Hydrologic Parameters:

A Strategy for Rural Subdivision

by

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ABSTRACT

A survey was made of 63 percent of the resident landowners in the three areas proposed by the Dumaresq Shire Council for future two and five hectare developments. Information collected from each of the residents covered such topics as collection and storage of rainwater, use of water within the house, reliability of farm dams, locality and use of groundwater resources, use of reticulated water where available and willingness-to-pay for a reticulated supply.

The collated data were used to design a strategy for subdivision based upon hydrologic parameters such as use and availability of water resources. The present use of water was used to indicate the household’s requirements hence the needs of a community based on the same life style.

Domestic use of water varied from 165 litres per person per day for households dependent totally on rainwater to 565 litres per person per day for dwellings reticulated from the Armidale supply.

Farm dams were unreliable in 88 percent of the properties surveyed while groundwater resources were expensive to exploit. Any strategy based upon a reliable water supply would have to consider:

(i) Provision of a reticulated water supply to each property in the subdivision:

(ii) Regulations enforcing minimum roof catchment areas and storage requirements based upon the local rainfall regime.

The provision of a reliable water supply is a legitimate planning criteria for subdivision of rural holdings into two and five hectare portions. It must be considered in conjunction with the provision of other essential services such as roads, electricity and telephone.
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