



## CONSERVATION COMMISSION OF WESTERN AUSTRALIA

### POSITION STATEMENT NO. 5

JUNE 2011

### DRAINAGE

#### Background

Because of salinity and waterlogging in properties adjoining land vested in the Conservation Commission of Western Australia (Conservation Commission), suggestions have been made to discharge water into vested land. For this reason, drainage is an increasingly relevant issue and if difficulties are not resolved they can lead to neighbour-to-neighbour problems. Some issues relating to drainage and Conservation Commission vested land include the following:

- Conservation reserves are often located in discharge areas, and wetlands in such reserves including streams and associated vegetation, are particularly vulnerable. A 1993 survey recorded the dominant class of vegetation in wetlands to be “dead trees” (Halse *et al*, 1993);
- Off-site effects which may lead to problems in reserves include altered surface hydrology (changes in the quantity and timing of water draining into the reserved land), altered groundwater flow (changes in mean water table levels and altered seasonal patterns), and altered water quality (increased nutrients, salt, silt and metal ions);
- The water, nutrients and silt which are lost from farmland are the very products essential for the maintenance of farm productivity; and
- Drains or pumps are sometimes used to reduce both waterlogging and salinity in agricultural land and sites are required into which the resulting water can be discharged or diverted through.

#### Relevant Legislation

Drainage may be controlled under several Acts and Regulations including:

- The *Soil and Land Conservation Act 1945* and *Soil and Land Conservation Regulations 1992* (which control soil conservation, drainage and catchment clearing and encourage good farming practices);
- The *Conservation and Land Management Act 1984* (CALM Act) and *Wildlife Conservation Act 1950* (which deal respectively with certain reserved lands, and with conservation on all tenures irrespective of vesting in the Conservation Commission). Some Wildlife Conservation Regulations apply specifically to nature reserves;
- The *Rights in Water and Irrigation Act 1914* (which deals with all aspects of drainage); and
- The *Environmental Protection Act 1986*.

## The Commission's Position

It is recognised that drainage or pumping can be an appropriate activity within reserves (or farmland), especially in the short term, while longer-term solutions are being devised and implemented; for example on waterlogged sites it may be necessary to undertake some drainage in order to establish trees, and trees may be useful to dewater agricultural or reserved lands.

Proposals to alter drainage into lands vested in the Conservation Commission deemed necessary for the management of that reserve are brought to the attention of the Conservation Commission by the Department of Environment and Conservation, under either the terms of a management plan or as necessary operations.

Relevant proposals on adjoining land are taken to the Conservation Commission by a referral either by the Department of Agriculture under the *Soil and Land Conservation Regulations 1992* (Notice of Intention to Drain or Pump), or by the Environmental Protection Authority.

The Conservation Commission will evaluate proposals for drainage affecting vested land and:

1. where deemed to be beneficial or neutral to the values of the reserve, the proposals may be supported;
2. where deemed detrimental to these values, the proposals would be opposed;
3. where a short-term detrimental effect is offset by a long-term gain, the proposals may be supported.

The Conservation Commission's position in each case will be communicated to the proponents, and where appropriate to the Department of Agriculture, the Department of Water, the Water Corporation, the Environmental Protection Authority, and the Department of Environment and Conservation or the Minister for the Environment.

If approved, construction may occur under the provisions of the CALM Act relating to necessary or compatible operations, or a management plan.

Proposals for evaluation by the Conservation Commission should normally:

- be prepared by an interdisciplinary group and involve the relevant Land Conservation District Committee (LCDC);
- be based on a catchment approach;
- address impacts on the conservation values of the vested land and of the receiving environment;
- evaluate a range of alternative solutions;
- consider environmental as well as economic values;
- consider long term as well as short term options;
- consider maintenance as well as construction costs;
- fairly allocate costs between beneficiaries;
- be based on proper engineering design; and
- evaluate effects on existing structure, e.g. culverts.

The Conservation Commission supports the concept that maximum water use *in situ* should be a goal for sustainable agriculture. The Conservation Commission therefore encourages the adoption of agricultural methods which minimise downstream loss of nutrients, silt, salt and water.

The Conservation Commission will continue to evaluate its role in protecting conservation values and encourages co-operation with other agencies in finding catchment-wide solutions to drainage problems.

**Reference**

Halse, S. A., Pearson, G. B. and Patrick, S., 1993. *Vegetation of depth-gauged wetland in nature reserves of south-west Western Australia*. Department of Conservation and Land Management, Technical Report No 30.