

NSW Farmers
Assoc. Orange,
Molong, Gulgong

SUBMISSION NO. 20

C/O PO Box 2037
ORANGE NSW 2800

18 August 2002

Mr Ian Dundas
Secretary

House of Representatives Standing Committee on Agriculture, Fisheries and Forestry
R 1.110 Parliament House
CANBERRA ACT 2600

Secretary: *W. Bee...*
RECEIVED
28 AUG 2002
HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON
AGRICULTURE, FISHERIES
AND FORESTRY

Dear Sir,

Re: Submission to the Water Inquiry from Orange, Molong and Gulgong branches of the NSW Farmers Association.

SUBJECT: Cloud-seeding as an aid to increased rainfall.

INTRODUCTION: The technology of causing substantial rainfall from clouds which do not always release their potential rain especially in times of drought, has been developed long ago, partially by our own CSIRO. Its effectiveness which has been proven many times around the world, is used continuously in Tasmania and was authorised in Northern NSW by the NSW Government in 1994 for a trial period. The authors of a subsequent report regarded this 3 month operation as an "outstanding success".

SUBMISSION: "We, as a significant representative body consisting of graziers, crop growers, irrigators and other diversified farmers making a significant contribution to the economy of our area, firmly believe that the practice of cloud-seeding managed in a practical fashion, under continued monitoring and controlled conditions with regard to the general ecology and well-being of our land, would enhance productivity and employment opportunities."

IN SUPPORT: The present ongoing practice of cloud-seeding in Tasmania which represents an increase of 15% to 25% of annual rainfall, costs approx. \$1M per year and continuously results in sales of electricity by Hydro Tasmania of \$20M per year. We often have cloud bands in NSW of a similar type to those in Tasmania, but we mostly do not enjoy any rainfall from them. At a very recent Symposium held in Orange NSW, where five speakers addressed a meeting of 45 people interested in the subject, the panel of speakers, some of whom were hydrologists, conservatively suggested that a 15% to 20% increase in rainfall could be experienced with the use of cloud-seeding within the Murray-Darling Basin. A senior officer of the Department of Land and Water Conservation proposed that this increase would be "quite significant" in regard to water in storage and ecological water flows. At a time when the condition of the Murray-Darling Basin is of such concern it is believed that we have to consider every practical way of improving the situation.

Dr. Don McDonald, a former regional director of the NSW Department of Agriculture, conducted a most perceptive analysis of cloud-seeding in 1983, and gave the practice his fullest support. He recommended that a number of cloud-seeding projects be routinely conducted in NSW under a government appointed body he called the cloud-seeding control and co-ordination unit. His analysis and recommendation remain sound and deserve renewed consideration.

DIFFICULTIES: Could the practice cause flooding or crop damage? Could it cause rain where some did not want rain? Continuous and ongoing projects would certainly require proper and considerate

management. Where to seed? Are the clouds suitable? When to seed? Is there any danger of chemical pollution? All these questions deserve proper answers, and the short answer is they have all been addressed. The agents used, ie, dry ice or silver iodide, are used in such minute quantities that there is absolutely no danger of pollution to the environment.

EASE OF ESTABLISHMENT: Speaking of NSW only, as we are familiar with our own region, a small contracting company with suitable aircraft and perhaps 2 or 3 staff could operate in our state for a cost of approximately \$1M per year. The actual cost of equipping a plane for this service is around \$80,000. After adequate training, a group of 15 or 20 members around the state could monitor cloud types and report to a central depot, a referee or monitoring committee could decide on whether or not to proceed. These decisions would need to take many factors into consideration.

We are told that the Hydro-Electric Commission in Tasmania would be very pleased to provide hands on assistance in setting up the above operation and train staff and others in all the important elements.

LASTLY: There is much information available on the subject, and we will forward a copy of Dr. McDonald's report shortly in support of this submission.

FINALLY: We seek an invitation to come personally to address any queries you might have on this subject. The group would most likely include Ian Searle, who has recently retired from Hydro Tasmania, and would be very happy to pass on information based on his 30 years of experience with cloud-seeding.

Signed:


STAN NOWLAND

Orange District Council of NSW Farmers' Assoc.

Signed:


NIGEL GINN

Molong District Council of NSW Farmers' Assoc.

Signed:


JOHN WARRE

Gulgong Branch NSW Farmers' Assoc.

This submission has been prepared by members of the NSW Farmers' Association, and representatives of Lachlan Valley Water Inc., Macquarie Food and Fibre, the Namoi Irrigators Council, Border Rivers Food and Fibre, Lachlan Valley Dairy Group.