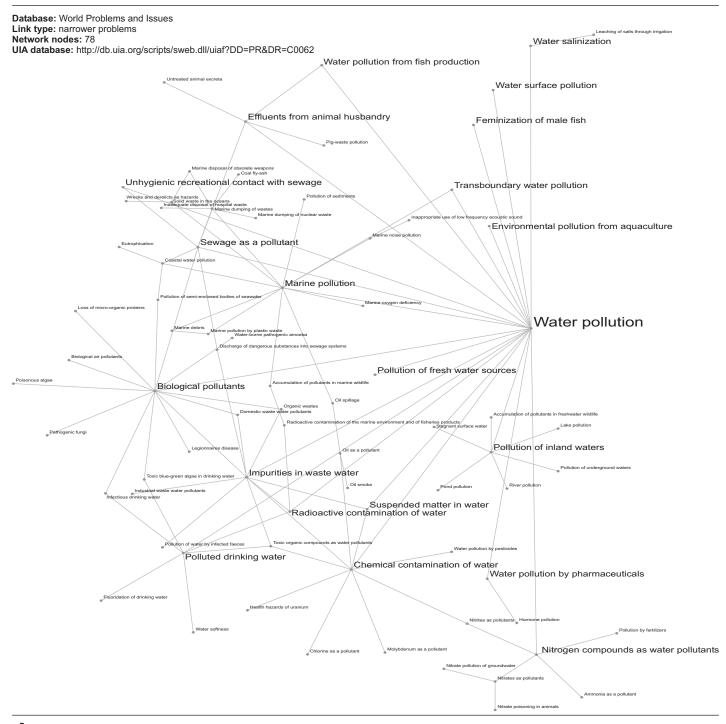
## Figure 10.1.2.28. Water pollution



All pollution immediately or eventually involves the hydrological cycle of the earth, because even pollutants emitted into the air and those present in the soil are washed out by precipitation. Water is considered polluted when it is altered in composition or condition so that it becomes less suitable for any or all of the functions and purposes for which it would be suitable in its natural state. This definition includes changes in the physical, chemical and biological properties of water, or such discharges of liquid, gaseous or solid substances into water as will or are likely to create nuisances or render such waters harmful to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, fish or other aquatic life. It also includes changes in temperature, due to the discharge of hot water. Pollution may be accidental (sometimes with grave consequences) but is most often caused by the uncontrolled disposal of sewage and other liquid wastes resulting from domestic uses of water, industrial wastes containing a variety of pollutants, agricultural effluents from animal husbandry and drainage of irrigation water, and urban run-off. The deliberate spreading of chemicals on the land to increase crop yields, or the addition of chemicals to water to control undesirable organisms, is another cause of pollution. Examples are the application of chemical fertilizers, and of pesticides for the control of aquatic weeds, insects and molluscs. Problems are compounded when national boundaries are involved, and cooperation in the management of transboundary waters is becoming essential.