



## WELCOME

Welcome to the **World Water Forum Special Edition** of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities *GPA Outreach* newsletter. *GPA Outreach* is a monthly newsletter designed to keep you up-to-date on the planning and preparatory events of the 2<sup>nd</sup> Intergovernmental Review of the *Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities* (GPA), which will take place in Beijing, China from 16 – 20 October 2006. This Special Edition of *GPA Outreach* contains information about GPA-related activities taking place at the World Water Forum, as well as articles of interest related to the GPA. We hope this newsletter will not only inform you, but also encourage you to become involved in GPA events at the World Water Forum and beyond.

Mexico 2006  
4th World  
Water Forum



The theme for the World Water Forum is “Local Actions for a Global Challenge.” The theme reflects the understanding that water related problems have their greatest impacts at the local level, and that local responses are essential to ensure that international commitments on water are met. In our efforts to meet international commitments, we must remember the intrinsic links that exist between freshwater and oceans. Oceans have become the final destination for municipal sewage and solid waste, chemical discharges from factories, fertilizer run-off and other pollution, much of which is transported to oceans by streams and rivers. The effects of this pollution are detrimental for the biodiversity and productivity of the marine environment,

as well as human health and well-being.

Stakeholders have a vital role to play in preventing the degradation of the marine environment from land-based activities and in contributing to the development of holistic management approaches that link river basins, coasts and oceans. UNEP GPA, together with its partners, will host three events at the World Water Forum (detailed below).

We look forward to your active participation and we encourage you to pass the messages on to colleagues and friends who may be interested in the GPA. Please do not hesitate to contact us for more information about the GPA or GPA events at the World Water Forum:

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### Facts About the GPA:

- The GPA was adopted by 108 Governments and the European Commission in 1995.
- It targets major threats to the health, productivity and biodiversity of the marine and coastal environment resulting from human activities on land.
- The GPA proposes an integrated, multi-sectoral approach based on commitment to action at local, national, regional and global levels.
- It is an important global mechanism that explicitly addresses the linkages between freshwater, coastal and marine environments.

## LINKING THE MANAGEMENT OF FRESHWATER AND OCEANS

Human activities and their impacts on river basins are intrinsically linked to problems of the marine environment. Pollution discharges, increased freshwater use, land use practices, river regulation works and water resource development projects have crucial impacts on principal coastal and oceans resources and may place the viability of coastal economic activities at risk. Increased demands for food for an expanding global population have necessitated a rapid growth of the agricultural sector during the last decades. The widespread and heavy use of fertilizers employed by modern agriculture many hundreds of kilometres from the coast is making nutrient over-enrichment and eutrophication an increasingly hot issue in coastal waters. Oxygen depleted “dead zones” have been a rapidly expanding problem during the last decades in, for example, the Gulf of Mexico adjacent to the Mississippi River delta, the Baltic Sea and South China Sea. On the other hand, freshwater flows are critical to the health and productivity of estuaries and coastal waters. Increased demand of freshwater, mainly for irrigated

agriculture (80% of water use) and urban development are depleting freshwater flows and damaging coastal ecosystems and their vital functions as spawning and nursery grounds for coastal fisheries.

River basins and the marine environment share common problems and therefore require joint solutions. The separate efforts of ocean management, coastal management and river basin management are not able to achieve the shared objectives. A holistic, ecosystem-based approach is needed, linking the management of river basins, coasts and oceans. The required scale of the area of integrated management is defined by the extent of the priority problems themselves, their driving forces, the extension of their impacts and anticipated societal responses. Defining the management area in such a way- as a ‘problem-shed’- may easily allow for the inclusion of groundwaters, air deposition, and river catchments in marine management approaches.

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## LINKING THE MANAGEMENT OF FRESHWATER AND OCEANS

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### Activities

GPA and freshwater-coast partners established at the WSSD in 2002 the FreshCo partnership and developed a series of activities, such as workshops, pilot projects, and an ICARM expert group to promote and guide the management link.

The Global Forum on Oceans, Coasts and Islands established the Task Force on Linking Freshwater to Oceans and organised the Lisbon and Paris conferences in 2005/06 to promote its message.

#### Management Link for Freshwaters and Coasts: Progress in Local Action

Saturday 18 March, 14.30-16.30 pm

At the 4<sup>th</sup> World Water Forum, the Global Forum is organising the session "Management Link for Freshwaters and Coasts: Progress in Local Action". Lessons learned from case studies will be presented as well as the achievements of some countries to include the freshwater-coast management link into GPA National Programmes of Action.

### Forthcoming Publications

GPA and its partners will issue two publications on linking the management of freshwaters to oceans in the next few months as a preparation for the IGR-2 meeting in October.

- The ICARM Casebook will capture the lessons learned from practical cases on linking the management of rivers and coasts. Case studies for some 20 river-coast systems will be analysed to assess the need for and benefits of linking management. Measures taken and constraints and challenges encountered in establishing a management link will be examined.
- An ICARM Progress Marker report will give guidance on assessing progress towards linking the management of catchments and coasts. The specific objective is to sketch a roadmap, identify subsequent phases and outcomes, and set adequate markers to guide and provide a yardstick for assessing progress.

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## GPA AT THE WORLD WATER FORUM

### Developing Solutions to Protect the Marine Environment from Land-based Activities:

#### Stakeholder Dialogue for the Latin America and the Caribbean Region

Date & Time: Monday 20 March, 9.00-12.00 hrs, in  
Venue: Hotel del Bosque, Room El Roble  
Address: Melchor Ocampo No. 323, Col. Nueva Anzures,  
C.P. 11590, Mexico City

This event will bring together stakeholders working in the Latin America and Caribbean region to discuss issues threatening the marine environment in the region and to explore the roles of stakeholders and national governments in developing solutions to these problems. The event will enable stakeholders in the region to input into the Second Intergovernmental Review Meeting (IGR-2) of the GPA, to be held 16-20 October 2006, Beijing, P.R. China. This event is one of a series of regional dialogues being hosted by Stakeholder Forum and UNEP GPA in preparation for the GPA IGR-2.

Anyone with an interest in the protection of the marine environment in this region is welcome to attend the regional stakeholder dialogue. This includes non-governmental organizations, women's groups, representatives from national, regional, and local government, regional organizations, academic groups, and representatives from the private sector.

Organised by Stakeholder Forum, Misión Rescate Planeta Tierra, Mexico A.C, and UNEP-GPA Coordination Office.

For more information or to register, please contact  
Jennifer Peer: [jpeer@stakeholderforum.org](mailto:jpeer@stakeholderforum.org)

### Protecting the Marine Environment from Land-based Activities: Multi-stakeholder Dialogue Session

Date & Time: Tuesday 21 March, 13.00-14.00 hrs  
Venue: Banamex Centre, Main Access Floor  
Room: Palacio de la Canal, Number 6

This side-event will facilitate preparing multi-stakeholder input to the 2nd Intergovernmental Review (IGR-2) of the GPA and to raise awareness on key messages from UNEP/GPA that form part of the broader focus of IGR-2:

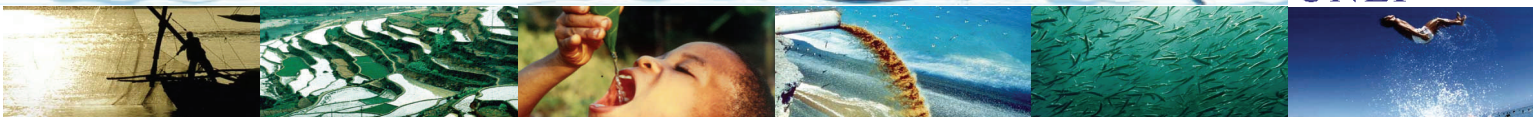
**Message #1:** The importance of linking freshwater to coasts/oceans management also in relation to the IWRM target 2005; and  
**Message #2:** The importance of environmental dimensions in addressing the Water and Sanitation targets 2015.

This dialogue session will also facilitate stakeholder input on the possible role of the World Water Council / WWF4 in preparing for GPA IGR-2; and key issues or activities stakeholders undertake to be profiled at GPA IGR-2. The floor will also be open to participants to announce intended contributions and commitments for GPA IGR-2.

Expected outputs include suggestions on: how to mainstream GPA in the work programmes of stakeholders; how best to address the issues mentioned in the messages 1 & 2; and involvement and commitment of stakeholders to prepare for GPA IGR-2, the Partnership Day, and beyond.

Organised by UNEP/GPA, Stakeholder Forum and the Global Forum on Oceans, Coasts and Islands

For more information please contact Cees van de Guchte, UNEP/  
GPA Coordination Office: [c.vandeguchte@unep.nl](mailto:c.vandeguchte@unep.nl)



## WASTEWATER AND THE MARINE ENVIRONMENT

The problem of *nutrient over-enrichment* in coastal waters is evident around the globe, and is becoming a major issue for the protection of the marine environment from land-based sources. In developed regions of the world, the reduction of nutrient input from municipal sewage has been significant due to large investments made in the collection and treatment infrastructure. In many European countries agricultural runoff is now becoming the major cause of nutrient over-enrichment.

Progress in sanitation and wastewater treatment in the developing world, however, is far from satisfactory and much more effort and financial resources should be made available in order to improve the situation, for both human populations and the environment. In developing countries approximately six children per minute still die from diseases caused by unsafe water and inadequate sanitation. An average of 250 million cases occur every year worldwide of gastroenteritis due to bathing in contaminated water, and between 50 – 100,000 deaths occur every year from infectious hepatitis. The global burden of human disease caused by sewage pollution of coastal waters has been estimated at 4 million lost man-years every year.

Deterioration of the aquatic environment is visible around the globe. In most of the UNEP Regional Seas the discharge of untreated domestic wastewater has been identified as a major source of environmental pollution. Coral reefs are affected by discharges of untreated sewage, precious habitats are disappearing and biodiversity is decreasing, fishing and agriculture possibilities are being lost and poor water quality is resulting in loss of income from tourism and loss of real estate value. To ignore wastewater pollution issues, especially in relation to inadequate wastewater treatment, can prove costly in human, ecological and financial terms.

In 2002, some 1.1 billion people (one-fifth of the world's population) were without adequate access to water, and 2.6 billion people (half of the developing world) lacked access to improved sanitation. Sanitation coverage in developing countries (49 %) is only half that of the developed world (98 %), with equivalent numbers of people un-served in both urban and rural areas. Population growth, rapid urbanisation, and increasing water supply and sanitary services to meet the target on water supply and sanitation will likely also generate wastewater pollution problems. Sanitation must therefore be integrated in a

sustainable sanitation cycle, which includes public sewage collection, re-use, treatment systems, and safe re-allocation to the natural environment as to prevent raw sewage from entering groundwater and surface waters, including coastal areas.

Presently only about 10% of the domestic wastewater in developing countries is being collected and only about 10% of existing wastewater treatment plants operate reliably and efficiently. Alternatively, decentralised ecological sanitation and the possible re-use of waste and wastewater, such as in agriculture, should be considered cost-effective options for reducing the discharge volumes of sewage. See the figure below which illustrates a ladder of sanitation options– this applies to both rural and densely populated urban agglomerations.

UNEP/GPA, jointly with WHO, UN-HABITAT, WSSCC and UNICEF have developed a Strategic Action Plan on Municipal Wastewater, and Guidelines and Key Principles for Local and National Action on Municipal Wastewater, which have been considered by over 100 countries at the GPA Intergovernmental Review meeting in 2001. Jointly with UNESCO-IHE and UNDOALOS, a training course on “Improving Municipal Wastewater Management in Coastal Cities” has been developed. From these a global consensus emerges on how to address municipal wastewater sustainably.

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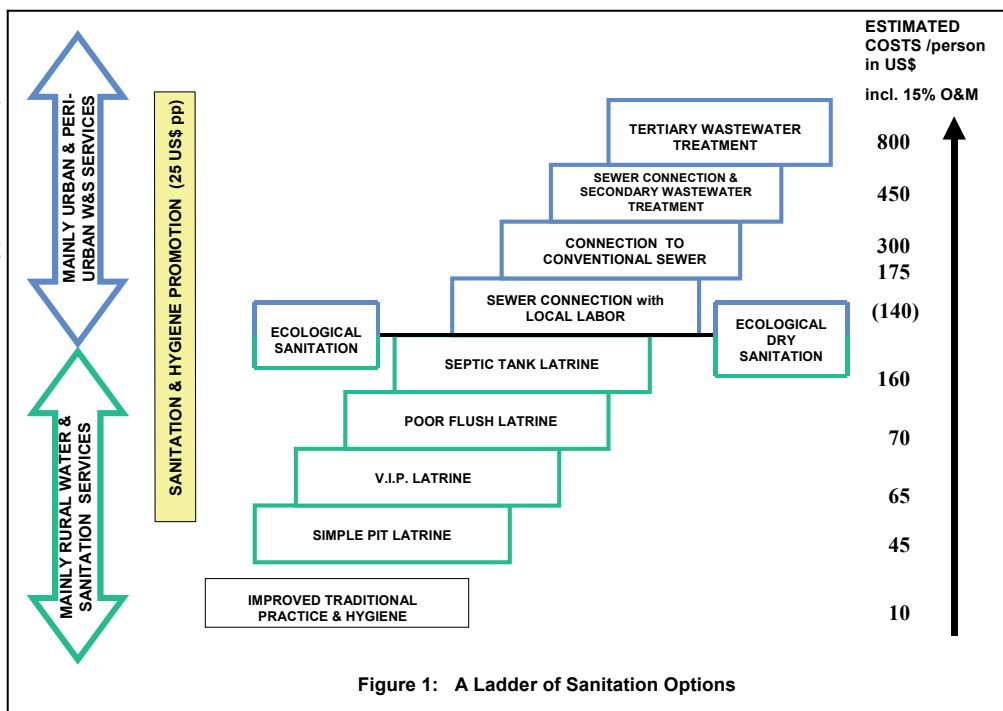
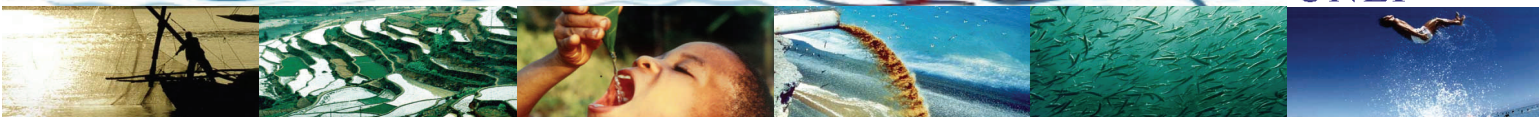


Figure 1: A Ladder of Sanitation Options



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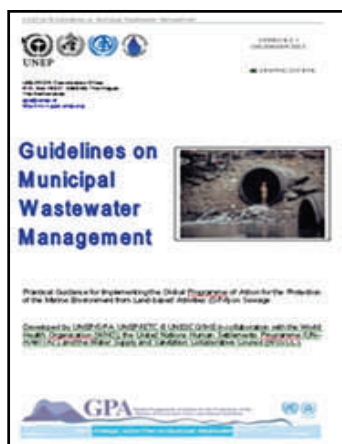
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## WASTEWATER AND THE MARINE ENVIRONMENT

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Best practices and successful innovative approaches urgently need intensifying and scaling up. Partnerships that actively and effectively implement innovative approaches are key to ensure success. These partnerships rely heavily upon strong commitment, shared responsibilities and shared risks among all stakeholders.

At the upcoming IGR-2 meeting in Beijing, 16-20 October 2006, the UNEP/GPA Coordination Office welcomes partnerships to present themselves and their work as it contributes to implementing the GPA with



respect to municipal wastewater, and to discuss strategic directions and collaboration beyond 2006. Also for this purpose, a preparatory multi-stakeholder dialogue is being organised during the World Water Forum in Mexico, on Tuesday 21 March, 13.00 - 14.00 hrs (see page 2 for details).

To read more on municipal wastewater, visit the UNEP/GPA website:

[www.gpa.unep.org/bin/php/programs/sap/index.php](http://www.gpa.unep.org/bin/php/programs/sap/index.php) and its training website at:  
[www.gpa.unep.org/training](http://www.gpa.unep.org/training)

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[c.vandeguchte@unep.nl](mailto:c.vandeguchte@unep.nl)

## STAKEHOLDERS AND THE GPA IGR-2

Every few years, Governments and other stakeholders meet to review the status of the implementation of the GPA and decide on action to be taken to strengthen the implementation of the GPA. In October 2006, the Second Intergovernmental Review Meeting of the GPA (IGR-2) will be held in Beijing, China. The objectives of the IGR-2 are to:

1. Strengthen implementation of the GPA and contribute to the achievement of the JPOI 2006 target.
2. Define the programme of work for the UNEP/GPA Coordination Office for the period 2007-2011.
3. Contribute to the International Decade for Action: 'Water is Life', 2005-2015.
4. Forward ecosystem approaches and contribute to the achievement of the JPOI 2010 ecosystem approach to coasts and ocean management target.

Active participation by stakeholders in the work of the GPA is vital to its success. Stakeholder Forum and UNEP GPA will host regional and multi-stakeholder dialogues prior to the IGR-2 to enable stakeholders to input into the IGR-2. Stakeholders are also invited to participate in the IGR-2 meeting in Beijing. The meeting will feature a Partnerships Day, which will highlight how various stakeholders contribute to implementing the GPA, as well as stakeholder dialogues.

For more information about the regional consultations or the IGR-2 please contact:

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## ABOUT STAKEHOLDER FORUM



Stakeholder Forum for a Sustainable Future's mission is to inform, influence, promote, and advance the implementation of sustainable development. Stakeholder Forum fulfils this mission by developing and facilitating multi-stakeholder processes that engage stakeholders in the development and implementation of sustainable development policy. To support multi-stakeholder processes, Stakeholder Forum also undertakes activities related to capacity building, training, and policy development.

Stakeholder Forum is delighted to continue our partnership with UNEP GPA as we build toward the IGR-2. Stakeholder Forum is working with UNEP GPA to undertake outreach and conduct dialogue with stakeholders to ensure that the IGR-2 will gain from the experience and expertise of a broad range of stakeholders.

For more information please visit [www.stakeholderforum.org](http://www.stakeholderforum.org)

## ABOUT UNEP GPA



The GPA was adopted in 1995 by 108 Governments and the European Commission in response to the increasing threat to the marine environment from human activities on land. The GPA is designed to be a source of conceptual and practical guidance for national and/or regional authorities for devising and implementing sustained action to prevent, reduce, control and/or eliminate marine degradation from land-based activities.

The United Nations Environment Programme acts as the secretariat for the GPA. The UNEP/GPA Coordination Office, located in The Hague, The Netherlands supports the implementation of the GPA by: promoting and facilitating the implementation of the GPA at the national level and the regional and sub-regional level and playing a catalytic role with other organisations and institutions in the implementation of the GPA at the international level.