Improved planning with ILSA

INTRODUCING A PLANNING TOOL THAT WILL HELP YOU UNDERSTAND THE EFFECTS OF VARIABLE CLIMATE, WATER AVAILABILITY AND PRICES ON YOUR IRRIGATED HORTICULTURAL FARM

The Loxton to Bookpurnong Local Action Planning Committee and the South Australian Murray-Darling Basin Natural Resources Management (SA MDB NRM) Board have worked with researchers at CSIRO and the University of Adelaide to develop a computer based tool called ILSA. ILSA stands for Interactive Land-use Strategic Assessment. This tool allows users to enter details about their irrigated horticultural farms to see what effects variable climate conditions, variable water availability and variable commodity prices have on their financial returns. The idea is to play “what if” games with the important variables that affect farm profitability and production. Property managers can look at possible effects on the bottom line without the risk of experimenting with the real thing.

HOW DOES ILSA WORK?

ILSA is a computer based user interface for enterprise scale planning that combines scientific and individual production information in an easy to use and practical way. Users enter information about their farm, choose climate conditions that they think will be applicable for a season, information about the crops they have and the returns they expect. The tool calculates the feasibility of the combinations, the amount of water needed and the financial consequence. Lots of combinations can be easily tried to build an understanding of the sensitivity of the different effects on farm viability.

WHAT CAN I USE ILSA FOR?

ILSA is primarily a learning and planning tool. It can help growers improve their understanding of the interactions between climate, land, water, crops and prices. It is possible to enter your particular circumstances and see how they may be affected as water availability and prices change. ILSA is not a financial or a crop management tool. It is a tool to help understanding and improved planning in a complex and variable world.
HOW DO I USE ILSA?
The user follows a logical set of steps to set up the farm description and the variables they would like to experiment with.
» Start with a name for the farm
» Enter a descriptive name for the option you intend to test
» Enter your current level of your entire water entitlement
» Select a climate change scenario from the drop down list
» Select “Add a Crop” to add a new crop from the drop down list
» Select an irrigation method from the drop down list
» Enter the area (hectares) of each crop
» The tool will automatically apply information to the usual amount of irrigation water applied per hectare, expected yields and a usual price per tonne. At this point you can choose to edit these values and add in what you think they should be.

Note: no information from ILSA is stored or made available to other users.

WHY DO WE NEED ILSA?
ILSA enables property managers to trial different management scenarios to improve the use of resources. The recent drought has sharpened the focus of irrigating with limited water supplies. Planning future farm management activities in the face of uncertain water resources presents a considerable challenge. Notably, the drought of the 2000’s has resulted in annual allocations that have never been experienced before. With increased demands for water and the prospect of the climate becoming drier, property managers will need to plan for more effective water use. Managing and adapting to variable markets and prices is not easy.

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Below: Screen view of Tool