

✓ Irrigation Annual Reporting



What?

An Irrigation Annual Report asking for details about each component of the Code of Practice is sent to all irrigators in the Angas Bremer Irrigation Management Zone in June each year. Answering each question truthfully and returning the form is compulsory.

Why?

To achieve accreditation under this Code of Practice for Irrigators. To retain your water allocation by showing water managers that your irrigation practices are satisfactory under the Water Allocation Plans for the Angas Bremer Prescribed Wells Area and the River Murray Prescribed Watercourse.

When?

In June each year an Irrigation Annual Report is sent to each irrigator by the ABWMC. Completed forms are due by 30 July each year.

How?

Follow the instructions and fill in the Irrigation Annual Report. The following information is required:

What to measure (units)

When to measure

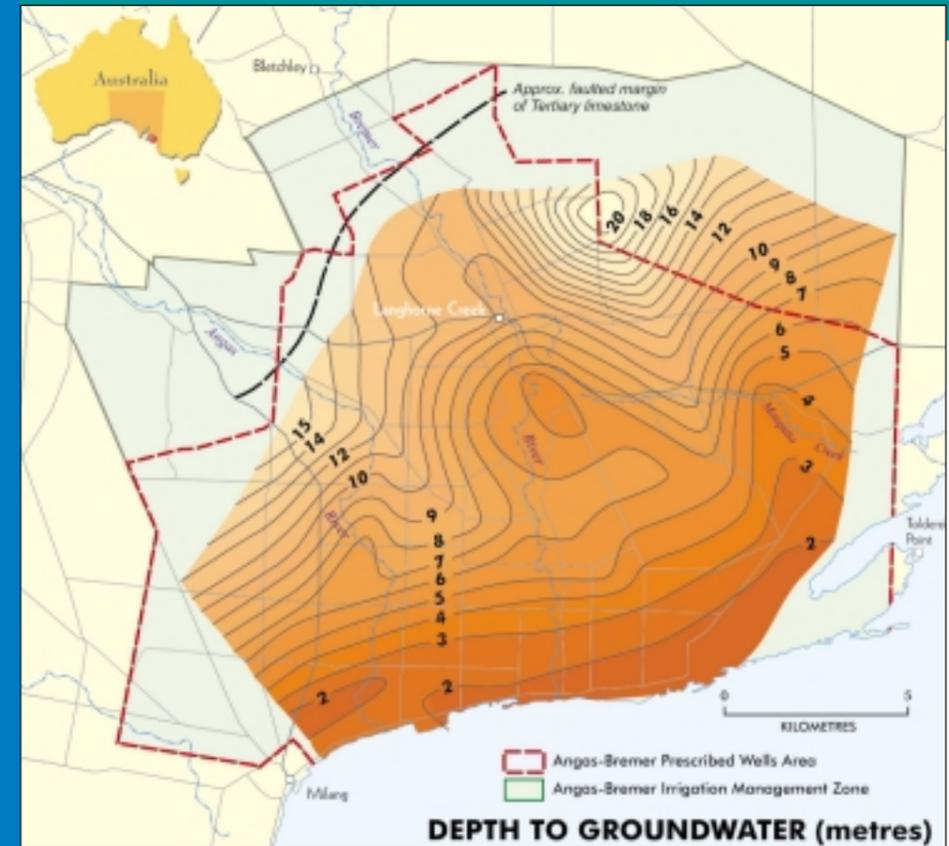
✓ Amount of water applied (mm) (Lake or groundwater)	✓ Each irrigation
✓ Volume of the water sample from 1m below the root zone (mm)	✓ Either prior to next irrigation or once per week
✓ Salinity of water from below the root zone (ppm)	✓ Either prior to next irrigation or once per month
✓ Groundwater level in monitoring well (m)	✓ Sept, Dec, March and June
✓ Distribution uniformity	✓ Beginning of irrigation season
✓ Floods (ha and hours)	✓ Each flood
✓ Annual Irrigation (mm/y)	✓ 30 June each year
✓ Salinity of irrigation water applied to the crop (ppm)	✓ 30 June each year
✓ Salinity of the soil under the root zone (ppm)	✓ Beginning and end of each irrigation season
✓ Aquifer recharge volumes (kL or ML)	✓ 30 June each year
✓ Area of each type of irrigated crop (ha)	✓ 30 June each year or as required
✓ Area of non-irrigated deep-rooted vegetation (ha)	✓ 30 June each year

There may be implications from the second Draft Water Allocation Plan for the River Murray Prescribed Watercourse that may have to be accommodated in this Code of Practice.
Angas Bremer Code of Practice for Irrigators, Issue No.1, August 2001



✓ Angas
✓ Bremer
✓ Accredited
✓ Irrigator

Angas Bremer



As at May 2000

A Code of Practice for managing irrigation in the *Angas Bremer*

- ✓ Irrigation efficiency
- ✓ Groundwater monitoring
- ✓ Vegetation planting and management
- ✓ Irrigation Annual Reporting

✓ Angas
✓ Bremer
✓ Accredited
✓ Irrigator

✓ Irrigation efficiency



What?

Irrigators must aim to achieve an efficiency of at least 85%, meaning that less than 15% of the irrigation water is allowed to drain below most of the active roots of the crop (hereafter, referred to as the root zone).

Why?

To minimise the volume of water draining into the groundwater and reduce the risk of waterlogging and soil salinisation.

When?

At **every** irrigation, record the amount of water applied and how much drained below the root zone.

Where?

At least one location within your major crop

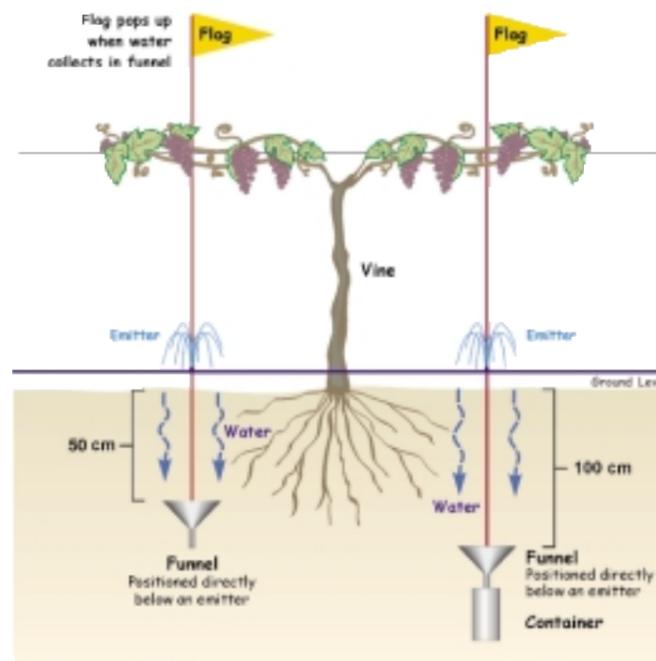
How?

Measure:

- The amount of water per irrigation (mm)
- The volume of water sampled from 1m depth either prior to the next irrigation or once per week (ml)
- The salinity of the irrigation water (ppm)
- The salinity of the water sample from 1m depth taken either prior to the next irrigation or once per month (ppm)

Enter these numbers into the **Angas-Bremer Irrigation Record Sheet**.

Location of irrigation drainage water collectors



More details on how to collect and record this information will be sent to you by the ABWMC with your **Irrigation Annual Reports** and **Irrigation Record Sheets** at the beginning of each irrigation season.

✓ Groundwater monitoring



What?

Quarterly monitoring of groundwater levels on irrigated land.

Why?

To detect any changes in groundwater levels which may indicate an increased risk of waterlogging and/or soil salinisation.

When?

Quarterly in September, December, March and June each year.

Where?

In groundwater wells located within the major crop on each irrigated property. If you have more than 500 ML on licence (River Murray and groundwater combined) you need at least two groundwater monitoring wells.

How?

Measure the depth to groundwater in a 6m deep test well. The measurement required is from the top of the steel casing to the water level or to the bottom of the well (if dry). Record the well number, the date and the depth to groundwater.

✓ Vegetation planting & management



What & when?

One hectare of deep-rooted, non-irrigated perennial vegetation needs to be established and/or maintained for every 100 ML of water on licence prior to 2 January 2003. This is on a pro-rata basis, for example, 110ML will need 1.1 ha or 25 ML will need 0.25 ha. An additional one hectare for every 100 ML on licence will be required prior to 2 January 2005. Existing vegetation can be counted for water on allocation prior to 2 January 2001 but new vegetation must be planted for new allocations or transfers after 2 January 2001.

Why?

Deep-rooted plants have the potential to intercept rainfall and excess irrigation water before it reaches the groundwater. Some plants can also access groundwater directly and will help to manage shallow regional groundwater levels.

Where?

Anywhere within the Angas-Bremer Irrigation Management Zone (see map on page 1). It is preferable to establish or manage vegetation on or as close to the irrigated area as possible.

How?

New vegetation must be established in accordance with the Water Allocation Plan for the Angas Bremer Prescribed Wells Area and the Angas Bremer Land and Water Management Plan. In general, the distance between the plants should be the same or less than the mature height of the plant (maximum spacing is 10 m). Plantings not fitting these guidelines will need to be assessed by ABWMC.

The area covered by vegetation can be measured directly in the field or by using aerial photographs. The area covered by lines of trees is simply the mature height of the trees (m) multiplied by the length of the tree line (m) to give an answer in square metres.