



flexible instrument



by Conrad C. Lautenbacher

Nearly 80 per cent of all marine pollution originates on land. Though the scientific community discussed the implications of land-based marine pollution for decades, “out of sight, out of mind” seemed to rule policy decisions. This mentality gradually changed, however, as more people came to understand the interconnected nature of the planet’s environmental systems.

Policy makers began to understand the importance of a healthy marine environment to the quality of life on land. More importantly, they started realizing the implications for the marine environment of decisions made on land, and sought solutions to mitigate their harmful effects.

The 1992 Earth Summit in Rio de Janeiro was a critical moment where political will began to catch up with scientific vision. Nations committed to protect the marine environment in general, and specifically to initiate a global effort to combat land-based sources of ocean pollution. The political support generated at the summit was solidified in 1995 when over 100 nations and the European Commission adopted the voluntary Global Programme of Action for Protection for the Marine Environment from Land-Based Activities (GPA), providing guidance to policy makers and resource managers to prevent, reduce, and control ocean pollutants.

Marine pollutants originate from a variety of land-based sources — including agriculture, near-shore and inland development, and coastal industry. And each country has its own policy priorities and limitations. The GPA successfully addressed these issues by prescribing a great deal of flexibility in how nations could meet larger environmental goals.

Environmental sustainability and economic viability are inextricably linked. While much attention is focused on the tension between the environment and economic activity, the reality is that they are inherently co-dependent. Consider:

- 61% of the world’s total economic output comes from areas within 100 kilometres of the coast.
- Marine tourism, marine fisheries, and aquaculture are estimated to provide global economic benefits worth \$161 billion, \$80 billion, and \$57 billion respectively.
- 70% of cities with populations over eight million are located on coasts and 38% of the global human population lives along a narrow strip of coastal land constituting only 7.6% of the Earth’s total land area.
- In some countries, up to 90% of all sewage is dumped directly into the ocean.
- Approximately half of the world’s coastal wetlands have disappeared.

Much economic vitality is built on the basis of a healthy, vibrant environment. At the same time, economic growth makes it easier to pursue policies and actions that promote environmental sustainability. The key to achieving this balance is to develop policies that remain flexible to changing needs and priorities.

The GPA has succeeded largely because of its flexibility. It is drafted to provide guidance at international, regional, and national levels — and so can be used to address problems associated with land-based sources of marine pollution at all of them, or at the one most appropriate for the situation. It has, for



example, guided the development both of the Arctic Council's Regional Programme of Action, and of a number of National Programmes of Action in such countries as Iceland, Canada, and Russia. The regional plan focuses on transboundary problems, such as persistent organic pollutants (POPs), while national ones focus on domestic issues.

The GPA is also flexible in its breadth. It addresses all major land-based sources (such as sewage, nutrients, heavy metals, POPs, oils, radioactive substances, litter, sediment mobilization, and physical alteration and destruction of coastal zones) rather than focusing on a single one. This allows lessons learned from managing one source to be applied, where appropriate, towards managing others.

As it is not legally binding, the GPA also allows nations to take action based on the particular needs and capacities of their economies and institutions. It recognises that one size will not fit all, and that administrative and management capabilities vary, based on national circumstances. It also provides assistance to governments when developing and implementing their National Programs of Action. My agency, National Oceanic and Atmospheric Administration (NOAA), for example, has helped 12 countries in the wider Caribbean with developing NPAs by working with the GPA Coordination Office and serving as a clearinghouse for information on land-based sources of pollution.

The GPA can also adapt to political trends and 'hot issues.' UNEP participants recently raised the topic of nutrient loading, which, while certainly not a new problem, has gained public visibility of late. Nutrient enrichment — in the

coastal environment, the concern lies with nitrogen — is a particularly cogent issue to address through the GPA structure. It tends to cross geopolitical boundaries and scientific disciplines and affects different areas in different ways, making the need for information sharing and maximum flexibility most important.

Ultimately, as its name suggests, the GPA is designed to lead to action. In response to the increasing public concern over nitrogen loading, the UNEP/GPA Coordination Office recently held an informal meeting on reactive nitrogen in the environment where participants agreed to form a Global Partnership on Nutrient Management that will support a number of joint activities to address the impacts of excess nitrogen in coastal and marine ecosystems. This GPA-led response will ensure that the 2006 Beijing Declaration — in which participating governments resolved "[to] devote additional effort, finance and support to address point and non-point source nutrients...as major and increasing source categories directly affecting human health, well-being and the environment" — is actualized.

It is readily apparent, when considering environmental challenges like land-based sources of marine pollution, that our world is increasingly connected. Since rivers and oceans span political boundaries, managing them must be integrated and flexible. The GPA, when utilized locally, regionally, and globally — from headwaters to coasts to seas — can provide our leaders with the information needed to promote the safety of our citizens, the growth of our economies, and the effective management of our planet's precious resources. 