

PERFORMANCE AUDIT IN BRIEF

Improving efficiency of irrigation water use on farms

Department of Primary Industries



THE AUDIT OFFICE
OF NEW SOUTH WALES

About the audit

The Department of Primary Industries (DPI) aims to foster profitable and sustainable development of primary industries. One significant way it works to achieve this is through assisting agricultural industries to use water more efficiently and productively. While DPI offers advice and support to farmers on how to grow crops, it is not its role to tell them what they must grow.

Similarly, in conducting this audit it is not our role to decide whether or not certain crops should be grown.

The audit examines the effectiveness of DPI in assisting farmers to adopt on-farm improvements in irrigation water use.

This report answers the following questions:

- does the Department of Primary Industries have effective approaches for improving the efficiency of water use on irrigation farms?
- have the expected outcomes of the Department's initiatives for improving agricultural water use efficiency been achieved?

Audit opinion

DPI has a crucial role in assisting the irrigation industry to respond to the conflicting demands placed upon the state's water resources.

The State Plan emphasises the importance of water to agriculture, and gives DPI responsibility to use its training programs to help farmers continue to increase water use efficiency.

However the National Plan for Water Security and the National Water Initiative (NWI) require that water be provided for the environment. This has increased the need for DPI to assist farmers to adjust to reduced availability of water.

Water use efficiency investments produce a mix of benefits for growers and benefits for the public and the community. DPI's strategy of working with agriculture industry bodies therefore has the potential to facilitate more efficient investment in R&D by providing a framework for industry and government to fund projects in accordance with the industry and public benefits they generate.

While DPI has developed project funding principles to assist in determining the appropriate mix of industry and government funding, it is appropriate that these continue to be improved. This should involve DPI working closely with key stakeholders, such as NSW Treasury, to make its approach increasingly transparent and to ensure opportunities for innovative approaches to water use efficiency continue to be developed.

DPI's WaterWise on the Farm education and training program was effective in increasing awareness of water use efficiency practices and technologies, in educating and training irrigators in farm water resources planning and management, and in encouraging them to change practices.

DPI needs to work closely with agencies with which it shares responsibilities in the State Plan to ensure that its water use efficiency activities contribute to the State Plan goals. It needs to work closely with Treasury to document the services it will require to do this, the resources which will be needed, and how its success will be measured.

This will ensure that DPI is well placed to continue to assist the NSW farming industry to adapt and survive periods of reduced water availability.



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Internet site: www.audit.nsw.gov.au

Key findings

Does the Department of Primary Industries have effective approaches for improving the efficiency of use of water in irrigation on-farm?

DPI has developed a number of effective approaches to improve efficiency of water use in irrigation.

It has developed close partnerships with industry research organisations and community bodies to identify opportunities for improving water use practices and technologies. It has attracted investment by agriculture bodies in R&D projects helping irrigators to adapt to reduced availability of water.

Programs such as WaterWise on the Farm were effective in increasing grower awareness of water use efficiency options and technologies and in educating and training irrigators in farm water resources planning and management.

But DPI has been unable to fully maintain programs such as WaterWise as Government funding has ceased.

Have the expected outcomes of the Department's initiatives for improving efficiency of agricultural water use been achieved?

DPI has contributed significantly to developing improved irrigation practices and having them widely adopted. But there is still more that can be done.

WaterWise delivered benefits of around \$88 million on an investment of \$20 million by accelerating adoption of improved irrigation practices and technologies. Other benefits were reduced stream and ground water salinity and increased community capacity to respond to future challenges.

To ensure that DPI's research, education and training activities maximise benefits to the community its criteria and processes for selecting R&D projects need to be made increasingly transparent to both stakeholders and clients.

DPI also needs to improve inter-agency planning with NSW Treasury to enable the efficient implementation of such programs in future.

Summary of recommendations

DPI should work closely with agencies with which it shares responsibilities to ensure that its water use efficiency activities contribute to the State Plan goals.

DPI and its key stakeholders should maintain their close relationships to ensure that they identify opportunities for new technologies and practices with the highest potential benefit.

DPI should further develop the transparency of its R&D selection principles to demonstrate that projects and activities are funded in accordance with the mix of industry and public benefits they will generate.

DPI should negotiate with NSW Treasury the resources it will require to meet its commitments to the State Plan, the future demands of the Commonwealth (including the NWI) and the effects of climate change. In doing so it should review best practice models in other jurisdictions for assisting and encouraging growers to adopt improvements.