UNEP - ENVIRONMENTAL PROGRAM



Issue: Addressing the Environmental Consequences of Military Activities in International Water

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Forum: United Nations Environment Programme (UNEP)

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Introduction

Conducting military actions in international waters, such as naval exercises, underwater weapons testing, and waste dumping, carries significant risks to marine ecosystems and biodiversity. These actions can lead to chemical contamination, sound pollution, and damage to habitats, all of which are felt by marine species within the marine environment and at a planetary level. Compounding this situation is an increasingly global environment of insecurity, in which military and national security interests doesn't put in consideration the environmental consequences.

UNEP recognizes the need to begin addressing these impacts, especially in accordance with principles of international environmental law, such as the United Nations Convention on the Law of the Sea (UNCLOS). National security versus global responsibilities to shared marine environments is a difficult paradox to navigate.

Key Terms

International Waters

Areas of the ocean that lie beyond national jurisdiction, also known as the high seas, where no single state has sovereignty.

Marine Pollution

The introduction of harmful substances or energy into the ocean, leading to negative impacts on marine ecosystems and biodiversity.

Naval Exercises

Military operations conducted by naval forces in preparation for combat, often involving weapons testing and ship maneuvers that may disturb marine habitats.

Environmental Warfare

The use of environmental modification or destruction as a tool or consequence of military conflict.

General Overview

Military activities in the high seas have increased in frequency and complexity. Whether it be a submarine conducting sonar testing, or dealing with unexploded ordnance, each of these military operations has the ability to irreversibly change marine life and pollute the environment. The environmental footprint of ship and seabased military fleets is often under valued due to lack of transparency and issues with international jurisdiction.

Marine pollution is exacerbated by the military through its naval vessels and submarines discharging fuel, chemicals, and solid waste. Even the residual impacts of military conflict, like sunken ships and unexploded ordinance, continue to introduce harmful substances into marine environments for decades after the hostilities ended. These processes were evident in the oceans of the Baltic and Pacific, where large numbers of chemical munitions were dumped following World War II.

In military contexts, sonar systems produce broad sound waves strong enough to interfere with the communication and navigation of marine mammals (e.g. whales and dolphins). Naval sonar exercises have been correlated to mass strandings and behavioral changes in marine organisms and raise concerns about international obligations to marine conservation agreements.

Even if UNCLOS prescribes a role for responsible states to protect the environment, it has not established strong enforcement measures concerning military activities. The issues of sovereignty and the importance of defense operations means evidence or oversight is often limited. The U.N. Environment Programme and the International Maritime Organization have called for greater collaboration and transparency, as a means of reporting and evaluating military impacts on the marine environment.

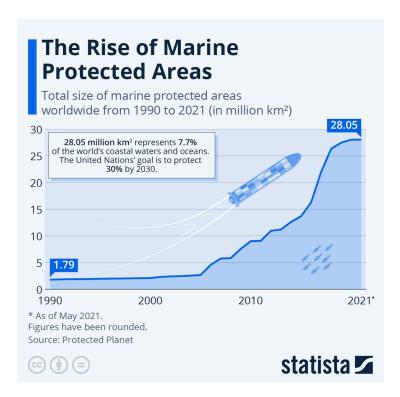
Military activities could reduce fish stocks and and even disrupt fishing zones, affecting coastal economies and food security. It should also be noted that Small Island Developping States (SIDS), like Maldives, Seychelles and Tuvalu are extremely depended on fishing and well therfore be impacted do to the environmental impacts in marines. That said seafoods will be equally impacted by the poltion and therfore be contamidated risking human lives.

Cases Studies

Military activities have left their deep and long-lasting marks on the world's oceans, mainly through the dumping of munitions and chemical weapons. In the aftermath of World War II, tens of thousands of tons of explosives, such as TNT and RDX, along with mustard gas, were dumped into the Baltic Sea. Decades later, studies show that these toxic substances continue to leak into surrounding waters and sediments, contaminating marine ecosystems and threatening coastal communities. Similar dumping occurred in the Pacific and Indian Oceans, where post-war disposal practices have created long-term pollution hotspots. These examples reveal how military actions can continue to harm the environment

long after conflicts have ended, emphasizing the urgent need for international cooperation to monitor, contain, and remediate these legacy pollutants.

Modern conflicts have only increased the environmental hazards facing marine ecosystems. For example, the ongoing war between Russia and Ukraine has destroyed water infrastructure like dams and wastewater treatment plants. The resulting release of pollutants and debris into rivers and the Black Sea has disrupted ecosystems and harmed marine life. Furthermore, naval mines, sunken military equipment, and coastal fortifications have modified habitats and raised contamination levels. These impacts illustrate that modern warfare extends well beyond the battlefield into the common marine environment and raise difficult questions about the balance between national defense and global environmental stewardship.



Timeline

1958 – Adoption of the first United Nations Convention on the Law of the Sea (UNCLOS I) addressing basic maritime governance.

1982 – UNCLOS III establishes modern legal frameworks for marine environmental protection.

1996 – NATO naval exercises raise international concern over whale strandings linked to sonar testing.

2008 – UNEP publishes a report highlighting the ecological risks of munitions dumping in the Baltic Sea.

2022 – Discussions at the UN Ocean Conference call for increased monitoring of military pollution in the high seas.

Major Parties Involved

United States Navy (USN)

One of the largest naval forces performing global operations; has an important contribution for sonar testing and maritime defense.

Russian Federation

Performs extensive naval operations that include submarine patrols and missile tests, adding to environmental stressors in the Arctic and Pacific.

NATO (North Atlantic Treaty Organization)

Conducts multinational military exercises that span multiple marine regions, highlighting the need for coordinated environmental oversight.

United Nations Environment Programme (UNEP)

Favors environmental duty and sustainability in light of military and security activities.

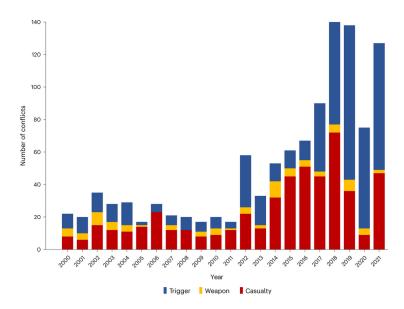
International Maritime Organization (IMO)

Sets and regulates international shipping and pollution control standards related to naval operations.

Greenpeace International

Monitors and advocates against ocean pollution and degradation caused by military activities.

Impact of the Russia-Ukraine armed conflict on water resources and water infrastructure



Number of studies on water in armed conflicts settings, per country:

Water in war: Understanding the impacts of armed conflict on water resources and t...



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Possible Solutions

- Establish international reporting requirements for environmental impacts of military operations in international waters
- Encourage states to include environmental impact assessments (EIAs) prior to conducting naval exercises.
- Promote UNEP-led research initiatives to assess long-term pollution from historic military waste.
- Develop an international framework under UNCLOS to govern environmental accountability for military activities.
- Support the creation of marine protected zones where military operations are limited or prohibited.

Bibliography

https://www.unep.org

https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

https://www.imo.org

https://www.greenpeace.org/international

https://www.nato.int

https://www.oceanpanel.org