

Going Down the Drain!

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River Indus (Pakistan):

The Indus one of Asia's rivers. From its source in the northwestern foothills of the Himalayas, it flows through the Indian state of Jammu & Kashmir and along the length of Pakistan to the Arabian Sea. The river and its five tributaries together make up the Indus Basin, which spans four countries and supports 215 million people. However, the increasing sedimentation in the Indus River is a major threat to one of Asia's main water body.

What is Sediment Pollution?

According to the Environmental Protection Agency, one of the three major sources of water pollution in streams and rivers is sediment.

Fine suspended particles cause turbidity in waterways. In other words, they make the water less transparent, blocking sunlight. The decreased light will impede the growth of aquatic plants, which provide essential habitat for many aquatic animals, including young fish. Another way sediment can be harmful is by smothering the gravel beds where fish lay their eggs. Aquatic invertebrates can suffer from damage to their fragile filtering systems, and if they are sessile (immobile) they can be buried by sediment. Fine particles can eventually be transported into coastal zones, where they affect marine invertebrates, fish, and coral.







CAUSES

- Heavy metal contamination
- Heightened levels of Nitrogen and Phosphorus
- Industrialization
- Dumping of untreated agricultural effluents, human waste

Effects

Short –Term:

- Immediate harmful effects on aquatic flora and fauna
- Water no longer be safe for consumption or sanitation purposes

Long-Term:

- Algae blooming in water -> decreasing oxygen level
- Production of acid rain as more nitrogen and sulfur oxides enter into the atmosphere
- Loss of diversity

Possible Courses of Action

Short –Term:

- Abandon the effected water supply and find a new water source
- Denitrification: to prevent the leaching of nitrates in soil and stop ground water contamination

Long-Term:

Educate the community to the benefits and economic reward



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