



Global International Waters Assessment

Discharges from Cruise Ships Cause Problems for the Caribbean Islands

The GIWA regional report on the Caribbean Islands highlights not only a number of problems endemic to the majority of SIDS, such as eutrophication, solid waste, freshwater shortages and destruction of coral reefs, but also points at the specific transboundary problem of spills and discharges from ships as a major threat to coastal and marine ecosystems.

GIWA region 4 is located in the northern part of the Wider Caribbean Region (Greater Antilles and The Bahamas Archipelago), where ships transit from the Panama Canal to the Northern Atlantic Ocean and oil tankers transit from the oil rich areas of Mexico, Texas and Venezuela, to North Atlantic and Caribbean refineries.

The GIWA Focal Point for this region is the Center of Engineering and Environmental Management of Bays and Coasts (CIMAB) in La Havana. The assessment workshops were

coordinated by Antonio Villasal of CIMAB and gathered scientists from all countries of the region.

The team determined that in order to limit the impact of intensive maritime traffic on fragile aquatic ecosystems in the region, the first measure would be to reduce risk from oil spills. Achieving this would require more cooperation, coordination and additional monitoring at the regional level. The second measure would be to address the problem of waste discharges from vessels at sea, and in particular from cruise lines.

Although the Wider Caribbean Area was declared a "Special Area" under MARPOL 73/78 Annex V (pollution by garbage), the region's most visited harbours still lack the infrastructure and capacity to treat waste. In addition, cruise ships with up to 3,700 passengers lack on-board marine sanitation devices (MSDs) with sufficient capacity to absorb daily quan-

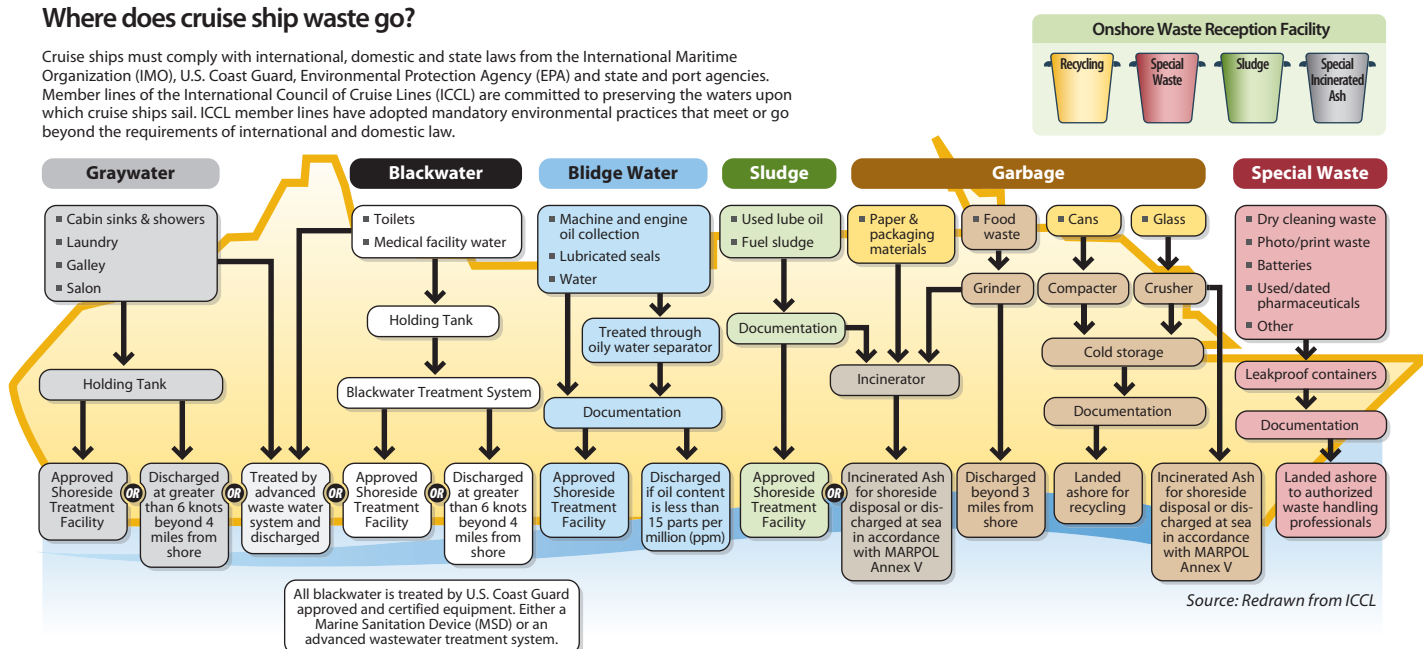


René García, Pierre Blime, Antonio Villasal, Félix Palacios, Héctor Quintana, Jesús Beltrán are experts working for the Caribbean Islands Report.

ties of wastewaters and garbage. Such situation, coupled with low enforcement at sea, induce cruise ships to dump their waste at sea. The result is that an impressive 64,000 tons of garbage dumped every year in the waters of the Wider Caribbean Area by cruise ships alone, not including similar quantities of oil residuals, toxic and microbiological substances, all clearly affecting the fragile equilibrium of the region's marine and coastal ecosystems.

Where does cruise ship waste go?

Cruise ships must comply with international, domestic and state laws from the International Maritime Organization (IMO), U.S. Coast Guard, Environmental Protection Agency (EPA) and state and port agencies. Member lines of the International Council of Cruise Lines (ICCL) are committed to preserving the waters upon which cruise ships sail. ICCL member lines have adopted mandatory environmental practices that meet or go beyond the requirements of international and domestic law.



Dear GIWA friends,

Water is at focus at upcoming events such as the International Meeting for the 10 year Review of the Barbados Programme of Action, to be held in Mauritius in January 2005. The GIWA team is preparing an important input to this meeting and we will there present our four regional reports from Small Island Developing States (SIDS). The Indian Ocean Island regional report is already printed, the Pacific Islands report in the final production stage and the

Caribbean Sea and the Caribbean Islands reports are in the peer review process.

The four GIWA reports will bring valuable information to the quest for sustainable development in these vulnerable nations where water can be a symbol for both health and wealth. The waters of the Caribbean are frequently visited by large cruise ships and the tourists' wastes are often dumped in the sea. Actions must be taken for not threatening the health of the residents on these islands.

Other regional reports are in the pipeline for completion and we are receiving a lot of attention in the regions concerned. This proves the importance of a global assessment on the environmental conditions of the worlds' waters.

Summer means vacation and nice swims for many people in the world. Let us continue the strive to keep these waters clean and healthy.

Dag Daler,
Scientific Director

Results Ready in Four Regions in Northern Atlantic

Thanks to a grant from the Danish Ministry of Environment, the GIWA assessment for the waters around Greenland and the Faroe Islands has recently been completed, and is now being prepared for publication. The assessment was carried out by UNEP Collaborating Center for Water and Environment (UCC Water) and the Danish National Environmental Research Institute (NERI), in close cooperation with a number of experts in the region.

In both West and East Greenland unsustainable exploitation of fisheries is a priority concern. The cod has virtually disappeared from the Greenland waters, but the fish has been replaced by shrimp, and the economic impact on the local economy has been mitigated by a change to catching shrimp. The drastic habitat changes are not only a result of overfishing. Changes in sea temperatures – and associated species migrations – are equally important, as the arctic ecosystems are highly sensitive to changes in temperature.

Pollution by chemical contaminants (in particular heavy metals and persistent or-

ganic pollutants) is another important issue. These toxics are accumulated in the tissue of fish and marine animals, and they are threatening the species feeding on these. There is also concern about health impacts in the Inuit population with a strong preference for food from the sea. This is particularly critical in East Greenland, where the remote communities are dependent on hunting for their food supply.

In the arctic North Greenland climate change and its impacts on the arctic habitats are priority concerns. Changes in temperature – and the associated reduction of ocean ice covers – threaten the unique and sensitive arctic habitats, like the polar bears.

The priority issues in Faroe Plateau are similar. Chemical contaminants – in particular mercury – are a concern here, where fish and whale steaks are national dishes. Overexploitation of fish resources are also a concern, due to the economic importance of the fisheries sector. Again, the productivity is highly dependent on the ocean temperatures.

Key causes have been identified, and the home rule administrations are actively addressing the local causes. The main causes of international concern are related to emission of toxic chemicals to the ocean in Europe, Asia and North America; and to the global warming related to greenhouse gases. There is an urgent need for international research efforts to better understand these impact on the sensitive arctic ecosystems; and to include these impacts in international policymaking.

Threats to the Barents Sea

The major findings of the GIWA report on Barents Sea were presented at an international environment conference in Tromsø, Norway, on May 26. The focal point professor Gennady Matishov from the Murmansk Marine Biological Institute introduced the results, pointing at severe threats from human activities to the Barents Sea ecosystem.



Are Sydnes, Gennady Matishov, Roman Mikhalyuk, Natalia Gulobeva, Tatiana Savinova, Salve Dahle and Dag Daler are some of the experts behind the GIWA report on the Barents Sea.

The impact of the over-exploitation of the fish stocks and the modification of ecosystem caused by the invasion of red King Crab and other alien species and the pollution from persistent organic pollutants and heavy metals is severe both for the environment and in terms of economic consequences, employment and incomes, states the report. In addition there are significant threats for further environmental degradation in the future due to the large amount of nuclear wastes in the areas of the former Soviet Union and increased exploration for petroleum resources and shipping of oil and gas through the Barents Sea.

