

**NATIONAL
DRYLAND
SALINITY
PROGRAM**

16/4/99

Committee Secretary
Standing Committee on Primary Industries and Regional Services
House of Representatives
Parliament House
Canberra ACT 2600

Dear Secretary

The attached submission is in response to your recent call for submissions to the above Committee to be forwarded to you by April 16, 1999.

This letter and the submission has also be forwarded by email. I would appreciate acknowledgment of receipt of this information.

Yours sincerely

Nicholas Newland
National Coordinator



The known and emerging effects of dryland salinity on infrastructure and development of Australia's regional areas.

(Submission from the National Dryland Salinity Program.)

1 Context

- a) The National Dryland Salinity Program is a national initiative jointly sponsored by the Commonwealth Government, State Governments and Australia's leading rural industries. It was established in 1993 to improve coordination of Australia's research, development and extension effort directed towards better management of dryland salinity across rural Australia.
- b) The first phase of the Program was completed in 1998. Since the establishment of the Program, the extent of impacts of dryland salinity have become better understood and appreciated. It has been long known that salinity affects the viability of many Australian agricultural enterprises.

2 Background

- a) However, it is only since the establishment of the NDSP that the extent of impact of dryland salinity on both rural and urban infrastructure (roads, buildings, bridges, pipelines), environment resources (native vegetation, wetlands, flora and fauna) and water quality for stock and domestic purposes has been more broadly realised.
- b) The impact of dryland salinity is being felt increasingly by rural communities in many regions of Australia and alarmingly, through parts of urban Australia, as well. Recent assessment of the extent of dryland salinity in Australia is that about 15 million ha are affected. It has also become apparent that in the Murray-Darling basin, about 75% of the salt accession to the river systems is from dryland sources as distinct from irrigation induced salinity.
- c) The emerging evidence is that this trend will continue to worsen for some considerable time and in some locations, will not be economically feasible to reverse.

3 NDSP planning

- a) In response to the need to understand more fully the issues of dryland salinity and in recognition of the seriousness of the issue, the partners to the Program have agreed to conduct a second phase of research, development and extension through to 2003. Investment in Phase II targets development of understanding

and tools which will support on-ground works financed by other programs, including state salinity action plans, components of NHT and closer association with transport agencies and local government.

b) The second phase intends to support:

- ◆ A wide range of communication activities;
- ◆ Research to understand better the complex interrelationships between managed ecosystems, rural landscapes and hydrogeological systems;
- ◆ Research, development and extension providing options for improved management of landscapes threatened by salinisation
- ◆ Gaining better understanding and the ability to demonstrate principles and practices enabling beneficial use or rehabilitation of salinised lands;
- ◆ Developing options for creating economic, legal social and institutional incentives and arrangements that encourage prevention of salinity and management of its impacts;
- ◆ Improving the understanding of principles and demonstrating the practices that address the cause, costs and consequences of salinity and its effects on industry, biodiversity, regional communities and governments.

4 NDSP Initiatives

a) The NDSP has recently sought expressions of interest from prospective proponents to conduct research on several items of direct relevance to the Committee's terms of reference. These include:

- ◆ assessing the efficacy of engineering techniques for management of dryland salinity,
- ◆ assessment of options for the productive use and rehabilitation of saline lands,
- ◆ local government capacity to manage dryland salinity and
- ◆ enhancing institutional support for management of dryland salinity.

a) These issues have direct relevance to several of the terms of reference. These projects are an integral part of the NDSP investment strategy. Other projects in the investment strategy include reviewing case studies to lower water tables under urban environments and designing, trying and demonstrating new and existing technologies to protect and rehabilitate infrastructure assets from salinity induced degradation.

5 Provision of follow up information

a) We believe that dryland salinity and its implications for regional development and development, maintenance and management of regional infrastructure are an emerging issue of significance to Committee deliberations.

b) Lack of time and resources prevents provision of more detail on these issues in this submission. However we would be keen to appear before the Committee and give more detailed evidence and answer questions Committee members may have.

16/4/99