

Harmful: Cruise Ship Sewage Disposal

BIOL 420: Ocean Conservation and Sustainability
Policy Brief Assignment:
Objective brief
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Image: Sewage Disposal by Monterey Bay National Marine Sanctuary

Summary:

Cruises have become increasingly popular. The industry carries about 20 million passengers worldwide every year. Despite the fact that cruises are often used as a form of vacation, they also create a lot of pollution. It is responsible for high CO₂ production and destruction of the marine environment. These giant floating cities, with thousands of cabins, swimming pools, casinos, clubs, and restaurants pollute as much as 14,000 cars do in a week. Even worse, cruises often dispose of its sewage untreated into the ocean. This sewage contains pollutants including fecal matter, bacteria, viruses, pathogens, nutrients, hazardous waste and pharmaceuticals, all of which can be harmful to human health and aquatic life¹.

Recommendations:

Develop a national policy to be implemented regarding the disposal of untreated sewage at sea for cruise ships. Furthermore, develop a national policy demanding that all cruise ships are required to have an onboard a waste treatment system with an up to date logbooks of their discharges.

Species Impact:

Untreated sewage presents a threat to the world's coral reefs. Sewage stimulates the growth of algae and as a result seriously hinders the ability for coral reefs to survive because the algae cover the filter-feeding corals³.



Image: Coral Reefs in Taiwan by RedOrbit.

stock photo

Introduction:

Untreated sewage negatively impacts marine ecosystems, wildlife, biodiversity, and the economic benefits of fisheries. Cruise ships are not required to have permits to dump raw sewage into the oceans, and they are not required to monitor or report what they release². As a result, neither the government nor the public know how much pollution is released. Policy at a national level is necessary to control dumping of sewage from cruises into the sea³.



Image: Many cruise ships by RedOrbit.

Issue:

Large amounts of sewage enter the marine environment due to a lack of strict enforcement and policies regarding the disposal of sewage materials at sea. However, this issue is a bit convoluted because cruise ships often sail into developing countries with poor enforcement resources, not many regulations exist in international waters and there are very few individuals there to enforce them. Furthermore, it is estimated that a 3,000 person cruise ship generates 210,000 gallons of sewage weekly which is enough to fill 10 backyard swimming pools³. The industry is not monitoring the quality of the waters in which they routinely dump their waste anywhere they sail. It is important that this issue be addressed for types of sea vessels to reduce sewage waste and minimize the threat to marine species⁵.



Image: Sewage in the waters of San Diego by Science and Issues

Policy Options and Implications:

It is proposed that a policy be implemented to monitor and track the waste of cruises would be a good start. The regulations could adopt practices from the protocol such as waste discharge record books, tracking the type and amount of sewage released, and inspection of cruise ships suspected of violating the regulations. However, to solve this problem, it is also encouraged to implement a marine sanitation devices which monitors onboard waste treatment including better treatment onboard ships⁵. Furthermore, cruise ships could carry a larger holding tank so that sewage could be offloaded in ports instead of at sea. The implications of this policy would be a reduced input of pollution from cruise ships into the marine environment. This should address the issue at a scale that is currently unregulated, and therefore aid in reducing the dumping of waste and exposure of marine species to potentially life threatening sewage.

References:

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- 4.RedOrbit. (2009, February 1). *Coral Reefs In Taiwan Turning Black.*
- 5.Oceana. (2014, January 1). *Protect Our Oceans: Stop Cruise Ship Pollution.*
- 6.Water Encyclopedia. (2008, January 1). *Pollution of the Ocean by Sewage, Nutrients, and Chemicals.*

