Water management in the rangelands

High quality, reliable water sources are critical for a sustainable pastoral industry. The Western Australian rangelands span highly diverse climates varying from the intense wet season of the north, to low intermittent rainfall in the southern and inland regions. Water resources have been of high concern in WA for decades; since 2006 state water reform has been aligning with the National Water Initiative (NWI).

Water reform

The NWI recognises the importance of increasing the productivity and efficiency of Australia’s water use, ensuring efficient water services to rural and urban communities and protecting the health of surface and groundwater systems. In WA, the principles of the water reform agenda have been derived from the state government’s three documents:

- State Water Plan 2007
- West Australia’s Implementation Plan for the National Water Initiative 2007
- Government Response to the Blueprint for Water Reform in Western Australia 2007.

These documents provide the platform for the integrated management of water in this state. The most significant change will be the replacement of outdated legislation the Rights in Water Irrigation Act 1914 (RIWI) with the Water Resources Management Act.

An uncontrolled artesian bore.
Benefits of water reform

Water reform will ensure that Western Australians have enough water for their long-term economic and social needs in a drying climate as well as protecting the environment. Other benefits include:

- better management of water resources so various, and sometimes conflicting, water demands can be met
- more accurate information about the amount of water available and how water is used
- a greater contribution to the costs of managing water resources by commercial water users
- improved water planning, allocation and use
- more efficient use of water.

Water resources management

The Department of Water manages water resources through regional water planning and allocation planning. The State Water Plan 2007 will be supported by a range of regional plans that identify regional water issues and priorities. The government has committed to a significant investigations program and this research will contribute to robust water allocation planning decisions.

Water allocation planning identifies the amount of water available while maintaining our environment and describes how this water can be shared among uses such as public water supply, industry and agriculture. Contribution of communities and stakeholders to water planning is an important part of state and regional water plans. When such planning is being conducted in your region you are encouraged to attend any workshops, information sessions or make a written submission.

A controlled artesian bore with tank, trough and solar panels which increase efficiency and enable water to be distributed elsewhere on the property.
Water for pastoralists

If your pastoral business only uses water for domestic and low-intensity stock watering, not much will change, even when the new legislation is finalised. The changes will impact most where there are competing demands for high volumes of water. We are required to ensure that water sources in such areas are protected from potential environmental, social or economic impact and thus avert any potential future interruptions to supply. Contact your local Department of Water office for up to date advice.

Water for pastoral diversification

If you have or are considering diversifying your pastoral business you will need a licence for any water use. Diversification activities might include tourist accommodation, irrigated pasture, high-intensity grazing or feedlots, horticulture, aquaculture, crops or tree farms. Licences apply to surface and groundwater resources, including artesian bores (but these vary from area to area).

On receipt of your application the Department of Water conducts an assessment varying in complexity depending on the local hydrology, availability of water, volume required, competing water usage, sustainability of proposed use and potential impact on water-dependant ecosystems. In areas where water is scarce or supply is irregular the volume of water requested in your application may be evaluated as significant enough to require you to demonstrate how you will efficiently use water and monitor your abstraction.

In such instances, you may also need a hydrological assessment to assist you to develop a water-use operating strategy which accompanies your licence as a set of management guidelines and commitments.

Protection of rivers and wetlands in pastoral areas is also an important consideration for the department when assessing diversification proposals, as certain introduced pasture species can become environmental weeds if not managed appropriately.

Contacts

If you have any questions about water, contact your regional Department of Water offices: Kununurra 08 9166 4100; Geraldton 08 9965 7400; Carnarvon 08 9941 6100; Karratha 08 9144 2000; Swan Avon Region (includes Kalgoorlie) 08 6250 8000; Esperance 08 9071 6129.

Further information about water is available at www.water.wa.gov.au