



PROJECT IDENTIFICATION FORM (PIF).

PROJECT TYPE: Full-sized Project
 TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	Advancing IWRM across the Kura river basin through implementation of the transboundary agreed actions and national plans		
Country(ies):	Azerbaijan, Georgia	GEF Project ID: ¹	6962
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	5325
Other Executing Partner(s):	UNDP	Submission Date:	8 August 2014
		Resubmission Date:	22 August 2014
GEF Focal Area(s):	International Waters	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	[if applicable]	Agency Fee (\$)	506,298

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
IW-2 Program ⁴	GEFTF	5,329,452	187,070,000
(select) (select) (select)	(select)		
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(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
Total Project Cost		5,329,452	187,070,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: Integrated water resources management in the Kura river basin to address water-energy-food-ecosystem security nexus through the implementation of agreed actions in the SAP

Project Component	Financing Type ³	Project Outcomes	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
Component 1: Establishment of effective cross sectoral IWRM governance protocols at the local, national and transboundary levels in the Kura Basin	TA	Regional, national and local legal, policy and institutional protocols harmonized within the Kura basin for strengthened IWRM implementation, including harmonized intersectoral coordination with environment, agriculture, energy and industrial sectors	GEFTF	617,109	28,810,000
Component 2: Strengthening national capacities to implement multi-sectoral IWRM in the Kura basin	TA	Capacity enhanced for responsible sectoral ministries and agencies to successfully harmonize and implement national IWRM Plans	GEFTF	1,174,500	50,190,000
Component 3: Stress reduction in critical areas	TA	Stress reduction in critical impact areas, and pre-feasibility studies in support of	GEFTF	1,652,167	43,870,000

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the GEF Website, [Focal Area Results Framework](#) which is an Excerpt from [GEF-6 Programming Directions](#).

³ Financing type can be either investment or technical assistance.

and pre-feasibility studies to identify investment opportunities for improving river system health		investment opportunities to improve river system health			
Component 4: Targeted stakeholder education and involvement projects to empower stakeholders in implementing local / national / transboundary actions in support of SAP implementation	TA	Academic, civil society, private sector, and local communities gain practical sustainable experience to validate their involvement in national and regional IWRM applications and innovations.	GEFTF	816,621	8,430,000
Component 5: Enhancing science for governance by strengthening the monitoring, information management and data analysis systems for IWRM	TA	Azerbaijan and Georgia using integrated monitoring, and implement data and information management systems in support of sustainable IWRM at national and transboundary levels .	GEFTF	815,272	55,770,000
	(select)		(select)		
	(select)		(select)		
	(select)		(select)		
	(select)		(select)		
	(select)		(select)		
Subtotal				5,075,669	187,070,000
Project Management Cost (PMC) ⁴			GEFTF	253,783	
Total Project Cost				5,329,452	187,070,000

If Multi-Trust Fund project :PMC in this table should be the total and enter trust fund PMC breakdown here ()

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Ministry of Ecology and Natural Resources - Azerbaijan	In-kind	770,000
Recipient Government	Ministry of Environment and Natural Resources Protection Georgia	In-kind	770,000
Recipient Government	Ministry of Emergency Situations Azerbaijan	Grants	12,500,000
Private Sector	AzerSu Joint Stock Company Azerbaijan	Grants	75,000,000
Private Sector	AzAmelioration JSC Azerbaijan	Grants	28,580,000
Donor Agency	UNDP Azerbaijan	Grant	649,351
Donor Agency	UNDP Georgia	Grant	691,016
Donor Agency	World Bank- Government of Georgia	Grant	63,000,000
Donor Agency	EU Government of Georgia Tech Assist.	Grant	4,629,633
Donor Agency	EUWI Azerbaijan	Grant	240,000
Donor Agency	EUWI Georgia	Grant	240,000
Total Co-financing			187,070,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	GEFTF	Regional <input checked="" type="checkbox"/>	International Waters	(select as applicable)	5,329,452	506,298	5,835,750
(select)	(select)	<input type="checkbox"/>	(select)	(select as applicable)			0
Total GEF Resources					5,329,452	506,298	5,835,750

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

b) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)⁵

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁶ (b)	Total c = a + b
UNDP	GEF TF	Regional Azerbaijan and Georgia <input checked="" type="checkbox"/>	International Waters	(select as applicable)	150,000	14,250	164,250
(select)	(select)	<input type="checkbox"/>	(select)	(select as applicable)			0
(select)	(select)	<input type="checkbox"/>	(select)	(select as applicable)			0
Total PPG Amount					150,000	14,250	164,250

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$1 mil; \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁶ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>(Enter number of hectares)</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>(Enter number of hectares)</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	1
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>(Enter percent of fisheries, by volume)</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>(Enter number of tons)</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>(Enter number of tons)</i>
	Reduction of 1000 tons of Mercury	<i>(Enter number of tons)</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>(Enter number of tons)</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>(Enter number of countries)</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>(Enter number of countries)</i>

PART II: PROJECT JUSTIFICATION

PROJECT OVERVIEW

A.1. Project Description. Briefly describe: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

A.1. Project Description

1) Global environmental problem, root causes and barriers:

Global environmental problem

1. Increasing water scarcity is a looming threat to sustainable development across the planet. There are uncoordinated and escalating demands, while supplies are becoming increasingly scarce. Of the planet's total water resources less than 1% is accessible as surface and groundwater. Economic development trends and expanding human population growth rates will result in increasing demands

⁷ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

on water resources for domestic and municipal uses, industrial processes, agricultural production and hydropower energy. The competing demands for water resources between sectors are expected to grow, while resources are becoming more scarce. Climate change scenarios show increasing temperatures, increased variability in precipitation and more frequent severe weather events, which will put additional strains on freshwater resources. For example, in the Alazani/Ganikh and the Khrami-Debed tributaries to the Kura river, climate modeling scenarios estimate that stream flow is to decline dramatically by 26 - 35% and 45 - 62% respectively by the end of this century. As a result, adaptive integrated, cross-sectoral planning must be undertaken for effective water resource management, taking into account climate change, growing demands for fresh water resources including surface and groundwater, and water use tradeoffs between sectors, to ensure the long-term security of food, water, energy and environmental resources. Further, as water resources become increasingly scarce, and many countries undergo political and economic transitions, tested strategies for nationally owned and implemented IWRM Plans are increasingly valuable to share lessons learned. Improved protocols to enhance coordination for effective water management between sectors will be key to maintaining social, political and economic stability and security around the world. This integrated cross-sectoral approach which incorporates the water-energy-food-ecosystem nexus, will serve as a model for countries to work together to safeguard water availability, enhance water productivity, water quality and management and delivery of water and ecosystem services in the long term.

2. The Kura River Basin is the main transboundary water system in the geopolitically challenging region of the South Caucasus. The participating countries of Azerbaijan and Georgia have undergone significant political and economic transition since the end of the Soviet Era and are now developing rapidly, though unevenly, across a wide range of sectors. Together Azerbaijan and Georgia cover 94,760 square km and represent 88% of the entire Kura basin. The Kura is the main river in the eastern half of Georgia and its basin comprises 49.6% of the total Georgian territory. Over 69% of the surface area of Azerbaijan is in the Kura river basin, and the confluence with the Aras river in Sabirabad Azerbaijan is a critical site for water management. The upstream 12% in Turkey and Armenia are mountainous headwaters are less developed and therefore with minimal anthropogenic impacts than in Azerbaijan and Georgia portion of the basin. Within Azerbaijan it is common to refer to the Kura Aras river basin as a result. The two countries have demonstrated strong commitment to cooperate towards transboundary integrated water resource management. Together Azerbaijan and Georgia are finalizing the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin support of UNECE and OSCE in line with the UNECE 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and international lakes. This legal framework has been strongly complemented by the UNDP-GEF foundational project supporting development of national IWRM Plans and both countries' and EU Association Agreement negotiations. There are very close linkages between the bilateral agreement and the implementation of the SAP that strengthen and reinforce one another. Recently both Azerbaijan and Georgia have indicated their commitment to modernize water management with harmonized approaches and shared data exchange in line with modern European approaches to address the priority transboundary concerns of changes in hydrological flows, deterioration of water quality, ecosystem degradation and flooding due to climate change. Both the Government of Azerbaijan and the Government of Georgia recognize that steps must be taken together to sustainably address these issues. The Turkish portion of the Kura river is less 5% of the basin and while they have not participated in the foundational project nor any other transboundary water project in the basin, there are strong regional linkages that exist between Turkey, Georgia and Azerbaijan, including energy exchange, transportation and security concerns. This project may serve to strengthen these regional initiatives in that water and security will be critical to the development of these emerging regional economic linkages. Currently Armenia which makes up the remaining 7% of the basin has indicated it will not join the Kura River SAP, however this project has been designed to include Armenia in activities should they elect to reshift attention to transboundary water management.

3. The surface and groundwaters in this river system are the principal source of water for all

sectors and users in both countries, including: industry, agriculture, hydropower, and municipal water uses. The region has high levels of endemic species, but is threatened by development plans favoring short-term benefits and not leading to sustainable development, especially in the face of climate change. Potential unsustainable over-extraction of surface and groundwater resources, uneven development rates and uncoordinated utilization of the shared natural resources represent challenges faced by both countries. Taking the steps to address these challenges in a collaborative manner, through the realization of national and transboundary priorities for the Kura basin in Georgia and Azerbaijan, provides a key tool for sustainable development in Kura basin shared by Azerbaijan and Georgia, while enhancing water/food/energy/ecosystem security through the intersectoral Water Nexus approach.

4. In the foundational phase of the UNDP-GEF Kura project, a Transboundary Diagnostic Analysis (TDA) was conducted, focusing on the shared priority concerns of variation and reduction in hydrological flow, deterioration of water quality, ecosystem degradation, and flooding. All of these are exacerbated by climate change. Within the TDA a Trend Analysis was conducted of planned water use among the municipal water, agricultural, and hydropower sectors to determine the anticipated impacts of water use on the river system. This highlighted that uncoordinated development will not be sustainable and will result in increased strains over water resource availability and quality within the national and transboundary setting. In Georgia the government intends to become a net exporter of hydropower, with important implications on environmental flow management. This was examined extensively for all countries within the demonstration project on Conflicting Water Uses and resulted in a set of concrete recommendations for development of environmental flow management regulations for multi-sectoral security at the national and transboundary level. Additionally the importance of flow regulation by hydropower reservoirs is critical to reduce catastrophic flooding. The TDA and Trend Analysis were key resources for the UNECE Nexus Pilot Study of the Alazani – Gahnikh Basin. This major tributary to the Kura served as a test basin for development of the transboundary Water Nexus methodology that will need to be refined and replicated in the future.

5. Both Azerbaijan and Georgia are aware that outdated approaches and uncoordinated water management will have negative impacts on economic development, human development and intersectoral coordination at the national and regional levels. They seek to avoid these negative externalities by implementing National IWRM Plans, developing intersectoral coordination protocols and the Strategic Action Plan (SAP) that addresses these priority issues at a regional level. The SAP is framed around four agreed Ecosystem Quality Objectives (EQO) which are:

EQO 1: To achieve sustainable utilization of water resources to ensure access to water and preserve ecosystem services;

EQO 2: To achieve water quality such that it would ensure access to clean water for present and future generations and sustain ecosystem functions in the Kura river basin;

EQO 3: To achieve and maintain ecosystem status whereby they provide essential environmental and socio-economic services in a sustainable manner in the Kura River Basin; and,

EQO 4: To achieve mitigation of adverse impacts of flooding and climate change on infrastructures, riparian ecosystems and communities.

6. They now see that the SAP implementation towards these EQOs will both serve to benefit their own countries via harmonization of the national IWRM plans, and, in support of the water nexus approach, will serve to improve transboundary cooperation and coordination in many water dependent sectors, including agriculture, energy, and environmental security. The emphasis on capacity building for sustainable integrated water management and increased ownership and stakeholders empowerment is a hallmark of the National IWRM Plans and the SAP to reduce donor dependency and increase localized problem solving of water issues. Azerbaijan and Georgia recognize that until capacity building gaps are filled in a meaningful way at the local, national and transboundary level, progress on integrated water resources management will be modest. The percentage of SAP implementation funds

allocated to capacity building is comparable to many other river basin SAP implementation projects that the GEF has co-financed and this capacity building is focused solely on that required for effective SAP and National IWRM Plan implementation. This approach is strongly supported in the Terminal Evaluation for the foundational project within the recommendations that have been incorporated into this proposal and will be included within the future project document in more detail.

7. In the global context of development, preparation of National IWRM Plans in many countries depends entirely on donor support, and they are often drafted by international experts without fostering national level ownership among those stakeholders responsible for plan implementation. Accordingly, the plans often fail to reflect the realities faced by implementing stakeholders, are laced with over-ambitious objectives, and result in little practical changes on the ground after the international consultants have moved on to other projects. Azerbaijan and Georgia recognized this trend and took steps, with the support of the UNDP-GEF Kura- Foundational Project, to draft National IWRM Plans as National Action Plans linked closely to national priorities and also addressing transboundary issues. These plans are rooted in the priorities identified by interdisciplinary national teams who ultimately will be responsible for overseeing plan implementation. National teams in Azerbaijan and Georgia have developed plans aimed to bring them into line with international best practices, the EU Water Framework Directive and international commitments to improved environmental management.

8. The foundational phase also developed a transboundary Strategic Action Plan (SAP) that was formally endorsed by Azerbaijan and Georgia in June 2014. The SAP actions derive from the TDA recommendations as well as locally led national IWRM Plans for Azerbaijan and Georgia. The national priorities in these plans are directly linked to the transboundary SAP, and through SAP implementation basin-wide efforts in water resource management will be harmonized where and when possible and appropriate.

9. The upstream-downstream and multiple sector demands of development in the Georgian and Azerbaijan sections of the Kura basin pose challenges towards realizing sustainable development and improved water, food, energy and environmental security. As both countries face the shared challenges of climate change, including more severe weather events, overall decline in precipitation, increased temperatures, increased rates of evapotranspiration, coupled with increasing populations in the lower basin, integrated water resource management (IWRM) and implementation of the Nexus Approach to water management provides an opportunity for the coordinated management of shared finite resources in the basin while also preserving the ecosystem upon which these resources depend. This is a common challenge in all transboundary river systems, and innovative approaches employed in the Georgian and Azerbaijan sections of the Kura Basin can serve as a model for the harmonization of national plans and priorities to ensure more sustainable development.

Root causes and barriers addressed

Root causes:

10. The TDA completed during the foundational phase of the UNDP-GEF project identified the root causes of the transboundary and shared water management challenges. The over-arching root cause is the lack of effective planning and implementation, due to lack of dedicated resources and capacity. This stems from:

- Lack of economic value of services from water resources and ecosystems in economic development planning – water resources and ecosystem services have been taken for granted, as the monetary value of these services has not yet been clearly understood. Without an assigned monetary value for ecosystem and water resource services, it is difficult to convince decision makers from key sectors to invest in the water and environment sectors. The shift to market economies has not included the value of ecosystems, and as such the capacity of economists to address environmental issues is low at this time. Instead, the preservation of ecosystems and shared water management are framed as

negative sum trade-offs between competing developments without clearly defined economic benefits.

- Lack of information of the costs of ecosystem degradation and water-borne pollution to the economy of the countries – ecosystem degradation results in loss of services and potentially earned benefits, and water-borne pollution both creates negative externalities for development downstream while also creating losses of potential assets at the source. There is a clear understanding of the need, but to date there is not sufficient capacity to assess these costs over time, which limits the decision maker ability to effectively act to improve this. Without a clear accounting of these costs, including public health costs that are largely borne by women, there is no incentive to change practices that result in ecosystem degradation and pollution.
- Lack of integrated and accessible data and their analysis for decision makers – data that are available on water resources and ecosystems contain gaps, are sectorally based and not exchanged and analysis of information is often not presented in accessible formats to optimize informed decision making towards improved management practices. The data that is collected is not analysed optimally due to a low level of capacity and lack of understanding of how to best present data for decision makers across sectors.
- Continued reliance on outdated water management practices – the legacy of discipline-specific and sector-exclusive water management practices. Countries need strengthened capacity, support and guidance, and incentives to embrace transitional approaches to accommodate the emerging understanding of natural resource management that will lead to improved positive sum sustainable development.

Barriers:

11. The UNDP-GEF foundational project has developed a transboundary SAP, the impetus to continue harmonization of national and regional plan implementation, requiring further support through improved political will and awareness of economic benefits from long-term sustainable development. In the Kura basin there is a growing appreciation of this link among some decision makers, however the critical ties to ecosystem preservation, sustainable water quality and water quantity management in line with international best practices, growing impacts of climate change and emerging tensions between sector-driven water uses are not yet fully understood. Further, without external support to sustainably ensure domestic and regional capacity there is a high probability that realization of intersectoral water resource management will not be harmonized between countries, and tensions over water quantity, quality and availability will increase within the region. There is a likelihood that governments will continue to pursue sectoral economic development based on the political power of specific ministries at the cost of long-term sustainable development within and between the countries. In a transboundary setting of a shared basin, barriers towards effective national and transboundary coordination are exponential. Failure to harmonize informed efforts at the local, national and transboundary levels will result in increased insecurity across the basin. These barriers include:

Policy & Regulatory

- Difficulty enforcing existing and planned national and regional regulatory frameworks and legal protocols to protect water resources and the ecosystems upon which they depend.

Institutional

- Insufficient expertise and investment in capacity building to meet the many specific needs and conditions across the basin and within the countries at the local, national and regional levels.

- Lack of ability to prioritize water resource management across the basin, though the allocation of government resources among some states is increasing.
- Low levels of harmonization of plans and approaches, as demonstrated by incompatible water quality standards between countries, resulting in a potential increase in tensions.
- Difficulty meeting commitments to the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin due to existing challenges to institutional capacities.

Knowledge/informational

- Lack of updated data on surface and groundwater resource availability, including flow and recharge rates, and the impacts of climate change, and low capacity to effectively use this information in the multi-sector development path.
- Lack of coordinated information and analysis to support an understanding of ecosystem-based management approaches that include attention to sectoral demands towards improving overall economic conditions.
- Lack of sustained capacity at local, national, and regional levels to meet the required commitments of the EU Association Agreements specific to the EU WFD and the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin.

Technological

- Lack of application of technologies that can serve multiple benefits in water resource management and reduce costs of irrational water losses, pollution and environmental degradation.

If not adequately addressed, the lack of institutional capacities, legal arrangements, knowledge management/information-sharing protocols and access to technologies will continue to remain major barriers to the effective implementation of national IWRM plans and harmonization in line with the SAP.

2) Baseline Scenario and any associated baseline projects

12. The attention to water resource management in the Kura Basin has been an ongoing challenge throughout the Post-Soviet period. As the countries are in transition, development of natural resource priorities has been internally focused. Georgia prioritized over-all hydropower development in 2006 and now is seeking to protect and preserve critical ecosystems. Azerbaijan initially prioritized oil and gas development and now has prioritized water resource management by decree, resulting in rapidly developing improvements in the water management and distribution systems. The donor community, including USAID, UNECE, ENVSEC, EU and others, has supported the approaches.

13. Since 2007 the EU Neighborhood Policy has instigated concerted efforts to support the South Caucasus countries to move towards harmonization of national policies with those of the EU. The impact on water management has been the introduction to the countries to the EU Water Framework Directive approaches. Several water specific EU funded projects have been undertaken to address capacity building, information exchange, technical applications and planning protocols in the basin. The adoption of these approaches is ongoing, though has focused extensively on sub-basin management rather than wider transboundary management. In addition, the EU has increasingly worked with the countries towards the application of basin management principals, yet support to institutional aspects of IWRM and cross sector coordination, required to facilitate river basin

management planning, has been coordinated by the UNDP-GEF Foundational phase project in Azerbaijan and Georgia, and is being strongly advocated by UNECE through the development of the bilateral agreement.

14. To date, the actual implementation of the IWRM approaches has been challenged by low institutional capacity, lack of budget dedication, and attrition of highly qualified national experts. Earlier efforts were focused on basic assessments, monitoring capacities and instruction in technological approaches that were largely based within single sectors. Recommendations from earlier projects focused on institutional developments, but the countries have been challenged to adopt these due to state budget allocations to other more immediate socioeconomic priorities, as well as challenges from other sectors that are focused on economic development without full consideration of sustainable resource use.

15. The current situation is one of somewhat uneven growth, and shifting capacities within the countries as political and economic transitions continue. The awareness of the need to implement IWRM and coordinate between sectors in both countries is growing quickly, but the capacity to do so successfully is developing unevenly. Further, unless approaches to IWRM and cross sectoral coordination between Azerbaijan and Georgia, and ultimately the other countries in the basin, are harmonized, there is a high probability that future coordination between countries, in line with the basin approach to IWRM, will become increasingly difficult, as the opportunity to support that co-development is not incorporated into the national laws, water codes, regulations and institutional capacities. Due to a lack of strong regional ties or formal supporting institutions between countries, the divergent development trends and the political estrangement between some participating basin countries, opportunities for harmonization of shared water resource management are quickly diminishing as countries individually move forward with new approaches and supporting legal protocols at the national level.

16. In the absence of the GEF Project the Kura River will continue to be impacted by:

- Uncoordinated and uneven development of water-dependent sectors at the national and transboundary levels, due to lack of effective resource governance, shifting political and economic development priorities.
- Surface and groundwater management will continue to be highly segmented and uncoordinated, which with the threats of climate change and over-use could result in significant tensions and increased ecosystem degradation.
- National water management authorities, associated agencies and stakeholders will not have the capacity needed to implement IWRM Plans and cross sectoral coordination and risk uneven, or even contradictory approaches to resource management across the basin with negative impacts on water, food, energy and environmental security.
- Development planning and decisions continue to be based on incomplete information, including the economic importance and value of water resource services, IWRM and cross sectoral coordination.
- Lack of harmonized water resource management approaches with risks for increasing insecurity across the basin for access to food, energy, clean water and a sustainable environment exacerbated by climate change impacts and economic development pressures at national and regional levels.
- Challenges to meet the commitments to the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin in a harmonized manner.

17. The proposed project builds on a set of baseline national and bilateral projects, which aim to

support transboundary water management as well as national integrated natural resource management including cross sectoral coordination within the basin. The other donor funded initiatives and projects however need to be more firmly linked to and complemented by a wider initiative to address the integrated capacity building for governance harmonization towards the joint ecosystem-based management. The governance of ecosystem and water use is increasing in importance but the current donor investments on the ground do not sufficiently build the governance capacity for the countries to independently sustain long term water management in line with the stated desires of the countries. Key components of this proposed project include the development of sustainable financing mechanisms to support SAP implementation by a wide array of donors and national initiatives targeting the sustainable use and integrated cross sectoral management of water resources in light of climate variability and change, as well as surface and groundwater management challenges.

The baseline projects that GEF will add an increment to include:

- The EU Water Initiative in Eastern Europe, Caucasus and Central Asia
 - OSCE, OECD and UNECE supported National Water Policy Dialogs
- UNECE Protocol on Water and Health
- UNDP Country Office Projects
 - Integrating Climate Change Risk to Water and Flood Management (Azerbaijan)
 - The GEF Small Grants Programme (Georgia)
 - Flood and Flash Flood Management (Georgia)
 - National Communications on Climate Change (Azerbaijan, Georgia)
 - UNDP GE/Finland Project on Sustainable livelihoods and responsible attitude to environment.
 - UNDP GE/EU Project on Sustainable management of pastures.
- OSCE Projects and Programmes
 - Implementation of the UNECE Water Convention (Azerbaijan, Georgia)
 - Environmental Assessment and Capacity Building (Georgia)
 - Enhancing National Capacity on Fire Management and Wildfire Risk Reduction (Azerbaijan, Georgia)
 - Cooperation and Sustainable Development of Mountain Regions (Azerbaijan, Georgia)
 - ENVSEC
- GIZ Projects
 - Sustainable Biodiversity Management in the South Caucasus (Azerbaijan, Georgia)
- The Finnish Environment Institute (Syke)
- USAID Project Integrated Management of Natural Resources in River Basins (Georgia)
- WWF South Caucasus Sustainable Dams Initiative
- World Bank Projects, including “Irrigation and Land Market Development” (Georgia) and “Water User Association Development Support Project” (Azerbaijan)
- UNESCO-IHE “Master’s Curriculum Development for IWRM with regional universities”
- FAO Irrigation and Agricultural Development Programmes

3) Proposed Alternative Scenario

18. In line with the Terminal Evaluation recommendation to continue active involvement in the Kura basin, thus maintaining critical momentum built during the foundational phase, the proposed project positions the GEF to continue to play a key catalytic role in harmonizing IWRM and cross sectoral coordination for sustainable water management through SAP implementation. The foundational phase of the UNDP-GEF Project supported both countries to develop National IWRM Plans, using highly participatory approaches to include the key stakeholders from multiple sectors responsible for IWRM implementation. Further, these key stakeholders identified the national capacity needs for effective IWRM, and the potential linkages between the national and transboundary priorities to strengthen and reinforce IWRM implementation and improved cross sectoral coordination at the national and transboundary levels. While previous projects have sought to do this to a degree at the sub-basin level, including for shared transboundary basins, the GEF foundational project has concurrently worked at the national level and from the transboundary perspective towards linking national and transboundary priorities and initiatives. The outcome is national plans that can stand alone but are strongly linked, and a bi-national SAP that provides a transboundary framework of support to facilitate coordinated implementation of IWRM to optimize river system health and sustainable development in the Kura basin. The SAP was developed concurrently with the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin with UNECE. The implementation of the SAP will prepare and support the countries to meet their commitments under this agreement, for long-term sustainability. This has been supplemented by the joint effort of the UNDP-GEF Foundational Project and UNECE to introduce a piloted approach the Water Nexus to the key sectors in Georgia and Azerbaijan, and to provide initial familiarity with the benefits of strong cross sectoral coordination.

19. The SAP implementation initiative provides critical linkages between the countries to meet the GEF-6 International Waters Focal Area key outcomes in Objective 2 Catalyse investments to balance competing water-uses in the management of transboundary management of surface and groundwater and to enhance multi-state cooperation.. This will be done through enhanced institutional effectiveness and capacity for conjunctive management of surface and groundwaters, and through taking the necessary steps to address the Water/Food/Energy/Ecosystem Nexus to enhance greater water-food-ecosystem security within the basin and to enhance linkages with other transboundary economic initiatives and regimes. This includes expanding the work initiated in the Alazani Ganikh sub-basin on introducing the benefits of cross sectoral cooperation through the Water Nexus.

20. The project proposes to demonstrate the added strength of implementing national plans in a coordinated and harmonized manner, with shared institutional priorities, capacity building experiences, common information management approaches, shared stakeholder experiences in IWRM, and joint realization of stress reduction opportunities for the shared water resources through complementary development strategies. This project seeks to implement the SAP Priority Actions that will incorporate transboundary IWRM principles into the national plans through support to the implementation of National IWRM Plans in Georgia and Azerbaijan and strengthening this implementation through enhanced water/food/energy and environmental security. This will also support the governments to meet their commitments under the Helsinki Convention, and the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin. The capacity building efforts will lay the foundation for potential future technical cooperation to be more formalized. Concurrently the project will support bi-lateral and international initiatives for ecosystem-based, cross-sectorally coordinated, adaptive management with sustainable national level support structures. This will include innovative solutions for reduced pollution in critical areas, and improve water use efficiency, with measurable results and governance mechanisms developed to ensure sustainability. Further, information systems for adaptation to climatic variability and change and sustainable groundwater use will be featured, to support intersectoral development planning and strengthen the stakeholders participation and governance, including local communities and gender mainstreaming, in all aspects of water resources

management.

21. The Project will be driven by the objectives and outcomes developed in the SAP and approved by the two Countries. The SAP and the associated National IWRM Plans present a wide range of actions that require support from National Governments, local communities and international donors. UNDP-GEF support will focus on specific issues identified in the SAP and national plans related to assisting with regional and national governance of the Kura Basin, towards cross-sectoral IWRM-based management, including capacity building, policy and institutional reforms, monitoring and data management systems, small scale projects in critical areas to illustrate stress reduction practices, and pre-feasibility investment planning for large scale transboundary issues.

22. The principal components of the proposed GEF project are as follows:

- Component 1: Establishment of effective cross sectoral IWRM governance protocols at the local, national and transboundary levels in the Kura Basin..
- Component 2: Strengthening national capacities to implement multi-sectoral IWRM in the Kura basin.
- Component 3: Stress reduction for critical areas, and pre-feasibility studies in support of investments opportunities to improve river system health
- Component 4: Targeted education and involvement projects to empower stakeholders in seeking implementing local / national / regional actions in support of SAP implementation
- Component 5: Enhancing science for governance by strengthening monitoring, information management and data analysis systems for IWRM.

23. GEF resources will also enable the implementation of on-the-ground measures aimed at demonstrating the establishment of sustainable use and management of riparian zones in the Kura Basin. Priorities defined in the National IWRM Plans, including cross-sectoral management of water resources, will serve as key vehicles to implement measures. Of the 10 outcomes of the SAP, at least 75% of these are reflected in the steps to reach these outlined in the National IWRM Plans.

24. Implementation of the project through the five inter-linked components will deliver the overall objective, which is consistent with the SAP's ecosystem quality objectives and basin vision. Component 1 will focus on institutional, regulatory and cross-sectoral coordination policy protocols for implementing effective IWRM nationally and in the transboundary context, supported by Component 2 - strengthening institutional capacities for IWRM implementation within all water dependent sectors. Component 3 will facilitate the longer term requirements of the SAP implementation through projects for water management and stress reduction in critical areas as well as pre-feasibility studies, the potential investments that will further support IWRM implementation, cross-sectoral coordinated governance and management, and improved river system health. Component 4 is designed to engage stakeholders and local communities, through awareness raising, gender mainstreaming, educational opportunities and small-scale stress reduction efforts on the importance of their inputs for successful IWRM. This component will also ensure the availability of well-trained junior staff needed in different institutions, responsible for the implementation of the IWRM plans. Component 5 – Enhancing science for governance by strengthening monitoring, information management and data analysis systems for IWRM and successful climate change adaptation for sustainable conjunctive use. About 1% of the GEF grant will be dedicated to contribute to IW-LEARN activities, such as maintaining and updating the webpage according to the IW-LEARN guidelines, preparing IW experience notes, participating in regional IW meetings as well as the IWCs during the project lifetime.

25. The Project Steering Committee and PCU will provide project co-ordination and oversight. This will ensure consistency and compatibility with the SAP and the activities of other parties

involved in SAP implementation. In particular, this project will closely co-ordinate with the EU, USAID, World Bank, UNECE, UN Agencies and other donor initiatives to support coordinated project implementation and to avoid overlap.

26. The principal components of the proposed GEF project are:

Component 1: Establishment of effective cross sectoral IWRM governance protocols at the local, national and transboundary levels in the Kura Basin

Currently in Georgia and Azerbaijan new Water Codes are being drafted and adopted that will include the principals of IWRM. The framework of an effective IWRM governance mechanism is needed in each country to ensure that modern approaches to IWRM are applied successfully and the application of policies are harmonized where possible between sectors and countries. The regional effort is supported by the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin. The countries will need support to meet their commitments under this agreement, through strengthened national governance protocols, and harmonized institutional approaches to water management. National Experts for the UNDP-GEF Foundational Project have been working on the development of these legal protocols and, in line with the national and transboundary priorities of the SAP, have recommended the following activities to maximize transboundary and basin wide benefits, as well as improve local and national conditions for increased water/food/energy/environmental security in the region through enhanced cross sectoral water management:

- Develop regulations to sustain updated calculation methodologies for environmental flows, taking into account the variability caused by climate change and competing water demand. To date the two countries have not adopted modern calculation methodologies and will require support to identify optimal approaches given both available information and hydro-morphology of specific tributaries and sub-basins for consideration in the agricultural, environment and energy sectors. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality impacted by flow rate, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of climate change.
- Implement effective regulatory strategies to encourage the efficient use of water resources, minimize losses, to support sustainable use of ground water resources, and to promote safe wastewater reuse in the agricultural sector, including private sector. This will be based on harmonization of approaches to water abstractions within the environmental and agriculture/amelioration and municipal water development sectors as outlined within SAP and detailed in the National IWRM Plans. The stress reduction efforts in Component 3 focused on improved efficiency will be linked to this. This will also enable the countries to more effectively meet obligations under the agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality impacted by flow rate, and SAP EQO 3 for ecosystem protection.
- Provide institutional support to river basin management organizations at the sub-basin level, and support intersectoral and integrated planning protocols harmonized for improved water use at all levels, and across sectors including agriculture, industry, environment, and energy sectors for effective basin planning supported by environmental protection policies as outlined within SAP and detailed in the National IWRM Plans. Improved governance at local levels will be emphasized within Component 4 for stress reduction in critical areas. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of climate change.
- Working with relevant authorities and stakeholders, including private sector, draft pollution abatement plans in line with the SAP and national priorities, to target maximum impact from investment opportunities for agriculture and municipal waste sectors to serve as a basis for environmental protection. This will link with the pre-feasibility study and pollution abatement in component 3 for stress reduction. This will support the countries to take concrete steps towards

meeting their pending commitments to the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin. This links to EQO 2 on water quality impacted by flow rate, and EQO 3 for ecosystem protection.

- Support harmonized IWRM plan implementation at the national and transboundary levels, strengthening exchanges on observed progress among neighbouring countries and between sectors. The existing National Water Policy Dialog Meetings supported by EU initiatives serve as interministerial committees currently and will continue to be supported under the Project implementation. As the UNECE bilateral agreement is finalized, this activity will also serve to support facilitating the involvement of multiple stakeholders in the processes. Currently Azerbaijan and Georgia are finalizing the bilateral agreement on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin, and once all points are agreed a Joint Commission will be formed which will complement and be enhanced by the work of this project. Additionally both countries are signatories to the UNECE Water Convention Protocol on Water and Health, co-chaired by WHO and UNECE. Aspects of this project will link to the work of that protocol and could be complimentary as well. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change.
- Formation of a Kura Public Private Partnership to provide non-binding advice and recommendations on water management and technical issues pertaining to transboundary resources within Azerbaijan and Georgia. The panel would be made up of governmental and private sector entities and NGOs (as appropriate). This could include Joint Stock companies such as AzerSu and Georgia Water and Power, Amelioration Joint Stock Companies in both Azerbaijan and Georgia, mining companies, oil pipelines operators, mineral water companies, etc. The idea is that this partnership could work to identify win-win/positive sum scenarios and to strengthen governance for key stakeholders. Members will also provide support to inter-ministerial water policy coordination meetings for stakeholders to the IWRM process. This body can serve to support the Joint Commission that will emerge as a result of the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin, and will be designed to be sustainable after GEF support is completed. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of climate change.

Component 2: Strengthening national capacities to implement multi-sectoral IWRM in the Kura basin

Within the two National IWRM Plans and the SAP the high level of disciplinary specific technical capacities among the experts in the Basin is acknowledged. The remnants of the Soviet Era include highly trained scientific and technical experts, as well as some of the benefit of boasting the highest literacy rates in the world. However, the training from that era is very discipline-specific and therefore the interdisciplinary approaches required for IWRM remain elusive. There is also a history of low levels of trust between sectors, which must be overcome to enhance national and regional water/food/energy/environmental security through cross-sectoral coordination protocols. Additionally many senior technical experts and scientists are nearing retirement age, while the younger generations often have not benefited from the Soviet education systems as extensively. As younger generations of water management specialists take on new responsibilities often requiring cross-sectoral coordination and sharing a common language of water management based on economic principles, support for their professional development is key. This should be specific to the basin and the institutions in which they work and provide an opportunity to expand their capacity, improve their technical and professional abilities. This will also help to ensure the sustainability of the success of the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin. This can be done at lower costs and with higher benefits by working with them within their own positions, taking steps to strongly incorporate IWRM approaches that emphasize

water/food/energy/environmental security into their professional duties. Through working with them in their current positions, over time more benefits can be reached than by means of external trainings abroad, which do not address their specific challenges, and can result in higher levels of professional attrition.

The Foundational UNDP-GEF Project initiated the UNDP-GEF EU Kura Aras IWRM Academy for rising decision makers. Sixty two rising decision makers working in the water management sector from the countries participating in the foundational phase were provided with 72 hours of basin- and country-specific training in IWRM. After its completion, participants and other institutional stakeholders requested additional trainings to be provided to the same experts as well as key national experts. Extension of the IWRM Academy, using similar approaches to build the immediate capacity of junior water management professionals, will benefit the basin by providing IWRM and Water Nexus topic-specific expertise to relevant institutional practitioners, by national and international experts. This will be critical to the long-term success of the post-GEF legal and institutional framework established by the bilateral agreement and pending EU Association Agreements. There are four main outputs for this institutional capacity building effort:

- Training programs for IWRM professionals, including on environmental economics, river basin ecology, Water-Energy-Food-Ecosystem Nexus, environmental flow management, sustainable ground water abstraction management, pollution abatement strategies, cross-sectoral and sector specific management practices for improved water use efficiency, pollution reduction and regional security. The work in Component 3 on stress reduction efforts will serve an examples for improving conditions and strengthening governance in critically impacted areas. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change.
- Building enhanced capacity within appropriate institutions and basin management organizations to implement river basin management plans in line with EU WFD requirements. This will be supported by improved governance for stress reduction in critical areas in Component 3. This links to SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change.
- Expanding and strengthening the capacity for enforcement agencies overseeing the implementation of laws and regulations that protect ground and surface water resources quantity, quality and environmental flows. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, and SAP EQO 3 for ecosystem protection.
- Strengthening the capacity for information management, data analysis and presentation in support of IWRM decision-making, including economic, socio-economic and international legal compliance protocols in line with international and bilateral commitments. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change.

Component 3: Stress reduction in critical areas and pre-feasibility studies to identify investment opportunities for improving river system health

In order to move beyond the monitoring, institutional, and capacity building approach to IWRM, towards taking steps to actually reduce stress on key water ecosystems, effective stress reduction and coordinated governance approaches in multiple sectors is needed in critically impacted areas. These projects will be commensurate with the budget allocation for these and will target areas where the greatest stress reduction can be achieved. In all cases the stress reduction efforts will be accompanied by associated governance mechanisms developed in Component 1 and capacity building in Component 4 to ensure the long term sustainability of stress reduction efforts following the completion of the project. This will be in line with the strengthening of river basin management organizations as well as multisectoral coordination that will be critical to addressing the long term

stress reduction for improved ecosystem health. Additional support from stakeholders and donors will be sought as available. It is also important to conduct pre-feasibility studies in support of larger-scale investment opportunities that can lead to achieving some of the outcomes defined in the SAP that require substantial investments. As these efforts will not be feasible within the short term of the project, this component is intended to attract larger-scale investment, including through the involvement of appropriate private sector organizations and IFIs (WB, EBRD, EIB), to reduce the national and transboundary degradation of the Kura River Basin. Accordingly, the activities for this component include:

- Implement projects in critically impacted areas using technologies to reduce factual water losses and improve water use efficiency in different sectors, including state and private agencies, with selected pre-feasibility studies to promote up-scaling to be completed. The loss of water resources, including ground water, within the distribution systems is estimated to be over 50% in some areas of the Kura Basin. As a result, water ends up where it is not needed and fails to reach its destination in an efficient manner. Outdated practices in industry, mining, energy, agriculture and municipal water management result in compounded losses, and increased costs. This leads to increased and often unsustainable reliance on ground water in some areas. The implementation of selected projects to reduce factual water losses and improved efficiency in critical areas will also inform stakeholders to enable them to work more efficiently and improve water governance at the local levels. This will be coordinated with on-going donor initiatives in specific sectors where feasible. This links to SAP EQO 1 on sustainable water use.
- Conduct pre-feasibility studies for the implementation of integrated pollution abatement plans working with state agencies and private sectors, to maximize the benefits and potential for transboundary collaboration on water quality and ecosystem improvements. This will be in line with output 1.4 to develop pollution abatement plans for the basin. It will build on the work of the TDA Desk Study on Water Quality Hot Spots and will focus on priority areas under significant stress from transboundary water pollution. The focus of these will be dependent upon maximizing stress reduction benefit as determined by the pollution abatement plans and improved transboundary governance to address water quality improvements. This links to SAP EQO 2 on water quality protection.
- Develop projects on river restoration in critical areas to improve the protected areas networks and river system health along river corridors and in catchment areas, in line with international best practices, to initiate efforts for the rehabilitation of river systems in key critical areas within the basin. These will be small scale on tributaries to the Kura in areas selected with government counterparts capable of sustaining the specific restoration measures and governance in line with national and international commitments while also strengthening local, national and regional capacity. The size of these will be small due to budget limitations, but will be conducted in the most critical areas to maximize stress reduction. This will be linked to the best practices of the International Rivers Foundation as possible. This links to SAP EQO 3 for ecosystem protection.

Component 4: Targeted education and involvement projects to empower stakeholders in implementing local / national / regional actions in support of SAP implementation

The successful implementation of IWRM, especially in light of the threats posed by climate change, requires that stakeholders from all segments of society take an active role and feel empowered to take responsibility for improving their conditions. Increasing capacity for academic, civil society, private sector, and local community stakeholders begins with awareness raising and education, and should be quickly expanded to provide opportunities and incentives for innovations to emerge from those who are most impacted including those impacted due to specific gender roles. It is critical that addressing the challenges of IWRM and climate change impacts on water is treated not only as the responsibility of the government institutions, but also must be fostered among all stakeholders. Together these link to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change. The

activities recommended to achieve this are:

- Identifying and training a diverse team of professional IWRM trainers to work with stakeholders towards reaching sustainability at the local, national and transboundary level. This may include NGOs, educators, community organizers, women's groups, Water User Associations as applicable academics, and IWRM practitioners from Georgia and Azerbaijan. The intention is that, once trained, they can take responsibility for expanding the training to others, based on shared curricula, initiatives and support teams within each country.
- Support bi-annual academic IWRM conferences for higher educational institutions in Georgia and Azerbaijan to share best practices on Kura themed IWRM topics. The UNDP-GEF Kura foundational phase of the project was catalytic in developing a shared curriculum for an IWRM Master's degree with Baku State University and Tbilisi State University. UNESCO-IHE is responsible for training instructors. However, as such programs emerge, it will be vital that students and instructors are able to share research and teaching experiences. This will help future generations of water resource managers to share familiar common approaches, and can support sustainable long term harmonization of IWRM.
- Conduct staged social marketing campaigns to improve the understanding among all stakeholders of the importance to actively participate in IWRM, and to empower them to prepare for and adapt to the impacts of climate change on water resources. Social marketing – using advertising approaches to change public opinion and behavior must be designed with cultural sensitivity, being most effective when done in phases to build awareness and induce changes in behaviors. Special attention will be given to gender specific issues in water management to encourage full participation of all water users and to empower those marginalized groups who have not had a voice in water management historically, as many of the key solutions may be within those populations.
- Host local competitions and regional showcasing for local stakeholder innovations in climate change adaptation for measurable stress reduction. The project, in cooperation with local schools, universities, small scale private sector, NGOs, and other civil society organizations, will host local and national competitions for low cost innovations in water use efficiency and climate change adaptation. This will link to the social media campaign and encourage marginalized groups to share their ideas. This will also highlight the need to conserve groundwater resources and protect critical catchment areas for improved water quality. The winning innovations will be shared regionally and showcased internationally, and as possible and appropriate small grants for up-scaling and replication will be secured. This may be done in collaboration with the GEF Small Grants Program.
- In order to share experiences more widely with the international water management community, a project information and experience sharing system will be developed through the coordinating offices, while the contribution to GEF IW:LEARN activities will continue as noted above with 1% of the GEF grant dedicated to continued participation in IW:LEARN activities.

Component 5: Enhancing science for governance by strengthening monitoring, information management and data analysis systems for IWRM

During the preparation of the TDA and drafting of IWRM Plans the need to harmonize monitoring and information management and to strengthen data analysis became clear. Gaps in data were identified within the TDA, and accordingly the SAP and the National IWRM Plans identify measures to support gap filling, to improve information management and to improve the quality of analysis of existing and newly collected information. In addition, there is a strong need to prepare to harmonize data at the national and transboundary levels as much as possible in line with the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin.

As an example, the participating countries have each adopted different parameters for assessing water

quality, as noted in the TDA Desk Study on Water Quality Hot-Spots. As a result, it is increasingly difficult to address water quality management, as reaching consensus on actual levels of pollution, its cause and effect is hampered by the lack of comparable standards. Additionally, information on the biodiversity and ecological functions within the river, riparian zones and the basin is not well understood and documented, leaving a baseline that urgently needs gaps filled in order to understand the impacts of development and climate change on ecosystems. Information collected on all aspects of water resource management must be integrated across sectors and analysed as a whole system rather than through discipline-specific sector-based approaches. Further, by supporting activities at the national level there are increased opportunities for transboundary harmonization, the sharing of lessons learned, as well as data exchange between countries as outlined in the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin. Additionally, while within both Georgia and Azerbaijan the development of hydropower facilities have has political primacy over environmental impact concerns, the Georgian Ministry of Energy and Azerbaijan Alternate Energy Agency both has stated that a lack of reliable ecological information reduces their ability to effectively plan and program flow releases. Both ministries have stated that they are not resistant to environmental flow regimes, provided sufficient information is available during the planning processes. Targeted activities to fill gaps and facilitate information management for harmonized IWRM implementation are:

- Improve the assessment systems and modeling of ground- and surface water resources availability and fluctuations, to gauge flow rate impacts on water quality and ecosystem health. Currently there is a lack of recent data and system for analysis that enable firm and agreed conclusions to be drawn on the cause and effect of shifting flows on water quality and ecosystem health. Historical hydrological information has been collected over almost a century but is only now being put into digital format for analysis of trends that will be critical for understanding both surface and ground water flow patterns, especially in light of climate change impacts. The effective use of the Water Nexus approach requires reliable assessment of data on hydrological flow data that can be shared and agreed by all sectors. This information is critical both for the development of pollution abatement plans with private sector inputs and for sustainable surface and ground water abstraction planning, as well as for accurately determining environmental flows. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, and SAP EQO 3 for ecosystem protection.
- Conduct an assessment of the economic and social benefits per unit of water used in different sectors to balance competing demands during the planning process. Currently sectoral coordination is hampered by a lack of a common metric for water management. As all sectors understand baseline economic management principles, being able to create a dialogue about water as an economic resource, including for water/food/energy/environmental security, is critical. This includes the cost and benefit per unit of water used for agricultural, hydropower, industrial, and municipal water development planning, as well as those related to the preservation of ecosystems and ecosystem services in light of climate change and needs to meet the multi-sectoral demands for water resources. This will also include the important role that hydropower reservoirs play in reducing the costs of catastrophic flooding in downstream reaches of the river. This links to SAP EQO 3 for ecosystem protection where it provides essential socioeconomic services. This also links to SAP EQO 4 on flooding through cost analysis of flood impacts.
- Develop ecological assessment programs for river system health, in support of guiding environmental flows regulation. This will enable the countries to strengthen baseline data and to gauge the impacts of development, changes in flow regimes and climate change, as well as the effectiveness of IWRM Plan implementation, and to ensure that environmental security is being preserved. In both Georgia and Azerbaijan the increasing emphasis on hydropower for electricity generation requires accurate and reliable information for permitting of new hydropower schemes, both to establish reliable baseline conditions but also to ensure that mitigation of negative impacts and enhancement of positive impacts can be assured and measured. This links to SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change.

- Strengthen protocols to support data exchange between within and across sectors within and across sectors and countries to inform sound IWRM decision-making at national and transboundary levels. Information exchange within countries remains highly formalized and often is not integrated effectively to support decision making. Improvements made at the national level can be shared at the basin level and can foster confidence building between countries. It will also significantly enhance the application of IWRM and build stronger commitment to the nexus linkages supporting water/food/energy/environmental security and climate change adaptation including conjunctive uses of ground and surface waters. This links to SAP EQO 1 on sustainable water use, SAP EQO 2 on water quality protection, SAP EQO 3 for ecosystem protection, and SAP EQO 4 specifically to impacts of flooding and climate change.

4) Incremental Cost Reasoning and Expected Contribution from the Baseline

27. In the framework of implementing the SAP and National IWRM Plans, the GEF funding will enable the consolidation of country and transboundary efforts to reduce transboundary degradation of the Kura basin through harmonized implementation. This will strengthen the implementation of IWRM and enhance water/food/energy/environmental security at the national and transboundary level, and encourage ecosystem-based management, by implementing the full range of policy, legal and institutional reforms towards the sustainable use of river ecosystems at the national and transboundary levels. This will also support the linkages of water to other regional regimes for energy, transportation, and culture. The GEF resources will support incremental activities including:

Component 1: will strengthen the framework for the implementation of IWRM, by supporting the harmonization of legal, institutional and regulatory protocols within and between countries for more effective governance of the shared river system and its water resources for strengthened water/food/energy/environmental security. This will be in line with pending bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin, and strengthen governance mechanisms for environmental stress reduction.

Component 2: will strengthen the capacity of the institutions responsible for implementing IWRM in the sub-basins, the countries, and at the transboundary level across sectors. This will support the long-term implementation of the bilateral agreement. This will also seek to support harmonization in approaches across sectors and between countries for more effective sustainable development and improved water/food/energy/environmental security. The improved capacity will enable the countries to sustainably reduce environmental stresses and better mitigate negative impacts on ecosystems from development.

Component 3: will reduce stresses in critical areas of impacted water resources, improve governance at the local, national and regional levels for stress reduction efforts, and prepare the countries to attract investments in larger-scale solutions to address major sources of ecosystem degradation and pollution for transboundary benefits.

Component 4: will empower stakeholder to play an active and innovative role in IWRM implementation from a wide range of perspectives. By building awareness of the challenges, and turning to stakeholders for possible solutions, ownership of these solutions and long term governance will be enhanced, and the potential for low cost stress reduction initiatives leading to sustainable results will be increased.

Component 5: will strengthen monitoring, data assessment and analysis systems in support of improved decision making, and increased exchange of comparable information and analyses between sectors and countries for improved governance and harmonized water resources management. This will increase applied water/food/energy/ecosystem security, stress reduction measures, and climate change adaptation including conjunctive uses by increasing the empirical understanding of necessary decisions to be made to realize the shared benefits of cross sectoral coordination.

5) Global Environmental Benefits

28. Under the guidance of the proposed project, it is expected that improvements in transboundary water management will be realized through both national and transboundary harmonization; in the longer term, as the SAP is implemented, improvements in the environmental and water resource status of the Kura should be clearly discernable. Implementing policy, legal and institutional reforms agreed to under the Kura SAP, with strengthened bilateral commitments and providing the two countries with relevant information, capacity and management tools will facilitate achieving these environmental status improvements and enhance water/food/energy/environmental security. For example, support to strengthened integrated planning protocols between sectors, and facilitating the harmonization of planning between sectors and countries by means of information sharing will enable the countries to build confidence at the national and transboundary levels for improved water management and strengthened regional cooperation regimes. This opens opportunities for developing shared solutions, exchanging lessons learned and potentially for creating higher levels of management harmonization at other economic and resource-dependent levels. Further, application of IWRM and Water Nexus will help the countries to meet commitments and goals to international agreements, through the application of practices that lead to improved sustainable development at the local, national and transboundary level, even under the threat of climate change.

29. This proposed project was preceded by a foundational UNDP-GEF IW project which supported Azerbaijan, Georgia and Armenia in the development of the regional TDA and SAP. Armenia has elected not to participate in the SAP implementation project at this time; however, the project has been designed such that Armenia could participate at some future juncture if it elected to do so. Consequently, the immediate focus of the project described in the PIF will be on the areas of the Kura river basin which lie within the territories of Azerbaijan and Georgia. While the omission of Armenia from the SAP implementation project is unfortunate, the significant importance of the Kura (Georgia and Azerbaijan), to water and food security, socioeconomic development, and regional cooperation remain paramount and underscores the significant global environmental benefits the proposed project would deliver in terms of improving transboundary waters governance and management. The significant commitment by both countries to the SAP and their respective national IWRM plans, combined with the tangible progress Georgia and Azerbaijan have made in reaching consensus on a regional legal framework in line with the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) through the bilateral agreement under final negotiations on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin, further underscores the value added GEF can provide in furthering transboundary cooperation in the politically volatile Caucasus. As the UNECE and GEF support processes go forward, it is very possible that the concrete measures Azerbaijan and Georgia have taken to improve transboundary cooperation could be catalytic and encourage broader participation by other Kura- river riparians and the project will continue to facilitate dialogue towards this end.

30. This project will allow the two countries to test the implementation of nationally-constructed IWRM Plans as part of the transboundary SAP. The implementation of priority measures to address national and transboundary concerns will enable them to move towards more sustainable development and integrated resource management nationally and across the basin. The foundational phase GEF IW Project fostered the approach of National IWRM Plans leading to the shared priorities in the SAP to be tested for effectiveness. In the standard GEF IW approach the TDA is developed, then based on its recommendations the SAP emerges, from which subsequently the National Action Plans are drafted. As the IWRM plans for Azerbaijan and Georgian are nationally constructed concurrently with the SAP and the TDA, as well as a trialing of the Water Nexus pilot methodology, with only the guidance of international experts, the likelihood of more effective IWRM application at the national level and in support of the transboundary level is much higher.

31. It is critical that countries are supported to do at the national level what they are also being asked to do at the transboundary level as noted in the GEF 6 IW Strategy. This will require staged implementation, with the proposed stage focusing on institutional, regulatory and capacity building in preparation for the development and management of larger-scale investments to reduce environmental stresses. This approach will ensure that there is a shared understanding of cause and effect relationships in water resource management to address transboundary challenges, as well as the stress reduction measures to address the transboundary degradation and shared capacity to sustainably address these. The proposed project will ensure capacity development based on the same principles in both countries, and promote the sense of local ownership of both national and transboundary solutions. This will increase confidence within and between states, and build lasting linkages for long-term sustainable development. This will also enhance regional institutions and shared regimes for transportation, energy, and culture through enhanced water/food/energy/environmental security and the implementation the bilateral agreement on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin.

6) Innovativeness, Sustainability and Potential for Scaling Up

32. Specifically in terms of promoting innovation the foundational phase of the UNDP-GEF Kura foundational project has taken steps outside of the standard TDA/SAP methodology to support capacities and plans at the national level to also collaborate in the transboundary setting, as noted above. This was done mainly to encourage the development of national plans, and enable countries to take steps nationally that will also have transboundary benefits. As a result, the SAP emanating from this approach has very strong linkages between national and transboundary priorities. Additionally it is important that the countries have stand-alone IWRM Plans and NAPs that can be independently supported as well as owned by the implementing stakeholders. This increases the likelihood of sustainability and accomplishment of these plans, while at the same time increasing the understanding of the localized benefits and willingness of countries to take steps in support of the implementation of these plans in the long run. This way, if the donor community cannot fund aspects of the SAP implementation there is a higher likelihood that the countries are willing to support it themselves. Further, if political tensions become inflamed and one country cannot participate, the transboundary benefits can still be realized.

33. The foundational phase of the project also conducted a Trend Analysis of the social and economic sectoral development plans as part of the TDA. National level sectoral plans for agriculture, hydropower development, municipal water development and industry were analysed for each country for 5 years, 10 years and 20 years. The impacts of these were assessed as they would impact water quantity, water quality, ecosystem health and climate change impacts. This set the stage for the need to integrate water resource management planning, with a strong emphasis on taking steps to protect water/food/energy/environmental security. The UNECE Pilot Nexus study built on this, and provided key cross sectoral stakeholders with an introduction to the importance of developing protocols for cross sectoral coordination at the national and regional levels.

34. Sustainability for the Project arises from continuing with this national-to-transboundary approach, by building capacity, strengthening institutions, improving monitoring systems, enhancing stakeholder involvement in IWRM and cross sectoral support for water/food/energy/environmental security with stress reduction efforts in critical areas at the national levels, while providing for harmonization at the transboundary levels. As noted above, the high level of national and local ownership, combined with fostering of transboundary relations, increases the likelihood of ongoing coordination and cooperation at key technical levels. The project will build national capacities for IWRM professionals in multiple sectors, establish a cohort of professional IWRM trainers, support the development and enforcement of laws and regulations for sustainable water use, gender mainstreaming, and increase stakeholder awareness, understanding and ownership of solutions. It is intended that the role of international donors will be phased out and replaced by national and basin-

wide experts and professionals capable of ensuring benefits for the stakeholders.

35. Regarding scaling-up, the lessons learned regarding the TDA (and Trend Analysis) -to-National IWRM Plans-to-SAP-to-implementation approach for enhanced water/food/energy/environmental security at the regional level can be applied throughout the world, creating a strong level of certainty that people know their own problems and need support to figure out how to address them. This focuses on empowering stakeholders to address the challenges they meet at the local and national level and to realize the critical transboundary benefits that can be obtained. The interdependence within a river basin system differs from regional seas and large marine ecosystems. Because of the uni-directional flows it is critical that each country take responsibility for addressing their own IWRM approaches, while recognizing the ecosystem-interdependence that spans political boundaries. Further, the potential for the shared management of transboundary waters can have large social and economic benefits across sectors. This can only be seen where national benefits are brought into harmonization with basin-wide benefits. Testing the effectiveness of this in the transboundary setting through the activities outlined above will serve as a potential model for other river systems around the world, especially where there may be tensions regarding shared water resources.

A.2. *Stakeholders.* Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes /no) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:

The project design will be informed by inputs from local stakeholder groups. The complex historical ethnic diversity of the South Caucasus is well integrated, with no individual groups qualifying as "indigenous people" within the standard developmental definition. Even so every effort will be made to include and address the needs of marginalized populations in the project activities. Civil society has played an important role in the development of the Kura SAP through the NGO Forum recommendations to the Project Steering Committee. NGOs and other members of civil society will be closely consulted during the design of the Project document and are expected to play a substantial role in the implementation of the project, specifically in Component 4: Targeted stakeholder education and involvement projects to empower local community stakeholders in implementing local / national / transboundary actions in support of SAP implementation. Community organizations, and civil society groups will support stakeholder guidance, with provide input to the Kura Public Private Partnership Boards, provide technical support to the project as appropriate and implement many stakeholder involvement activities. They will also provide key support to facilitate local civil society partners involvement for capacity building and stress reduction efforts in critically impacted areas.

A.3. *Gender Considerations.* Are gender considerations taken into account? (yes /no). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

In line with their recommendations of Gender Mainstreaming for Water Management Report, drafted in the foundational phase of the Project, gender mainstreaming will be featured throughout the project preparation and throughout the project. There is a very strong gender equality within the water management within Georgia, and largely within Azerbaijan as well, due to the Soviet legacy of high level educational and professional equality. As a result the heads of water monitoring agencies in both countries are female, there is gender equality within the institutionalized water governance sectors of both countries. It is encouraging that 80% of students in the geography and hydrology department at Baku State University are women, suggesting this trend towards gender equality will continue. At the professional levels though there are some limitations for younger women in terms of ability to conduct unchaperoned field work, and expectations that prioritize traditional gender roles within the home will take precedence over professional development. Additionally within the general population traditional gender roles preclude decision making regarding water resource management, though this is changing especially as the important role women play in understanding domestic water use becomes increasingly appreciated by the municipal water development sector. This sort of attention will be emphasized throughout the project to support the increased

awareness of gender roles in water management and the benefits that both men and women bring to successful integrated water resources management. Within the professional capacity building for water management in Component 2 selection of women for trainings will be emphasized and gender mainstreaming for water management will be included within the trainings. A gender mentoring program will be established with senior and junior professionals. Additionally, gender aspects in community based water management will be highlighted within Component 4: Targeted education and involvement projects to empower stakeholders in implementing local / national / regional actions in support of SAP implementation. Additionally within the pre-feasibility study work in Component 3, it is anticipated that working with women as key stakeholders most impacted by low water quality, will emphasize both the needs, roles and priorities of both men and woman in pollution abatement. In the development of the Project Document, a consultant with gender mainstreaming experience in the region will be recruited to provide input to ensure that gender inclusivity can be monitored through appropriate and gender mainstreaming M&E system indicators.

A.4 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

Risk: Political instability could affect the implementation of actions at country or regional level

Level of Risk: Medium

Mitigation: The project will promote coordination among various actors from the outset, and is designed to provide a key supporting role to the Joint Commission. to the bilateral agreement under negotiation on Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin.

Risk: The multiplicity of interventions for SAP implementation without effective coordination could limit the expected results and duplicate efforts.

Level: Medium

Mitigation: The project will establish the group of partners to better manage intervention efforts and provide a platform for synergy and complementarity as agreed for the SAP implementation, using the GEF IW Indicators framework, to help partners managing results and impacts on the ecosystem.

Risk: Environmental variability and climate change could alter ecosystem processes and functions, and reduce ecosystem services.

Level: Low

Mitigation: A demonstration activity has already been carried out to evaluate the impacts of climate variability and change on river flows and ecosystem, related to environmental flows. Providing for a sound methodology for calculations of environmental flows in light of climate change will further guide adaptive management to meet global changes. Implementation of IWRM plans will aim to incorporate Climate Variability and Change.

A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:

36. The project will link with ongoing and future initiatives to be undertaken by key donors, by supplying necessary knowledge and tools on adaptive ecosystem-based management. During the PPG phase, in-depth consultations will be undertaken to establish partnerships and practical modalities for linking and collaborating with ongoing and planned initiatives, as to avoid duplication and ensure that GEF resources build on the progress and achievements made to date through such initiatives. A strategy and plan for collaboration with relevant ongoing and planned initiatives will be prepared during the preparatory phase, including defining the roles and responsibilities of critical stakeholders. Below is a preliminary list of linked and baseline interventions and plans for coordination.

Donor: EU

Objective of the intervention: EU Waters Initiative for EECCA region focuses on water resource management and improvements to water quality

Proposed Coordination: Ongoing coordination with EUWI efforts in the Kura , including those implemented through UNECE, OECD, and OSCE

Donor: WWF

Objective of the intervention: Sustainable Dams Initiative for the South Caucasus

Proposed Coordination actions: Support to WWF efforts through data exchange and inclusion with SAP Activities. Also members of the UNDP-GEF PCU will serve on the Advisory Board of the WWF Project.

Donor: UNECE

Objective of the intervention: Bilateral agreement in process to align TB water management between AZ and GE in line with the UNECE Helsinki Convention

Proposed Coordination actions: Pending finalization of the agreement, support to the establishment and functioning of a bilateral Joint Commission to maximize harmonization and minimize redundancies

Donor: UNECE

Objective of the intervention: Both countries have signed the UNECE Helsinki Convention Protocol on Water and Health, Azerbaijan has ratified it.

Proposed Coordination actions: In line with the functions of the Protocol, provide ongoing support to data exchange between approaches, data management and pollution abatement measures, when and where possible.

Donor: UNESCO-IHE

Objective of the intervention: UNESCO-IHE and Delft University will be conducting a training of instructors for the IWRM MSc Program in Georgia. Azerbaijan will be self-funded with additional support from the GWP. Additional support will be sought by UNESCO-IHE to ensure longer-term inputs and sustainability of the IWRM MSc at the national levels.

Proposed Coordination actions: In line with the UNDP-GEF foundational project, which played a key catalytic role in the development of the shared IWRM MSc curriculum with Baku State University and Tbilisi State University, the proposed project will foster student-to-student learning and best-practices exchange through biannual basin-wide academic conferences.

Additional co-financing agencies will contribute the following:

Ministry of Ecology and Natural Resources Azerbaijan: Support for government involvement, data access, accommodations for project office, conference space, expertise and review of project materials, project guidance, data and information and coordination with other stakeholders and ministries. (\$770,000)

Ministry of Environment and Natural Resource Protection: Support for government involvement, data access, accommodations for project office as possible, conference space, expertise and review of project materials, project guidance, data and information and coordination with other stakeholders and ministries. (\$770,000)

Ministry of Emergency Situations Azerbaijan: Additional water quality information, additional satellite imagery and use of GIS, extensive hydrological information collected by the MES AZ in an extensive water balance using international best practices. Sharing of data with project and with Georgia. (\$12,500,000)

AzerSu Joint Stock Company: Water quality information, and data collection methodologies, ground water studies in line with international best practices, construction of waste water treatment facilities throughout the basin in riparian communities that currently discharge untreated waste directly into the river. approaches to be shared with Georgia and other sectors through the project in accordance with SAP and IWRM Plan implementation. (\$75,000,000)

AzerAmelioration: Extensive refurbishment of irrigation using water conservation technologies in line with international best practices across the Azeri portion of the basin, and experiences of effectiveness to be shared with Georgian Amelioration through project. Additional data on water use, agricultural economics and water modeling approaches to be shared with Georgia and other sectors through the project in accordance with SAP and IWRM Plan implementation. (\$28,580,000)

UNDP Azerbaijan/EU - EC: Clima East: Supporting climate change mitigation and adaptation in Russia and Eastern Neighborhood countries through pilot projects. Improved land and forestry management, including critical flood plain forests and critical catchment areas. (\$649,351)

UNDP Georgia/Government of Finland - Sustainable livelihoods and responsible attitudes to environment project: Stakeholder education and awareness raising in critical and protected areas in the Kura Basin. Serves as a model for stakeholder education and increases populations awareness of importance of ecological management. (\$41,666)

UNDP Georgian/EU – Sustainable management of pastures project: Sustainable pasture management in areas of high sensitivity in the Kura Basin where overgrazing results in impacts on hydrological regimes. Will serve as an example of the importance of integrated land and water management. (\$649,350)

World Bank- Government of Georgia Irrigation and Land Market Development Project: Updating and refurbishment of irrigation channels in Kura Basin within Georgia, and introduction of water conservation and abstraction monitoring. Development of Water User Associations for improved water use and water efficiency and improved water quality from agriculture. Sharing of data, experience and expertise, including from/to Azerbaijan. (\$63,000,000)

EU Government of Georgia Technical Assistance for the Water Infrastructure Modernization and Development Project: In line with the EU Association Agreement, improvement in water infrastructure, including municipal water for Tbilisi and related environs discharged into Kura River through the Gardabani Collector 10 Km upstream from Azerbaijan border. Sharing of data, experience and expertise within Georgia and information exchange with Azerbaijan. (\$4,043,959)

EU Georgia Improvement of Waste Management Systems in Georgia: Support for improved waste management in Kura basin to reduce contamination of ground water through leaching of contaminants. Reduction of contamination of water resources and potential for site for abatement plan monitoring. (\$585,707)

EUWI Azerbaijan Support for National Level Capacity and Coordination through the EU Water Initiative: Support for coordination with the National Water Policy Dialog Meeting which serves as the Interministerial Coordination Committee. (\$240,000)

EUWI Georgia Support for National Level Capacity and Coordination through the EU Water Initiative: Support for coordination with the National Water Policy Dialog Meeting which serves as the Interministerial Coordination Committee. (\$240,000)

DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

37. CURRENTLY THE COUNTRIES HAVE NO BINDING LEGAL ENVIRONMENTAL CONVENTIONS IN THE BASIN . THROUGH THE FOUNDATIONAL PHASE OF THE UNDP-GEF KURA PROJECT A TRANSBOUNDARY SAP WAS DEVELOPED WITH HIGH LEVELS OF INPUTS FROM NATIONAL STAKEHOLDERS. THE SAP WAS ENDORSED BY MINISTRIES OF GEORGIA AND AZERBAIJAN BEFORE JUNE 2014, AND BOTH COUNTRIES HAVE NATIONAL LEVEL PLANS IN PLACE THAT DIRECTLY SUPPORT SAP IMPLEMENTATION. THE COUNTRIES ARE FINALIZING THE

BILATERAL AGREEMENT UNDER NEGOTIATION ON COOPERATION IN THE FIELD OF PROTECTION AND SUSTAINABLE USE OF THE WATER RESOURCES OF THE KURA RIVER BASIN CURRENTLY. THE SAP IS DESIGNED TO PLAY A KEY SUPPORTING ROLE TO THE BILATERAL AGREEMENT BY SUPPORTING DEVELOPMENT OF WATER GOVERNANCE PROTOCOLS, BUILDING THE CAPACITY OF THE COUNTRIES TO MEET THEIR OBLIGATIONS AND TO HARMONIZE THEIR APPROACHES FOR SUSTAINABLE WATER MANAGEMENT. SAP IMPLEMENTATION WITH CROSS SECTORAL IWRM USING THE WATER/FOOD/ENERGY/ENVIRONMENT SECURITY NEXUS HAS THE ADDITIONAL BENEFIT OF GARNERING SUPPORT FOR THE BILATERAL AGREEMENT BY STRENGTHENING SUPPORT FROM MULTIPLE SECTORS ACROSS THE REGION.

38. THE SAP HAS FOUR ECOSYSTEM QUALITY OBJECTIVES (EQOS) AND TEN OUTCOMES TO ACHIEVE THESE. THESE ARE:

•EQO # 1: TO ACHIEVE SUSTAINABLE UTILIZATION OF WATER RESOURCES TO ENSURE ACCESS TO WATER AND PRESERVE ECOSYSTEM SERVICES, THROUGH THE OUTCOMES “IMPROVED MANAGEMENT OF EXISTING QUANTITIES OF GROUNDWATER AND SURFACE WATER RESOURCES” AND “REDUCED LOSSES OF WATER RESOURCES”.

•EQO # 2: TO ACHIEVE WATER QUALITY SUCH THAT IT WOULD ENSURE ACCESS TO CLEAN WATER FOR PRESENT AND FUTURE GENERATIONS AND SUSTAIN ECOSYSTEM FUNCTIONS IN THE KURA RIVER BASIN, THROUGH THE OUTCOMES “IMPROVED MONITORING PROGRAMS”, “POLLUTION REDUCTION AND PREVENTION”, AND “HARMONIZATION OF WATER QUALITY STANDARDS”.

•EQO # 3: TO ACHIEVE AND MAINTAIN ECOSYSTEM STATUS WHEREBY THEY PROVIDE ESSENTIAL ENVIRONMENTAL AND SOCIO-ECONOMIC SERVICES IN A SUSTAINABLE MANNER IN THE KURA RIVER BASIN, THROUGH THE OUTCOMES “MONITORING AND ASSESSMENT OF THE STATUS OF RIVERINE AQUATIC ECOSYSTEMS”, “IMPROVED SUSTAINABLE USE OF NATURAL RESOURCES”, AND “RESTORATION OF RIVERINE ECOSYSTEMS”.

•EQO # 4: TO ACHIEVE MITIGATION OF ADVERSE IMPACTS OF FLOODING ON INFRASTRUCTURES, RIPARIAN ECOSYSTEMS AND COMMUNITIES, THROUGH THE OUTCOMES “REDUCTION OF HAZARDS DUE TO FLOODS AND DROUGHT”, AND “HARMONIZED CLIMATE CHANGE ADAPTATION”.

39. THE AZERBAIJAN PRESIDENT PASSED A NATIONAL DECREE TO PRIORITIZE WATER RESOURCE MANAGEMENT IN JANUARY 2013. WHILE WATER RESOURCE MANAGEMENT HAD BEEN IMPORTANT, THIS DECREE HAS ACCELERATED THE DEVELOPMENT OF THE NATIONAL IWRM PLAN SUPPORTED BY THE UNDP-GEF FOUNDATIONAL PROJECT. IN ADDITION, BECAUSE OF THE INCOME GENERATED BY THE EXPORT OF PETROLEUM RESOURCES, AZERBAIJAN IS ABLE TO INVEST REVENUES INTO THE WATER SECTOR, INCLUDING THE DEVELOPMENT OF MUNICIPAL WATER RESOURCES MANAGEMENT, MELIORATION AND IRRIGATION FOR INCREASED FOOD SECURITY, AND THE MINISTRY OF EMERGENCY SITUATIONS, ESTABLISHED IN PART TO ADDRESS AND REDUCE FLOODING IMPACTS. THE FOCAL POINT MINISTRY OF ECOLOGY AND NATURAL RESOURCES CONTINUES TO SERVE AS A KEY PARTNER, AND NEW LEGAL STRUCTURES ARE RAPIDLY BEING DRAFTED TO SUPPORT THE IMPLEMENTATION OF IWRM, INCLUDING A GOVERNMENT ECONOMIC DEVELOPMENT PLAN FOR REGIONS IN AZERBAIJAN THAT WILL BE BASED ON THE IWRM PLAN FOR THE WATER SECTOR DEPENDENT DEVELOPMENT.

40. GEORGIA IS BLESSED WITH ABUNDANT WATER RESOURCES, AND HAS BEEN PURSUING A DEVELOPMENT PLAN THAT WILL ENABLE THE COUNTRY TO BECOME A NET EXPORTER OF HYDRO-POWER GENERATED ENERGY.

THE REALIZATION THAT PROTECTION AND PRESERVATION OF RIVER ECOSYSTEMS IS CRITICALLY NEEDED IS ACTIVELY BEING PURSUED BY THE GOVERNMENT, IN ORDER TO SUSTAIN THE NATURAL RESOURCES OF THE COUNTRY. THE UNDP-GEF FOUNDATIONAL PROJECT HAS SUPPORTED THE DEVELOPMENT OF A NATIONAL IWRM PLAN FOR GEORGIA THAT INCLUDES ADDRESSING THE NEED TO CREATE ROBUST INSTITUTIONAL STRUCTURES, HARMONIZE THE NATIONAL WATER CODE WITH NATIONAL AND INTERNATIONAL COMMITMENTS, AND SUPPORT HARMONIZATION WITH THE EU WFD. THERE IS AN AWARENESS THAT DEVELOPING THIS PLAN BASED ON EXISTING AND NEEDED CAPACITIES WILL REQUIRE ADDITIONAL SUPPORT AND COORDINATION WITH NEIGHBOURING STATES.

41. ADDITIONALLY, BOTH OF THE COUNTRIES HAVE SIGNED IMPORTANT INTERNATIONAL CONVENTIONS THAT ARE COMPLEMENTARY TO THE PROPOSED PROJECT, THE SAP AND NATIONAL PLANS. THIS INCLUDE, AMONG OTHERS:

- THE UNECE HELSINKI CONVENTION PROTOCOL ON WATER AND HEALTH;
- THE RAMSAR CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE;
- THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA;
- THE BASEL CONVENTION ON THE CONTROL OF TRANSBOUNDARY MOVEMENTS OF HAZARDOUS WASTES AND THEIR DISPOSAL;
- THE RIO CONVENTION ON BIOLOGICAL DIVERSITY;
- THE PARIS CONVENTION ON COMBATING DESERTIFICATION;
- THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE AND ITS KYOTO PROTOCOL;
- THE AARHUS CONVENTION ON ACCESS TO PUBLIC INFORMATION, PUBLIC PARTICIPATION IN DECISION-MAKING, AND ACCESS TO JUSTICE IN ENVIRONMENTAL MATTERS; AND
- THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. Record of Endorsement⁸ of GEF Operational Focal Point (S) on Behalf of the Government(s): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [SGP OFP endorsement letter](#)).


NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Ms. Nino Tkhilava	Head of Department of Environmental Policy and International Relations	MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES PROTECTION OF GEORGIA	7 AUGUST 2014
H.E.Hussein Baghirov	Minister	MINISTRY OF ECOLOGY AND NATURAL	21 JANUARY 2014

⁸ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

		RESOURCES OF AZERBAIJAN	

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies⁹ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Ms. Adriana Dinu UNDP-GEF Executive Coordinator and Director a.i.		22 August 2014	Mr. Vladimir Mamaev Regional Technical Advisor		vladimir.mamaev@undp.org

C. Additional GEF Project Agency Certification *(Applicable Only to newly accredited GEF Project Agencies)*
 For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.

⁹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF