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URGENT -- PLEASE DELIVER ASAP

To: David Harwood
Legislative Assistant, Global Warming/Energy Efficiency

From: Scott A. Hajost
International Counsel

Date: July 21, 1992

Dear David,

For your information, I am faxing you a copy of my testimony on UNCED and related oceans issues before the House Committee on Foreign Affairs and Committee on Merchant Marine Fisheries. Please contact me if you have any questions.

Sincerely yours,

Scott Hajost



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TESTIMONY OF
SCOTT A. HAJOST
INTERNATIONAL COUNSEL
before the
SUBCOMMITTEE ON OCEANOGRAPHY
COMMITTEE ON MERCHANT MARINE AND FISHERIES
and the
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

JULY 21, 1992

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INTRODUCTION

Thank you Mr. Chairmen for the opportunity to testify today before the Subcommittee on Oceanography, Great Lakes and the Outer Continental Shelf, Committee on Merchant Marine and Fisheries and the Committee on Foreign Affairs, regarding the 1992 United Nations Conference on Environment and Development (UNCED), including related oceans issues. I am Scott A. Hajost, International Counsel with the Environmental Defense Fund (EDF). EDF is a leading national environmental organization with over 200,000 members which links science, economics and law to create innovative, economically viable solutions to today's environmental problems. EDF played an active role in the preparations for the Conference and in Rio. I personally was a member of two advisory bodies to the UNCED Secretariat on oceans and atmospheric issues.

THE ROAD FROM RIO

The Earth Summit was an unprecedented gathering of States, international organizations and non-governmental organizations (NGOs) which started to address the relationship between the growing needs and pressures of human development and the resulting problems now threatening the global environment. It marked the first major post-cold war conference and the beginning of a rearrangement of the world order from that of East-West conflict to North-South dialogue placing environmental and developmental issues at the forefront, and redefining national security, including in the UN System. Some have suggested that simply having prepared for and convened the Summit with adoption of a Rio Declaration, Agenda 21, Forest Principles and treaties on climate change and biodiversity made the Rio Earth Summit a success in itself. Clearly, two years of intensive preparation, including widespread NGO participation, and bringing over 100 world leaders together to a conference on environment and development can be viewed as a positive exercise that increased attention on the need to integrate environmental and economic policies.

At the same time, it must be recognized that UNCED produced at best, a blueprint of diplomatically qualified recommendations which will not save species, protect the oceans, ensure human health and end poverty by themselves. The true test of Rio will be the commitment to follow-up by Governments, individually and through the international institutions and agreements they control. NGOs have a vital role to play in this process. It has also been noted that in many ways Rio was all about money; how much would the North give the South, would world debt be relieved and markets opened to developing countries. While the success of UNCED depends in significant part on providing additional resources, both financial and technical, to developing countries, which is also an important economic investment by the North, too little emphasis was given on the quality of current (as well as future) assistance. Substantial amounts of money is now spent on

unsustainable development projects every year. The World Bank alone has a billion dollar energy portfolio with only about 1% devoted to end-use energy efficiency.

RIO FOLLOW-UP IN THE UN

Real action starts this fall in the General Assembly which will represent the first test in the follow-up to Rio. The key item will be the establishment of the UN Sustainable Development Commission and the extent of its mandate to define further sustainable development, and to monitor environment and development trends, implementation of Agenda 21, environmental treaties, and reform the UN System. Important issues also include the question of secretariat support for the Commission and UNCED implementation more broadly in the UN System, the enhanced role of NGOs in the UN system, strengthening of UNEP, possible criteria for preparation of national reports in implementing Agenda 21, plans for a process of General Assembly review of Agenda 21, and provision for secretariat support and future meetings under the Climate Convention prior to its entry into force.

The Sustainable Development Commission, whose establishment the G-7 reinforced in their Munich Summit Economic Declaration, is regarded as one of the more important products of UNCED. The Commission has a critical role to play in monitoring progress in the implementation of Agenda 21 within the UN System, by national governments and through international environmental agreements, and must be provided the capacity to do so. In particular, the Commission should have a strong role in reviewing the performance of the Bretton Woods institutions and agreements, i.e., the World Bank, IMF and GATT, in promoting sustainable development. The Commission will require a discreet technical staff of sufficient size and related expertise to support its operations. The secretariat unit should be headed by an individual with access to the Secretary General, heads of UN agencies and to high-levels of government. The Commission will also require an assured source of funding and the authority to meet as necessary. Moreover, it is essential that it be provided regular and full reports and documentation by all UN bodies including the Bretton Woods group.

While the language in Agenda 21 on the Commission refers to its members as representatives of member States, a significant role should be provided for participation by non-governmental groups. This should include the capacity to bring matters to the attention of the Commission. The creation of subcommissions and ad hoc bodies with independent experts will be critical in this regard. Representatives on the Commission should have the expertise and capacity to reflect fully cross sectoral interests. Governments must make preparations for and participation in the Commission a government-wide priority.

Overall, the Commission should provide an external forum to review

implementation of UNCED and lead the way in integrating environment and development policies in the UN System and beyond. To do so, the Commission should rely to the extent possible on independent expertise, including the proposed high-level advisory body. Related to this, there is a need to revise ECOSOC accreditation procedures to provide for broader access to UN bodies by NGOs as foreseen in Agenda 21. The U.S. should take the lead in this regard.

Agenda 21 also calls for the strengthening of UNEP, which as with the Commission, requires translation from words into action. UNEP will need a substantially larger level of secure funding to carry out the focused mission in Agenda 21. It must also have a much stronger regional presence, a stronger voice in the UN System and an enhanced communications capacity.

US IMPLEMENTATION

It is critical that there be a clearly delineated UNCED implementation process in the Executive Branch. This process should define clear goals and objectives, identify benchmarks to monitor progress, assign high priority to UNCED implementation in each concerned agency, and create a high-level interagency coordination mechanism. Oversight of the process could also require a new position and staff within the Executive Branch dedicated to UNCED. Provision should also be made for regular reporting to Congress and for fully transparent decision making open to effective participation by the public. Additional resources must be made available to staff this effort. Consideration should be given to a possible Presidential advisory committee or some type of independent commission to monitor U.S. performance in meeting UNCED goals. Vital elements include a clearly defined process for preparing the U.S. national action plans and reports, and on a national strategy for sustainable development.

As a first step, there should be a thorough examination of the Rio Declaration, Agenda 21, the Forest Principles, and the Climate Convention to determine where U.S. laws and policy should be changed or augmented to meet UNCED commitments. For example, existing U.S. NEPA guidelines may not be broad enough to meet a number of recommendations on environmental impact assessment in UNCED documents. Also, under the Climate Convention it is presently unclear exactly how the U.S. will ensure that climate change considerations will be taken into account in U.S. social, economic and environmental policies and actions, or the process by which national policies and measures to limit greenhouse gas emissions will be developed, including as they relate to public participation.

Congress has an important role to play in the this effort and should also be assessing what present and future legislative efforts would lend support to UNCED implementation. Overall, U.S. efforts to implement Agenda 21 and monitor progress may be benefited by new legislation with effective

non-governmental oversight to ensure progress is actually made.

Chapter 38 of Agenda 21 on International Institutional Arrangements calls upon states to "consider" the preparation of national reports, to "consider" the preparation of national action plans for the implementation of Agenda 21 and to "consider" setting up a national coordination structure responsible for the follow-up of Agenda 21. Moreover, Chapter 8 on Integrating Environment and Development wording says governments "should" adopt a national strategy for sustainable development and further calls upon states to remove or reduce subsidies that do not conform with sustainable development objectives and to move towards pricing consistent with sustainable development. A key objective of U.S. preparation of a national action plan and sustainable development strategy should be to address market interventions or subsidies that promote below cost exploitation of natural resources such as timber sales, grazing, water use and mineral exploitation on national lands. To the extent that it extols the virtues of the free market, the U.S. should reexamine its own practices that impede free market valuation of resources.

In the July 8 Munich Summit Economic Declaration, President Bush and other G-7 leaders recognized that "rapid and concise action is required to follow through on our commitments on climate change to protect forests and oceans, to preserve marine resources and to maintain biodiversity". In particular, the President and other G-7 leaders committed to drawing up national action plans by the end of 1993. Moreover, in his statement at Rio, President Bush called upon industrialized countries to meet by January 1, 1993 to lay out national plans for meeting the specific commitments in the Climate Change Convention. In his press conference in Rio, the President also stressed that "commitments made are going to be commitments kept". It is time for the U.S. to follow through on those promises made at the recent Munich G-7 Economic Summit.

INTERNATIONAL FINANCING MECHANISMS

A key post-UNCED organizing theme should be focused on ensuring that financial flows through the World Bank, the IMF and the world trade system actually promote sustainable development. In this regard, the G-7 hold the keys to the world's economic system through their control of the public financial institutions, the international trading system and their own economic and environmental policies. They have a special responsibility to ensure the success of the follow-up to Rio, but in large part only paid lip service to this responsibility at the recent Munich G-7 Economic Summit.

The World Bank emerged as one of the winners from Rio with an enhanced role as the vehicle for UNCED-related financing. At Rio, the G-7 nations promoted the evolution of the GEF from pilot project to the world's main multilateral mechanism to finance and manage international

environmental agreements. The GEF was launched in 1990 as a pilot project which will last until 1994. In light of current problems related to a lack of institutional transparency and ineffective quality control of projects, it is premature to consider new money for the GEF until its pilot phase has been independently evaluated. An independent and open review of the GEF must be undertaken before expanding its scope and scale.

Although in theory the GEF is administered jointly by the World Bank, the U.N. Development Program and the U.N. Environment Program, in practice the World Bank has assumed a dominant role by managing all investment projects and administering the GEF core fund. This means that the GEF is largely run by an institution which itself, through its annual lending program of \$23 billion, has great problems ensuring that its projects do not contribute to greenhouse gas emissions, the loss of biodiversity and the marginalization of people forcibly displaced by its projects. Unless the GEF serves as a catalyst to make overall World Bank operations consistent with global environmental goals, the GEF will only serve as green window dressing on the continuation of environmentally destructive projects. In this regard, it may be noted that while the GEF is identified as the interim funding mechanism under the Climate Treaty, overall World Bank energy lending does not presently support implementation of the Treaty's objective. In one regard it is important that Chapter 9 of Agenda 21, Protection of the Atmosphere, dropped a specific reference to public financial institutions in the context of energy policies.

Sustainable development, the key concept universally embraced in Rio, is predicated on the active participation of local people in the development process. Participation depends on having access to information. Yet the GEF has so far failed to institute clear rules and procedures to ensure that the public has access to information on GEF projects. Furthermore, relevant information on regular World Bank loans is routinely withheld from public review in both donor and recipient countries. Even the GEF's Participant's Meeting, a semi-annual gathering of government representatives to review and approve GEF work programs, is not provided with relevant information on World Bank loans to GEF projects. The U.S. must insist that standard GEF operating procedures require full public access to information on both GEF projects and associated World bank loans and a framework for affected communities to participate in GEF and World Bank project design and implementation phases.

The restructuring process of the GEF has not yet been able to articulate in a clear fashion the roles, functions and most importantly, the decision-making capacities of the various GEF-related entities such as the proposed Participant's Assembly and the Scientific and Technical Advisory Panel, the World Bank's Board of Executive Director's and the Parties to both the Climate and Biodiversity Conventions and their subsidiary bodies, as well as to other existing and future global environmental agreements covered by the

GEF. The U.S. should seek a clarification of the responsibilities of the various treaty bodies and ensure that the treaty bodies have ultimate responsibility for meeting the objectives of the agreements. The GEF includes International Waters as part of its portfolio. There is a need to clarify the scope of this topic and its relationship to IMO activities and agreements and UNEP Regional Seas Programs. Moreover, the U.S. interagency process for reviewing program areas and proposed projects requires substantial strengthening, including providing opportunities for NGO input.

Quality control, monitoring and evaluation of the GEF must be separate from the GEF implementing agencies in order to avoid possible conflicts of interest. The U.S. should insist that these functions be vested in an independent governance body with representation from both developed and developing countries, NGOs and popular organizations.

Finally, with regard to bilateral funding, the US should undertake an overall examination of its foreign assistance to ensure that it is directed towards sustainable development. In particular, it should redirect funds from military programs. Improvement of energy efficiency should be a principal focus of assistance to Russia and Central and Eastern Europe. The Munich Summit Economic Declaration specifically identified alternative energy sources and increased energy efficiency as a means for replacing unsafe nuclear power plants in those countries.

GATT

The General Agreement on Tariffs and Trade (GATT) and other trade agreements should be restructured to integrate environmental and developmental concerns and to ensure that they are a tool promoting sustainable development. The GATT Working Group on Environmental Measures and International Trade should be encouraged to adopt provisions that will explicitly authorize trade sanctions that are expressly endorsed in international environmental agreements, such as the Montreal Protocol and the Convention on the International Trade of Endangered Species, and the Basel Convention, and allow for national and subnational environmental standards that are more stringent than international standards so long as the contracting party adopting such standards respects the national treatment principle. Finally, the GATT dispute resolution process should provide for public participation, public right-to-know, panelists with environmental expertise and shift the burden of proof to the party challenging an environmental or health standard. Several UNCED documents appear to try to limit the use of trade measures, particularly unilateral ones including in the oceans arena, and the U.S. should clarify how these UNCED documents effect U.S. law.

CLIMATE CHANGE CONVENTION

Although the U.S. is responsible for the emissions of almost 25% of fossil fuel CO₂, the U.S. refused to agree to a global climate change convention that contained binding commitments to stabilize and reduce carbon dioxide and other greenhouse gas emissions specifically by the year 2000, and with specific deadlines for commitments thereafter. Other major industrialized countries were all prepared to endorse a convention that included a specific commitment to stabilize CO₂ and other greenhouse gas emissions not controlled by the Montreal Protocol at 1990 levels by the year 2000.

At the same time the U.S. proposed initiatives on forests would require developing country actions without halting the cutting of its own old growth forests. The position of the U.S. seems to be that the fate of the world's tropical forests is a matter of international concern that should be the subject of an international agreement, but that the status of fossil fuel combustion and CO₂ emissions in the U.S. is not a legitimate matter of international concern since it means the U.S. accepting international legal obligations.

The U.S. should promptly ratify the Climate Change Convention before the tentative fall meeting of the Intergovernmental Negotiating Committee on climate change. A part of the ratification process, it would be useful for the Senate to help clarify the specific commitments of the U.S. to limit greenhouse gas emissions. As part of domestic implementation of the Treaty, the President should prepare a global climate policy for the Congress as foreseen by the Global Climate Protection Act of 1987. The U.S. should support initiatives calling for a follow-up protocol to the Convention providing for reductions in CO₂ and other greenhouse gases not controlled by the Montreal Protocol; e.g. 25% from 1990 levels by 2005. Along these lines, the German government has called for earlier negotiation of a protocol to the Convention.

BIODIVERSITY CONVENTION

Although the U.S. did not sign the Convention on Biological Diversity in Rio, the President stated that U.S. efforts to protect biodiversity will exceed the requirements of the Treaty. To test that assertion, it would be very useful to evaluate U.S. biological diversity programs, measured against each article of the Biological Diversity Convention. It should be noted that the Convention applies to marine areas, and could provide an effective new global tool to conserve marine biological diversity.

The Biological Diversity Convention could provide some important economic incentives for developing countries to protect and conserve tropical forests. Developing countries and their citizens would receive some share of the economic benefits to be derived from utilizing genetic material from tropical forest plant species in the development of new pharmaceutical and other products through biotechnological and other means. These incentives

are critical due to the fact that the preponderance of biological diversity, so important to the development of new food crops and medicines, is found in the developing world.

The Administration claims that signing the Treaty would have compromised the ability of U.S. companies to protect international property rights, i.e., their patents. However, the Treaty specifically provides that companies would not be required to transfer technologies based on information derived from genetic resources in developing countries if their patents cannot be protected. Indeed, the inability of firms in industrialized countries to protect these patents would undercut not only the economic incentives of pharmaceutical and other companies in industrialized countries to develop such products, but would reduce the economic benefits to be shared with appropriate parties in developing countries. The Administration should conduct a complete evaluation to assess whether access by U.S. companies might be impeded.

OCEANS

Agenda 21 Chapter 17 on "Protection of the Oceans" is the most extensive and comprehensive of all of Agenda 21. It advances seven major programs:

- *integrated management and sustainable development of coastal areas, including exclusive economic zones
- *marine environmental protection
- *sustainable use and conservation of marine living resources of the high seas
- *sustainable use and conservation of marine living resources under national jurisdiction
- *addressing critical uncertainties for the management of the marine environment and climate change
- *strengthening international, including regional, cooperation and coordination
- *sustainable development of small islands

Four major follow-up conferences to UNCED are recommended in the Oceans Chapter alone to address the following issues:

- *integrated management and sustainable development of coastal marine areas to be held by 1994

- *land-based sources of marine pollution

- *straddling and highly migratory fish stocks to be held as soon as possible

- *sustainable development of small island developing

The full impact of pollution on the oceans is still not clearly understood. At one time, it was believed that the world's oceans could serve as the unlimited receptacle for man's garbage and debris, and at the same time continue to provide ever-increasing fish harvests. Disturbing evidence and an increase in scientific studies in this area have taught us that the oceans may indeed be harmed by man's activities, and harmed significantly. As concern heightens over the potential effects of global warming and rapidly declining fish stocks, it should be remembered that the oceans play a critical role in global climate stability and provide a high percentage of the world's protein.

Oceans act as the world's largest CO₂ "sinks" and therefore help stabilize the planet's temperature. CO₂ is absorbed by the oceans and transported to two major sinks; the Arctic Ocean and the neighboring Norwegian/Greenland Sea and the Weddell Sea near the coast of Antarctica. As surface currents, such as the Gulfstream, carry warm, salty water towards the poles, the temperature begins to drop and the water sinks to the bottom of the ocean floor carrying accumulated CO₂ with it. In addition, plant and animal matter falls through the water column after dying, taking stored CO₂ with it, and collects at the bottom of the sea. These two processes, physical and biological, result in storing over 58 times more CO₂ in the deep oceans than exists in the atmosphere. If this system were disrupted, which could be caused by rising global temperatures, CO₂ would remain trapped in the atmosphere and contribute to increased concentrations.

Coral reefs could be the first ecosystems damaged by rising temperatures. Higher ocean surface temperatures could provoke large-scale bleaching of corals, which prevents continued growth and reproduction. Coral reefs serve as vital sources of biological diversity in the food chain and also serve as protective barriers against storm damage. Additionally, sea-level rise poses a significant risk to small island states and should be addressed in the context of reducing greenhouse gases as the way to abate climate change and sea-level rise.

The Polar regions are also extremely delicate ecosystems and even a small rise in temperature could trigger large scale ice melting which would in turn result in global sea level rise and could dramatically alter the ocean current and meteorological patterns as salinity and temperature patterns are disrupted. As El Nino has demonstrated, the potential ramifications of such changes could cause a serious increase in coastal storm destruction and

erosion. Additionally, the Polar seas host two key nutrient upwellings which form foundations for the world's oceans food chain. Stratospheric ozone depletion threatens to significantly reduce phytoplankton production which would result in serious shortages throughout the food chain.

UNCLOS

The Introduction to Chapter 17 refers to the 1982 UN Convention on the Law of the Sea (UNCLOS) as reflecting international law setting forth rights and obligations of States and providing the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources. The U.S. recognizes that UNCLOS generally represents customary international law outside of its seabed mining provisions, although the U.S. has neither signed nor acceded to the Convention (UNCLOS is nine ratifications away from formal entry into force.) Despite differences over seabed mining and whether they have ratified the Treaty, the references to UNCLOS in Chapter 17 reflect that States regard it as the codification of international law on oceans environment and development issues. That stated, there of course are questions of interpretation such as on high seas fisheries and straddling fish stocks which will need to be addressed in the proposed conferences.

Suggestions were made in the course of preparation of the Oceans Chapter of Agenda 21 that UNCED should promote a widely ratified UNCLOS. No such language was contained in the final document. Notwithstanding the customary law status of most of UNCLOS, universal ratification of UNCLOS would put protection of the oceans on the soundest legal footing, including application of the convention's dispute settlement provisions. The U.S. should continue to fully support UN initiatives that would allow it to accede to the Convention at the earliest possible date. Moreover, the U.S. should undertake to assert the maximum coastal State jurisdiction that it can consistent with the Convention, including enforcement against vessel source pollution in its Exclusive Economic Zone.

LAND-BASED SOURCES OF MARINE POLLUTION

Land-based sources of marine pollution, which include sewage, nutrients, synthetic organic compounds, sediments, litter and plastics, metals, radionuclides, oil and polycyclic organic hydrocarbons, represent approximately 70% of the contaminants entering the marine environment. These contaminants may enter the marine environment through the atmosphere, outfall pipe discharges, or in the form of non-point run-off. During UNCED, environmental groups strongly supported a commitment to negotiation of a global legal instrument on land-based sources of marine pollution which could reinforce and catalyze regional agreements, provide a network of monitoring and information exchange, mobilize additional resources for developing countries, and consider deep ocean impacts. Unfortunately, the

U.S. and most other governments did not support endorsing such a convention. Instead Agenda 21 Chapter 17 calls upon the United Nations Environment Program to convene an intergovernmental meeting to address land-based sources of marine pollution. During UNCED there were some hopes that the U.S. would announce plans to host this conference. However, this development never materialized and we now urge the U.S. to seize this initiative immediately. In particular, such a conference should utilize the 1985 "Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-Based Sources" as a framework from which to help launch negotiation a global legal regime.

Although almost all large U.S. coastal communities have secondary sewage treatment facilities, the U.S. is still faced with coastal water quality problems due to large cities with substantial combined sewer overflows (CSOs) which deposit untreated sewage into our coastal waters. CSOs are a primary source of shellfish bed closures and the leading cause for our remaining bacteriological coastal water quality problems. Currently, CSOs are only addressed by draft guidelines produced by the Environmental Protection Agency (EPA) and provisions should be included in the Clean Water Act reauthorization to provide for the authoritative regulation of CSOs.

The United State's coastal water quality is also seriously degraded by agricultural and storm-water run-off, as well as soil erosion. In the case of agricultural run-off and soil erosion, steps must be taken to encourage or require better land-use management practices in the following areas; crop selection, buffer zones, fertilizers, pesticides, and till methods. Storm-water run-off represents a significant source of oil and other toxic substance pollution which collects on parking lots, roadways, and at industrial sites, and enters the coastal water system untreated during periods of heavy rainfall. The Clean Water Act should be amended to explicitly require non-point source control programs to meet environmental criteria, not simply to implement best management practices.

OCEAN DUMPING

Chapter 22 of Agenda 21 on the Safe and Environmentally Sound Management of Radioactive Wastes encourages the London Dumping Convention (LDC):

to expedite work to complete studies on replacing the current voluntary moratorium on disposal of low-level radioactive wastes at sea by a ban, taking into account the precautionary approach, with a view to taking a well informed and timely decision on the issue

This fall's 15th LDC consultative provides the opportunity to amend the Annexes to the London Dumping Convention, which currently allow for sea-disposal of low-level radioactive wastes or other matters, and replace the

voluntary moratorium with a ban. The U.S. should also support and promote a full ban on the disposal of sewage sludge and contaminated sediments in marine waters.

PROTECTION OF ECOSYSTEMS

Coral reefs, estuaries, mangroves, wetlands and seagrass beds are identified in Chapter 17 as the among the Earth's most highly diverse, integrated, and productive ecosystems serving important ecological functions. States are called on to identify and protect these systems by designating protected areas to limit human access and prevent pollution. The U.S. should review the extent of its own protected areas to determine whether further measures are needed to preserve these unique ecosystems. This review should include an examination of the IMO Guidelines on Particularly Sensitive Sea Areas, and possible application of these criteria to marine ecosystems requiring significant levels of protection such as coral reefs.

Additionally, the Biodiversity Treaty identifies ecosystem and habitat conservation as essential to protecting biodiversity, and this approach should be applied to both coastal and deep ocean areas. These provisions of the Treaty may require a more serious examination of the impacts of land-based sources of marine pollution as a threat to marine ecosystems and habitats. The Coral Reef Stewardship Act (H.R. 4483) and the Coral Reef Environmental Research Act (H.R. 4537) are examples of domestic legislation that promote conservation of ecosystems with high levels of biological diversity. In particular, the Coral Reef Stewardship Act would enhance the protection of coral reefs from ship and grounding damages by strengthening enforcement and penalty provisions previously established under the Marine Protection, Research, and Sanctuaries Act of 1972. (For further recommendations on coral reef protection and research, see the April 13, 1992 testimony of EDF scientist Rodney M. Fujita before the Subcommittee on Oceanography, Great Lakes, and the Outer Continental Shelf of the Committee on Merchant Marine and Fisheries of the U.S. House of Representatives.)

WETLANDS

Wetlands and estuaries play an integral role in our coastal water ecosystem; acting as both a pollution filter and as a buffer against storm and flood damage. Chapter 17 specifically identifies wetlands as requiring priority protection. Wetlands and estuaries also serve as the nursery areas for our coastal fish populations. As it stands now, coastal fish stocks are faced with depletion of a magnitude which threatens the continued economic viability of our fishing fleets. We must recognize the vital importance of wetlands to the protection of our coastal waters, halt continued wetlands loss, and work to restore wetlands.

In August 1991, the President released his so-called wetlands initiative.

While the President during his campaign in 1988 and in his first term of office spoke warmly of protecting wetlands and achieving a no-net loss goal for wetlands in the United States, the August 1991 wetlands initiative dramatically conflicted with this posture. The August 1991 wetlands initiative had two parts. The first part was a proposal for a new manual that would be used by federal field agencies for delineating wetlands in the field subject to federal jurisdiction under the Clean Water Act. The responsible federal agencies, particularly the Corps of Engineers, EPA, the Fish and Wildlife Service and the Department of Agriculture, have been in the process of preparing a field manual for delineating wetlands for more than a decade. According to a report entitled "How Wet Is A Wetland? The Impacts of Proposed Revisions to the Federal Wetlands Delineation Manual" dated January 1992 prepared by the Environmental Defense Fund and World Wildlife Fund, the President's manual would reduce by about 50% the number of acres of wetlands in the United States subject to federal jurisdiction. Best scientific estimates are that the U.S. has about 95 million acres of vegetated wetlands remaining. The manual would provide for federal jurisdiction over only about half that amount.

At the time it released the President's wetlands policy in August 1991, the White House had little idea what the quantitative hydrologic, soils and vegetative indices used in his proposal would mean in terms of jurisdictional delineations in the field as applied to scores of different kinds of wetlands systems. Although the four federal agencies had set up an inner agency technical task force in late 1990 to propose revisions to the 1989 multi-agency manual, the White House in effect disregarded the recommendations of the technical task force and did not solicit its assistance in preparing the August 1991 manual proposal.

The August 1991 manual is still in proposed status and has not yet taken effect. The President should not make a final decision to adopt this manual for use by all federal agencies. Publishing such a scientifically irresponsible proposal has been an enormous disservice to environmental conservation in the country and if adopted would result in placing significant amounts of wetlands at risk.

INTERAGENCY COORDINATION

Federal agency budgets, including EPA, NOAA, FWS, US Geological Survey, Army Corps of Engineers, and the Coast Guard, should be increased to allow for expanded research, monitoring and enforcement activities related to current coastal marine environment contaminant levels. Research efforts are not presently systemized, and as a result, programs duplicate workloads and results are not linked effectively. This produces a situation where there is a large amount of data but very little useful information. Recent amendments to the Clean Water Act (section 319) established formal linkage between the Act's water pollution control program and the Coastal Zone

Management Act. This is a start, but clear lines of communication at all levels must be established between Federal agencies charged with the protection of our coastal waters. Such a Federal coordinating body should be required to ensure that standards promulgated by one agency are protective of ecosystems and resources under the jurisdiction of another. These standards should adopt a preventive approach to toxic compounds, including freezing emissions until they are proven to be harmless or entail acceptable risk. It should be recognized that pollution prevention, or reduced use of toxic materials in manufacturing processes and household goods, is the best way to control pollutants, particularly persistent toxics like heavy metals and chlorinated organics, which make their way into the environment even when they are controlled at the point of discharge. These changes could be implemented through appropriate amendments to the CWA.

The effectiveness of coastal marine pollution enforcement should be reviewed, and in particular, steps must be taken to improve techniques targeting land-based sources of marine pollution. This involves expanding the Coast Guard's mandate in this area and broadening the scope of waterfront facilities which are actively surveyed on a regular basis. Sincere efforts must also be made to improve coastal marine pollution enforcement networks with a goal to increasing communication and coordination between federal, state and local activities.

GLOBAL OCEAN OBSERVING SYSTEM

In terms of international efforts to assess and monitor current trends and levels of marine pollution, Chapter 17 makes reference to the establishment of a Global Ocean Observing System. This could take the form of an international clearinghouse devoted to the fields of oceanography and meteorology and could be created along the lines of the International Physics Institute in Switzerland. Such a global oceans institution should be organized, staffed and directed by scientists. Its primary responsibility would be to compile and analyze existing and new data and to process the results into a format that is readily accessible to other scientists, as well as policy-makers, around the world. The establishment of a research center dedicated to the comprehensive study of the marine environment will make it possible to more effectively protect the marine environment and its vast resources.

CONSERVATION OF LIVING MARINE RESOURCES

High Seas Drift Net Agreement

This is a significant example of positive U.S. leadership on an international environmental question during the past two years. Responding to strong grassroots interest in saving millions of birds and mammals being killed each year by the large drift nets, the U.S. helped orchestrate an international effort that succeeded in mobilizing the UN General Assembly to

adopt Resolution 46/215, which called for the phase-out of drift nets. At the same time, senior U.S. officials carried out effective bilateral negotiations with the nations which are the principle users of drift nets. The result is that in a few years time, the spread of drift nets has been reversed. The U.S. should continue to push for and monitor full implementation of this Resolution.

Straddling and Highly Migratory Fish Stocks

The world's fishery resources are faced with burgeoning demands that could result in dramatically reduced annual yields. Certain straddling and highly migratory fish stocks, such as the North Atlantic Cod and the Alaska Pollock, are being rapidly depleted as a result of unregulated fishing, excessive fleet sizes, and insufficiently selective fishing techniques and gear. Agenda 21 Chapter 17 calls on states to convene an intergovernmental conference under the auspices of the United Nations to address issues related to straddling and highly migratory fish stocks, and to seek implementation of the United Nations Convention on the Law of the Sea provisions on the conservation and management of these living resources. This initiative is supported by the G 7 and was referred to in their Munich Summit Economic Declaration. The intergovernmental conference should produce global standards for coastal and high seas jurisdictional and management issues, methods to determine apportionment, and a model funding mechanism to ensure that developing countries can participate fully. These standards must then be applied at the regional level, taking into consideration individual fish stocks. Successful regional agreements will depend on the full participation of all states which are engaged in straddling and highly migratory fish stock activities in each region. The conference should also examine technologies, such as long-lining, for methods to reduce by-catch a waste.

The U.S. should take the lead in promoting a rapid convening of and supporting preparation for the intergovernmental conference.

THE ARCTIC MARINE ENVIRONMENT

The Arctic Ocean is readily identifiable as an ecologically sensitive and geographically cohesive area. Although it is subject to pollution from long-range airborne contaminants, offshore mineral exploration and exploitation activities, shipping activities, and land-based runoff, the Arctic is not adequately protected by the existing international legal regime, nor by the Arctic Environmental Protection Strategy recently adopted by the Arctic Rim Countries. The U.S. should review the possibility of establishing a UNEP Regional Seas Program type agreement for the Arctic Ocean. In addition, the U.S. should explore special area status for the Arctic under MARPOL and the identification of particularly sensitive areas consistent with IMO Guidelines on Particularly Sensitive Sea Areas.

As western scientists have been allowed greater access and freedom to

investigate the state of the Russian Arctic environment, evidence of large-scale environmental degradation has surfaced to paint a picture of grim realities; nickel and iron smelting operations on the Kola Peninsula adjacent to Norway and Finland, oil and gas development on the Yamal Peninsula and surrounding areas, acid rain has effected 70% of the entire Russian Arctic, and improperly disposed nuclear reactors in the Kara, Barents and White Seas which are in the prime fish breeding and fishing grounds for Scandinavia. The Russian Aid Bill recently passed by the Senate specifically makes reference to the availability of funds to halt environmental degradation in the Russian Arctic, and to support the clean up and restoration of the Arctic marine environment. Funding provided by this Legislation should be directed to efforts to rebuild and maintain decrepit factories which are the most significant source of pollution in the Russian Arctic, and to help support capacity within the Russian scientific and technical communities to serve as a foundation for environmental protection strategies in the Russian Arctic.

CAPACITY BUILDING

The U.S. educational system produces high quality scientists and engineers. This human resource could be directed to the important task of training and assisting representatives from developing countries to protect and manage their coastal marine environment and its resources.

TECHNOLOGY TRANSFER

The U.S. should follow the lead of other states such as France and Norway and donate research vessels to developing countries and provide training and personnel support necessary to establish self-sufficient coastal monitoring programs. The U.S. is also in a position to assist developing countries with technology to create and manage scientific databases.

SHIPPING ACTIVITIES

The U.S., through appropriate international organizations such as the International Maritime Organization, should seek stronger safety standards and stricter inspection practices to ensure that ships are sea-worthy and do not represent a threat of accidental spillage. The U.S. should promote participation at an October 1992 conference sponsored by IMO to address human factor engineering issues as a means to reduce accidents at sea. Finally, the suggestions made in Agenda 21 Chapter 9 on Atmosphere and Energy that governments develop and promote cost effective, more efficient, less polluting, and safer transportation systems should be applied to marine vessels.

SURVEILLANCE AND MONITORING

The U.S. possesses the world's most advanced aerial and satellite

surveillance technology and capabilities. These resources should be directed to cooperative efforts to monitor marine pollution from ships and enforcing MARPOL discharge provisions more rigorously.

INTERNATIONAL OIL POLLUTION PREVENTION, LIABILITY, and COMPENSATION AGREEMENTS

The U.S. should promote entry into force of the Convention on Oil Pollution Preparedness, Response and Cooperation (OPPRC). The U.S. and Sweden are the only States to have ratified the OPPRC, which will not enter in to force until there are fifteen ratifications. The U.S. should continue to press for wider participation and prompt ratification. The U.S. is currently not a party to the 1984 Protocols to the Oil Spill Liability and Compensation Conventions. Negotiations should be initiated to resolve conflicts related to liability limitations issues which prevent the U.S. from participating in international agreements directed at insuring that large-scale oil spills are covered by insurance funds. This process may include a review of the Oil Pollution Act of 1990 to determine how U.S. domestic interests may be incorporated into the international legal regime.

ACADEMY TRAINING PROGRAMS

Congress should take steps to place greater emphasis on environmental engineering and pollution prevention education at the U.S. Coast Guard Academy, the U.S. Naval Academy, the U.S. Merchant Marine Academy as well as the five state merchant marine academics. Despite strong efforts to improve environmental regulatory regimes, the inherent difficulties surrounding the enforcement of marine pollution provisions makes it vital to teach and instill individual responsibility within the merchant marine service.

CONCLUSION

Implementation of UNCED presents a daunting but essential task in protecting the planet and advancing U.S. environmental, economic and foreign policy interests. The U.S. demonstrated genuine leadership on the road to and from the 1972 Stockholm Conference on the Human Environment. It was passed on the road to Rio. Now is the time for Congress and the Executive Branch to provide a clear map for the right road from Rio. In particular, it is important that there be a detailed plan of action for U.S. follow-up to UNCED prepared by the Executive Branch with input from Congress and the public in order to guide budgetary decisions.