitted to Governor in Council for approval.

## Legal implications for project plans

As with approved property plans, approved project plans are binding on all present and future owners and the Crown. A soil conservation order can be issued requiring an owner of land to comply with a project plan. Failure to comply with a soil conservation order can result in the issue of a court order and/or a fine. Alternatively, the Director-General of DERM can take whatever action is necessary to ensure compliance with the plan, and the owner is liable for the expenses incurred.

## Plan amendment or revocation

Both approved property plans and project plans can be modified to accommodate circumstances that differ from those applying at the time of approval. Plans may be amended or their approval may be revoked. This involves similar procedures to those used in the initial approval process.

## Further information

For more information on soil erosion, visit your nearest Department of Environment and Resource Management (DERM) business centre or refer to additional fact sheets and *Soil conservation measures – Design manual for Queensland* (enter 'design manual' in the search box), which can be found on DERM's website <[www.derm.qld.gov.au](http://www.derm.qld.gov.au)>.

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For general enquiries contact the  
Queensland Government call centre 13 QGOV (13 74 68)  
or visit [www.derm.qld.gov.au](http://www.derm.qld.gov.au)