

**Table 6.4: Summary of Soil Invertebrate Toxicity Thresholds for NaCl in Soil**

<b>Ecological Endpoint</b>	<b>Salt or Ion</b>	<b>Concentration in Soil (mg/kg)</b>	<b>Comments</b>
<b>EC<sub>50</sub> -NL</b>	<b>NaCl</b>	<b>1,200</b>	<b>Nominal concentration</b>
	<b>Cl<sup>-</sup></b>	<b>728</b>	
	<b>Na<sup>+</sup></b>	<b>472</b>	<b>Measured in Saturated Paste</b>
	<b>Cl<sup>-</sup></b>	<b>630</b>	
<b>LC<sub>x</sub></b>	<b>Na<sup>+</sup></b>	<b>320</b>	<b>Nominal concentration</b>
	<b>NaCl</b>	<b>4,700</b>	
	<b>Cl<sup>-</sup></b>	<b>2,900</b>	<b>Measured in Saturated Paste</b>
	<b>Na<sup>+</sup></b>	<b>1,800</b>	
<b>LC<sub>x</sub></b>	<b>Cl<sup>-</sup></b>	<b>2,500</b>	<b>Measured in Saturated Paste</b>
	<b>Na<sup>+</sup></b>	<b>1,200</b>	

The foregoing slides show that many plants and soil invertebrates suffer actual growth or population decline at chloride concentrations well below 1,000 mg/kg, whether as a spiked concentration in soil or as a measure derived from saturated paste.

Similar damages occur near  $EC = 4$ .

How do we reconcile EC and Chloride as indicators of biological damage?