

Examples of typical cumulative effects on water		
Type of cumulative effect	Main characteristics of effect	Example
<b>Time crowding</b>	Frequent and repetitive effects	Frequent and numerous water abstraction for agricultural irrigation during dry seasons leading to depletion of water resources e.g. reservoir/ groundwater levels.
<b>Time lag</b>	Long delays between cause and effect	Changes in water table affecting the ecology of wetlands and marshes.
<b>Space crowding</b>	High spatial density of effects	<ul style="list-style-type: none"> <li>• Effect on aquatic ecology of acid mine leachate from several old mines within a catchment.</li> <li>• Effect of high population density on the water environment e.g. high rates of sewage effluent discharge.</li> </ul>
<b>Cross-boundary</b>	Effects occur some distance away from the source	Sediment loading from development activities may affect downstream areas where flow rate decreases and transported sediments are deposited.
<b>Synergistic</b>	Effects resulting from multiple sources or combined effects different in nature from the individual effects	Decrease in water level due to over-exploitation of groundwater combined with water pollution associated with agricultural surface water runoff in a wetland leading to the disappearance of a certain wetland species.
<b>Indirect</b>	Secondary effects resulting from a primary activity	Unsustainable planning of roads in sensitive wetland areas causing secondary/ induced development activities and increased pressure on the aquatic environment e.g. holiday home developments.
<b>Nibbling</b>	Incremental effects	Incremental effect on aquatic ecology of nutrient loading from agricultural practices.

**Note:** This table provides a framework to illustrate how this guidance could be used.