



Launching a new phase in the fight against land-based sources of marine pollution

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In the 1970s, oil pollution from ships and land-based pollution were considered the two main threats to the ocean. Thanks to a number of factors, including increasingly strict regulation of the shipping sector, pollution from ships is no longer a major problem, and international declarations on ocean no longer emphasize it. However, the same cannot be said for land-based pollution, which remains a significant challenge for the health of the ocean and its inhabitants. As of today, it is indeed estimated that land-based sources contribute about 77% of marine pollution.

Building on Operative Paragraph 13 of the Political Declaration from the 2nd UN Oceans Conference held in Lisbon, Portugal in 2022, this *Issue Brief*, along with the supporting *Note*, challenges participants to the 3rd UN Ocean Conference in Nice (France, June 2025), to discuss and address the following question: "What must governments specifically do at national, regional and global levels to rapidly accelerate the implementation of precautionary and ecosystem-based approaches to coastal pollution?"

KEY MESSAGES

The 1995 Washington Declaration and Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was for a long time the primary global instrument recommending practices and procedures for addressing land-based sources of marine pollution in a holistic manner. However, after thirty years of limited funding and lacklustre implementation, identifying locations where the GPA has been the primary driving force of domestic reform is extremely difficult.

Despite some success, initiatives developed at the regional level, especially through regional seas programs, often face major implementation issues. In the same way, donor initiatives often lead to local success, but are regularly hampered by the funding, with larger sums, of activities and practices that are harmful for the marine environment.

Overall, while localized success stories are not entirely absent and much has been learned regarding domestic implementation, the marine environment continues to receive unacceptable levels of pollutants from land-based activities via subterranean, riverine and atmospheric vectors.

In 2025, the international community will commemorate the 30th anniversary of the Washington Declaration and the inception of the GPA. This significant milestone coincides with the organization of the 3rd United Nations Ocean Conference, scheduled to convene in Nice (France). This juncture offers a timely opportunity for the global community to initiate a new phase in combating land-based pollution.

1. BACKGROUND

The 2nd World Ocean Assessment, published by the United Nations in 2021, reported that “about 40% of the world’s population lives in the coastal zone, that is, within 100 km of the coast. The proportion is increasing.” It also highlighted that “the marine environment brings both benefits and risks to human health, especially for people who live near it.” At the macro scale, it is indeed estimated that land-based sources contribute about 77% of marine pollution. However, the absolute ratio of land-based to sea-based sources of pollution fluctuates dramatically dependent on, *inter alia*, physical location, types of pollutants, and seasonal variability. In many locations, close to 100% of marine pollution comes from land-based sources.

Considerable progress has been made at the international level to address individual categories of coastal and marine pollution. The 2001 Stockholm Convention and the 2013 Minamata Convention have made an effective contribution to combating pollution from Persistent Organic Pollutants (POPs) and mercury. Since 2002 and a resolution adopted by the United Nations Environmental Assembly (UNEA), an Intergovernmental Negotiating Committee (INC) has been established with the objective to “develop an international legally binding instrument on plastic pollution, including in the marine environment”. However, there are many other, more diffuse and routine sources of land-based pollution, which receive less attention from the international community.

The long list of pollutants that reach and negatively impact the marine environment also includes heavy metals, pathogens, radioactive substances, hydrocarbons, petrochemicals, and other forms of solid waste, heat and even noise. Furthermore, the quantum of naturally occurring substances, such as reactive nitrogen and carbon dioxide, has significantly increased due to activities of direct benefit to humanity, such as the production of fertilizers and energy. However, for certain marine ecosystems the altered balances of such substances may have a devastating effect. Similarly, land-based activities such as mining, clearing vegetation for agriculture or forestry, and building roads, homes and hotels can destroy critical habitats and fill rivers and estuaries with mud and silt. Development that modifies riparian and coastal zones also limits the capacity of natural systems to filter out increased levels of pollution. In turn, these practices reduce the resilience of coastal and marine ecosystems, making them more susceptible to pressures such as climate change, coastal storms and over harvesting.

2. INTERGOVERNMENTAL EFFORTS TO FIGHT AGAINST LAND-BASED POLLUTION

At the global level, the non-binding 1995 Washington Declaration and Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), adopted by 108 countries and the European Union, was for a long time the

primary global instrument recommending practices and procedures for addressing land-based sources of marine pollution in a holistic manner. However, after thirty years of limited funding and lacklustre implementation, identifying locations where the GPA has been the primary driving force of domestic reform is extremely difficult. Moreover, at the fifth session of the Intergovernmental Review Meeting in 2022, governments stopped short of officially closing the GPA but downgraded it when it decided “to hold no further sessions of the periodic Intergovernmental Review Meeting (...), recognizing that [UNEA] can continue to provide guidance on priorities and actions to address marine pollution from land-based activities”. The GPA has thus become a shadow of its former self, and it is timely to question whether (i) it should be reinvigorated, (ii) the existing disparate mechanisms addressing individual pollutant source categories are sufficiently robust to address the persistent challenge of land-based sources of marine pollution, (iii) an entirely new or alternative approach, or approaches, is required.

Initiatives have also been developed at regional level, especially through regional seas programs, some of which have adopted dedicated protocols on land-based pollution. These instruments adopt similar definitions of land-based sources of marine pollution, include black-listed substances and regulate the discharge or release of grey-listed substances. Despite some successes, the implementation of these protocols often faces major implementation problems.

Multilateral and bilateral donors also play an important role in the fight against land-based pollution, financing projects and initiatives aimed at reducing pollution and managing waste. In February 2024 for instance, the Global Environment Facility (GEF), under its GEF-8 funding round, approved the Clean and Healthy Oceans Integrated Programme, providing \$112m of GEF resources and \$748m of indicative co-funding to address the combined effects of climate change and excessive nutrient loads that create marine hypoxic zones. Donor initiatives often lead to local successes, but are regularly hampered by the funding, with larger sums, of activities and practices that are harmful for the marine environment.

3. LOCAL SUCCESS BUT NO TRANSFORMATIVE CHANGES

Notwithstanding the large number of agreements and initiatives aimed at addressing land-based sources of marine pollution, the world’s ocean and seas continue to be under the severe threat of pollution. While localized success stories are not entirely absent and much has been learned regarding domestic implementation, the marine environment continues to receive unacceptable levels of pollutants from land-based activities via subterranean, riverine and atmospheric vectors. Table 1 summarizes the main challenges faced by stakeholders, at different levels.

TABLE 1. Challenges in the fight against land-based pollution

Political inattention	As long as it does not lead to major ecological disasters or health problems for coastal populations, marine pollution does not receive the attention it needs from decision-makers at national and local levels.
Subsidies harmful activities	A lot of money is spent every year on land-based pollution control, but even more money is given to activities that have a negative impact on the marine environment.
Funding	Donors have increasingly directed funding towards individual pollutant source categories, e.g. plastics, at the expense of holistic programmes addressing the cumulative impacts of coastal and marine pollution.
Knowledge/technology transfer	The policy, technical and social solutions to many coastal pollution challenges are frequently location-specific and are not easily transferable. International cooperation is required to extract the key elements of success and to support governments tailor those elements to their own particular circumstances.
Cost-effectiveness	Many solutions to coastal pollution have involved large and expensive infrastructure projects, e.g. municipal wastewater treatment facilities, that are not always feasible in many developing countries. Increased support is needed for nature-based solutions, e.g. coastal wetlands.
Lack of guidelines	User-friendly flexible guidelines are required to support both national and sub-national governments implement multilateral commitments, e.g. regional protocols and EU Water Framework Directive.
Broad-brush MEAs	There is frequently a large gap between the language of global or regional MEAs, and the locally-specific challenges faced by municipal authorities, industry or agricultural districts. At the local scale, global MEAs may be irrelevant, or lack the necessary triggers to support real change. The consensus nature of multilateralism means that pollution hotspots are rarely identified, and solution remain broad in their application.
Use of indicators	The plethora of performance indicators and reporting frameworks imposed on governments by multilateral instruments is increasingly a burden for many governments. There exists a need to rethink indicators, including aligning/streamlining regional and global indicators.
Reporting requirements	There is a lack of alignment between reporting requirements for many global issues, e.g. sustainable production and consumption, sustainable development, biodiversity.
Capacities	There exists a need to significantly upscale the training of policy officers and local practitioners in methods and approaches to reducing coastal pollution.
GPA Secretariat	Adequate funding is no longer available for a dedicated GPA Secretariat within UNEP to support the implementation of the GPA.
Transboundary river management	Rivers are major vectors for pollution to coastal ecosystems. However, transboundary river management is highly complex and, in some instances, politically challenging.
Mitigation and restoration	Multilateral efforts to address coastal pollution, either holistically or for individual pollutant source categories, should focus on clean-up/ecosystem restoration as much as on reducing new pollution entering the system.

4. KEY RECOMMENDATIONS

In 2025, the international community will commemorate the 30th anniversary of the Washington Declaration and the inception of the GPA. This significant milestone coincides with the organization of the 3rd United Nations Ocean Conference, scheduled to convene in Nice (France). This juncture offers a timely opportunity for the global community to initiate a new phase in combating land-based pollution. To this end, governments should:

1. Review how the existing international institutional infrastructure, e.g. the GPA and the respective Regional Seas protocols and action plans, can be better supported to facilitate and accelerate coordinated responses to the cumulative effects of all forms of coastal pollution, even in the absence of complete scientific understanding of those cumulative effects, i.e. applying precautionary approach.

2. Initiate and implement sustained ecosystem-based initiatives that address the cumulative impacts of coastal pollution using ecosystem-based approaches. In this context, governments could:
 - a. Launch a coalition of like-minded countries wishing to reinvigorate, support and/or create new global and/or regional mechanisms that address coastal pollution through integrated coastal zone and river-basin management, i.e. ecosystem-based approaches to coastal pollution;
 - b. Empower local and municipal authorities to regulate coastal pollution in all forms, while also providing adequate funding and expertise for improved wastewater/industrial effluent management and to restore riparian zones/coastal wetlands; and
 - c. Encourage, support and connect community-based initiatives, such as beach, harbor and lagoon clean-ups.

3. Invest in ecosystem-based approaches that build the resilience of coastal communities to the combined threats of pollution, climate change and loss of biodiversity.

4. Increase funding for global and regional scale collaboration on coastal pollution, e.g. UNEP's Source to Sea programme, with a particular focus on information management, mutual learning and knowledge sharing, reporting and capacity building.

5. Accelerate the implementation of the 2022 Kunming-Montreal Global Biodiversity Framework (GBF), with a specific attention to Target 7 (pollution) and 18 (harmful incentives and subsidies).

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The Oceano Azul Foundation is an international organization that contributes to protecting and conserving the ocean, integrating key areas such as Ocean Conservation, International Ocean Advocacy and Ocean Policies, Frameworks and Economics. The Foundation also promotes raising awareness, involving, and educating society in order to influence a change in behaviour.

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