

# **Global Commitments to address the Nutrient Challenge**

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# Nutrient Challenge

**Nutrients (N & P) - key for maintenance of soil health to grow crops and thus ensuring world food security**

**Food security of two-thirds of the world's population depends on availability and use fertilizers**



# N contamination has become systemic problem

N fertilizer, N content of food → Agricultural runoff, municipal wastewater  
→ N loading to rivers → N loading to coastal zone → Eutrophication in  
coastal zone → Dissolved oxygen depletion “dead zones” → Reduction  
of fish habitat, other ecosystem impacts



Emissions from vehicles, industrial  
emissions → Atmospheric transport of  
nitrogen → Deposition of nitrogen →  
Nitrogen saturation of soil



Fertilizer volatilization, industrial emissions → Transport to upper  
atmosphere → Depletion of ozone layer

# Global Commitments to address Nutrient Challenge

## Agenda 21 Chapter 17 – led to adoption of GPA in 1995

**November 1995:** GPA adopted in the Washington Conference

to prevent degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment

Nutrients is addressed as 1 out of 9 source categories

**November 2001:** IGR 1 in Montreal

Montreal Declaration calls on “[...] United Nations Agencies and programmes and international financial institutions to incorporate, where appropriate, the objectives of the GPA into their respective work programmes, giving priority in the period 2002 – 2006 to addressing the impacts of sewage, physical alteration and destruction of habitats and nutrients on the marine environment, human health...”

## 2002: WSSD, Johannesburg

JPOI Para 33 calls for action to

“.....advance implementation of the GPA and Montreal Declaration, with particular emphasis during the period 2002-2006 on municipal wastewater, the physical alterations and destruction of habitat, and nutrients.....”

## 2006: IGR 2 in Beijing

Through the Beijing Declaration 104 Governments and the European Commission 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”

# Global commitment reaffirmed

**CBD Aichi Target 8:** calls for action to reduce pollution, including from *excess nutrients*, to levels that are not detrimental to ecosystem function and biodiversity, and the sustainable development goals.

## GPA IGR3 Manila Declaration

64 governments and the EU called for further development of the GPNM and associated regional and national stakeholder partnerships, as well as their activities .....(and) "to step up efforts to develop guidance, strategies or policies ..... so as to improve nutrient use efficiency ..., and to mitigate negative environmental impacts through the development and implementation of national goals and plans...".

**The Rio+20 Outcome document** notes "with concern that the health of oceans and marine biodiversity are negatively affected by marine pollution, including marine debris ..... and ***nitrogen-based compounds***...." (para 163)

**UN SG's Oceans Compact** calls for "reducing pollutants from sea and land-based activities, including ..... litter, harmful substances and ***nutrients from wastewater, industrial and agricultural runoff entering the world's oceans***"

**UNEP POW 2014-2015** approved by the 27 session of the Governing Council (February 2013), "actions catalysed through the multi-stakeholder Global Partnership on Nutrient Management to reduce and, where possible, eliminate threats to aquatic environments from land-derived nutrients" .

## **All positive signals of governments commitment and good starting points**

Effective nutrient reduction strategies would call for new approaches and outreach to society as well as a broad partnership of interests

GPNM acknowledges important role of governments, industry, science community, international agencies, regional intergovernmental bodies and NGOs to address the Nutrient Challenge

GPNM is fully committed to work with all stakeholders to address the unintended impacts of current production and use of Nutrients



**GPNM recognizes the value of partnering to define and mobilize commitments of all stakeholders to secure the Harvest**

## **Green Fields and Blue Oceans**



**THANK YOU**