M/s Louise Gell
The Secretary
Senate Inquiry
Environment, Communications, Information Technology, and the Arts.
Parliament House
CANBERRA, ACT, 2600

### Re – Inquiry into the extent and economic impact of salinity in the Australian environment

Dear M/s Gell

I am pleased to be able to make the following comments to the above inquiry on behalf of the Central West Catchment Management Authority (Central West, NSW). Comments are framed by recent and former experience in salinity (Salt Team Leader (DIPNR) –NSW Salinity Strategy; Salinity Investigations Officer(DLWC)-NSW Salt Action Program; and Program Manager Implementation-Central West CMA).

# (a) Goals of National Programs

There have been considerable successes in Central West NSW in dealing with salinity in recent times, that are consistent with the goals of NAP, NHT & Landcare

#### **Successes**

The NSW Salinity Strategy, initiated by "a whole of government" Salinity Summit in Dubbo (2000) gained direction from the community to construct a framework of activity contained within the NSW Salinity Strategy. Field trips and pre-summit tours were conducted by agency and community groups of the Central West, as well as participation in the summit. Highlights of activity initiated include:

**Salt Teams** – The Central West Salt Team , comprised of staff from across DIPNR and NSW Agriculture achieved considerable community capacity building and sustainable NRM actions

- ☐ Training of frontline staff in State Agencies( DIPNR/ NPWS/ Agriculture/ Sydney Water) and community landcare groups in "Three-tiered salinity training"
- □ Expert advice for salinity management including CMB Blueprints, development & planning
- □ New Information including salinity investigations providing groups with priority actions for their catchment area, demonstrations of new principles, innovative ideas and methods.
- □ Urban salinity advice, training and information material development for local government.
- Capacity building via awareness and innovative relationship engagement programs.
- □ Networks- development of Central West Urban Salinity Alliance, Sustainable Farmers Network (formerly Central West Salt Farmers Network), and continued support to STIPA and Conservation Farmers Association. The landcare network has been invaluable in communication and implementation, particularly with regard to TARGET project.
- ☐ Private Agronomist training facilitated by NSW Agriculture targeted at providing skills for frontline staff (NSW`Ag & Vet/ Elders/ West Farmers Landmark)
- ☐ Accredited Training course development, and implementation

**TARGET Project** - A \$4.6 m Pilot Project to examine social & economic barriers to achieving salinity targets was conducted over 2 year project lifespan in small (2,800ha) medium (400,000 ha) and large (1.5m ha) scale catchments across the Central West. The project simultaneously looked at impediments to adoption , as well as incentive roll out options such as tenders, buying environmental outcomes, cost sharing principles and Environmental Service Ratios (ESR's). Some of the outcomes are listed below:-

- □ Different sections of communities respond to different triggers
- □ All catchments are different in biophysical issues, social structure and economic status, especially at scale differences. Small scale is influenced by social issues mainly, whereas at large scale the influence is biophysical.
- □ Need to understand the differences before you engage the community
- ☐ Impediments are not usually biophysical (they include succession planning, religion, age structure and access to farm labour)
- ☐ Individuals will only easily implement activities that do not impinge on production or social situation (ie "Landcare 10% rule" only do the easy tree-lines, demonstrations etc which is about 10% of change needed on properties); but real system change is extremely difficult.

- □ There are distinct groupings (Landcare Active/Landcare Inactive/Active Non Landcare/Inactive Non Landcare) that influence behaviour. The people who are not in landcare, but are actively doing NRM activities is often 60% of landholders, and agencies do not engage this section of the community.
- ☐ The TARGET project provided a model of how funding could be implemented with groups having a major devolved funding role, with true partnerships with agancies.

**Salinity Modelling-** Salinity models such as LUOS/ CLASS/ CATSALT have been tested in Central West for use in investment decisions . Advances using Groundwater Flow Systems (GFS) have also been made in the Central West and integrated into modelling tools. The Central West Blueprint relies heavily on this GFS approach.

**Environmental Services Scheme** - This project explored the use of market based instruments, and tested tools for assessment of environmental outcomes. Two innovative sites were established in the Central West Catchment.

# NAP projects -

- ☐ First stage of NAP investment in salinity has been rolled out in the Central West with 85% of funds on ground (03-04 Investment Funding)
- ☐ There have been a number of Interim Priority Projects that have focussed on delivery of data to fill gaps in knowledge.

### **Issues**

There have been a number of issues from recent salinity activity that impact on delivery of programs:-

- □ Salinity is a long term issue, and the perception that short term funding will "fix" the problem is unrealistic.
- ☐ Areas of catchments will remain saline, focus needs to be placed on using saline resources (Productive Use of Saline Lands)
- Outcome modelling and determinations are in their infancy. It is extremely difficult to quantitatively determine the impact of one action (eg planting tree block in upper catchment) and measure the outcome in salinity reduction in another distant part of the catchment of that action.
- □ **Responsibility** of salinity is "whole of government" and "whole of community".
- □ Capacity building has been often focussed on broad scale general delivery and not utilised people with salinity skills in program delivery. Where a specific focus has been made, significant "learning" has occurred.

### (b) Role of regional catchment management authorities

Regional catchment management authorities are tasked with a role in salinity management in an environment of :-

- □ Declining agency extension and science availability
- □ Declining real investment in NRM activities (in comparison to health, education & policing)
- Monitoring & Evaluation requirements that are expensive and time consuming to be completed in required detail
- □ New operational frameworks in NSW.

The current drought conditions are achieving a "salinity holiday" for Central West CMA in terms of achieving it's salinity targets, and recent Audit data indicate reduced modelled outcomes, but the reality is a significant salinity problem exists in the Central West that genuine partnerships of activity may have a chance of controlling.

The primary role of CMA's is to implement on ground change through on- ground investment targeted at salinity activities through NAP, NHT & Landcare Programs. To effectively fulfil this role the following support measures are clarified:-

Scarce dollars,	need to be	effectively	targeted to th	ne areas of	greatest value.

- ☐ Genuine partnerships and activity through whole of government and whole of community
- ☐ Extension & training services need to be provided, and resourced
- Outcome based monitoring is a long term goal, but needs to be practically implemented in short term
- Targets need to reflect current knowledge, and that they are not aspirational goals

- ☐ There is a high priority with vegetation management (particularly clearing of native vegetation). Programs need to reflect soil health issues, as well as catchment yield (water)
- □ Capacity programs involve people. If you just rely on dollars and information alone , no change will occur. You need to engage people to create change !!
- ☐ Issue of land salinity/salt load / EC (salinity) needs to be understood by the community and agencies. If you treat land salinity or attempt to reduce salt load, you can quite often increase salinity (concentration). The items are not mutually exclusive.
- □ "Turf wars" between government agencies have been a feature of program areas in the past. The role of the CMA is to find common ground and seek solutions

# (c) Recommendations to assist regional managers & landholders

The following are identified to assist communities with salinity management.

### Need

- ☐ Identifiable state level focus for CMA salinity activity ( ie funded programs that all CMA's can contribute and network with)
- People focussed programs, as change involves people. We need to understand the differences between people, and then offer programs that suit that group of people.
- ☐ Integration of biophysical/ social/ economic activity in programs at one time. We tend to treat issues in isolation.
- ☐ Measures that assist us to transparently and quantitatively allocate scarce resources to the most appropriate areas (not just biophysical area, could be social impediment that is limiting uptake)
- □ Networks and genuine partnerships to communicate and extend salinity information. These may take the form of CMA / Agency alliances to use scarce people and financial resources.

Thank you for the opportunity to present this information, and if the need arises, I would be happy to present this information in person.

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for & on behalf of :-Central West Catchment Management Authority