

## Water Quality Overview

	Unpolluted Stream or Pond
Chlorides	<ul style="list-style-type: none"> <li>Clean water usually has less than 5 mg/l chloride.</li> </ul>
Nitrates	<ul style="list-style-type: none"> <li>Clean water has less than 1 mg/l nitrate-nitrogen. The Hudson generally has about 2.2 mg/L of nitrate or 0.5 mg/L of nitrate nitrogen.</li> </ul>
Phosphates	<ul style="list-style-type: none"> <li>Clean water has low phosphates, usually between 0.01 and 0.03 mg/l.</li> </ul>
pH	<ul style="list-style-type: none"> <li>Water with a pH range from 6.5 to 8.6 is the best condition for fish and almost all invertebrates.</li> </ul>
Aquatic Organisms	<ul style="list-style-type: none"> <li>Clean water has a large number of different kinds of aquatic organisms, including those that cannot tolerate pollution.</li> </ul>

	Polluted Stream or Pond
Chlorides	<ul style="list-style-type: none"> <li>Water with more than 250 mg/l chloride is considered not drinkable.</li> <li>Chlorides can enter water from road salt, soil leaching, and industrial and animal wastes.</li> </ul>
Nitrates	<ul style="list-style-type: none"> <li>High readings indicate pollution from fertilizer, sewage, industrial waste or detergents and may accelerate the eutrophication process.</li> <li>Federal law requires that nitrate levels in public water supplies be less than 10 mg/l of nitrate-nitrogen or 45 mg nitrate; 1 mg/L of nitrite-nitrogen.</li> </ul>
Phosphates	<ul style="list-style-type: none"> <li>Readings higher than 0.3 mg/l phosphate indicate pollution from fertilizer, sewage, industrial waste or detergents and may accelerate the eutrophication process.</li> <li>Waste water is 5 to 30 mg/l phosphate.</li> <li>Drinking water must have less than 0.5 mg/l phosphate, according to federal law.</li> </ul>
pH	<ul style="list-style-type: none"> <li>Water with pH less than 5 or greater than 9 is harmful for aquatic life.</li> <li>Below pH 4.5, few fish and invertebrates can survive.</li> <li>pH can be influenced by soil leaching, industrial pollution, and acid rain.</li> </ul>
Aquatic Organisms	<ul style="list-style-type: none"> <li>There may be many organisms in the stream, but there will be little variety. All of the organisms will belong to a few species that can survive in polluted water.</li> </ul>