

Urban Development within a Rural Drainage District

Development Services Business Unit – Information Sheet 59

Background

When development is planned within a rural drainage area it is important that the following is understood and appropriate planning/design is undertaken to address the issues.

Rural drains provide a service to make land viable for agriculture. They are not designed to give flood protection to all land at all times and some inundation of land is allowed. These drains do not provide the protection required for urban development and in most cases improvements to the drainage network are needed to meet the level of service required by the change in land use.

The establishment of strategic and arterial drainage planning guidelines for development is the responsibility of the Department of Water and Environmental Regulation (DWER). Included in the guidelines is a requirement for the retention of the naturally occurring storage capacity of the floodplain of an existing drain. The internal drainage system for any development of urban or small rural life style lots within the catchment of a rural drainage district is provided to meet the level of protection required by the local government (or other service provider).

DWER, Water Corporation and local government requirements should be obtained by the developer for any development in the catchment of a rural drainage district at the preliminary planning stage to determine the detailed drainage requirements to protect the rural drainage system. The Corporation does not provide planning or advisory services to developers on matters relating to performance of subdivisions in rural areas.

Urban Development Proposals

Developers shall, at their cost and to the satisfaction of the Corporation, be responsible for ensuring that the level of service to the rural drainage district is not compromised by the outflow from a development. Development projects need to minimise discharge to, and take into account the limited capacity of, rural drains.

The design of compensating basins and drainage discharge must demonstrate that the function of the Corporation's drains will not change.

Developers shall, as a minimum, ensure the following:

- Flows to any Corporation rural drainage system, from a storm event of an average recurrence interval level of protection determined by local government, are not increased as a direct or indirect result of the development. In addition, any naturally occurring storage capacity of the floodplain of existing drains is retained. Any compensation basins and/or drains constructed in public land will become the responsibility of the local government or where this requirement cannot be met then an easement shall be provided to protect the capacity of the drainage system.
- Where the catchment of an existing Corporation rural drain is developed and the drain serves only urban or small rural life style lots the drain will be de-registered and any associated assets such as (e.g. bridges, culverts) may be transferred to the local government (i.e. there is no upstream or other rural catchment contributing flows to the drain).



- Where a Corporation rural drain exists prior to development a service will be provided by the Corporation from the existing drain at the boundary of a development, or if the development abuts an existing road reserve the downstream side of the abutting road reserve, or another point as negotiated with the local government.
- Where additional drainage infrastructure has been provided by the Corporation for flood protection purposes to urban areas the design of the internal drainage system for any development must recognise the impact of a major storm event on the flood protection works. Urban areas impacted by flood protection works must be protected from a major flood event by either upgrading that infrastructure to incorporate that event or by providing protection within the development for the impact of the event. The design of the internal drainage system shall identify and incorporate upgrades to existing flood protection as required. This will extend to the integrity of levee systems to meet the change in risk from rural to urban land. These requirements are in addition to Australian Rainfall and Runoff level of protection requirements for urban developments.
- Where an existing rural drain provides a service to rural land upstream of an urban development of the section of rural drain within a proposed development may be treated as follows:-

1. Top of Drain

Where land along a rural drain is urbanised at the top of a drain, and there is no upstream rural drainage service required Corporation will de-register the drain.

2. Middle and Lower Drain

Where land adjoining a rural drain is urbanised along or at the end of a rural drain, and there remains upstream and/or downstream rural drainage customers, the Corporation will retain an interest in the drain and one of the following requirements will apply depending on negotiations with local government.

- All costs associated with investigating, designing, constructing and upgrading any rural drain or flood protection works to protect urban development from flooding are to be met by the developer.
 - A. The rural drain and its 72 hour (1% Annual Exceedance Probability) flood path will be located within a Drainage Reserve vested in Corporation. The Corporation will be responsible for the operation and maintenance of the drain. For the Reserve to be used for the Public Open Space (POS) the Corporation may be prepared to consider a licence agreement with the local government for it to operate and maintain the drain as part of a POS area serving the urban development.
 - B. Incorporate the drain in a combined POS and Drainage Reserve vested in the local government, where easements is created over either the flood path within the reserve, provide access to the drain for Corporation to undertake works necessary for it to ensure compliance with its Water Services Licence.