UNITED NATIONS



United Nations Environment Programme

UNEP (DEPI)/RS.13 /WP.2.RS

Original: ENGLISH

13th Global Meeting of the Regional Seas Conventions and Action Plans Busan, Korea, 3 – 5 October 2011

PROGRESS IN IMPLEMENTING THE GPA

2007 - 2011

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Progress in implementing the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities at the national, regional and international levels in the period 2007-2011

Note by the secretariat

- 1. The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was adopted by 108 governments, the European Commission and other relevant stakeholders in an intergovernmental conference held in Washington D.C, USA in November 1995. The Programme represented a clear commitment among national governments, international and regional organizations and programmes, non-governmental organizations and major groups to protect and preserve the marine environment from adverse impacts of land based activities. The GPA framework calls for comprehensive, continuing and adaptive actions and provides a series of recommendations as well as criteria for their development at different levels with a focus on actions by governments. It provides a comprehensive yet flexible framework to assist countries in fulfilling their duty in accordance with international law to preserve and protect the marine environment from sewage, physical alterations and the destruction of habitat, nutrients, sediment mobilisation, persistent organic pollutants, oils, litter, heavy metals and radioactive substances. There have been two intergovernmental reviews of the progress in implementing the GPA, the first in Montreal, Canada in 2001, the second in Beijing, People's Republic of China in 2006.
- 2. This report provides a summary and overview of the implementation of the GPA by countries in the period since the last review in Beijing in 2006, along with the assistance provided in so doing by UNEP as the Secretariat through the UNEP/GPA Co-ordination Office. UNEP as the Secretariat of the GPA is tasked with facilitating and promoting the implementation of the Global Programme of Action through international, regional and national action.
- 3. The Governments attending the 2nd Intergovernmental Review meeting (IGR-2) of the Global Programme of Action in Beijing, People's Republic of China in October 2006, agreed that over the period 2007 2011 they would "focus on mainstreaming the implementation of the Global Programme of Action in national development planning and budgetary mechanisms". The Governments indicated that mainstreaming will require integration of the Global Programme of Action across sectors and ministries and also integration into domestic and international aid budgets, development plans, strategies and actions. Furthermore, through the Beijing Declaration, Governments also agreed that over the same period in order to help focus implementation of the GPA more effectively they should "devote additional effort, finance and support to address point and non-point source nutrients, including municipal, industrial and agricultural wastewater, as major and increasing source categories directly affecting human health, well-being and the environment, including marine ecosystems and their associated watersheds."

- 4. In line with this approach, the governments agreed in Beijing that during the period 2007-2011, the UNEP/GPA Coordination office should facilitate the implementation and mainstreaming of the GPA at the national level, and to provide assistance to countries in assessing how the conservation of marine and coastal ecosystems contributes to poverty alleviation and the achievement of the Millennium Development Goals, and to support them in mainstreaming the sustainable development of oceans and coasts into international development frameworks and national planning and budgetary processes. Finally, governments agreed that there should be a focus on and strengthening of the UNEP Regional Seas Programmes in order to implement the Global Programme of Action, and called upon the Global Environment Facility (GEF) to continue to support and catalyze implementation of the Global Programme of Action through the GEF supported projects.
- 5. The information in the present report provides a concise overview of progress made in advancing the Global Programme of Action during the period 2007-2011 supported by various actors. A number of important considerations, however, should be borne in mind in regard to the compilation of this summary report. First, the primary responsibility in implementing the GPA lies with governments. Secondly, the GPA, remains a valuable and flexible tool to achieve various goals and targets set by the international community as they relate to the coastal and marine environment and their associated watershed. Therefore, the governments and their stakeholders are able to implement the Programme in a variety of ways and under different initiatives. For example, action on persistent organic pollutants (POPs), a major source category under the GPA, is now taken forward at a multilateral scale under the Stockholm Convention adopted in 2001. Similarly, countries now adopt analogous approaches to the GPA, such as integrated coastal zone management and/or integrated water resources management plans. For these reasons it is not possible to capture the full extent, and in a systematic way, as to how countries are taking forward implementation of GPA related activities. The report therefore is a summary and overview, though additional information on national actions is given in 'Information Document UNEP/GPA.......
- 6. Given the specific role afforded to the UNEP/GPA Co-ordination Office y, as outlined above, in assisting countries, the role of the UNEP/GPA Coordination Office is able to be more fully documented in this report and the focus tends to be on activities where it has helped support action by countries. It is however, important to note that the UNEP/GPA Coordination Office delivered the results as noted in this report with minimum resources projected in the programme of work that was approved during the IGR-2 in Beijing. During the reporting period the UNEP/GPA Coordination Office had only 3 professional staff and one support staff , all paid out of Environment Fund, with limited extra-budgetary resources for implementation of activities.

Key achievements

7. The progress outlined in the present report demonstrates the political determination on the part of governments to undertake tangible action to address the underlying causes of marine degradation resulting from land-based activities. In many countries as it would be demonstrated in the subsequent paragraphs, the governments have taken actions to integrate the implementation of the Global Programme of Action across sectors and ministries and into national budgets, development plans and strategies. In summary, many of the goals set by the international community for the further implementation of the Global Programme of Action by governments and the facilitating role of the UNEP/ GPA Coordination Office for the period 2007–2011 have been met. The strategic direction set during the IGR2 on the implementation of the Global Programme of Action through strengthening the UNEP Regional Seas Programmes to address the Global Programme of Action and developing strategic partnerships with the GEF and the GEF supported International Waters projects, and the regional seas conventions and action plans have been instrumental in bringing about these results. Notwithstanding the above, as it will be outlined in this report much remains to be done to protect the marine environment from land-based activities.

National implementation of the Global Programme of Action

8. National Programmes of Action – an overview. A national programme of action (NPA) was the policy framework envisaged under the GPA to facilitate implementation and mainstreaming of the GPA at the national level. On information received from governments, some 70 countries (to check with Razi) have established framework NPAs since the inception of the GPA. Since the IGR-2 in 2006, countries have embarked on the development of NPA,have revised their NPA and many of them successfully

integrated coastal and marine environmental management and pollution reduction measures into national sustainable development plan/strategy and budgetary processes. Details on the state of play of NPAs are given in the Information Document

9. A number of countries that have finalized the development of framework NPAs since 2006 moved into actual implementation of the NPA through pilot projects to address priority issues. The pilot projects implemented by the countries aim to demonstrate sustainable management approaches, testing of new technology (e.g., use of constructed wetlands or mangroves for wastewater management, stimulating multi-agency cooperation and developing partnership between the state and non-state actors to address land-based sources of coastal and marine pollution. The partnership with non-state actors (non-governmental organizations and private sector institutions) is an important contribution to the development of new institutional arrangements for coastal resources management and addressing land-based sources of marine pollution through application of appropriate technology and management systems suited to local circumstances. These pilot projects also made contributions to the implementation of Bali Strategic Plan for Technology Support and Capacity-building (BSP)¹ and South-South Cooperation. For many of these pilot projects under the UNEP/GPA Coordination Office, the GEF and other development partners have provided technical and financial assistance, while significant amount of resources came from the participating government institutions and other national partners. A list and short description of relevant projects is included in 'Information Document ... National and regional implementation and reporting'.

Mainstreaming of coastal and marine issues into national development plan and budgetary process

- 10. Pursuant to the decisions taken during IGR-2, the UNEP/GPA Coordination Office in partnership with the Stockholm Environment Institute (SEI) produced a guidance document "Making Mainstreaming Work: An Analytical Framework, Guidelines and Checklist for the Mainstreaming of Marine and Coastal Issues into National Planning and Budgetary Processes". Following the finalization of this guidance document, UNEP/GPA Coordination Office organized a series of regional training workshops, in partnership with the governments, Regional Seas Programme and other institutions, to familiarize national governments and key stakeholders with the concept of mainstreaming and the key steps that would entail to mainstream coastal and marine issues into national planning and budgetary processes leading to integrated planning. These workshops took place in Asia (November 2007) Eastern Africa (May 2008), the Caribbean (July 2008) and the South Pacific (September 2009). These regional workshops were attended by senior officials of the Ministry of Environment, as well as from other Ministries such as planning, finance, public utilities, tourism, water resources and fisheries, all of whom have a great stake in the maintenance and improvement of the environmental quality and ecosystem function of estuarine, near shore and ocean waters. These workshops enhanced the opportunities for many policy makers to recognise the contribution of the coastal and marine resources to national gross domestic product and the livelihoods of coastal population.
- 11. The Asia regional workshop, held in Chennai, India was organised in collaboration with the Ministry of Environment and Forests, Government of India and the Institute for Ocean Management of Anna University. The delegates representing the ministry of environment, finance and planning from Bangladesh, Sri Lanka, India, Indonesia, Philippines and Vietnam took part in this workshop. The senior government officials drawn from ministries and agencies responsible for environment, economic affairs and finance from Seychelles, Comoros, Madagascar, Mauritius, Kenya, Tanzania, Mozambique and South Africa attended the Eastern Africa regional workshop held in Port Luis, Mauritius, hosted by the Mauritius Ministry of Environment and National Development and facilitated by the Secretariat of the Nairobi Convention . The Caribbean regional workshop was hosted by the Jamaican Ministry of Environment, and facilitated by the Secretariat of Cartagena

¹ The Bali Strategic Plan constitutes an inter-governmentally agreed approach to strengthen technology support and capacity building in developing countries, as well as countries with economies in transition. It seeks to strengthen the capacity of Governments of developing countries and of countries with economies in transition at all levels and provide systematic, targeted, long- and short-term measures for technology support and capacity building. Another objective of the Plan is to promote, facilitate, and finance access to and support for environmentally sound technologies and corresponding know-how. The Plan also aims to enhance delivery by UNEP of technology support and capacity building based on best practices from both within and outside UNEP. In particular, the Plan seeks improving coordination of disparate efforts to strengthen capacity by various multilateral and bilateral institutions. It does so by providing a framework for strengthening cooperation among UNEP, multilateral environmental agreement (MEAs), and other bodies engaged in environmental capacity building, including the UN Development Programme, the Global Environment Facility, civil society, and other relevant stakeholders.

Convention/Caribbean Environment Programme. Government officials from ministries of environment, economic affairs and finance from Jamaica, Belize, Trinidad and Tobago, Bahamas, Barbados and St Lucia, and representatives from the Caribbean Development Bank and Organization of Eastern Caribbean States (OECS) attended the workshop. The South Pacific regional workshop was organised by the Permanent Commission for the South Pacific (CPPS), and was attended by the delegates nominated by the National Focal Points of the Action Plan of the Southeastern Pacific representing Chile, Colombia, Ecuador, Panama and Peru as well as representatives of various government and non-governmental institutions from Ecuador.

- 12. These regional mainstreaming workshops facilitated sharing of national level experiences in integrating coastal and marine environmental issues into national development plans and budgets. The presentations and discussions of the workshops helped the participating country delegates to reach a new understanding of the mainstreaming approach and created new incentive to expedite the mainstreaming process. These meetings have subjected the 'mainstreaming analytical framework' to robust examination by policy makers and the results have been extremely positive, with several countries indicating their enthusiasm for starting a mainstreaming process and the discussions identifying elements of existing planning and institutional systems that provide building blocks for such a process. The participants reached the conclusion that to move the mainstream process it would be important to set priorities that have wide and high level support and good prospects for success, and articulate these priorities based on an economic analysis that demonstrates the full value of the sustainable management of marine and coastal resources to national development.
- 13. One of the key outputs of these workshops was an outline for a national mainstreaming strategy for each participating country. The outlines prepared by the government representatives describe the steps to be undertaken in the short term to initiate the mainstreaming process in their respective countries, responding to the specific national circumstances. The outlines of a mainstreaming strategy were aimed at creating awareness in the governments about the opportunities created by mainstreaming of marine and coastal issues into national planning and budgetary processes, as well as at providing a first insight into the tasks that would need to be done to address the issue.
- 14. As a follow-up of these regional mainstreaming workshops several countries achieved progress in their efforts to mainstream coastal and marine environmental management issues into the wider framework of governance. For example, the Government of Indonesia has focused on strengthening the link between river basin management, land-based sources of pollution and the impacts of climate change to facilitate the integration of coastal issues into national development frameworks and budgets, and the reduction of poverty. The Indonesian government has also initiated harmonization of various existing rules and regulations; such as the Act on Spatial Planning (No.26 of year 2007) and the Act on the Coastal Areas and Small Islands Management (No. 27 of year 2007). The Indian government in its efforts to implement the NPA has embarked on a large scale coastal zone management programme to address policy and legal issues with pilot projects in several key coastal states and also established a National Centre for Sustainable Coastal Management (NCSCM) to promote sustainable coasts through increased partnerships, conservation practices, scientific research and knowledge management for the benefit and wellbeing of current and future generations.
- 15. In the Caribbean, the Jamaican government was able to incorporate key areas of concerns identified in the Jamaican NPA into the Government of Jamaica's policy and legislative frameworks, and these have become an integral part of the Jamaica's National Environmental Action Plan (JaNEAP). The JaNEAP is a three-year cycle plan and its implementation is monitored through the JaNEAP annual report. In Jamaica the NPA also supported the development of the National Sustainable Tourism Plan in the form of the Blue Flag programme, increases in beach license fees, and improved understanding of the contribution to be gained by an integrated watershed and coastal zone management approach. In Belize completion of the NPA was accompanied by legislative changes to the Environmental Protection Act including the passing of Effluent Limitations Regulations and the Integrated Water Resources Management Act. The NPA has influenced the implementation of solutions to environmental and coastal issues to the extent that it has enabled a greater focus on environmental actions in support of the country's national development priorities. Guyana which finalized the development of its NPA in 2009 has now drafted new "standards for industrial effluent discharge into the environment" and established an inter-agency coordinating mechanism to mainstreaming public health into the main budgetary process utilizing the GPA approach. Integrative planning and cross-agency coordination mechanism has also been strengthened in Saint Lucia and through the development of its NPA and coastal zone management policies and actions, Saint Lucia has been successful in promoting marine and coastal environmental protection through key sectors within Saint Lucia's economy, including the development of recreational water quality standards.

- 16. The UNEP/GPA Coordination Office in its efforts to facilitate mainstreaming of coastal and marine issues into national planning and budgetary processes also assisted countries to undertake review studies and introduce policy reforms in utilizing their own resources effectively and efficiently, and to find possible new domestic resources, make the most of foreign assistance and optimize possibilities of utilizing international financial institutions and commercial financing. In Sri Lanka, the Ministry of Environment and Natural Resources based on a study² supported by the UNEP/GPA Coordination Office established an environmental conservation levy exclusively for environmental conservation. The Environmental Conservation Levy Act, No.26 of 2008, in Sri Lanka empowered the Ministry of Environment and Natural Resources to impose environmental levy on specific products and services that clearly pose an environmental hazard and the revenue accruing from this levy can be directly utilized for taking corrective action to eliminate or alleviate the hazard. Trinidad and Tobago is another example, where the government has established a "Green Fund" through imposition of a 0.1% tax on the gross sales and receipts of any company doing business in the country and the Green Fund which amounts to date millions of Dollars, and used to support projects for the sustainable management of the environment.
- 17. In the light of these experiences, UNEP/GPA Coordination Office also organised workshops for sharing of cross-regional mainstreaming experiences in Hanoi (2008) during the meeting of the Global Forum on Oceans, Coasts and Island and in Manila (2009) during the East Asian Seas Congress. The aim of these workshops, were to inform and reflect on country experiences in 'mainstreaming' and thus to define a collective strategy to further expedite the process and seek answers to 'what a policy should contain' and 'what policy choices a nation can afford', so that mainstreaming becomes a focus on solutions with a strong evidentiary (economic and physical) and institutional basis.
- 18. Finally, and consistent with the approaches outlined above, it should be noted that the GPA and its NPA and mainstreaming approach have helped catalyse broader approaches to integrated coastal management. In China, the development of an NPA and associated coastal pollution control programmes are being embedded in the 12th five-year plan (2011-2015). The government of Seychelles, while revising its Environment Management Plan for the period 2011-2020, set out that the Environment Management Plan of Seychelles represents the country's environmental programmes foreseen over a ten year period and constitutes a national environmental strategy for Seychelles. The Kenyan Ministry of Environment and Mineral Resources has finalized its Integrated Coastal Zone Management Action Plan 2011-2015, while in Japan, the "Basic Act on Ocean Policy" was enacted in 2007. The "comprehensive governance of the oceans" and "integrated management of the coastal zone" stipulated in this Basic Act are intended to protect the marine environment from land-based activities.
- 19. In view of the experiences gained to date, strong leadership and political will still remain vital to supporting the process of translating the Global Programme of Action into national programmes of action and implementation of long-term activities and to ensure mainstreaming of coastal issues in the overall national development framework. Legislation dealing with coastal and marine resources needs to address a wide range of land-based pressures upon coastal and marine environments. At the same time, greater support in developing environmental financing strategies and other supporting mechanisms is needed. Furthermore, the integrated coastal management as a continuous, proactive and adaptive process of resource management that builds on participation and provides a framework for the management of multi-sectoral activities and maintain options for future uses of resources could also be used as a complementary framework to harmonize sectoral planning and to resolve multiple use conflicts of coastal resources.

Addressing Key Source Categories

20. The following section reviews progress on addressing a number of key land based sources of pollution identified under the GPA in line with the desire of governments at the 2nd IGR in Beijing to focus on a few key activities in GPA source category implementation. These are nutrients, wastewater and marine litter.

Nutrient Management

² Development of Market Based Instruments for Environmental Management in Sri Lanka, May 2008.

- 21. During the IGR-2 the Governments through the 2006 Beijing Declaration resolved "to devote additional effort, finance and support to address point and non-point source nutrients, including municipal, industrial and agricultural wastewater, as major and increasing source categories directly affecting human health, well-being and the environment, including marine ecosystems and their associated watersheds".
- 22. Pursuant to this call, UNEP/GPA Coordination Office facilitated series of meetings ad consultation with governments and other relevant stakeholders to design a comprehensive nutrient management programme. In a meeting of policy makers, fertilizer industry, representative of science community and UN agencies, May 2007 in The Hague (co-sponsored by the Netherlands' Ministry of Environment) UNEP/GPA Coordination Office presented the primary design of a nutrient programme and the architecture of a global partnership. This was subsequently presented to a wider group of experts during the 4th International Nitrogen Conference in Brazil 2007 to solicit feedback and support. This consultative process subsequently led to the establishment of the Global Partnership on Nutrient Management (GPNM).
- 23. The GPNM is a partnership of governments, scientists, policy makers, private sector, NGOs and international organizations³ to address the growing problem of nutrient over-enrichment. The Partnership was launched formally on 6 May 2009 in New York during the 17th session of the UN Commission on Sustainable Development.⁴ The GPNM recognizes the need for strategic, global advocacy to trigger actions by governments and other stakeholders in moving towards lower nitrogen and phosphorous inputs to human activities. The GPNM aims to raise awareness and facilitate the exchange of good practice to address the root causes of harmful algal blooms. The partnership provides a platform for governments, UN agencies, scientists and the private sector to forge a common agenda, so that policies and investments are effectively 'nutrient proofed'. The GPNM also provide a space where countries and other stakeholders can forge more co-operative work across the variety of international & regional fora and agencies dealing with nutrients. The GPNM is guided by a Steering Committee, chaired by the Government of the Netherlands, while the other members are Governments of the USA and India, China-UK Sustainable Agricultural Innovation Network (SAIN) and UN-Habitat. UNEP/GPA Coordination Office acts as the Secretariat of the GPNM.
- 24. With support from the GPNM partners, UNEP/GPA Coordination Office secured GEF funding for the project "Global foundations for reducing nutrient enrichment and oxygen depletion from land based pollution, in support of Global Nutrient Cycle". The project aims to address the underlying problem of the lack of a sufficient governance and management framework for effective action on reducing nutrient inputs and improving efficiency of use. The project intends to; (a) provide countries (notably developing countries and those in transition), with the information, tools, and policy options, including up-scaling and replication, in a systematic and accessible way. This is necessary to analyse and take cost effective action in developing nutrient reduction strategies to the benefit of their coastal areas and stakeholders and (b) catalyse global, regional and national action through stakeholder partnerships, which foster the benefits of more effective nutrient management and (c) provide a platform for the uptake and application of the tools, policy options and information developed under the project. This approach will provide policy makers with a road map as to which investments and actions can be most cost effective.
- 25. Two key nutrients nitrogen and phosphorus remains key to sustain crop production and ensure food security. These two nutrients also involved in complex cycles and associated with environmental impacts. The understanding of the nitrogen cycle is making progress thanks to the work of the International Nitrogen Initiative (INI), which is a member of the GPNM. The INI European and North American centres have completed their regional assessments, while additional support is needed for other regions (e.g., Africa, Asia and Latin America and the Caribbean) to go through the same assessment process. As to phosphorous, the priority is to update scientific knowledge. We have currently a poor understanding of the phosphorous cycle. It is urgent to quantify the phosphorous pools and flows in agriculture and waste at different scales (global, continental, watershed). It is thus critical to determine the potential of mitigating losses by farming systems, in particular through the reduction of soil erosion. Assessing the potential of recycling organic nutrient sources (in particular livestock manure and sewage sludge), and developing practices that improve their use efficiency are also priorities. A more precise understanding of the global nutrient cycle (covering nitrogen and phosphorous) is envisaged as an important area of action towards the development of policy options, based on

³ The Partners to date are the Governments of the USA, The Netherlands, Italy, Germany, the European Union, India, China, Thailand, Indonesia, International Fertilizer Industry Association, International Nitrogen Initiative, various academic and research institutions and UN agencies namely FAO, UNESCO/IOC, UN-HABITAT, UNDP and UNEP (for details visit: www.gpa.unep.org).

⁴ The launch was co-sponsored by the Government of the United States of America and Government of The Netherlands.

sound scientific facts, and therefore, proposed in the programme of work of the UNEP/GPA Coordination Office for the next phase.

Wastewater Management

26. The UNEP/GPA wastewater programme takes into consideration the fact that the water supply and wastewater treatment are closely linked. However, it is wastewater or sewage that impacts on the coastal and marine environment. The wastewater programme therefore, promote concrete action at the local and national levels aimed at addressing sewage through uses of alternative solutions, including low cost technologies, appropriate financial mechanisms and partnerships; and creating an enabling environment for action for wastewater collection, treatment and re-use (i.e. for agricultural purposes), and reallocation to the natural environment. In considerations of the above, the focus of UNEP/GPA wastewater programme has been to build capacities at the local, national and regional level and up-scale innovative and sustainable approaches in wastewater management through the delivery of regionally adapted training courses.

UNEP/GPA Coordination Office has been training municipal wastewater managers on "Improving Municipal Wastewater Management for Coastal Cities" together with the UNESCO-IHE Institute for Water Education and other partners around the world.. The emphasis of the programme is to promote community-based solutions to marine and freshwater pollution problems through improving sanitation and wastewater management practices. They aim to achieve these through additional vocational and academic training which will impart skills in building and maintaining water supply and sanitation infrastructure, and improve expertise in monitoring and quality assurance of the projects (for details see Para ...under Training and Capacity building activities to support implementation of the GPA). The training is based on the 'UNEP/WSSCC/WHO/UN-HABITAT Guidelines for Municipal Wastewater Management' and their associated "10 Keys for local and nation action", and was developed in the framework of the Train-Sea-Coast (TSC) programme of the United Nation's Division for Ocean Affairs and the Law of the Sea (UN/DOALOS).⁵ In 2010, UNEP, UN-Habitat, and the UN Secretary General's Advisory Board on Water and Sanitation (UNSGAB) - in partnership with the members of UN Water - combined their collective experience and expertise to highlight the challenges posed by excessive, illegal and unregulated discharge of wastewater. The report "Sick water - the central role of wastewater management in sustainable development", identifies threats to human and ecological health and the consequences of inaction, while also presenting opportunities, where appropriate policy and management responses over the short and longer term can trigger employment, support livelihoods, boost the health of people and ecosystems and contribute to more intelligent water management.

27. To tackle immediate consequences the "Sick Water" report recommends for adoption of a multi-sectoral approach to wastewater management as a matter of urgency, incorporating principles of ecosystem-based management from the watersheds into the sea, connecting sectors that will reap immediate benefits from better wastewater management. The report also emphasized on the importance of a planning process that creates enabling environment for innovation and the need for innovative financing of design, construction, operation and maintenance of appropriate wastewater infrastructure. Finally, the report reminds that fact that in light of rapid global change, wastewater management plan should be developed against future scenarios, not current situations and the solutions must be socially and culturally appropriate, as well as economically and environmentally viable into the future. In the light of this "Sick Water" report a UN-Water Task Force on

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