

Appendix B– LEGAL AND SAFETY ISSUES

B.1 Introduction

In some cases, it may be necessary to obtain licences or permits for farm dams from state and local governments. There are also issues regarding public safety and public liability that should be considered in some circumstances.

B.2 State Government Licensing (NRM)

In Queensland, the Department of Natural Resources and Mines (NRM) has a number of licensing or permit requirements applicable to farm dams. These requirements are undergoing change as part of the implementation of Water Act 2000, proposed to take effect by September 2001. The local NRM resource management officer should be consulted to find out the latest requirements.

B.2.1 Water Licences

Farm Dam not on a Watercourse

Farm dams not on a watercourse are not required to have a water licence.

One exception to this rule is if NRM establishes jurisdiction over overland flow (flow outside the bed and banks of a defined watercourse) in an area. This is not the case in the Bundaberg area at present and is not likely in the future. Currently only the Condamine/Balonne catchment of Queensland is affected by this issue.

Farm Dam on a Watercourse

A waterworks licence is required to build a dam that will interfere with the flow of water within the bed and banks of a watercourse. NRM should be contacted for information on application procedures. As part of the application procedure, a one-off development permit is required to undertake construction.

Pumping from a Watercourse

A licence to pump from watercourses is required from the Department of Natural Resources and Mines.

Definition of a Watercourse

The following is the current definition used by NRM. Inevitably, there is a degree of subjectivity in this definition and NRM staff are the final arbiters.

“**watercourse**” means a river, creek or stream in which water flows permanently or intermittently -

- (a) in a natural channel;
- (b) in a natural channel artificially improved;
- (c) in an artificial channel that has changed the course of the watercourse;

but, in any case, only at every place upstream of the point to which the spring tide normally flows and reflows therein whether due to a natural cause or an artificial barrier therein or, when the chief executive has declared by notification under this Act a downstream limit then, during the continuance in force of that notification, only at every place upstream of that limit.

“**watercourse**” includes bed and banks and any other element of a river, creek or stream that confines or contains water.

“**bed and banks**” with reference to a watercourse or lake, means land over which the water of that watercourse or lake normally flows or that is normally covered by that water whether permanently or intermittently, but does not include land abutting or adjacent to the bed or banks that is from time to time covered by floodwater.

Watercourse Discussion

If the drainage feature is a gully or depression that merely collects localised runoff after heavy rainfall it is not a watercourse. The Department exercises no control in these areas.

For the purposes of this definition, “bed” means the relatively flat and “banks” the relatively steep portions of the first mentioned land.

The definition of a watercourse includes bed, banks and all the elements of a river, creek or stream that contain or confine water. This is interpreted to include all lands between where the stream runs a banker. Where the bank on one side extends in the same feature above the level where water is flowing out of the stream the definition includes up to the top of that feature. This may include terraces in the stream but not the adjacent floodplains.

Hence, it is expected that a watercourse may impinge onto freehold as well as crown leasehold lands, particularly where a watercourse does not form the boundary of freehold or leasehold land.

It is not possible to have a single definition that precisely defines all watercourses in Queensland. Stream types across the state are most varied in size, shape and nature in line with the vast climate and topographic differences that occur across the state.

NRM field staff use their discretion based on local knowledge as to whether or not a feature is deemed to be a watercourse under this definition.

Watercourse Determination

In the process of determining whether a drainage feature is a “watercourse” for the purposes of the Water Resources Act 1989 the drainage feature must have at least some of the following attributes:

- **non tidal** - the drainage feature must be above the tidal limit as evidenced by observation or reference to tidal charts. For the purposes of determination the Mean Water High Spring (M.W.H.S.) level of tidal run is used;
- **named** - while not absolutely essential the primary drainage feature that appears on official maps and plans with a name will usually be a “watercourse”. Many of the tributaries of the primary feature may not be watercourses for the purposes of the Water Resources Act and the primary feature may not be determined to be a watercourse over its entire length e.g. in the upper reaches where only a small percentage of the catchment is upstream of a certain point;
- **flow** - this does not necessarily mean a continuous flow but some degree of permanence i.e. it does not flow only immediately after rain. Drainage features with small localised catchment areas i.e. gullies, drains etc. would have no permanence of flow and thus would seldom be classed as a “watercourse” (exceptions might include spring fed features and features with small catchments but high evenly distributed rainfall (e.g. wet tropics areas);
- **structure** - the drainage feature should be made up of a bed (i.e. relatively flat portions) usually containing erosion debris (sand, gravel etc.) and banks (i.e. a relatively steep portion). The cross section would usually be basically a “U” shape typical of rivers, creeks and streams rather than “V” shape typical of erosion gullies etc. which usually contain little erosion debris;
- **continuity** - the drainage feature should be continuous from its source to some point of discharge and not start and stop and start again with no apparent connection. Although not essential the drainage feature would normally pass through two or more properties as a distinct continuous feature;
- **resource** - the drainage feature should usually contain a sustainable resource yield of either water or quarry material (note that the water resource could be contained within the quarry material resource i.e. water in the bedsands);
- **riparian values** - the drainage feature would usually contain fauna or flora which is distinctive by its type or abundance relative to the land or floodplain adjacent.

B.2.2 Referable Dams

The Department of Natural Resources and Mines is responsible for the regulation of dams that may pose a risk to the population in the event of failure. Such a dam is known to be a 'referable dam'. The Water Act 2000 recently changed the definition of a referable dam. Under Chapter 3 of the Act, a dam will be a referable dam if:

- a) a failure impact assessment is required to be carried out **and**
- b) if that assessment states that the dam will place more than 2 people at risk if it fails.

A failure impact assessment will be required when a dam will be:

- a) more than 8 m in height and has a storage capacity of more than 500 ML **or**
- b) more than 8 m in height and has a storage capacity of more than 250 ML and a catchment area that is more than 3 times the surface area of the dam at full supply level.

Based on these conditions most of the farm dams proposed for the Bundaberg area would not be referable. For more information contact the NRM - Dam Safety Section or visit <http://www.nrm.qld.gov.au>.

B.2.3 Riverine Protection

The Water Act 2000 states a permit is required to:

- a) destroy vegetation in a water course, lake or spring
- b) excavate in a water course, lake or spring
- c) place fill in a water course, lake or spring.

This includes building a weir across a watercourse or, for example, excavating a pump chase (channel) through the side banks of a watercourse into a sump. NRM should be contacted for application procedures if required.

B.3 Local Government Licensing (Shire)

In some areas, farm dams may require approval under a shire planning scheme. Some councils may require a Development Application, supported by an Environmental Impact Statement or similar where appropriate. Development Applications are usually only required for large developments and do not extend to farm dams. Despite their lack of legislative control, most Shires have concerns about farm dam and irrigation developments that alter the flow of flood and local drainage waters.

B.4 Crown Land, Neighbouring Land and Road Reserves

Before planning the location of a dam, it is important to be sure that the dam and/or the backwater does not encroach upon Crown land or land that is part of a

neighbouring property (see Photograph B-1). Similarly, excavating or piling soil on Crown or neighbouring land without permission can become a costly mistake. The State can and will enforce the restoration of the altered land if they become aware of any such activity. This can be avoided with the preliminary research done on a BLIN Map as discussed in Chapter 2.

It is possible to get an authority to locate works on unallocated Crown land, reserves and gazetted roads. This requires a Permit to Occupy from the Department of Natural Resources and Mines, or a Lease granted by the State Government. These permits or leases are seldom granted. However, in some cases a road closure may be approved to accommodate a development.



PHOTOGRAPH B-1 – ENCROACHMENT OF DAM ON ROAD RESERVE

B.5 Safety and Public Liability

Occupational health and safety, and public liability issues should be taken into account when considering constructing and operating a farm dam. Examples of the types of actions that might be necessary to address these issues include:

- Fence excavated dams beside roads where they pose a risk to passing traffic
- Fence any dams that are easily accessible to the public.

- Minimise threat to life and property by ensuring good dam design and placement and maintaining embankments in good order.
- Erect warning signs to notify public of the danger as shown in Photograph B-2.

The comments above do not constitute legal advice and a solicitor should be consulted if there is a concern over these or similar issues.



PHOTOGRAPH B-2 – WARNING SIGN ON DAM