

# Fact Sheet

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## Fact Sheet – Irrigation Water Flow Rates on Rice

Peak flow rates are required in early to mid-January when planting rice to determine the maximum area to plant on a single outlet.

In January, sufficient flow needs to be available that both meet the evapo-transpiration needs of the rice plus raise the water depth to at least 20cm in preparation for the cold sensitive microspore growth stage.

On average the crop demand for the first 15 days in January is about 1.5 ML/ha. This is sufficient to meet average evaporation plus 1mm/day deep percolation.

During this same period, rice water depth needs to be increased by about 15cm, taking it from around 5cm at panicle initiation to 20cm at microspore. This requires another 1.5 ML/ha to be applied over the 15 days.

Flow rates sufficient to apply 3ML/ha over 15 days (or 0.2 ML/ha/day) are therefore required.

The following table shows minimum flow rates required for this period with varying crop sizes.

Crop Area (ha)	Flow rate (ML/day)	Flow rate (Revs)
40	8	6.2
50	10	7.7
60	12	9.2
70	14	10.8
80	16	12.3

These flow rates assume average evaporation rates for this period. If above average temperatures are encountered, higher flow rates will be required.

- Contributed by NSW DPI District Agronomist John Fowler M. 0427 079 138.