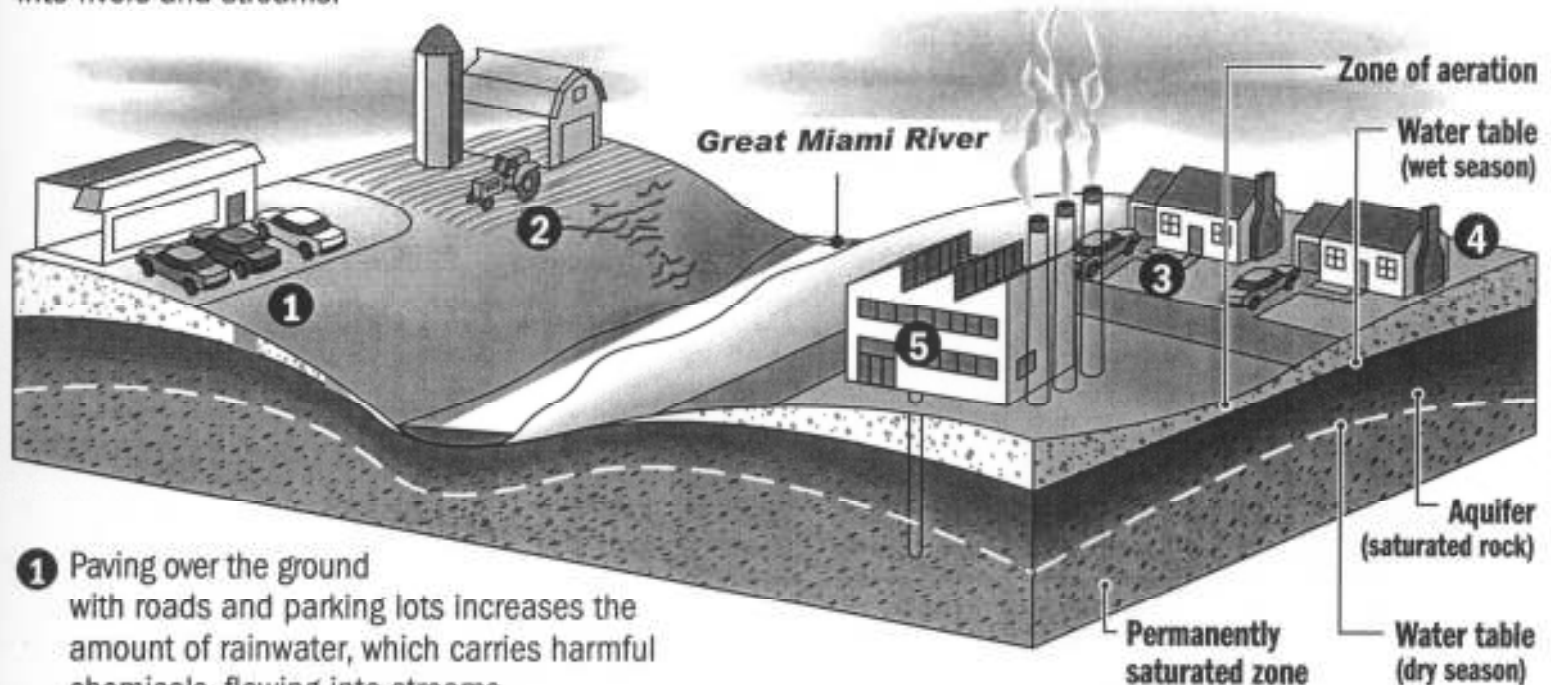


Water threats

A three-year study of water quality in the Little Miami River and Great Miami River watersheds found high concentrations of pesticides, nutrients and other harmful chemicals such as PCBs and DDT. Those chemicals were often found at levels that can harm human health and aquatic life. Here's a look at how chemicals get into rivers and streams:



1 Paving over the ground with roads and parking lots increases the amount of rainwater, which carries harmful chemicals, flowing into streams.

2 Pesticides, herbicides and animal waste, which are high in nitrogen and phosphorus, are carried into streams with rainwater from farms.

3 Oil, gasoline, metals, brake-pad dust and other auto-related fluids run off of driveways and roads in urban and suburban areas.

4 Chemical fertilizers and pesticides are carried with rainwater from suburban lawns.

5 Factories and utility companies release harmful chemicals, such as mercury, from their smokestacks which then falls into streams and rivers.

Effects of chemicals found in the water-quality report

DDT and PCBs: Chronic low-level exposure can cause liver damage, reproductive abnormalities, birth defects, immune suppression, neurological disorders. DDT has been identified as a probable human carcinogen and can have adverse effects on the reproductive and nervous systems.

Atrazine: Can cause dermatitis and eye irritation. High exposure levels can affect the nervous system. Atrazine has been identified as a possible human carcinogen.

Nutrients: High levels of nutrients, such as nitrogen and phosphorus, in drinking water can cause low oxygen

levels in the blood of infants, a potentially fatal condition known as "blue baby syndrome." It also can lead to excessive and unsightly growth of algae in waterways which, in turn, can lead to foul odors, bad taste and fish kills because of low dissolved-oxygen levels.

Pharmaceuticals and household chemicals: The effects of these chemicals at low concentrations are generally unknown, although they are suspected to interfere with or mimic natural hormones in people and aquatic life that control growth, sexual development and reproduction.