

Petroleum Spills

Human Health Risk

Ecological Risk

M

Socioeconomic Risk

M - H

Spilled oil and gas products can pose a threat to aquatic ecosystems in a number of different ways. Catastrophic oil spills on the order of the Exxon Valdez, while unlikely to occur, would have devastating effects on a marine or riverine environment. Minor oil spills, which happen much more frequently, can have significant cumulative impacts. Recreational vehicles such as jet skis release a significant portion of their fuel into the water. Finally, underground storage tanks may leak, allowing the contents to seep into the soil and ground water, eventually contaminating surface water systems.

What's at risk?

Fish, shellfish, and birds are most directly affected by oil spills. Most spills occur in Newark Bay, Arthur Kill, Kill Van Kull, and the Delaware River.

What are the ecological impacts in New Jersey?

The severity of the impacts will vary depending on (1) the properties of the specific product spilled, (2) natural conditions such as water temperature, wave action, and weather at the time of the spill, and (3) the feeding habits of affected wildlife—shore birds versus waterfowl for example. About 600 spills occur each year, averaging less than 10 gallons each. Major spills of more than 500 gallons occur much less frequently—11 occurred in New Jersey between 1997 and 2000.

What are the socioeconomic impacts in New Jersey?

Millions of dollars are spent by polluters, DEP, and tank owners for emergency clean ups. Additionally, the threat of a catastrophic tanker accident along with the unsightly appearance and odor associated with degraded ship channels creates moderate levels of psychological and aesthetic impacts.

What's being done?

The United States Coast Guard, EPA, and Department of Environmental Protection share responsibilities for helping to prevent, monitor, and clean up accidental oil spills in New Jersey waterways. EPA and DEP regulate the repair and closure of underground storage tanks. Despite regulations and programs aimed at reducing the risk of accidental oil spills, the volume of petroleum-related activity ensures that spills will continue to pose a threat as long as oil is transported, stored, and processed in New Jersey. There are no restrictions on the use of jet skis and other marine engines that routinely release quantities of fuel and engine oil to the water.