

Regional Australia Committee  
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Secretary: ..... SL .....

**Farm** - 795 hectares - 635ha irrigation and lease 160 ha dryland. Grown from 465 ha 5 years ago.  
**Grow** - Wheat, Barley, Canola, Faba Beans, Field peas, Shaftal clover for hay and seed, Oaten hay, Lucerne, Maize, Soybeans. Sell to export markets, secondary industries (pasta, bread, beer, vegetable oil, tofu and soy products), and animal feed (dairy, horse, pets).  
**Average Annual Rainfall** 445 mm

**Improving our ability to turn water (either rainfall or irrigation) into yield has been one of our key drivers over the past 10 years.**

**How have we become more efficient water users?**

### **1. Changes to the way we farm**

We have very hard setting, non-subbing soils prone to compaction. Yield potential was always limited because of poor water holding capacity. Through a change in management regime to stubble retention, direct drilling and controlled traffic, the soils are now better able to capture and store any available moisture. The soils infiltration rates have improved from 30 mm to 70 mm. Not only has this dramatically lifted yield but has also increased the flexibility within the cropping programme. We now grow high yielding crops using a system of integrated pest management, weed control, fertiliser management, rotations, stubble management, and inter-row sowing. In 1990 we would aim for 3.5 T/ha wheat yield we now aim for 7 T/ha and have achieved 8.5 T/ha.

We have invested                      in plant and equipment to make these changes.

### **2. Changes to our farm layout and irrigation set up**

We have laid out paddocks to irrigate more efficiently. Laser grading and investing infrastructure bay outlets and timers.

On our most recent land purchase we spent                      on laser grading and                      on putting in outlets on 140ha (                      per hectare).

We are involved in a trial of soil moisture monitoring. We now have remotely sensed moisture data being sent back to our home computer hourly. This has improved our irrigation management.

These on-farm changes rely on having a modernised delivery system that provides flexibility in time and amount and flow rate of water.

The Northern Victorian Regional Water Strategy involved extensive consultation with irrigation and industry leaders and the community. The report was well received and allowed for the introduction of water carry over arrangements and a new reserve policy that will effectively eliminate zero opening water allocations. The more conservative allocation policies and carryover now in place in Victoria will ensure water is only used on options that provide a return. Importantly the strategy acknowledged that the Goulburn River and its wetlands needed more water to improve their health (350GL). The MDBA guide to SDLs indicates a minimum of 442 GL would be required.

### **Key Points**

- Strengthen irrigated agriculture with research and extension work to increase productivity and profitability. Get more out of water.
- Optimise the use of gravity supply systems
- Target buy back of water to areas that should no longer be irrigated in conjunction with upgrading the remaining irrigation system.