

Salinity Inquiry
Submission No. 12.....

The Committee Secretary
House of Representatives Standing
Committee on Science & Innovation
Suite R1 - 116
Parliament House
CANBERRA ACT 2600

October 10, 2003

Dear Sir/Madam

Inquiry Into Coordination Of The Science
To Combat The Nation's Salinity Problem

Summary: Research and monitoring data on salinity have not been evaluated systematically, cost-effectively or comprehensively over the past three decades or so. In some instances salinity programmes have been replicated because there is no national inventory on the work undertaken so far and no national co-ordinated strategy on the problem in general.

The future management of Salinity should be the responsibility of a Statutory Authority with the principal brief to implement a 50-year strategic plan, which should be reviewed and analysed annually, and to formulate a national policy. Such an approach will obviate the current ad hoc approach in addressing discrete problems, imbalance in funding and duplication of research projects.

Background Scenario

Despite criticism from environmentalists and the conservation movement the coal mining industry has been proactive regarding salinity for many years. In 1975, for example, Utah Development Company Limited in Queensland began a water sampling programme because at that time there were no scientifically valid data for assessing the impact of mining on the environment. Details of this work and how the extent of salinity was assessed are described by Hails & Langkamp (1986).

During the 1970's and 1980's many comprehensive monitoring and research projects were initiated by the coal industry in NSW, Queensland, SA and WA in an attempt to restore, and improve upon, the pre-mining productivity of land scheduled to be disturbed by open-cut mining. The New South Wales Coal Association funded research on salinity in the Hunter River Valley in order to evaluate the generation, treatment and disposal of saline minewater.

As far as this writer is aware, the results of different projects conducted by the mining industry throughout Australia have never been analysed and collated - the establishment of a national data bank would help to rectify this situation and would be cost-effective over the long-term.

Recent Developments

Only during the past decade has greater attention been focused on salinity by Federal & State Government agencies. However, inadequate financial resources, a lack of coordinated policies and no projected long-term strategic management plan have been the major stumbling-blocks in mitigating the problem effectively.

The magnitude of the impact of salinity on the economy has been highlighted briefly on pages 4&5 of the Inquiry Information Release dated August 2003, with examples cited from WA & SA.

In addition to this information a Bureau Of Statistics Report, based on a Land Management & Salinity Survey and released in 2002, shows that more than 3300 farms and 350,000 ha. of agricultural land are subject to salinity in SA.

Furthermore, it has been forecast that NSW could lose 5 million hectares to salinity by 2050. In Queensland, almost 20% of the State's grain producing

area is at risk from dryland salinity over the same period.

In toto, about 17 million hectares of arable land, throughout Australia, will be affected by salinity over the next 50 years because existing action plans and projects are not geared to improving current farming practices. Rather, they focus on rehabilitation and do not really tackle dryland salinity(1).

If this insidious problem continues unabated there will be long-term cost increases in food production, not to mention the exponential cost to reduce salinity from spreading over larger areas.

Statutory Authority

Data on salinity programmes have not been collated at a national level and there is no plan, either strategic or management, from which to establish priorities for future research and funding - according to the complexity of a particular problem. Uneconomic, short-term political decision-making and bartering has prevailed, par excellence. For example, it has taken the Federal and West Australian Governments three years to negotiate a national action plan to investigate salinity problems in that State(2).

Thus, there is an urgent need for an organization, such as a Statutory Authority, to be established so that salinity can be coordinated and evaluated at a national level.

The Authority should be responsible for:

- * A national policy to reduce and to eradicate salinity over the next fifty years or so.
- * Formulating a 50-year strategic plan which should be reviewed and revised annually as new information and research data become available.
- * Implementing policies and strategies to access, analyse and collate all existing data stored in the archives of the mining, forestry and agricultural industries, Government departmental and university/college libraries which also have prolific research and monitoring information, consultants' reports, Environmental Impact Statements and associated publications, and other relevant information.
- * Identifying key issues and evaluating viable options to address them.
- * Establishing priorities for funding at State and regional levels.
- * Reviewing existing legislation and ascertaining whether, or not, it is economically practicable and socially acceptable in terms of community benefits.
- * Promoting a national educational programme to accommodate the concerns of diverse interest groups. Such a programme has been sadly lacking hitherto but, if implemented, would dilute the hyperbole and sensation created by the media.
- * Ensuring co-operative and interdisciplinary research projects between the agricultural, forestry and mining industries, and government research organizations like the CSIRO.
- * Implementing salinity management best practices, environmental management systems and land use policies.

The above-mentioned responsibilities can be conducted cost-effectively and efficiently, especially in an electronic age which also makes the task easier.

Conclusion

Salinity is not delineated by State boundaries - it is a national problem which must be administered by an independent organization and funded by the Federal Government and the States/Territories on a pro rata basis.

So far, too many disparate investigations have been undertaken. Many of these have been uneconomic, replicates, and have afforded minimal benefits only to the Australian community. Now is the time to think "big", but to resolve the

salinity problem correctly.

References

Hails, J.R. & Langkamp, P.J. 1986 Environmental Agenda Corporate Coal: An Australian Case Study. Publishing & Marketing Australia, 132 pp.

(1) Salinity Plan Taken With Grain Of Salt, Australian, June 6, 2002.

(2) Salinity Cash Flows, But Just A Trickle, Australian, October 6, 2003.

Yours faithfully



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