

CONCEPT PAPER for a FULL-SIZED GEF PROJECT

- 1 Project title:** Towards a Convention and Action Programme for the Protection of the Caspian Sea Environment
- 2 GEF Implementing Agency:** United Nations Development Programme in cooperation with the United Nations Environment Programme
- 3 Country or countries in which the project is being implemented:** Azerbaijan, I.R. Iran, Kazakhstan, Russian Federation, Turkmenistan
- 4 GEF Focal Area(s):** International Waters
- 5 Operational Program/Short-term measure:** Waterbody-based Operational Programme (OP8)
- 6 Country Drivenness (Project linkage to national priorities, action plans and programs):**

The regional economic, social, and political importance of the Caspian Sea has continued to attract and focus strong national and international attention. All five littoral states have participated emphatically in the first phase of the Caspian Environment Programme (CEP: 1998 to present), and have expressed continued support for a single, regional structure that would coordinate initiatives to address regional environmental issues associated with the Caspian Sea. The countries are anxious to initiate implementation of the Strategic Action Programme (SAP), where the fruits of their hard labour during the first phase of the CEP will become evident. The need for a second phase of the GEF project has been agreed by the CEP Steering Committee, which will culminate in transition of responsibility for governance and execution of CEP from a partnership between the littoral states and the international community, to the littoral states themselves, with the international partners playing a more supportive role.

During the bridging phase of the GEF support for the CEP, national commitment will be evidenced by increased responsibilities in the riparian countries for financial, procurement/contracting, and programme management activities. Indicators for this commitment will include, *inter alia*:

- National support of National Coordination Units and the PCU
- National Support of Steering Committee Meetings and Activities
- National endorsement of the NCAP and Ministerial agreement of the SAP
- Endorsement of the Framework Convention
- National Support to any Caspian Regional Thematic Centres (CRTCs) that the countries agree to maintain

In addition to strong national support, continuation of the GEF project is encouraged by the private sector, which has been a major supporter of the CEP Phase I activities, and is expected to continue to do so in second phase activities. This private sector participation is critical for both sustainability and effectiveness of many of the commitments that will be made under the Strategic Action Programme (SAP) and National Caspian Action Plans (NCAPs).

The GEF encourages the countries to demonstrate their commitment to the Caspian environment prior to the GEF C.E.O.'s endorsement of the Full Bridging Project by signing the Framework Convention and completing their National Caspian Action Plans.

The National Policies of these countries all support the importance of the Caspian environment, as shown below.

National Policies

Azerbaijan: Sustainable use of the Caspian Sea is a major component of the National Environmental Action Plan (NEAP). The NEAP lists three major issues for the Caspian environment: pollution, water level fluctuation, and fisheries decline. For pollution, the NEAP listed the major causes as exploitation of

mineral resources, in particular oil extraction and pipeline construction; metal based pesticides; cadmium in fertilizers; improper disposal of heavy metal containing wastes; and emissions from metallurgical industry. Prevention of further pollution is recommended as the most effective means of dealing with the issues as curative measures are extremely expensive. Recommendations to deal with pollution include: use of less toxic chemicals for oil exploitation, reduction in volume of toxic waste, and development and application where possible of waste free technologies. For water level fluctuations no single cause was identified in the 1998 NEAP. Water level fluctuations are considered as a cause of secondary pollution of the Caspian due to inundation of contaminated lands, wastes dumps and coastal oil fields, e.g., Bibi Eybat. Recommended actions include isolation, relocation, and stabilisation of threatened contaminated areas, establishment of effective monitoring system in coastal areas, and development of an integrated coastal zone management planning system. The major causes listed for decline in fish stocks, particularly the sturgeons, include dam construction in the 1940s and 50s, pollution of various forms, and low sturgeon hatchery capacity and production. Illegal over-fishing is also cited as a major cause and is attributed to an ineffective legal framework. The remedial actions include increase in hatchery capacity and a reduction in catch quotas, referring to a need for regional cooperation for resolution of the problem.

Immediately following the adoption of the NEAP, Azerbaijan obtained loans from the World Bank to address several topics of concern. These early projects included the clean-up of mercury in the soils adjacent to the Caspian Sea in the city of Sumgait; reconstruction of a sturgeon hatchery along the Kura River; and demonstration of clean-up of oil ponds that dot the littoral environment. In 2001, environmental management structure was revised with a view to streamline it and enhance its efficiency. In May 2001, by decree of the President, a new Ministry of Ecology and Natural Resources was established which incorporated the functions of the five former government bodies: State Committee on Ecology and Nature Utilization Control, Azerforest Production Association, State Committee of Geology and Mineral Resources; State Hydrometeorology Committee, and Azerbalig State Fishery Corporation. Azerbaijan has signed, accepted, or ratified a number of the international conventions including Biodiversity, CITES, World Heritage, Climate Change, London Convention, and Desertification Control (see annex 5).

Islamic Republic of Iran: Primary laws related to the environment in I.R. Iran include the Law of Environmental Protection and Development (1991), Law of Protection of the sea and internal water bodies against oil and oil-product pollution (1975), Law on Punishments for over-exploitation of the fishery resources in the Persian Gulf and the Caspian Sea (1979), and law on Protection of Natural Parks, Protected Areas, and Sensitive Areas (1975). At a high policy level, the High Council for the Environmental (HCE) oversees environmental policy. The Environmental Protection and Enhancement Act of 1974 established the Department of Environment (DOE) as the responsible party for environmental protection. Fisheries and forestry are administered by the Fisheries Organization and the Forest and Rangeland Organization respectively, both being affiliated with the Ministry of Agricultural Crusade. Environmental Impact Assessment has a policy basis in I.R. Iran, carried out by the DOE under approval by HCE (1998). The Iranian National Strategy for Sustainable Development identifies the following relevant actions among its list of priority actions and investments:

- Implementing projects to protect biodiversity and international water pollution mitigation.
- Implementing a priority investment programme for “win-win” projects and investments that have environmental and economic benefits (such as watershed and forestry management projects).
- Addressing water pollution problems from urban households and industrial sectors through water pricing, institutional framework strengthening and efficient prioritised investment.

I.R. Iran has drafted a draft National Strategy for Biodiversity Protection, and has signed, accepted, or ratified a number of international conventions including Biodiversity, Ramsar, CITES, World Heritage, Basel, MARPOL, Climate Change, London Convention, Stockholm Convention, OPRC, and Desertification Control (see annex 5).

Kazakhstan: A number of key environmental policies have been approved by the Kazakhstan Parliament and implemented by the National Government during the past decade. In 1996, the Concept of Environmental Safety of the Republic of Kazakhstan was developed as a national policy. Later, in 1998, a Strategic Plan up to 2030 “The Environment and Natural Resources” was approved by the President. In this plan, the following priorities are set: effective governance of the environment, rational use of

natural resources, and development of a programme of environmental education. The Ministry of Natural Resources and Environmental Protection has established Action Plans based on this strategy. For instance, the National Environmental Action Plan for Sustainable Development (NEAP/SD), which was implemented from 1998 – 2000, had the specific goals to reduce industrial pollution, introduce resource-saving technologies, combat of desertification, stop topsoil destruction, rational use of water resources and avoidance of water pollution, stop the loss of forests, biodiversity protection, protection against radioactive pollution, and protection of public health. At the local level, the local oblasts (provinces) have developed their own environmental plans, and yearly action plans are approved by the local Akimat (executive head or governor). However, implementation of these laws (such as the Law on Environmental Protection of 1997) at the national and oblast level suffers from lack of financial resources. A number of important legal instruments relating to oil production on the Caspian shelf have been adopted in the context of CEP implementation: A law on oil has been passed, specific environmental conditions for operations in the northeastern sector of the Caspian has been approved, along with a national Oil Spill Response Plan. Kazakhstan has signed, accepted, or ratified a number of international conventions, including: Biodiversity, CITES, World Heritage, MARPOL Convention, Stockholm Convention, and Desertification (see annex 5).

Russian Federation: The Russian Federation has made significant inroads in environmental policy reform during the past decade, hand-in-hand with its transition to market economy. Significant Russian policy initiatives during the past decade have included use of economic instruments, decentralization of the policy implementation to the regions, and expanded public participation. New policies on waste management, and water and air pollution abatement are undergoing implementation. National and regional environmental funds used to provide financing for environmental protection, but the way this process was implemented represented a negative incentive for reducing discharges. The new Russian laws have eliminated this reverse incentive. Environmental impact assessment follows the “OVOS” process, established by the 1995 Federal Law on Ecological Examination, enhancing public participation. The Russian Federation’s National Environment Action Plan contains reference to a 1996 – 2000 Federal programme entitled Solution of Social, Economic and Environmental Problems Relating to the Caspian Sea Level Rise, which was being implemented by the Ministry of Construction. Also, the NEAP refers to the on-going Volga Revival Programme implemented by the Ministry of Natural Resources.

Implementation of these policy reforms has met with significant problems, including low priority given to the environment by the government, lack of separate Ministry for the Environment (an original Ministry of Ecology was replaced by the former State Committee which itself was subsumed into the Ministry of Natural Resources in 2000), too much discretion in enforcing regulations is left to local authorities (regional governments may have their own environmental administrations), economic instruments suffer from inflation, and poverty and other social considerations have prevented natural resource pricing from keeping up with inflation. Finally, federal budget funding, according to OECD, has fallen to an alarmingly low level (0.5 per cent of total budget expenditure). Thus, a policy basis is in existence, but implementation is weak. One significant development during the past decade has been the expansion of the protected areas in Russia, which now span some 5.5 percent of the country (about 1 million square kilometres). Growing environmental awareness has sprung from the increased environmental education and expansion of the NGO networking.

The Russian Federation has signed, accepted, or ratified a number of international conventions, including: Biodiversity, Ramsar, CITES, MARPOL Convention, London Convention, and World Heritage (see annex 5).

Turkmenistan: Turkmenistan’s environmental management mirrors much of the country’s governance: it is still strongly centralized. The Cabinet of Ministers is responsible for utilization and protection of natural resources. Numerous laws govern the environment, most dating to the early to mid 1990s. They include a law on nature protection (1991), law on protection and rational utilization of fauna (1993, 1997), and protected areas (1992). The Presidential Resolution N304 of 1991 (on measures for radical improvement of ecological situation in the Caspian Sea basin) devolves responsibility for the Caspian directly to the President. The Ministry of Nature and Environment Protection is a principal executing arm for this work. However, as in other former Soviet countries, lack of budget has severely limited the staff of the Ministry,

and thus its effectiveness. For instance, Turkmenistan has yet to complete a NEAP (despite many years of activity in this direction), though under Japanese funding it is now in the process of developing its NEAP. Turkmenistan has signed, accepted, or ratified a number of international conventions: Biodiversity, World Heritage, Basel Convention, and Desertification Control (see annex 5).

Sub-regional Policies and Cooperation

There has been sub-regional cooperation between the littoral states dating from early in the 20th century. Early agreements first between I.R. Iran and the Russia, and later by the Soviet Union and I.R. Iran, set the legal basis for cooperation in the areas of fisheries, navigation, and other related topics addressing the Caspian Sea. Since the formation of independent republics from the former Soviet Union, no regional convention addressing the Caspian Sea environment has been agreed by all parties. However, there is ample evidence of environmental cooperation in a series of regional declarations and other agreements in the Region; for instance, the Almaty Declaration of May 1994 between the Caspian littoral countries established a basis for cooperation. This declaration was followed shortly by a delegation from the World Bank, the United Nations Environment Programme (UNEP), and the United Nations Development Programme (UNDP) to the region which identified key problems and documented commitment from the littoral countries to participate in the Caspian Environment Programme. In May 1998, at meetings in Ramsar, I.R. Iran, the Caspian Environment Programme was formally begun. Since then the CEP has moved forward with development of a Transboundary Diagnostic Analysis, National Caspian Action Plans, and a regional Strategic Action Programme (SAP) to address the transboundary problems of the Caspian Sea. This first phase of activity is nearly complete.

As part of the Phase I CEP activities, under GEF partial support and with UNEP additional support and facilitation, the Region has prepared a near-final draft of a Framework Convention for the Protection of the Environment of the Caspian Sea. Through a series of six meetings, the Framework Convention has been negotiated. However, its ratification has been delayed by the lack of regional agreement on the legal status of the Caspian Sea (sea or lake). Although the governments of the littoral states have stated their desire to address environmental issues of the Caspian separate from the context of regional politics, the legal status debate has slowed adoption of this Framework Convention. The next meeting of the Framework Convention working group is to be in late May 2002, in I.R. Iran, and a Regional Ministerial Meeting is scheduled for September, 2002, also in I.R. Iran, during which it is expected that the Framework Convention and the SAP will be signed.

Under the CEP, a draft Regional Cooperation Plan for Emergency Response in case of major Oil Spills has been discussed and almost finalized; a regional plan has been drafted and agreed to combat the alien species *Mnemiopsis leydyi* and other introduced species; a Fisheries Management Plan has been drafted and is being negotiated; and a Regional Biodiversity Strategy is through its finalization process. In addition to the CEP, the former Soviet republics all cooperate in fisheries management through the Caspian Bioresources Commission that meets annually to decide on allocation of total catch quotas for Caspian fisheries and apportionment amongst the four northern countries. I.R. Iran is not a member of this Commission, but cooperates informally. The last meeting was held in Baku, AZ, on 29-30 March 2002, and included participation by the I.R. Iran. Recently, since the listing of caviar on Appendix II of CITES, all five countries have met to establish regional quota for caviar, a notable sign of regional cooperation mirroring their economic interest in this resource. All the Caspian states are members of the Caspian Committee of Hydrometeorological Services (CASPCOM), which has recently signed a Memorandum of Understanding to cooperate and coordinate activities with CEP.

Activities in the first four years of CEP have been supported by the GEF, EU/Tacis, UNDP, UNEP, World Bank, private sector, bilateral assistance, and the Caspian littoral states. This initial phase of CEP was faced with many challenges and hurdles which had to be overcome. These include: lack of open sharing of data and information; difficult and changes

7 Context

Regional Importance of the Waters

The Caspian is the largest inland body in the world, containing some 44% of all inland waters on the globe. Physically the Caspian Sea is one of extremes. Its salinity varies from a few parts per thousand in the North Caspian during times of high Volga inflow, to more than 50 ppt in the Kara Bogaz Gol, a small evaporite basin that nestles in the Turkmen coastline. Temperatures of the Caspian Sea likewise are extreme, ranging from summers highs in the mid 30 degree C range, to freezing in the North Caspian as it ices up each winter. Evaporation generally is high, of the order of one meter per year, a primary contributor to water level fluctuations that are extreme here (fluctuations span 3 m in the vertical, during the past 100 years, and even much more in geological times). The Sea is divided morphologically into three parts, the northern part shallow (mean depth of some 6 m), the middle section with an average depth of 190 m (maximum exceeds 700 m), and the southern Caspian with a mean depth of 184m (maximum depth of 1025 m). Though the basin is well oxygenated in general, the vast variations in river flow may contribute to periods of deep water anoxia from time-to-time.

This is the physio-chemical setting for the globally important resources of the Caspian Sea. Environmentally, the Caspian is host to a unique biodiversity and serves as habitat for globally important species. The unique biodiversity include a large degree of endemism that makes this in general somewhat poor flora and fauna unique. The history of Caspian flora and fauna is one of introduction and endemism. During prior links with the Mediterranean Sea through the Black Sea, and through the Arctic linkage in past geological time, the two major sources of biodiversity came to the Caspian. Endemism has worked on these two sources of biodiversity, expanding further the diversity of the system. Bottom-dwelling gobies perhaps represent the most endemic of Caspian fauna. In the past 50 or more years, additional anthropogenic introductions have taken place, some intentional, and some accidental. Beneficial species have been introduced as keystones of the food web, and harmful species have been introduced accidentally through water transport, and through purposeful introduction. One major example of accidental introduction is the ctenophore, *Mnemiopsis leydyi*, documented for the past few years in the Caspian Sea.

The Caspian Sea is served by the largest river in Europe – the Volga River – as well as several other significant transboundary rivers (Ural River, Kura River). These rivers contribute special habitat to flora and fauna, including *inter alia* sturgeon and other fishes, as well as vast migrating bird populations. The shallow north Caspian is fringed by a wide reed belt (Potamageton and other types), that serves as important habitat for migrating and year-around bird populations. Extensive flocks of flamingos, for example, populate the northern and southern waters of the Caspian Sea at different times. At least 15 globally threatened species use the region (geese, ducks, pelican, crane, eagles, etc.) as well as IUCN-listed sturgeon species. Many flora and fauna species contained in red books of the five littoral countries are found in the Sea and coastal zone. From a flyway perspective, the wetlands in the region lie astride the East African flyway, the Mediterranean flyway, and the Central Asian-Indian flyway, involving millions of birds each year (estimates are up to 10 million birds feed and rest here each year in spring and autumn). As an example, the Volga Delta, due to its uniqueness, has some 800,000 ha designated as a Ramsar site.

Since the Caspian is an enclosed Sea, it has limited carrying capacity compared to other marginal seas. Pollution entering the Caspian either is biogeochemically altered, or remains in the Sea for years. None escapes through dilution from external buffering waters. The circulation of the Caspian Sea is typical of semi-enclosed Seas: it consists of a number of quasi-permanent cyclonic (counterclockwise) gyres that transport water and materials transboundary, as well as smaller anticyclonic and cyclonic gyres that come and go depending on the winds, water inflows, buoyancy fluxes, and other driving forces. Thus, pollution entering the Caspian Sea from the Volga, for instance, is ultimately distributed through the Sea and its sediments. Oil spills likewise respect no boundaries, and poor oil extraction practices in offshore Azerbaijan are reported to have soiled Iranian and Turkmen coasts, and perhaps Kazakh and Russian shores as well. Radioactivity entering through the Kura River or from other coastal areas has the opportunity to disperse through the entire Caspian Sea. This is the transboundary character of this Sea.

General Status of the Waters

Extensive historical data are available from the former Soviet Union addressing water and sediment quality in the Caspian. However, transition economies of the past decade have shifted budget resources from the hydrometeorological agencies that performed these measures, and hence the database has declined intensively. Although some monitoring has taken place during the past decade, sampling and analysis techniques are often suspect, and monitoring frequency is much reduced. Iranian monitoring is sparse and cursory: little historical data are available on its offshore waters and bottom sediments. Fortunately, the advent of international oil and gas exploration and accompanying environmental baseline and impact studies, as well as various international donor programs (e.g., Baku Bay study), have provided some new data during the past decade that permit some degree of analysis. The Transboundary Diagnostic Analysis benefited from recent data from international sources, including a sediment quality cruise of the entire Caspian except Turkmenistan waters undertaken as part of phase I CEP activities. This cruise showed high natural contents of certain heavy metals in sediments (due to geological sources; e.g., nickel, cobalt, and certain other metals), and some persistent organic pollutants (e.g., DDT and its breakdown products, some other pesticides/insecticides, etc.). With the exception of hotspots no significant accumulations of petroleum hydrocarbons (PAHs) were observed in the coastal waters, nor were PCBs noted at a concentration to pose human health or ecological risk. In particular, the general northeast part of the Caspian Sea, off the Kazakh coast, seems to have coarser sediments with relatively low concentrations of inorganic and organic materials, suggesting that the baseline sediment quality against which the oil and gas activities starting in the region is not heavily contaminated.

However, in spite of the basin-wide observations, there are notable hotspots of pollution, including Baku Bay, Sumgait, the Kura River delta (copper and pesticides), Makhachkala, Astrakhan, Atyrau (heavy metals including chromium), Aktau, Turkmenbashi Bay, Chelekan, and perhaps some of the Iranian rivers/ports (Anzali, Chaloos, etc.) (see annex 1.3 for map of hot-spots). These hot-spot areas require further interventions to define more fully the extent of contamination, and evaluate the risk exposure and, if indicated, to identify prevention and mitigation strategies.

The status of the waters themselves is less certain. The CEP cruises did not do extensive water column sampling, because single point samples are not representative of the average quality of the waters of the Sea. Given low concentrations of certain contaminants (e.g., heavy metals and some organics), accurate measurement requires large volumes and repeated sampling, which was not performed under the CEP to date. Historical data show some local areas of eutrophication, but not to the extent of the neighboring Black Sea, and these data have not been fully quality controlled. Historical data have been shown to suffer from poor analytical techniques (especially in measurement of heavy metals), lack of adequate methodologies (for measuring ammonia, for instance), and are not readily available to the CEP. However, water clarity remains high (loss of water clarity was an early warning signal for massive eutrophication of the Black Sea), and there are no documented mass declines in reed beds or other aquatic plants due to eutrophication. Temporary loss of macrophytes in the North Caspian accompanies fluctuations in water levels, but these are apparently short-term losses. Interestingly, die-off of reed beds may produce temporary and local eutrophic conditions due to mass carbon loading in these areas. Thus, the CEP focused on documenting sediment quality, as an integrator of long-term water quality, rather than attempting to do (poorly) direct sampling of the water.

Indirect evidence such as remote sensing does document hydrocarbons in the water. Furthermore, the Ecotox Project recently reported that all fish sampled from Azerbaijan, I.R. Iran, and Kazakhstan (results not available from the Russian Federation and Turkmenistan yet) measured positive for cytochrome P-450C activity, indicating that the fish had been exposed to PAHs at some time in the recent past. However, the sources of these hydrocarbons is not clear: they may come from active oil and gas operations, from flooded contaminated area on land (due to inundation by higher water levels and surges), marine transport, even from natural seeps (the mud volcanoes emit hydrocarbons to the environment along the Apsheron ridge separating the South Caspian from the Middle Caspian), rivers, and perhaps other industry.

Extensive data have been collected under the CEP regarding the ecotoxicology of the Caspian seals, sturgeon, and bony fishes. Although not all data are yet available, some trends have been observed from

analysis of tissues and organs of Caspian biota. Organochlorides (particularly DDT and its breakdown products) are observed in these organisms, at levels thought to affect fecundity and hence the entire population (especially for seals, where bioaccumulation of between 10-1000 times the background level of these organochlorines has been documented). Other organochlorines measured in Caspian seals, in decreasing order of importance, include PCBs, HCHs, CHLs, and HCB. Histopathological studies have been performed to link organism responses to the chemical loading, but the results of these studies are not yet available. For bony fishes, however, it appears that some histopathological responses to pollution have been observed. For seals, there is a definite histopathology associated with the pollutant loading: decades of research have documented how seal fecundity, for instance, is adversely affected by DDT and other contaminants in tissues and organs. A recent mortality of seals in 2000 in the region had as a proximate cause the canine distemper virus (CDV), which combined with other stresses on the seals to cause mortalities in Kazakhstan, Azerbaijan, Turkmenistan, and possibly the Russian Federation (no direct data are available from the Russian scientists yet). By contrast, seal deaths in 2001 showed little sign of CDV, suggesting another proximate cause of mortality in this year. Despite the efforts of the Ecotoxicology project (funded by the Japanese Large-Scale Studies Trust Fund through the World Bank), much still remains to be learned regarding fundamental ecotoxicological dose-response behaviour of Caspian organisms.

From a biodiversity standpoint, despite three years of data summary, there is precious little quantitative data on extents and rates of degradation of habitats and loss of species. Though each country notes loss of habitats, quantitative data are scarce. Exceptions, of course, include the loss of habitat due to damming of rivers in Russia, Azerbaijan, and I.R. Iran, which has reduced the natural spawning grounds and habitat of sturgeon and other anadromous/catadromous fish. Certain coastal areas in I.R. Iran are undergoing stress due both to introduced vegetation and eutrophication; however, again, the exact quantification of these losses is not known. Therefore, habitat loss appears to be a threat, particularly with rapidly expanding oil and gas exploration and exploitation. Biodiversity is also under threat at the species level. The Caspian Seal has undergone recent mass mortalities, with a finding of high concentrations of certain heavy metals and POPs (mainly DDT) in tissues and organs; its status is uncertain, due to a lack of knowledge about total numbers (estimated at between 50,000 and 400,000 individuals). Sturgeons are threatened, due to over-fishing, loss of habitat resulting in large part from dam construction on the major rivers of the Caspian (including the Volga), and possibly pollution. The Caspian tiger, one of eight tiger ecotypes known in the world, once spanned the Caspian from northern I.R. Iran through the Caucasus, to Lake Balkhash in Kazakhstan, and down to Turkmenistan. However, this species is thought to have become extinct in the past couple of decades, in spite of anecdotal evidence to the contrary. The demise of this major hallmark species in essence evidences the massive loss of habitat in the region, from the former vast reeds of the Iranian coastline (now overwhelmed by local populace since the advent of malaria control), and loss of wetlands in Kazakhstan and Turkmenistan, to the urbanisation of the coast of Azerbaijan.

In addition, introduced species continue to pose a threat to the ecosystem, and is an area where intervention would be beneficial. In 1994, early reports identified the ctenophore *Mnemiopsis leidyii* (M.I.) as a major threat to the Caspian Sea, particularly from the direct route to the Black Sea via the Volga-Don Canal. The first phase of the CEP addressed this threat by establishing a regional working group (including international participants and Black Sea scientists), providing training courses to assist regional scientists to identify the organisms, conducting a basin-wide fisheries cruise that made observations of the ctenophore, and preparing an Action Plan for M.I., which includes possible introduction of the larger ctenophore *Beroe* as a control measure. The M.I. has reached large densities in some southern portions of the Sea, densities rivalling those of the Black Sea during the M.I. peak there. A possible investment intervention targeting the invasive species issue is the construction of a ballast water treatment facility in Astrakhan, the major entry point for most accidental introductions of exotic species.

From a fisheries standpoint, a recent fisheries stock assessment cruise showed reduced stocks of sturgeon and certain other commercially valuable fish in the Caspian, while semi-anadromous fishes in the Northern Caspian have increased compared to previous years (vobla, bream, and zander). Sturgeon catches continue to decline, and the limited sturgeon samples analysed showed high levels of physiological damage. Causes of sturgeon decline (as well as other catadromous/anadromous fishes)

include poaching, dam construction limiting spawning habitat, rice culture on the Volga delta, pollution, and overall decline of habitat. Kilka appeared to be decreasing, perhaps under the influence of *Mnemiopsis*. Other fishes (e.g., gobies) seem to be stable.

National Contexts

Azerbaijan: Azerbaijan has a coastline of some 825 kilometers along the Caspian Sea (of the approximately 7000 km of shoreline), and more than half of its population lives along the Caspian coast. Its capital city, Baku, is situated majestically along the hills of the Apsheron Peninsula overlooking the Sea, and relies strongly on its port for commerce. Baku has a history of varying degrees of reliance on its hydrocarbon resources dating back centuries, starting with the ancient zoroastrian religion, to 19th century development by Europeans, Soviet development throughout the 20th century, up to the present day multinational oil and gas companies. Oil and gas are critical natural resources for Azerbaijan, the cornerstone of its economic policy. Fisheries are also significant for Azerbaijan economy, domestically and internationally (caviar trade). Therefore, the Caspian Sea is a major focus for national policies regarding economics, the environment, and even international policy. The Azerbaijan shoreline and offshore are dotted with mud volcanoes, low-temperature geothermal sources of various hydrocarbons, heavy metals, and rare earth materials. Azerbaijan has been strongly affected by the water level rise from 1978 to 1996 (especially in the Baku region), and the Apsheron Peninsula suffers from more than a century of oil exploration and exploitation, with little thought given to the environment or human condition. Desertification from technogenic sources is another strong indicator of environmental degradation in Azerbaijan.

I.R. Iran: The three northern provinces of Gilan, Mazandaran, and Golestan border the Caspian Sea, and support some 6 million population along about 1000 km of coastline. This is the most densely populated national coastal area; nearly the entire Iranian coast has villages and towns dispersed along it. Population growth rate is very high especially in urban areas where it is close to 5% per annum. Agriculture, industry, and urbanisation all contribute to the degradation of the Caspian Sea and the coastal areas including the narrow forested watershed. The Sea provides income to much of the region through fisheries, transport, and tourism. Oil and gas exploration has begun in Iranian waters, although no proven resources have been announced to date. The coastal zone has a special significance as a major food belt for I.R. Iran, due to the high rainfall and excellent soils. Lack of sewerage and sewage treatment facilities, lack of coastal planning, and intersectoral cooperation all contribute to degradation of the Caspian. I.R. Iran's seriousness to the CEP has been demonstrated by their strong participation in Phase I CEP, and their offer to host the CEP PCU/Secretariat during the next phase.

Kazakhstan: Kazakhstan has a vast littoral area along the Caspian, spanning some 2320 kilometres of coastline. Two major cities lie along the Caspian: Atyrau (former Guryev, effectively the operations center for the oil and gas exploration activities in the North Caspian Sea, and a major fisheries port) and Aktau (site of a nuclear reactor, uranium mining operations, and a major port). In addition, smaller towns also dot the coast (e.g., Fort Shevchenko), but in general, the Kazakh coast is sparsely populated. As a major center for oil and gas resources (the long-lived Tenghiz Field is located along the NE shore of the KZ Caspian coast), fisheries resources, and a major recreational area, this part of KZ plays a central role in the KZ national economic, environmental and policy framework.

Russian Federation: Three regions of the RF lie along the Caspian Sea: Astrakhan oblast, Republic of Kalmykia, and Republic of Dagestan. Together, the three regions cover some 1460 km of the Caspian coast. Major cities along the coast include Astrakhan (at the mouth of the Volga), Makhachkala, and Derbent. Fisheries, shipping, oil transport, and oil and gas extraction are all major economic activities within this area of the Caspian Sea. Industrial activities around Volga and Terek estuaries, illegal fishing, and land inundation have seriously stressed the environment. On the Kalmykian coast, desertification and water level fluctuations (including both longer-term and short-term storm surges) provide constant challenges to human health, natural resources, local industry, and the transportation infrastructure. The Russian Federation contains the largest river in Europe, the Volga, which discharges into the Caspian Sea. The R.F. has conducted a major project on the river, the Volga Revival project, which is in its last phases. A major initiative is planned to continue multi-disciplinary studies of the Volga in the future. The

CEP has retained strong ties with the Volga Revival Project and other national RF activities on this river, to provide input to the TDA and CEP activities in general.

Turkmenistan: Spanning approximately 1200 kilometers of the Caspian coast, the Turkmen coast, including the evaporation basin of Kara Bogaz Gol, is beset with environmental stressors. Perhaps the dominant issue here is desertification, both natural and technogenic. Lack and misuse of water resources has created vast new areas of deserts, resulting in both environmental and human health hazards. Lower Caspian water levels of the early 1980s exposed large areas of Kara Bogaz Gol to intense winds, spreading mined salts throughout the region, with serious human health impacts. Inadequate water supplies require use of expensive desalination plants, for which the government has inadequate budget. Port and industrial activities at the coastal city of Turkmenbashi have led to local poor air and water quality. Industrial activities farther south along the coast near Chelekan, including onshore and offshore oil and gas exploitation, have created extensive pollution of the land (threatened by rising water levels in the 1980s and early 1990s). Both industry and oil and gas activities generate radioactive waste products, which are inadequately controlled. Fisheries, particularly sturgeon, are in decline in Turkmen waters.

8 Project Rationale and Objectives:

Objectives

The primary objective of this GEF bridging project is consolidation and preliminary implementation of the SAP of the Caspian Sea, including filling of gaps in information and developing capacity in the region for project execution. The initial phase of the CEP focused on formulating a Transboundary Diagnostic Analysis (TDA) and development of National Caspian Action Plans and a Strategic Action Programme.

Experts from around the region worked over a two-year period to analyse available data and information and identify:

- The main perceived threats to the Caspian Sea, both transboundary and at the national level; and
- For each of the above, undertake causal chain analyses to identify root causes and specific interventions to address those causes

However, quantitative data regarding the causes and impacts were lacking; therefore although root causes could be identified, we could not rank them in terms of priority. Prioritization is an essential step if cost effective NCAPs and SAP are to be developed. We therefore approached the analysis from a different direction and, taking into account earlier findings, the TDA team identified five Environmental Quality Objectives (EQOs), which represented the region's long-term vision for the Caspian. Against each EQO a set of targets (with timelines) was then agreed in order to achieve the objective, and for each target a listing of required and costed baseline and incremental interventions was developed. The full set of EQOs, targets and interventions appears in annex 4 and is presented in the TDA as the provisional SAP. Early targets include interventions to undertake further strategic studies to refine the TDA and to determine the relative impact of the perceived threats. Early targets also include policy, legal, regulatory, capacity-building, and institutional reform to address pervasive root causes identified in the causal chain analyses.

The preliminary SAP, alongside the Biodiversity Strategic Action Plan for the Caspian, has been used by the national teams to develop their NCAPs and is being used to develop the final SAP. The outcomes and activities given in section 9 of this paper are drawn from this preliminary SAP.

Threats

The major threats to the Caspian Sea identified during the TDA process include the following:

- a) Habitat/Biodiversity Loss: Loss of habitat due to human activities (settlement, industrial usage, technogenic desertification, damming of rivers, etc.) and loss of biodiversity due to human activities (e.g., oil and gas exploration and exploitation, overfishing, habitat destruction, introduced species)

- b) Pollution: Hot spots of pollution, due to industrial, agricultural, and urban sources of pollution; use of POPs (e.g., DDT, HCH) and certain heavy metals (e.g., copper) in agricultural settings, including pest control (witness recent widespread spraying of DDT in Kazakhstan, Russia, and perhaps Azerbaijan to control locusts); accidental spillage of oil and oil products in the coastal zone and at sea; increased localised nutrient levels, possibly due to inadequate sewerage systems and sewage treatment and poor maintenance at those facilities that do exist
- c) Invasive species such as *Mnemiopsis*; some accessing the Caspian via the Volga-Don and Moscow canal systems, others due to purposeful introductions (aqua-culture, biological control, pet-trade).
- d) Fisheries decline due to uncontrolled over fishing of certain fish stocks due to lack of regional fisheries agreement, and limited national capacity to control poaching and regulate the fisheries.

Underlying Cause

The above threats to the Caspian environment have many underlying causes (many of which are common to several threats), including:

At a regional level:

- Absence of a ratified and in force Regional Framework Convention for the Protection of the Environment, or analogous agreement
- Lack of specific protocols for such a regional Convention (including protocols on land-based activities, marine pollution sources, biodiversity conservation)
- Intense economic reliance on oil and gas resources of the Sea, with accompanying socio-political tensions
- Global over-valuation of sturgeon caviar, combined with decrease in available supplies
- Lack of regional agreement on legal status of the Caspian Sea
- Weakness in understanding and policy recognition of value of biodiversity conservation for current and future generations
- Lack of regional planning institutions (e.g., for regional EIA, responding to transboundary emergencies, fisheries management, regional conservation efforts)
- Weak public (stakeholder) participation at levels of decision-making and weak public awareness (under-developed civil society) of environmental issues
- Absence of national budget allocated for the environment due to low priorities placed on environmental issues

At the National level:

- Weaknesses in existing policy, legal, and regulatory institutional framework to address specific problems of the Caspian Sea
- Lack of enforcement of existing laws and regulations
- Low income levels and poverty amongst some Caspian residents
- General weakness of Environmental Agencies/Ministries in the region
- Absence of government will and budget addressed towards environmental matters
- Transition economies leave large gaps for abuse of power in coastal and marine affairs (fishing, poaching, use of resources, planning/management)
- Lack of an effective coastal zone planning and management function in all five countries
- Weak intersectoral cooperation on environmental issues (e.g., conservation, fisheries, resource use)

Baseline Scenario

The countries are slowly moving towards stronger environmental policies, as their transition economies mature. Evidence for this comes from a variety of sources, including their adoption of many international conventions (see annex 5), their active participation in the negotiations of the Framework Convention for

The Protection of The Caspian Sea, and improved cooperation with CITES regarding the management of the sturgeon fishery. However, weaknesses in the Ministries of Environment in the Caspian states have led to poor compliance with existing national legislation and slow implementation of those international conventions that have been signed and ratified. Priority in all the countries is given to economic development with the environment low on the current political agendas. This situation will remain in the short-to-medium term since it is unlikely that the environment will benefit greatly from the expected oil and gas bounty in 5-to-10 years time under the present policy framework. Around the region's hot-spots, the coastal population has grown used to and now has adapted to an impoverished natural environment, though experiencing adverse health impacts while doing so. With the present severely under-developed civil society, this attitude is unlikely to change in the next few years. The Caspian Sea is a threatened environment, which desperately needs protective measures in place and support for civil society involvement to save it from further degradation. Governments tend to take decisions based on inaccurate or incomplete data on the environmental status of the Caspian (for instance, lacking up-to-date monitoring data on the Sea). Occasional disagreements between departments within Ministries have led to compromised strategies and action plans and ultimately wastage of precious resources and inaction. Regional cooperation often has benefited from international partner stewardship, though regional measures have taken place independently as well (e.g., Bioresources Committee). International support and partnering has encouraged this regional cooperation at a time when it is fragile due to the unresolved legal status of the Caspian Sea.

Alternative Scenario

The alternative scenario includes continued intervention by GEF and other international partners as catalysts and facilitators to accelerate change. The GEF and other international partners have successfully facilitated the parties in addressing transboundary environmental issues; this is the role they can continue to bring to the CEP. The work of the CEP would continue as a transitional mechanism towards a Convention and permanent secretariat. Under the stewardship of UNEP, UNDP, and EU/Tacis, the countries would proceed towards signing the Framework Convention, agreeing institutional arrangements, and negotiating key regional protocols and agreements (Biodiversity, Invasive Species, Oil Spill Contingency planning, Fisheries Management, and others). International partner support to assist the countries with upgrading their policy and legal bases, strengthening their institutional arrangements, improvement of compliance with existing national legislation, and implementation of multi-lateral and international environmental agreements will provide a firm basis for future protection of the Caspian environment. Through the CEP, the importance and value of the Caspian can be advocated effectively at the international, national, and, importantly, the regional administrative levels. Assistance from the international partners towards implementation of the SAP will provide impetus and momentum to the National Governments to implement their own endorsed NCAPs. The resulting NCAPs and SAP will reflect a clear and more quantitative assessment of the environmental status of the Sea as reflected in the TDA; the TDA will serve as a much needed technical basis for prioritising national and regional needs and better target the riparian country's limited resources. The CEP will provide a nucleus around which support from other international organisations can be mobilized. Specifically, the CEP can encourage the oil and gas sector to provide comprehensive and coordinated support towards the environment, thereby transferring costs and benefits to this segment of the private sector where one might argue they rightfully belong. More open and complete private sector involvement will also assist the region to develop a sustainable mechanism for their alternative scenario. Continued attention to regional cooperation in public awareness and participation, perhaps through strengthened regional NGOs, strengthened communication, a regional EIA process, and more open environmental decision-making processes will continue to be a role of the international donors.

More specifically, the project will result in the following alternative scenario:

- Improvement of the protection status of globally significant biodiversity in the Caspian, including an agreed protocol for the Convention and protection measures implemented (regionally agreed biodiversity targets, network of protected areas focused on priority targets),

- Primary toxics of concern (chlororganics, oil-related products, and some heavy metals) agreed, sources of priority toxics identified, legal/policy interventions reviewed so national legislation will address these PTS more effectively (and identify means to strengthen compliance of existing laws), regional and national plans of action for land-based sources developed.
- Invasive species control mechanisms identified in a Protocol to the Convention, national commitments and actions to follow (voluntary) IMO Guidelines on ballast water, action plan for addressing the problem of *Mnemiopsis* implemented, a regional body established to provide expert advice regarding introductions, and public awareness/education projects conducted in the Iranian sector of the Caspian as a national invasive species control mechanism.
- High level endorsement of the SAP and NCAPs by each riparian country.
- Signing of regional environmental agreements, including the Framework Convention with its numerous protocols and annexes.
- Establishment of a permanent PCU as custodian of legal documents governing the CEP, and as operational programme management and coordination body
- Capacity in the Secretariat of the Framework Convention to implement the Convention, and ability to execute projects on behalf of UNDP, UNEP, the World Bank, and other donors.
- Capacity in the Programme and National Coordination units to execute regional and national projects.
- Capacity to effectively involve all Stakeholders, in particular coastal communities, in developing planning processes for Caspian environmental protection.
- Built-in regional capacity for monitoring and evaluation of SAP implementation
- Incorporation of SAP and NCAP priorities into ongoing activities and programmes of the Implementing Agencies in the region.

Why should GEF get involved at all?

Continued attention to the regional environmental agreements currently being negotiated (Fisheries Management Agreement, Framework Convention, Oil Spill Response Cooperation Plan, Caspian Biodiversity Action Plan, Hydrometeorology Cooperation) will be required of the international community, as the region struggles to agree on the legal status of the Sea. Lacking such an agreement, some governments tend to delay progress on these environmental agreements, except when encouraged by the international community. The GEF has gained regional acceptance as a major international partner and leader in regional and transboundary environmental initiatives, along with the various UN agencies and EU/Tacis, and the execution of the alternative scenario would benefit greatly from this leadership. UNDP's strengths in capacity building, institutional strengthening, public awareness and participation, and demonstration projects (through the Matched Small Grants Project) will help lead the region to a more sustainable environmental framework. UNEP's strengths in regional agreements will assist the region in achieving consensus on these issues. GEF's experience in interaction with the private sector (particularly the oil and gas industry) has been particularly useful in striving towards a long-term sustainable mechanism for the environment.

On their own, the countries will continue their focus on national environmental issues, and neglect the transboundary ones (primary toxics, globally significant biodiversity including sturgeon, and invasive species). GEF funding will provide the increment to allow these countries to focus on and resolve these transboundary issues.

9 Expected outcomes and activities of Full Project:

This project will be a bridge during which certain outputs will be achieved prior to full SAP implementation. Key progress achieved during the first phase of GEF funding in several areas (Biodiversity, institutional framework, Framework Convention, pollution levels, invasive species including *Mnemiopsis*, etc.) permits early SAP implementation in these areas as part of this next GEF project. This bridging project will be

implemented by UNDP, but with full UNEP participation in several areas (see outcomes A, B, and C, in particular, below) under an Interagency Agreement with UNDP/UNOPS. The World Bank, meanwhile, will complete its portion of the first GEF project, in approximately the same time frame.

The full bridging project's objectives to a large extent drawing on the preliminary SAP (see annex 4), will be:

- To continue specific capacity building and institutional strengthening measures begun during earlier GEF funding, including:
 - To assist in the strengthening of a regionally owned coordination mechanism and to help with the transition of the PCU into a fully functioning body capable of carrying out the work of the Secretariat to the Framework Convention once signed.
 - To develop capacity within the emerging/interim Secretariat of the Framework Convention to execute projects on behalf of the Implementing Agencies and other donors.
 - To undertake stewardship of the regional negotiations of ancillary agreements to the Convention (headquarters agreement, financial arrangements, etc.) and draft protocols to the Conventions.
 - To provide technical assistance to the Caspian states to improve and strengthen their legal and policy frameworks as they relate to the Caspian, and where necessary provide advice on implementation and compliance of framework.
 - To promote country signature of key environmental Conventions relating to the Caspian.
- To achieve Ministerial signature of the SAP, national signature followed by endorsement of the NCAPs, and signature leading to ratification of the Framework Convention.
- To improve the status of globally significant biodiversity in the Caspian, by completing quantitative assessment of the state of the Caspian environment in a number of priority transboundary areas identified in the TDA: Biodiversity (including Sturgeon and Seals), Invasive species, and Persistent Toxic Substances (including Persistent Organic Pollutants, oil products, and heavy metals)
- To commence implementation of the SAP in three key areas: Biodiversity, Invasive species, and Persistent Toxic Substances, in part through strengthening Civil Society
- To continue the Matched Small Grant Programme of small-scale investments, currently being executed by the World Bank under the first GEF CEP project, addressing priorities of the NCAPs/SAP. These grants are intended to result in tangible environmental improvements..

The European Union through the agency EuropeAid is committed to further support of the CEP and a strategy document is to be released shortly. It is understood the next EU project will be worth approximately 4 million euro and is likely to commence in mid 2003 or later.

Specifically, the full Phase II GEF project is anticipated to have the following outcomes and activities (to be verified and expanded during the full PDF-B stage):

A. Outcome: A sustainable, strengthened, and regionally owned coordination mechanism for development and management of the Caspian Sea environment, in the form of a newly formed country-supported PCU located in the Islamic Republic of Iran capable of execution of regional projects, strong country-supported National Coordination Units capable of execution of national projects, and a network of institutions addressing transboundary environmental issues as addressed in the TDA and SAP. The fate of the Caspian Regional Thematic Centres, which in the next CEP phase would be country supported, will be decided by the countries at the PDF-B Inception Meeting in Baku in April 2002.

Activities

1. Relocation of the Programme Coordination Unit (PCU) to I.R. Iran, including equipping, staffing and training of the PCU. The Programme Coordinator and assistant will be selected from regional candidates and supported by the littoral states.

2. Transfer and further development of the Caspian Information System to the PCU in I.R. Iran, with strong linkages to contributing institutions in the region.
3. Provision of training to the staff of the PCU/interim Convention Secretariat and the national Coordination Units to enable them to execute national and regional projects.
4. Update by the PCU, in consultation with the countries and donors, of the overall CEP Concept Paper, with reference to the SAP and Framework Convention.

B, Outcome: Preparation of ancillary agreements to the Framework Convention and drafts of the major protocols targeting priority transboundary issues (biodiversity, persistent toxic substances, invasive species, land-based sources, marine and seabed pollution, and environmental impact assessment, data exchange).

Activities

1. Secondment of a full time environmental lawyer from the region to the PCU for two years to assist in preparation of the draft ancillary agreements and protocols, reporting to the country funded Programme Coordinator.
2. Three months training of regional lawyers by UNEP in Geneva.
3. Protocol working groups established and workshops held to draft key protocols

C. Outcome: In each country, continue work started in GEF Phase 1 to identify gaps in environment policy and legislation related to the priority transboundary problems of the Caspian Sea and, where necessary, draft enabling policy and legislation and improve record of compliance and implementation of National legislation and International Conventions.

Activities

1. Provision of legal expertise to each Caspian state to undertake a detailed gap analysis and help draft enabling policy/legislation; it is envisaged that a lawyer will be seconded for a period to each Ministry of Environment to help execute this task.
2. A series of National and Regional workshops conducted by staff from the secretariats of the most important environmental Conventions to enhance capacity of the Caspian states to implement and enforce Regional and Global Environmental Agreements. Follow-up technical assistance to be provided to each Ministry.
3. Technical assistance in further analyzing and promoting EIA regional policies and practices in line with the Espoo Convention. Drafting of a protocol on EIA procedures for projects having transboundary impacts, including the consultation process using CEP web-site and other modalities.
4. Technical assistance in reviewing possible economic instruments for the Caspian Sea, to promote environmental sustainability.

D. Outcome: A quantitative assessment of habitat loss in the Caspian and its coastal zone and verification of critically threatened areas, and, in conjunction with the oil and gas industry, the design and establishment of monitoring methodology/programme for the Caspian Sea.

Activities

1. Undertake quantitative surveys of coastal wetland and marine habitats to fill gaps identified during the Phase I GEF project in each Caspian littoral state, including evaluation of sensitivity and threats (including Water Level Fluctuations).
2. Quantify the effects of lost habitat to fisheries, and develop activities to preserve such habitat in support of fisheries (including major habitats in the Volga, Ural, and other river deltas)
3. With the assistance of the oil and gas industry, together with UNEP and the World Conservation Monitoring Center, produce a quantitative and accurate sensitive areas map of the Caspian and make available using internet map server technology. This will form the basis of a regional biodiversity database and will be an essential component of the oil spill response cooperation plan being prepared by IMO.
4. Develop a set of habitat monitoring protocols for the Caspian and help establish a biodiversity monitoring programme, in consultation with the Convention For Biodiversity and Convention on Migratory Species

E. Outcome: Preliminary implementation of the Caspian Biodiversity Strategic Action Plan developed in GEF I, focusing on compliance with existing nature protection regulations (see outcome 2 and 3), implementation of species and habitat specific conservation action plans, and targeted public awareness campaigns.

Activities

1. Implementation of Action Plans for the protection of threatened habitats.
2. With the assistance of the private sector, implementation of Action Plans for the protection of specific endangered species, such as the Caspian seal and the sturgeons.
3. Create an up-to-date Caspian biodiversity database, building on the outputs from GEF I, including a complete check-list of species and electronic identification keys.
4. Establish an ECO-net around the Caspian, comprising a coordinated network of centers and institutions which when operable would provide a biodiversity monitoring network for coastal waters and adjacent wetlands. This network could be modelled on the early Bio-Net set up by the World Bank in 1997-1998.

F. Outcome: Implementation of invasive species Action Plan (developed during CEP Phase I) in close coordination with the GEF Global Ballast Waters project to address, in particular, the impact of the ctenophore *Mnemiopsis* on the Caspian ecosystem.

Activities

1. Support and expansion of the monitoring programme for *Mnemiopsis* currently operating in Russia, Azerbaijan and I.R. Iran.
2. If it has not already be undertaken, the proposed controlled introduction of the ctenophore predator *Beroe* to combat *Mnemiopsis*, which has received the approval of the CEP Invasive Species Advisory Group, subject to preparation and approval of an Environmental Impact Study for this introduction.
3. Studies into the biological control properties of the butterfish on *Mnemiopsis* as a longer term solution to the high ctenophore biomass in the Caspian.
4. Establishment of a regional body to authorize, monitor, and police planned alien species introductions (this body might build on the Invasive Species Advisory Group, but will have much broader responsibilities and authority)
5. In conjunction with the GEF Global Ballast Waters project, undertake a pre-feasibility study into establishing a ballast water reception facility at Astrakhan at the mouth of the Volga, in addition to those facilities already in place for compliance with MARPOL.
6. Create an invasive species database for the Caspian.
7. Updating national legislation to increase compliance with the (voluntary) IMO Ballast Water guidelines

G. Outcome: Assessment of the pollution loading of the Caspian and determination of distribution and composition of PTS (such as persistent organic pollutants, oil products, and heavy metals) in the riverine waters and sediments and coastal waters, in order to prioritise future interventions directed towards amelioration of the environment.

Activities

1. Expand and improve the Tacis land-based activity assessment, including contaminant source assessment in the coastal zone and major river basins (Kura/Arax, Volga up to Volgograd, Sefid Rood, and Ural), including point and non-point sources and quantification of hot-spots within the rivers (working with the GPA Secretariat in The Netherlands, the POPs Secretariat in Geneva, and with the regional and national PTS and POPs assessments and enabling activities)
2. Determine the flux of major contaminants from the Volga cascade (in conjunction with the planned UNESCO project) and the Mingechaur reservoir.
3. As a continuation of work from the first GEF CEP project, further surveys of the riverine water, sediments and sea waters in the Caspian states, including the coastal sediments off Turkmenistan, assessing the impact of key transboundary contaminants in water and sediments.
4. Assistance in the design and implementation of a cost effective and affordable regional monitoring methodology / programme for key transboundary contaminants and in conjunction with the oil industry develop an environmental rapid assessment methodology/programme using bio-marker techniques, combined with awareness-raising activities

H. Outcome: Regional (developed as part of the project) and National Action Plans addressing the activities contributing to transboundary Persistent Toxic Substances (PTS) including persistent organic pollutants, oil products, and heavy metal pollution (as only two of the five Caspian littoral states are presently signatories to the Stockholm Convention, assistance by UNEP in developing national support for signature and in developing enabling activities will be part of the project)

Activities

1. Draft and agree a regional Action Plan for addressing the activities contributing to transboundary PTS, including Persistent Organic Pollutants and heavy metal pollution.
2. Review of legislation and guidelines relating to the usage and application of agrochemicals in the five states and proposals for improved legislation, regulation and compliance with relevant Conventions. Where the country has signed the Convention, this activity will be linked through the country's POPs Enabling Activity.
3. Undertake a survey of usage and stockpiling of pesticides in the contributing basin (coordinated with any national POPs Enabling Activity inventories to avoid duplication) and develop and agree best-practice guidelines for managing pesticide stockpiles in the Caspian basin (perhaps with FAO participation under an IAA).
4. Undertake a regional public awareness campaign against the use of banned pesticides and other chemicals (coordinate with any similar activities planned under country's POPs Enabling Activities).

I. Outcome: Enhanced and informed stakeholder and intersectoral participation in the management of the Caspian environment.

Activities:

1. Enhanced participation of media through the development of a CEP media kit for local, national, and international journalists outlining mission objectives, projects, and programmes of the CEP. Develop database of media contacts.
2. Strengthening of Caspian NGO community building on the work undertaken by ISAR and USAID. Encourage NGO representation on the CEP Steering Committee and in CEP activities.

5. 3. Continue with the support of Caspian Coastal Concern Groups, established in the first project, and expand the network. Hold a conference of the Caspian Mayors.
4. Creation and implementation of environmental awareness training programme for policy makers, building on GEF-I PIPP training. Active intersectoral coordination enhanced within all five Caspian States.
6. Strengthened private sector participation in the CEP, perhaps through establishment of a CEP private sector advisory body which could include the International Petroleum Industry Environmental Conservation Association (IPIECA).
7. An evolving public participation plan that is updated frequently according to changing conditions and needs.
8. Regional capacity for monitoring and evaluation of SAP implementation through continued development and application of GEF Process, Stress Reduction and Environmental Status indicators.

J. Outcome: Implementation of a set of small-scale environment projects that support SAP and NCAP implementation and result in tangible improvements to the Caspian environment.

Activities:

1. Matched funding of small-scale investments from the NGO, public and private sector, which target common or transboundary Caspian issues identified as priorities in the TDA/NCAP/SAP and will result in tangible environmental improvements. This activity will be a continuation of the Matched Small Grants Programme currently being executed by the World Bank as part of the first CEP GEF project.

All activities will be undertaken in an iterative and participatory manner in part through the process of monitoring and evaluation. This will ensure that feedback is continually incorporated into outputs, that stakeholders in each country can influence, where appropriate, the regional outputs, and will generate 'buy-in' and commitment to the project.

10 Sustainability (financial, social, environmental) and replicability of the full project

The proposed project is designed to facilitate transition to full SAP implementation and provide support to the Convention ratification process. The countries are preparing and will endorse their NCAP, and sign the SAP. Their NCAPs, when finalized, will indicate their national commitments to legal, policy and institutional reforms, and investments, which address both national and transboundary environmental priorities. The SAP, when endorsed, will include the common transboundary environmental priorities for the Caspian Sea, as well as regional and national commitments to reforms and investments which address these.

The SAP is attempting to address concerns of the various stakeholders based on the detailed Stakeholder analysis carried out in CEP Phase I. Stakeholder conflicts were identified comprehensively in Phase I; consequently the NCAPs and SAP are being crafted to develop interventions that will not be held hostage to these conflicts. It makes no sense to develop lists of interventions if conflicts make it impracticable to implement these on a short time frame (e.g., five years). This early stakeholder involvement and analysis is one activity directed towards sustainability. Further, broad Stakeholder involvement, with enhanced intersectoral and public awareness and participation, will encourage a more mature civil society in the region, and facilitate broader participation in decision-making (thereby encouraging long-term sustainability). Stakeholder involvement necessarily includes various government sectors, as well as the private sector.

Another step towards sustainability will result from the GEF focus on interventions directed at policy, legal, regulatory, and institutional mechanisms. By improving these at the outset, each country will be poised with the proper basis for long-term sustainability. All countries as well as various stakeholders (international bodies such as UN Agencies, private sector, NGOs, bilateral donors, etc.) have accepted the CEP as the environmental policy and management framework for the Caspian. This broad

acceptance therefore will help assure sustainability of this mechanism. The Framework Convention, which is the primary legal instrument of the CEP, should be accepted by the countries by the end of Phase I. Regardless, the countries have agreed the text and content; so the sustainable framework is outlined and agreed.

Participation of the private sector is another significant success of CEP Phase I. By engaging the oil and gas sector (in particular) in CEP Phase I, they became a full Stakeholder for the Caspian, rather than an environmental opponent. Their participation benefits both the CEP and regional states, and also provides an enhanced opportunity for industry to improve its environmental record and reputation of enhanced corporate citizenry (as stressed by Kofi Annan's establishment of a new UN office to oversee global corporate citizenry). By contributing to the activities of the CEP, they are taking a significant role in development of a sustainable mechanism for long-term improvement of the environment (in spite of historical suspicions and concerns about their proper role).

The focus on developing regional legal mechanisms (the Framework Convention with its protocols) will assure that the regional basis is set for sustainability. Though a Convention is not sufficient to assure sustainability, it is certainly necessary for achieving sustainability.

Capacity building within the anticipated PCU (and the ensuing Framework Convention Secretariat), as well as the National Coordination Units, will help assure the sustainability of the measures to protect the Caspian Environment. In particular, building capacity for execution of IA and bilateral projects will permit more complete country ownership of future GEF and other donor interventions.

Financial sustainability of the CEP in the long-run will depend on the mobilization of a mix of resources, including national, private sector, and regional resources, the latter perhaps generated by targeted economic instruments, such as levies on bioresource and mineral products.

Replicability will come, for instance, from some of the Matched Small Grants Projects which should serve as models for other projects elsewhere in the region.

11 Country Eligibility:

All riparian countries are eligible for GEF support for International Waters. UNDP has a programme in each country.

12 Stakeholders involved in project:

The Caspian Environment Programme in its first phase made efforts to involve a broad spectrum of stakeholders. As might be expected of a new project, the preponderance of involvement was by the governmental sectors (various Ministries). However, the public awareness and participation component of the project moved rapidly forward, and numerous stakeholders were involved, including: governmental ministries, local environmental agencies, research scientists, educators, school children, local fishermen and farmers, private sector, NGOs, and local governance mechanisms. Though not all-encompassing, the first phase of CEP included a full stakeholder analysis, in order to identify the major stakeholder interests in the various major perceived problems and issues, and to identify possible stakeholder conflicts in the different areas of major perceived problems and interests. This analysis has made it more realistic to identify interventions that would not be held hostage to stakeholder conflicts, and thus make the SAP more implementable. A focus of the GEF II project for the CEP will be to involve a variety of stakeholders and their interests more in regional decision making, thereby enhancing civil society participation in the programme.

13 Information on project proposer:

The project proponents are the riparian governments of the Caspian Sea (Azerbaijan, Islamic Republic of Iran, Kazakhstan, Russian Federation, and Turkmenistan).

The project will be implemented by UNDP and executed by UNOPS. OPS will assure neutrality, and financial/administrative oversight. Applying a 'lesson learned' from phase 1, to avoid delays in the appraisal phase, UNEP will work on the legal aspects of this GEF Phase II specifically under Memorandum of Understanding with UNOPS, rather than through separate implementing agency project documents as was done under Caspian Phase I. UNDP, UNEP and OPS will together ensure appropriate linkages with related GEF and other internationally supported projects, including the various GEF biodiversity projects in the region (Ural, Volga, Iranian wetlands, etc.), as well as other projects facilitated by international partners (e.g., USAID, EU/Tacis, World Bank, etc.).

14 *Financing Plan of Full project*

GEF will finance many of the incremental costs of the bridging interventions, targeting transboundary issues only. GEF will finance capacity building and institutional strengthening assistance, as well as demonstration projects (through the Matched Small Grants Projects). However, even some of these activities may be co-financed by EU/Tacis (approximately \$4 million euros), USAID (varying amounts: see Annex 2), and other international partners. The ecotoxicology studies are expected to continue with the Ecotox Project currently making plans for its next phase. EU/Tacis is committed to another phase of funding of activities in the Caspian Sea. The World Bank continues to finance implementation of projects in the Caspian region, including, for instance, activities in support of Azerbaijan's NEAP. Bilateral efforts are expected to continue as well. UNDP will be mobilized as part of the GEF project to consider country level efforts in support of the new NCAPs and SAP. Annex 2 provides a partial list of other international partners and their activities in the Caspian region. The anticipated GEF request for the full project is \$4-5 million.

Baseline financing is expected to continue at a high level, as it has in the past. Despite the difficulties raised by transition economies, the countries still participated fully in the CEP, including the GEF project. As the GDP has improved in these countries during the past four years, we expect some of this improvement to be reflected in strengthened attention to the environment, and hence a stronger baseline. Co-financing for the next GEF project will also increase, as the countries take over responsibility for funding the PCU (and/or Secretariat), the National Coordination Units, and some Steering Committee activities. Full details of this expanded baseline and co-financing will be determined during the PDF-B activities.

15 *IA coordination and Linkages to GEF and IA programs and activities*

Transition to implementation of the SAP will require a variety of support measures and financial mechanisms. Accordingly, as with other international waters projects, implementation of the SAP will rely on good coordination and cooperation amongst the GEF and other donors. Specifically, the World Bank and EU/Tacis have been major partners contributing to the Caspian Environment Programme, and their support is expected continue (EU/Tacis is expecting a 4 million Euro next phase to start in mid-2003). The World Bank currently is completing the execution of the GEF Phase I project: Priority Investment Portfolio, Training, and Matched Small Grants Project (MSGP). The World Bank project may culminate in a donors conference, at which partnering for identified investment projects will be sought from the international community. The World Bank-executed Matched Small Grants Project will transition to a PCU (regionally) executed Matched Small Grants Project, under a suitable arrangement with UNOPS. Prior to regional execution, the World Bank and UNOPS will provide training to the PCU Staff (financial management, procurement and contracting, and technical and financial reporting), and the GEF project will assist the PCU to execute the MSGP. In line with the GEF Operational Strategy, it is expected that the World Bank will take the lead in any subsequent GEF-supported investments targeting priority transboundary issues in the Caspian.

The project will build on the institutional and informational basis of other regional projects including those of GEF and other international partners (see Annex 2).

Interagency Agreements may be developed during the bridging phase with FAO (fisheries management and removing stockpiles of harmful agrochemicals), IMO (ballast water facility), UNEP (Convention; legal/regulatory); and others, where there is a strategic advantage to enlist their specific expertise.

In recent years, a broad body of experience and knowledge with preparing and implementing SAPs and enhancing regional cooperation on international waters has developed, much of it through GEF support. The project will build on the experience and findings of the GEF International Waters and other projects, particularly those involved in the preparation of SAPs. In particular, this project will liaise closely with the Global International Waters Assessment (GIWA), the Global Programme for Action, the River Basins Initiative, and IW LEARN. Interaction with GIWA will include provision of the Caspian TDA to GIWA for their use in the GIWA regional assessment, use of GIWA tools such as the Point Source and Diffuse Source Rapid Assessment Methodologies (if they are significantly improved), and participation in other GIWA activities as necessary to support GIWA goals.

16 Proposed project development strategy

A PDF B will be requested for the further development of the project. The PDF B will be implemented over 4 months, starting early April of 2002.

The PDF will: generate the detailed information needed to design the full project; identify and cost-out the components and activities of the full project, including co-financing; carry out broad stakeholder consultations for project preparation; develop the institutional mechanisms to implement the full project; and prepare a stakeholder participation plan.

It is anticipated that the full project brief with incremental cost analysis will be submitted to GEF Council at its October 2002 meeting.

17 Response to Reviews

Following are detailed responses to reviews by the GEFSEC and the World Bank:

GEFSEC comments:

Comment: Focus of concept needs to be clearly restricted in all aspects to the top few priority transboundary issues and away from general 'environmental management'.

Response: The Concept Paper has been restructured to demonstrate the focus on three priority transboundary and globally significant biodiversity issues: Biodiversity (with some overlap with fisheries habitat); Invasive Species; and Persistent Toxic Substances.

Comment: Next phase project should be viewed and framed as a 'bridging' project to finalize TDA (incl. any new data or root cause analysis needed), SAP, NCAPs and Convention, all fully endorsed or signed and ratified as key outputs of the 'bridge'. The 'bridge' could also include preliminary implementation of selected elements of the SAP/NCAPs that are ready (e.g. Mnemiopsis plan, etc.) and targeted capacity building/institutional strengthening.

Response: The Concept has been revised to reflect the "bridging" aspect, including finalization of regional agreements; preliminary implementation of selected aspects of the NCAPs/SAP; and capacity building/ institutional strengthening.

Comment: Provide expected Full project funding request in the concept (up to ~\$5 million, 2-2.5 years).

Response: This has been added to the Project Brief.

Comment: As soon as possible, GEFSEC would like to receive and review available background information (draft or better) on pollution loadings, fisheries survey, seals, biodiversity strategy, alien

species action plan and any other strategies that fall under the SAP. Not clear at all from the TDA *where* toxics are a problem and *which* specific biodiversity is threatened (and by what). Also please provide GEFSEC with a copy of current Convention text.

Response: The following have been provided to GEFSEC electronically:

1. Latest version of the Draft Framework Convention for the Protection of the Environment of the Caspian Sea
2. Draft TDA
3. NCAP Core Group and NCAP Suggested Scope and Contents
4. Environmental Audit of Agrochemical Usage along Caspian IRI shoreline
5. Draft Rapid Assessment of IRI using GIWA
6. Pollution Database
7. Oil Contamination Report
8. ASTP final report
9. Mueller et al. article on Volga sediments
10. Geochronology of Volga sediments compared to Rhine/Danube sediments
11. Regional Biodiversity Report
12. Draft Regional Plan of Action for Protection of Caspian Habitats
13. Draft report on BSAP stakeholders meeting
14. Action plan for Invasive Species in Caspian
15. Report on the Caspian Marine Expedition (CRTC MB 2001)
16. TDA of relevant Important Commercial Resources (CRTC MB 2000)
17. Statement of the Caspian States regarding cooperation in sturgeon conservation
18. Report of first regional workshop on Caspian regional oil spill response cooperation
19. Draft list of CEP reports

Comment: Provide evidence for Turkmenistan's present and continued participation in the GEF programme.

Response: There is nothing concrete addressing this question, but the issue will be clarified during the PDF-B stage. TK has participated in most activities, including seal surveys; however, they have not allowed sampling in their waters of either sediments or fish resources (largely due to their disagreements with AZ regarding median line of the Caspian).

Comment: Provide evidence that Framework Convention has been agreed upon and is nearing signature (meeting report(s), Convention timeline).

Response: Email sent by Turner to GEFSEC on 2 March 2002 addressing this issue.

Comment: GEFSEC needs to see as much as possible evidence for specific country commitments to reform of laws, policies and institutions, and investments, related to addressing priority transboundary issues. These should definitely appear in the NCAPs and would help to define selected SAP implementation activities that might be supported in the bridging project.

Response: The exhaustive Legal Review performed under UNEP facilitation identifies policy/legal/institutional reforms. Commitments will come in the NCAPs/SAP, which will be available by the time the full bridging project starts.

Comment: SAP and presumably full project (through a component) should include country/regional commitment to explore application of user fees (e.g. sturgeon, oil/gas) to generate revenue to sustain regional environmental mechanism(s) and resource management.

Response: Email sent by Turner to GEFSEC on 2 March 2002 addressed this issue. An activity has been added to Outcome C to address this issue, building on the existing report by the CRTC on Legal, Regulatory and Economic Instruments (LREI) on this issue.

Comment: Full project must include submission of an independent evaluation (executive summary sufficient) of the UNDP and UNEP components of the Phase 1 project (with understanding that WB component would be evaluated at a later date upon its completion). PCU should start this process immediately; develop TOR and recruit and deploy evaluation team in consultation with UNDP-GEF.

Response: The process for obtaining an independent evaluation has been started, and TORs are drafted.

Comment: Project needs to clearly show linkages/parallels between EQOs and GEF process, stress reduction and environmental status indicators; what are the incremental (transboundary) vs. baseline (domestic) elements of the EQOs?

Response: The use of EQOs, targets, and interventions are consistent with the GEF approach for TDAs, although framed in a slightly different fashion. The EQOs are broad, policy-level statements of the desired condition of the Caspian Environment. Targets are specific, time-dependent and quantifiable steps towards achieving the EQOs. Finally, interventions or activities represent a list of steps necessary to achieve the target in the time frame and at the level specified. Consistent with GEF guidance, each Target and each Intervention/Activity is assigned an environmental indicator. GEF specifies three types of indicators, as follows:

Process Indicator

A step/activity which provides for future environmental improvements, but actually doesn't deliver any, e.g.:

- TDA
- NCAP/SAP
- Convention agreed, ratified, and comes into force
- Public awareness increases

Stress Reduction Indicator

A step/activity that actually reduces stress on the environment, e.g.:

- Municipal wastewater treatment plan built and operating
- Buffer zones created around river banks
- Farmers reduce use of fertilizer or pesticides
- Protected areas established and functional
- ICZM plan implemented
- Fishing quotas obeyed and/or enforced

Environment Status Indicator:

An environmental parameter whose level can actually be measured to show improvement (or not), e.g.:

- Overall level of biodiversity increases
- Endangered/threatened species taken off list
- Fisheries yield stable or increasing and sustainable
- Concentration of pollutants in the Sea or basin river water or sediments decreases

The use of environmental indicators is a means to specify *a priori* the expected output or result of that activity or intervention. Therefore, activities such as new laws or regulations represent a process indicator, improved industrial processes resulting from the new laws and regulations represent a Stress Reduction Indicator, and reduced levels of contaminants in Caspian seals will represent an Environmental Status Indicator. Similarly, the targets can be classified by a series of environmental indicators.

Therefore, the use of EQOs and Targets is simply a novel but consistent step taken to develop an expert consensus on priority interventions/actions, complete with environmental indicators, as a step towards creation and monitoring the implementation of the NCAPs and SAP.

Comment: Fully clarify roles and confirm support of other IAs (in writing if possible) in this (UNEP) and future (WB) GEF interventions in the Caspian.

Response: UNEP has agreed to provide written support of their role in this Bridging Project. They will be primarily responsible for outputs B and C of the Concept Paper. UNDP has met with the World Bank (Conrad Ritter and Amy Evans) in Baku, AZ, in February 2002, to discuss their comments on the bridging project (see discussion below). A. Hudson (UNDP-GEF) has received confirmation from Ms. Evans regarding WB support of transitioning the Small Grants to the bridging project under UNDP implementation. UNDP has to date received no specific written documentation of the Bank's anticipated future GEF interventions in the Caspian, which likely will depend on the outcome of their PIP and their planned donor conference.

Comment: Location and geographic nature of transboundary concerns should be clearly shown in annexed map(s) of the Caspian (e.g. major fishing areas, TB pollution hot spots, significant threatened biodiversity, etc.)

Response: These have been updated where necessary to show "hotspots" and the major transboundary issues.

Comment: Bridging project should include a SAP/NCAPs donors meeting which WB would coordinate (see if the meeting can remain under UNOPS execution umbrella but with Bank in lead on planning and implementation).

Response: This donors meeting is already planned as part of the GEF Phase I PIPP, which is executed (coordinated) by the WB, but still under UNDP implementation.

Comment: Progress on the Convention is one of the success stories of Phase 1 and should be highlighted and more fully described in the concept.

Response: The Concept Paper has been revised to strengthen the description of this success.

Comment: Arrange a consultation with GEFSEC (UNDP, UNEP, WB, CEP); CEP would first provide a briefing of the programme so far leading into discussions and consensus on next steps and requirements for the GEF project. Revised concept could be circulated prior to the meeting as main discussion item.

Response: A phone consultation has been planned.

Comment: Following consultation meeting, revised concept addressing all of the issues raised could be quickly circulated to GEFSEC for pipeline entry and clearance for rapid pdf-b funding. Suggest trying to achieve pipeline entry in next 4-6 weeks, e.g. by 1 April 2002 so still have four months for project preparation.

Comment: Suggested new title which integrates above recommendations:

"Consolidation and Preliminary Implementation of National and Regional Policy, Legal and Institutional Measures to Address Priority Transboundary Issues in the Caspian Sea"

Response: In the spirit of this GEFSEC comment, the new title agreed with GEFSEC is: Towards a Convention and Action Programme for the Protection of the Caspian Sea Environment

WORLD BANK COMMENTS:

The World Bank comments were made on the PDF-A proposal, which, unfortunately, was an early version and not the final version submitted for funding. For the Concept Paper, the World Bank repeated its objections to the PDF-A proposal, which still remained. In order to resolve the issues outstanding, the World Bank and UNDP (with its consultants) met in Baku, AZ, in February 2002. At this meeting, the detailed comments of the Bank were discussed in detail. Following this meeting, several email and phone exchanges took place to discuss the World Bank input to the Concept Paper. The following answers clarify the responses of UNDP to the World Bank's comments.

Comment: We find the proposal unclear in terms of its proposed outcome and scope.

Response: The Concept Paper has been reorganized for clarity, in response to WB and GEFSEC comments.

Comment: At the Steering Committee Meeting in Moscow last November, all international organizations, including UNDP made very clear that there would be no new GEF project/funding unless the Caspian Countries would have taken on substantial and material responsibility for managing the CEP. This point should be made explicit in the GEF proposal.

Response: This matter was discussed at length during consultations between the WB and UNDP. The major issues included the need for the countries to show national ownership. A further issue was the ability of the PCU/ Secretariat to execute GEF and other projects. The Section on Country Ownership has been strengthened to show necessary country commitments (including, *inter alia*, the signing of the SAP and Framework Convention; national support for the National Coordination Units). In addition, discussions between the WB and UNDP have clarified that the UNDP agrees in principle with the PCU/ Secretariat executing future projects, once they have the legal status and the capacity to do so. As part of the bridging project, UNDP has emphasized the component of capacity building not only for the PCU/ Secretariat, but also for the National Coordination Units of each country.

Comment: A limited bridge financing to help with the transition of the coordination office to I.R. Iran and the restructuring of the management of the thematic centers could be justified. However, the proposal is not clearly identified as such.

Response: The Concept Paper has been modified to reflect the bridge concept, as emphasized by both the WB and the GEFSEC.

Comment: The proposal includes reference to Biodiversity NCAPs and a Biodiversity SAP. These were not outputs of the first (UNDP) GEF project and it is not clear where the request for such biodiversity activities originated.

Response: As part of the SAP process, a Biodiversity SAP is being developed. This is not viewed as a stand-alone document, but rather as part of the NCAP/SAP. Therefore, it was envisioned in the UNDP GEF project, but because of its importance was given increased emphasis.

Comment: We could support the proposal only if the above points have been clarified and reflected in the document

Response: We believe the consultations and modifications to the document clarify and reflect the concerns of the WB.

Comment: In addition we have some specific comments (reference to sections of the document):

Section 7. (and throughout document) refers to "CEP Phase 1" or CEP 1. This should be corrected to read GEF Caspian Phase 1. The CEP is the Caspian Environment Program. The first GEF Caspian project, "Addressing Transboundary Environmental Issues in the Caspian" is a major contributor to the CEP, but is not the CEP. The CEP is a program of the five littoral states, supported by GEF, UNDP,

UNEP, the Bank, EU-Tacis, and various bilateral and commercial partners. The proposed phase II GEF Caspian project should also be correctly titled, to avoid confusion.

Response: This correction has been made.

Comment: Section 9 (last paragraph re rationale): The rationale given (that the achievements of the first GEF project would be lost without a second phase) could be made stronger.

Response: This comment has been strengthened not only in Section 9, but throughout the document.

Comment: Sections 11 (last 4 ticks):

- Matched funding....this apparently refers to the continuation of the Matched Small Grants Program. Text should be revised as follows: "Matched funding of small scale investments that result in tangible environmental improvements"

Response: Changes reflected in the revised Concept Paper.

Comment: - What is the TIA?

Response: This phrase is no longer used in the Concept Paper.

Comment: - What are the PPM and SEG?

Response: These abbreviations are no longer used in the Concept Paper.

Comment: - What does revisiting the technical and financial support to TDA/NCAP/SAP mean? Culling lessons learned? This is unclear as written, especially as the TDA/NCAP/SAP were outputs of the GEF Caspian Phase 1 project.

Response: This section has been rewritten for clarity.

Comment: Section 20: EU should be mentioned as a source of revenue for the Caspian PCU.

Response: The participation of the EU in future phases has been clarified by the Programme Coordinator and corrections to the Concept Paper made accordingly.

COMMENTS ON MEETING WITH WORLD BANK AND IA PHONE MEETING WITH GEFSEC

On 2 April 2002 the PCU and the PDF-A consultant met with Amy Evans of the World Bank to discuss comments on the Concept Paper. This was followed by a teleconference between Al Duda of GEFSEC, Vladimir Mamaev and Frits Schlingemann of UNEP, Amy Evans and Konrad Ritter of the World Bank, Andy Hudson of UNDP, Tim Turner and Hamid Ghaffarzadeh of the PCU, and David Aubrey. This was followed on 3 April 2002 by a clarifying email from V. Mamaev to the PCU regarding the possible role of UNEP in the PTS, POPs, and LBS sections.

This Bridging Project Concept Paper has been revised according to comments at the two meetings. In particular,

- clarification of the country contributions and commitment has been made,
- the idea of a revised CEP Concept Paper during the bridging phase was included,
- clarification of UNEP's role in the PTS/POPs activities, as well as the LBS activities was made, including linkages to PTS/POPs regional assessments and enabling activities,
- miscellaneous corrections to the text were made based on details provided by UNEP and the World Bank,
- a Public Participation Plan, Monitoring and Evaluation Plan, and use of Process indicators was added to the PDF-B activity list,

- Intersectoral Coordination was emphasized,
- Focus on seals and sturgeon was mentioned,
- The role of oil in the environment and the discussions of the oil industry participation were strengthened,
- Inclusion of the Volga Basin was described,
- The concept of a bridging project was strengthened,
- The transition from MSGP from World Bank execution to PCU Execution was described,
- Functions of the PCU were clarified (document custodian and managerial/operational body),
- And other miscellaneous changes incorporated.

ANNEXES

- Annex 1: Figures supporting the text
- Annex 2: Other projects addressing Caspian Environmental Management
- Annex 3: Executive summary of the Transboundary Diagnostic Analysis
- Annex 4: Structure and components of the NCAPs/SAP
- Annex 5: Summary of International Environmental Agreements Signed By Caspian Littoral States