

Environmental Protection Agency – Water Quality Guidelines for a Healthy Aquatic Waterway:

pH		Salinity (Southern Coastal QLD)		Dissolved Oxygen (% saturation)	
Upland Freshwater (greater than 150 m at sea level)	6.5 – 8.2	Upland Freshwater	580 uS/cm	Upland Freshwater	90 - 110
Lowland Freshwater	6.5 – 8.0	Lowland Freshwater	580 uS/cm	Lowland Freshwater	85 – 110

pH Levels in Livestock Drinking Water:

Water for domestic and stock use should be in the pH range of **6.5 to 8.5**. If the pH is highly acidic (less than 5.5), acidosis and reduced feed intake may occur. Highly alkaline water (over 9) may cause digestive upsets and diarrhea, lower feed conversion efficiency and reduce intake of water and feed.

Livestock Salinity Tolerances (Electrical Conductivity - us/cm)

Livestock	No adverse effects on animals expected	Animals may have initial reluctance to drink or there may be some scouring, but stock should adapt without loss of production.	Loss of production and decline in animal condition and health would be expected. Stock may tolerate these levels for short periods if introduced gradually.
Beef cattle	0 – 6250	6250 – 7800	7800 – 15,500
Dairy cattle	0 – 3900	2500 – 6250	6250 – 10,900
Sheep	0 – 6250	6250 – 15,500	10,000 – 20,300
Horses	0 – 6250	6250 – 9300	9300 – 17,000
Pigs	0 – 6250	6250 – 9300	9300 – 12,500
Poultry	0 – 3100	3100 – 4600	4600 – 6250

Plants Salinity Tolerances (Electrical Conductivity - us/cm)

Conductivity	Salinity class
< 650	1 - Low salinity water, suitable for use on all crops except tobacco, with all methods of water application, with little probability of a salinity problem developing.
650 - 1300	2 - Medium salinity, suitable for use on all but very low salt tolerance crops. Water can be used if a moderate amount of leaching occurs. Plants with medium salt tolerance can be grown, usually without special practices for salinity control. Sprinkler irrigation with the more saline waters in this group may cause leaf burn on salt-sensitive crops, especially at higher temperatures in the daytime when evaporation may be high.
1300 - 3000	3 - High salinity - suitable for use on medium and high salt tolerant crops only. Water should not be used on soils with restricted drainage. Even with adequate drainage, special management for salinity control may be required.
3000 - 5000	4 - Very high salinity - suitable for use only on high salt tolerant crops. For use soils must be permeable, free draining, and water must be applied in excess to provide considerable leaching.
5000 - 8000	5 - Extremely high salinity generally unsuitable for irrigation unless soils are permeable, well drained and crops are of very high salt tolerance.
> 8000	6 - Too saline for irrigation

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