



United Nations Agency for Project Services

Global Environment Facility (GEF)
The World Bank

Blueing the Caspian Sea
(P181526)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

Draft

3 December 2025

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Abbreviations and Acronyms

AGSC	Azerbaijan Gas Supply Company
AUMCO	Austria Multi-Country Office
BCSP	Blueing the Caspian Sea Project
BMP	Biodiversity Management Plan
CRPD	United Nations Convention on the Rights of Persons with Disabilities
CSO	Civil Society Organization
E&S	Environmental & Social
EIA	Environmental Impact Assessment
EBA	Endemic Bird Area
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESHG	Environmental Safety and Health Guidelines
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
FGD	Focus Group Discussion
FM	Financial Management
GBV	Gender Based Violence
GEF	Global Environment Facility
GRM	Grievance Redress Mechanism
IBA	Important Bird Areas
IDA	International Development Association
IDP	Internally Displaced Person
IFC	International Financial Corporation
ILO	International Labor Organization
KMG	KazMunayGas
KPI	Key Performance Indicator
LMP	Labor Management Plan
LRP	Livelihood Restoration Plan
M&E	Monitoring & Evaluation
MENR	Ministry of Ecology and Natural Resources
NGO	Non-Governmental Organization
OHS	Occupational Health and Safety
OIP	Other Interested Party
O&M	Operations & Maintenance
OP	Operational Policies
PA	Protected Area
PAD	Project Appraisal Document
PAP	Project Affected Person

PDO	Program Development Objective
PCU	Project Coordination
PIU	Project Implementation Unit
POM	Project Operations Manual
PPE	Personal Protective Equipment
RPF	Resettlement Policy Framework
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SDG	Sustainable Development Goals
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SOCAR	State Oil Company of Azerbaijan Republic
TCIS	Tehran Convention Interim Secretariat
TM MENR	Turkmenistan Ministry of Ecology and Natural Resources
TM MEP	Turkmenistan Ministry of Environment Protection
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environmental Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
WB	World Bank
WWF	World Wildlife Fund

Executive Summary

The World Bank will be supporting the United Nations Office for Project Services in implementing the Global Environment Fund (GEF)-funded Blueing the Caspian Sea Project. The Project Development Objective is to strengthen pollution monitoring and biodiversity planning in targeted sites within the Caspian Sea in Azerbaijan, Kazakhstan, and Turkmenistan. The project will support the following activities: pollution monitoring and biodiversity planning in the three countries.

The project activities will take place in Azerbaijan, Kazakhstan, and Turkmenistan with a focus on the coastal areas of the Caspian Sea. Not all locations of subproject activities are not known at this stage, except for some of the protected areas that will be supported, including the proposed Garabogaz Marine Protected Area in Turkmenistan, the Itbalygy State Nature Reserve in the Mangistau Region of the northern Caspian in Kazakhstan, and the Absheron National Park in Azerbaijan.

This Environmental and Social Management Framework (ESMF) has been prepared to identify the potential environmental and social risks and impacts of proposed Project activities and propose suitable mitigation measures to manage these risks and impacts. It maps out the countries' laws and regulations and the World Bank Environmental and Social Standards (ESS) applicable to the Project, and describes the principles, approaches, implementation arrangements, and environmental and social mitigation measures to be followed.

The Project has been rated as *Substantial* risk. Component 1 on Pollution Monitoring includes the involvement of detergents and chemicals in the pollution monitoring process. This poses risks of water pollution, soil contamination and bioaccumulation, as well as workers' health risks where workers are exposed to toxic, corrosive or carcinogenic chemicals; or community health risks where chemicals are stored improperly or through accidental spillage.

Component 2 supports one recently created, and two proposed Marine Protected Areas (MPAs), which will positively impact biodiversity conservation, enhance ecosystem services, and support fish populations.

The creation and expansion of MPAs may restrict access to natural resources for communities and businesses, which may lead to economic pressure on local communities and to illegal activities, such as poaching and fishing. There could also be negative impacts on vulnerable groups through land appropriation for the expansion or creation of MPAs. Once the MPAs are created, conflict between law enforcement and communities could arise around the MPAs.

The project is proposed to work in three specific areas, and the potential risks of the expansions in terms of number of people displaced, number of people whose livelihoods may be affected, and estimated area of land to be expropriated is characterized as follows:

Azerbaijan, Absheron National Park. The boundaries for the expansion of the existing national park to include marine areas will be determined in year 1 of the project. It is not anticipated that people will need to be displaced, but there is a minor possibility of land acquisition. Livelihoods are unlikely to be affected negatively as recreational fishing is likely to continue to be allowed.

Kazakhstan, Caspian Itbalygy State Nature Reserve: The boundaries of the marine reserve, which includes the “Seal Island” site and the “Prorva” site, were established by the government in 2024. No communities live in the area that was declared, and no people are expected to be displaced. Livelihoods are unlikely to be affected negatively as fishing with permits will likely continue to be allowed. There could be changes needed to shipping routes. No land is expected to be expropriated.

Turkmenistan, Garabogaz Marine Protected Area . The boundaries of the protected area have been proposed and will be confirmed in year 1 of the project. There are no settlements, farms, or villages located within or adjacent to the proposed area. As a result, there is currently no significant local human impact on the area's ecosystems through agriculture, fishing, or other resource-based activities. No land is expected to be expropriated.

Further risks and impacts through the creation of MPAs in regard to biodiversity include (i) alterations of ecosystem through predatory-prey disruptions, (ii) invasive fish species may take advantage or protected spawning zones competing with sturgeon for habitat, (iii) increased populations of invasive marine species, and (iv) overfishing and harming of marine life in other areas. Other social risks include lack of stakeholder inclusion and access to Grievance Redress Mechanisms especially where activities under Component 2 inflict the expansion or new creation of PAs, affecting people's access to resources in the new PA areas. No enforcement agency will be funded by the Project, but the countries' will need to enforce the relevant restrictions through the MPAs.

These risks will be managed and mitigated based on the generic risk mitigation measures as listed in the generic **Environmental and Social Management Plan** (ESMP), included in this ESMF, as well as PA Management Plans and site-specific E&S instruments supplementing the PA Management Plans (e.g. Environmental and Social Management Plans (ESMP) or Resettlement Action Plans (RAP). A separate **Stakeholder Engagement Plan** (SEP) has been prepared for the Project, based on ESS10 on Stakeholder Engagement. The SEP can be found here: [provide disclosure link for the SEP]. A Resettlement Policy Framework (RPF) has been prepared for potential resettlement or access to resource issues, it can be found here: [provide disclosure link]. In addition, a Process Framework (PF) has been prepared to establish a process by which members of the affected communities participate in the design of project components, to determine the measures necessary to achieve the objectives of ESS5, and implement and monitor the relevant project activities [disclosure link].

During the Project preparation phase a variety of stakeholder engagements have been undertaken in Azerbaijan, Turkmenistan and Kazakhstan between May and August 2024 and March and April 2025. Stakeholders consulted included the relevant government agencies and members of civil society. During the consultations pollution monitoring and biodiversity planning around the Caspian Sea were discussed. Stakeholders broadly welcomed the project.

Training and capacity building will be provided for all Project workers and key stakeholders in order to ensure effective implementation of the ESMF, SEP, and the other E&S instruments. An initial training approach is outlined in this ESMF and includes the identification and assessment of E&S risks; selection and application of relevant E&S risk management measures/instruments; E&S monitoring and reporting; incident and accident reporting; application of LMP, and the application of the SEP and the GRM. To the extent possible, training on E&S risk management will be integrated into the project cycle and operational procedures.

The estimated costs for the implementation of this ESMF are USD 600,000.

The UNOPS Project Implementation Unit (PIU) will implement the Project. The UNOPS PIU will be responsible for coordination, implementation, and monitoring and evaluation (M&E) of the project, as well as procurement, FM, and ESF compliance, including approving and tracking the distribution of funds and environmental and social management and monitoring. The PIU will include an Environmental and Social Specialist that will mainly be responsible for the implementation of this SEP.

The UNOPS PIU will be responsible for coordinating with each national BCSP Focal Point assigned by the respective Government for the execution of national-level activities in Azerbaijan, Kazakhstan and Turkmenistan. The national agencies include the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan, Ministry of Ecology and Natural Resources of the Republic of Kazakhstan and the Ministry of Environment Protection of Turkmenistan.

1. Introduction

This Environmental and Social Management Framework (ESMF) is developed to support the environmental and social due diligence provisions for activities financed by the Global Environment Facility (GEF) and managed by the World Bank as part of the 'Blueing the Caspian Sea' Project. The project will support Azerbaijan, Kazakhstan, and Turkmenistan to enhance the monitoring of pollution and biodiversity management in the Caspian Sea, which will be complementing ongoing national efforts to meet the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention) obligations. The Global Environment Facility (GEF) through the World Bank plans to finance the United Nations Office for Project Services (UNOPS) to implement the Blueing the Caspian Sea: Building Capacities for Pollution Management and Biodiversity Conservation Project. UNEP will receive direct financing through the GEF to implement additional components of the Project.

This ESMF follows the World Bank Environmental and Social Framework (ESF) as well as the national laws and regulations of Azerbaijan, Kazakhstan and Turkmenistan. The objective of the ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements of the participating countries. A framework approach has been selected given that the exact Project locations are unknown at the time of Project preparation.

The ESMF aims to (a) assess the environmental and social risks and impacts of the proposed Project and propose mitigation measures; (b) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures for managing and monitoring environmental and social issues related to the activities; (d) identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF.

This ESMF should be read together with other plans prepared for the project, including the Stakeholder Engagement Plan (SEP), the Environmental and Social Commitment Plan (ESCP), the Resettlement Policy Framework (RPF), and the Process Framework (PF).

2. Project Description

2.1 Project Development Objective

The Project Development Objective (PDO) is to strengthen pollution monitoring and biodiversity planning in targeted sites within the Caspian Sea in Azerbaijan, Kazakhstan, and Turkmenistan and coordinate action on pollution control, biodiversity conservation, and climate change adaptation in the Caspian Sea region.

2.2 Project Components

Component 1: Strengthening Pollution Monitoring

Comparability. Given the multiple sources, kinds, and varying impacts of pollutants affecting the Caspian Sea, the project will focus on developing systematic approaches and comparable monitoring, assessment, and action across the three countries in several dimensions of critical impact of pollution on biodiversity, ecosystem health, and water quality. The generation of comparable parameters and formats for pollution monitoring will enable countries to establish the state of pollution at regional level.

Caspian Sea focus. Each country has documented and addressed pollution challenges in different ways over time, with discontinuous investment in capacity and data collection and sharing of information and analysis on the common resources. Activities will focus on common areas at the national level with maximum impact on the Caspian Sea ecosystem and waters including (a) monitoring pollution from freshwater inputs (watersheds and runoffs), (b) enhancing coastal and marine pollution monitoring within the MPAs and nature reserves, and (c) addressing pollution originating from oil and gas exploration and production.

Scale-Up. The project will provide technical assistance to establish national-level consultative and collaborative mechanisms for private and public sectors in the oil and gas industry with other sectors—notably regarding environment and marine resources—active in the Caspian Sea. The intent is to engage on the application of best practices to monitor and improve control of pollution and explore leveraging of companies’ compliance monitoring of oil and gas industry operations. During project implementation, each country will convene at one national roundtable, followed by participation in one regional roundtable.

Subcomponent 1.1: Multi-country technical assistance to strengthen pollution monitoring.

Multi-country activities. A set of activities benefiting the three countries simultaneously will develop national programs of action consistent with the impact accelerator approach. The assistance aims to improve policy harmonization, share knowledge, and make comparable data available. The project will provide a balance of technical assistance for policy, training, knowledge exchange, methods, and equipment. Multi-country activities also offer economies of scale such as for provision of guidebooks/approaches and training.

Marine pollution roundtables and prefeasibility studies. The roundtables will be the main multi-country activity as it will allow economies of scale in the technical assistance and provide an opportunity for cross-learning among the three countries (Azerbaijan, Kazakhstan, and Turkmenistan). Three linked activities will be undertaken by the project:

- a. Organise national pollution roundtable discussions to engage stakeholders (government, private sector, academia, civil society, and international experts) on opportunities for better pollution monitoring and identify needs for scale-up;
- b. Organise a multi-country (Azerbaijan, Kazakhstan, and Turkmenistan) roundtable to present findings of instruments and policy/regulations needed to capitalize on opportunities for pollution monitoring;
- c. Develop with each country one or more concrete prefeasibility studies of finance and policy instruments for pollution monitoring and reporting.

Anticipated activities to be implemented by the three governments (Azerbaijan, Kazakhstan and Turkmenistan):

- d. Provide feedback and input on the prefeasibility studies.
- e. Facilitate stakeholder participation in the national and multi-country roundtables.
- f. Consider finalization of prefeasibility studies and potential adoption after the project of related policy instruments.

Subcomponent 1.2: Pollution monitoring in Azerbaijan.

The Environment Policy Department of the MENR Azerbaijan will be the recipient of technical support in the following areas:

Development of a marine pollution monitoring scheme. Four linked activities will be undertaken by the project:

- a. Conduct a gap review of pollution monitoring practices and provide recommendations for a MENR coordinated scheme for Azerbaijan.
- b. Support MENR in developing a marine pollution monitoring scheme
- c. Organise a national validation workshop with stakeholders to review and endorse the scheme, including institutional arrangements.
- d. Provide technical assistance to MENR to draft the policy instruments needed to facilitate adoption and implementation of the scheme (e.g. policies/laws, institutional frameworks, coordination, execution, and reporting/monitoring).

Anticipated activities to be implemented by MENR:

- e. Review and provide feedback on the gap analysis and proposed monitoring scheme.
- f. Participate in and validate the scheme at the national workshop, including institutional arrangements.
- g. Adoption of a marine pollution monitoring scheme based on the draft policy instruments prepared under this sub-component.

Capacity building in the pollution monitoring scheme. Two linked activities will be undertaken by the project:

- a. Develop a MENR capacity building plan, training manuals, and tools for marine pollution monitoring, with particular focus on pollutants affecting marine protected areas (MPAs) and river estuaries.
- b. Support MENR to implement the capacity building plan by delivering targeted training programs for MENR staff and partners on the use of the monitoring system and other identified areas, and by supporting MENR in applying the acquired knowledge and integrating monitoring practices into institutional processes.

Anticipated activities to be implemented by MENR:

- c. Nominate staff and focal points to participate in training and knowledge transfer activities.
- d. Endorse and implement the MENR capacity-building plan within institutional structures.

Equipment for implementing the pollution monitoring scheme. Two linked activities will be undertaken by the project:

- a. Procure and hand over to MENR selected equipment to monitor and analyze key pollutants identified in the scheme, with emphasis on impacts on MPAs (seal rookeries) and river estuaries (fish spawning areas).

- b. Provide training on the operation and maintenance of equipment to MENR staff.

Anticipated activities to be implemented by MENR:

- c. Assign technical staff for operation and maintenance of procured equipment.
- d. Ensure provision of adequate resources (staff time, utilities, O&M budget) for equipment sustainability.

Awareness raising, education and outreach, incl. monitoring and reporting. Two linked activities will be undertaken by the project:

- a. Develop and implement awareness raising and outreach campaigns on marine pollution highlighting valuation of Absheron National Park MPA area in Baku metropolitan area and sturgeon regeneration in river estuaries with focus on urban audiences and ecotourism.
- b. Provide technical assistance to MENR for the preparation of the annual pollution monitoring report in collaboration with its partners, including SOCAR and AGSC.

Anticipated activities to be implemented by MENR:

- c. Support UNOPS's implementation of outreach campaigns to ensure wide dissemination
- d. Develop and disseminate the annual pollution monitoring report, in collaboration with partners (e.g., SOCAR, AGSC).

Subcomponent 1.3: Pollution monitoring in Kazakhstan.

The Kazakh Scientific and Research Institute of the Caspian Sea (KSRICS) of the MENR located in Aktau on the Caspian coast will be the recipient of support on pollution monitoring. A Presidential Decree created the institute on January 25, 2024, with a mission to coordinate national actions and regional engagement to address the multiple, diverse challenges to the Caspian Sea and its resources.

Development of a marine pollution monitoring scheme. Four linked activities will be undertaken by the project:

- a. Conduct a gap review of pollution monitoring practices and provide recommendations for a KSRICS (MENR) coordinated marine pollution monitoring scheme for Kazakhstan
- b. Support KSRICS in developing a marine pollution monitoring scheme.
- c. Organize a national validation workshop with stakeholders to review and endorse the scheme, including institutional arrangements.
- d. Provide technical assistance to KSRICS to draft the policy instruments needed to facilitate adoption and implementation of the scheme (e.g., policies/laws, institutional frameworks, coordination, execution, and reporting/monitoring).

Anticipated activities to be implemented by KSRICS:

- e. Review and provide feedback on the gap analysis and proposed monitoring scheme.
- f. Participate in and validate the scheme at the national workshop, including institutional arrangements.
- g. Adopt a marine pollution monitoring scheme based on the draft policy instruments prepared under this subcomponent.

Capacity building in pollution monitoring scheme. Two linked activities will be undertaken by the project:

- a. Develop a KSRICS capacity-building plan, training manuals, and tools for marine pollution monitoring, with particular focus on pollutants affecting marine protected areas (MPAs) and river estuaries.
- b. Support KSRICS to implement the capacity-building plan by delivering targeted training programs for KSRICS staff and partners on the use of the monitoring system and other identified areas, and by supporting KSRICS in applying the acquired knowledge and integrating monitoring practices into institutional processes.

Anticipated activities to be implemented by KSRICS:

- c. Nominate staff and focal points to participate in training and knowledge transfer activities.
- d. Endorse and implement the KSRICS capacity-building plan within institutional structures.

Equipment for pollution monitoring scheme. Two linked activities will be undertaken by the project:

- a. Specific equipment procured based on the key pollutants to collect and analyze as identified in the scheme affecting MPAs (with focus on seal birthing areas).
- b. Hand over equipment and provide training on its operation and maintenance to MENR staff

Anticipated activities to be implemented by KSRICS:

- c. Assign technical staff for installation, operation, and maintenance of procured equipment.
- d. Ensure provision of adequate resources (staff time, utilities, O&M budget) for equipment sustainability.

Awareness raising, education and outreach, including monitoring and reporting. Two linked activities will be undertaken by the project:

- a. Develop and implement awareness raising and outreach campaigns on marine pollution and biodiversity impacts for affected stakeholders including coastal communities and actors, polluting sources, decision makers.
- b. Provide technical support to KSRICS for the preparation of the annual pollution monitoring report, developed jointly with KazHydroMet (MENR) and KazMunayGaz.

Anticipated activities to be implemented by KSRICS:

- c. Support UNOPS's implementation of the outreach campaigns to ensure wide dissemination.
- d. Develop and disseminate the annual pollution monitoring report, in collaboration with partners.

Subcomponent 1.4: Pollution monitoring in Turkmenistan.

The CaspEcoControl of the MEP located in Turkmenbashi on the Caspian coast will be the recipient of support on pollution monitoring. The project will reinforce monitoring through targeted purchase of equipment vital to monitoring key pollutant inputs from rivers and runoff areas, with particular focus on biodiversity impacts and protected areas.

Marine pollution monitoring scheme. Four linked activities will be undertaken by the project:

- a. Conduct a gap review of pollution monitoring practices and provide recommendations for CaspEcoControl (MEP) coordinated marine pollution monitoring scheme for Kazakhstan
- b. Support CaspEcoControl (MEP) in developing a marine pollution monitoring scheme.
- c. Organize a national validation workshop with stakeholders to review and endorse the scheme, including institutional arrangements.

- d. Provide technical assistance to CaspEcoControl (MEP) to draft the policy instruments needed to facilitate adoption and implementation of the scheme (e.g., policies/laws, institutional frameworks, coordination, execution, and reporting/monitoring).

Anticipated activities to be implemented by CaspEcoControl of the MEP:

- e. Review and provide feedback on the gap analysis and proposed monitoring scheme.
- f. Participate in and validate the scheme at the national workshop, including institutional arrangements.
- g. Adopt a marine pollution monitoring scheme based on the policy instruments prepared under this subcomponent.

Capacity building in pollution monitoring scheme incl. key pollutants (i.e. hydrocarbon sources). Two linked activities will be undertaken by the project:

- a. Develop a CaspEcoControl capacity building plan, incl. training manuals, and tools to monitor key sedimentary, seawater and atmospheric pollutants focusing on MPA areas including river estuaries.
- b. Support CaspEcoControl to implement the capacity-building plan by delivering targeted training programs for CaspEcoControl staff and partners on the use of the monitoring system and other identified areas, and by supporting CaspEcoControl in applying the acquired knowledge and integrating monitoring practices into institutional processes.

Anticipated activities to be implemented by CaspEcoControl of the MEP:

- c. Nominate staff and focal points to participate in training and knowledge transfer activities.
- d. Endorse and implement the CaspEcoControl capacity-building plan within institutional structures.

Equipment for pollution monitoring scheme. Two linked activities will be undertaken by the project:

- a. Specific equipment procured and handed over to CaspEcoControl of the MEP based on the key pollutants to collect and analyze as identified in the scheme affecting MPAs (with focus on seal birthing areas).
- b. Provide training on the operation and maintenance of the equipment to CaspEcoControl staff

Anticipated activities to be implemented by CaspEcoControl of the MEP:

- c. Assign technical staff for installation, operation, and maintenance of procured equipment.
- d. Ensure provision of adequate resources (staff time, utilities, O&M budget) for equipment sustainability.

Awareness raising, education and outreach, including monitoring and reporting. Two linked activities will be undertaken by the project:

- a. Develop and implement awareness raising and outreach campaigns for identified pollution sources (i.e., oil and gas sectors), decision makers and the public nationally and specifically Turkmenbashi and the Caspian coast.
- b. Provide Technical Support to CaspEcoControl for the preparation of the annual monitoring report in association with the oil and gas industry and other partners.

Anticipated activities to be implemented by CaspEcoControl of the MEP:

- c. Support UNOPS's implementation of outreach campaigns to ensure wide dissemination

- d. Develop and disseminate the annual pollution monitoring report, in collaboration with partners.

Component 2: Strengthening Biodiversity Planning

A keystone species approach. The project will focus on visible and well-known keystone species, Caspian seal and sturgeons, as beacons for advocacy and rationale for protected areas management with the aim of bringing demonstrated successes to scale post-project. Each country has documented and addressed biodiversity challenges in different ways over time, with discontinuous investment and coordination in data collection and sharing of information and analysis on the common resources. For example, the population of Caspian seal today is a rough estimate, and without a functioning protocol for monitoring seals and keystone species, the population cannot be effectively managed at the national or regional level. The project will go beyond recommendation for monitoring to actual reporting on the status of seal populations in the three countries.

Phased approach to marine protected areas. The project will apply the phased approach to protected areas management (described in para 126 of the PAD) which includes “conceptualization” with biophysical and socioeconomic assessments to confirming protected areas boundaries, “establishment” with drafting and enacting required legislation and regulations, and “management” with training of personnel and provision of selected equipment.

Biodiversity finance for scale-up. To raise the ambition and scale of results beyond project life, the project will engage the government and partners on innovative financing instruments. Specifically, the project will explore the opportunity to leverage the World Bank’s bond issuance platform and seek non-government contributions. Innovative finance has been demonstrated successfully, for example with the Bank’s “Rhino Bond.”¹

Subcomponent 2.1: Multi-country technical assistance to strengthen biodiversity planning.

Multi-country activities. The focus will be on addressing biodiversity monitoring and planning consistent with the “Impact Accelerator” and the phased approach to protected areas mentioned above. The assistance will aim to understand the ecosystem in specific areas, analyze institutions and regulatory frameworks, inform protected areas management plans, and evaluation of and conservation measures for flagship species indicative of Caspian Sea viability, notably the Caspian seal and sturgeon populations.

Keystone species approach. The project will include activities that guide national implementation for biodiversity monitoring and planning. Two linked activities will be undertaken by the project:

- a. Carry out technical studies and develop a how-to guidebook on biodiversity monitoring building in part on existing guides and incorporating latest innovations.
- b. Organize learning events and exchanges among national experts from the three countries and with international scientists on comparability of biodiversity/specie information.

Anticipated activities to be implemented by the Project Focus Countries (Azerbaijan, Kazakhstan and Turkmenistan):

- c. Provide feedback and input on the guidebook.
- d. Facilitate stakeholder participation in learning events and exchanges.

¹

<https://thedocs.worldbank.org/en/doc/7039bd837e60e484fb3a93ea63951306-0340022022/original/CaseStudy-WildlifeConservationBond.pdf>

Phased approach to marine protected areas. One activity will be undertaken by the project:

- a. Develop a guidebook on the “phased approach to protected areas management,” including guidance on managing environmental and social issues, on the phased approach that will be put in practice with the proposed MPAs in each country.

Anticipated activity to be implemented by the Project Focus Countries (Azerbaijan, Kazakhstan and Turkmenistan):

- b. Provide feedback and input on the guidebook.

Biodiversity finance for scale-up. To sustain and scale up results beyond the project’s lifetime, the project will engage with the government through two interlinked activities to be implemented under the project:

- a. Organize a regional workshop presenting models of finance instruments that could be applied in the context of the biodiversity finance gap.
- b. Prepare pre-feasibility study of a government-selected finance instrument (one per country), assessing its applicability, operational requirements, and potential for long-term implementation.

Anticipated contributions from the three governments (Azerbaijan, Kazakhstan and Turkmenistan):

- c. Identify one innovative financing instrument to be further developed through a project-supported pre-feasibility study.

Subcomponent 2.2: Biodiversity planning in Azerbaijan.

The project will contribute to biodiversity monitoring and planning through an increase in and improvements to its MPAs system and evaluation of the status of flagship species. Through the Biological Diversity Protection Service in the MENR, the project will add a marine protected area to the existing Absheron National Park, which is located in central Azerbaijan adjacent to the Baku metropolitan area.

National biodiversity priority setting. One activity will be undertaken by the project:

- a. Stocktaking of lead species, with particular attention to status Caspian seals, fish and waterfowl in Absheron MPA.

Anticipated activity to be implemented by MENR:

- b. Provide data and technical input for stocktaking of lead species and baseline assessments, particularly on Caspian seals, fish, and waterfowl populations.

Technical assistance to enhance the protected areas management system with emphasis on expanding the Absheron National Park. Four linked activities will be undertaken by the project:

- a. Develop a technical study and recommendations for the overall protected areas system enhancement, including application of the GEF Management Effectiveness Tracking Tool (METT) approach.
- b. In view of the expansion of the Absheron NP, support the consultation process led by MENR for the proposed Absheron MPA with participation of government, research, tourism, oil companies, fish companies, and civil society on MPAs and use of GEF promoted METT approach for Absheron MPA.

- c. Provide technical assistance to MENR to strengthen the management framework for the expanded Absheron Marine Protected Area, including support in drafting the management plan, and preparing related policies, charters, and legal instruments required to formalize the updated status and governance structure of the MPA.
- d. Preparation of site-specific environmental and social instruments for Absheron MPA.

Anticipated activities to be implemented by MENR :

- e. Support access to protected sites and relevant documentation needed for technical studies and assessments.
- f. Organize and lead stakeholder consultations and validation workshops related to the Absheron MPA expansion and policy recommendations.

Capacity building for the Absheron National Park. Three linked activities will be undertaken by the project:

- a. Provide technical training for government, academia, NGOs and private sectors (including tourism) on issues related to MPA management with the Absheron NP pilot (incl. training plans, training/workshop and training on public communications, stakeholder consultations, and equipment).
- b. Procure selected equipment for Absheron National Park based on identified needs for the implementation of the METT approach, including support in defining technical specifications and providing training on the operation and maintenance of the procured equipment.
- c. Develop and implement awareness/outreach strategy on MPAs and biodiversity conservation highlighting Caspian seals and sturgeon regeneration. The target audience may include private sector (including the tourism industry) to promote understanding of marine conservation, the planned expansion of the Absheron National Park MPA, the ecological importance of islands for seals, and river estuaries for fish habitats, at both local and national levels.

Anticipated activities to be implemented by MENR:

- d. Engage national institutions, research institutes, and park authorities) in the preparation and review of the MPA management plan and environmental and social instruments.
- e. Coordinate across ministries and agencies to review and comment on draft policies, laws, and charters for the Absheron MPA's updated legal status and management framework.
- f. Nominate staff and specialists to participate in capacity-building activities, technical training, and workshops on MPA management, stakeholder engagement, and equipment operation.

Promote visibility and participation of the private sector in awareness and outreach initiatives implemented by UNOPS, including tourism, fisheries, and oil companies.

Subcomponent 2.3: Biodiversity planning in Kazakhstan.

The project will contribute to Kazakhstan biodiversity monitoring and planning through support to a recently created Caspian Itbalygy State Nature Reserve in the Mangistau Region that serves as an important habitat for the migratory Caspian seal.

National biodiversity priority setting. One linked activity will be undertaken by the project:

- a. Stocktaking of lead species with particular attention to status Caspian seal birthing areas in Mangistau marine area.

Anticipated activity to be implemented by KSRICS:

- b. Provide data and technical input for stocktaking of lead species and baseline assessments, particularly on Caspian seals, fish, and waterfowl populations.

Technical assistance to enhance the protected areas management system with emphasis on the Caspian Itbalygy State Nature Reserve. Four linked activities will be undertaken by the project:

- a. Organize Validation workshop with the KSRICS and Forestry and Wildlife Committee and other government, research, ecotourism actors and civil society on MPAs and use of GEF METT approach for the Caspian Itbalygy State Nature Reserve in the Mangistau Region.
- b. In view of the Caspian Itbalygy State Nature Reserve, support the consultation process led by MSRICS for the reserve with participation of government agencies, academia, tourism operators, oil companies, fish companies, and civil society on MPAs and use of GEF promoted METT approach for Caspian Itbalygy State Nature Reserve.
- c. Provide technical assistance to MENR to strengthen the management framework for the Caspian Itbalygy State Nature Reserve, including support in drafting the management plan, and preparing related policies, charters, and legal instruments required to formalize the updated status and governance structure of the MPA.
- d. Preparation of site-specific environmental and social instruments for Caspian Itbalygy State Nature Reserve.

Anticipated activities to be implemented by KSRICS:

- e. Support access to protected sites and relevant documentation needed for technical studies and assessments.
- f. Organize and lead stakeholder consultations and validation workshops related to the Caspian Itbalygy State Nature Reserve and policy recommendations.

Capacity building in managing the Caspian Itbalygy State Nature Reserve. Three linked activities will be undertaken by the project:

- a. Provide Technical assistance KSRICS and its partners to draft the MPA management system/plan, specifically for the recently created Caspian Itbalygy State Nature Reserve in the Mangistau Region.
- b. Procure selected equipment for Caspian Itbalygy State Nature Reserve based on identified needs for the implementation of the METT approach, including support in defining technical specifications and providing training on the operation and maintenance of the procured equipment.
- c. Develop and implement awareness/outreach strategy on MPAs and biodiversity conservation highlighting Caspian seals and sturgeon regeneration. Implement an awareness and outreach strategy targeting the private sector (including the tourism industry) to promote understanding of marine conservation, the ecological importance of islands for seals, and river estuaries for fish habitats, at both local and national levels.

Anticipated activities to be implemented by KSRICS:

- d. Provide technical data and expertise for stocktaking of lead species and assessments of Caspian seal birthing areas in the Mangistau marine region
- e. Engage national institutions, research institutes, and park authorities in the preparation and review of the MPA management plan and environmental and social instruments.
- f. Coordinate across ministries and agencies to review and comment on draft policies, laws, and charters for the Caspian Itbalygy State Nature Reserve legal status and management framework.

- g. Nominate staff and specialists to participate in capacity-building activities, technical training, and workshops on MPA management, stakeholder engagement, and equipment operation.
- h. Promote visibility and participation of the private sector in awareness and outreach initiatives implemented by UNOPS, including tourism, fisheries, and oil companies.

Subcomponent 2.4: Biodiversity planning in Turkmenistan.

The project will support the Government of Turkmenistan in strengthening biodiversity monitoring and planning through assistance to the creation of a new Garabogaz marine protected area, improvements to MPAs system and evaluation of the status of flagship species.

National biodiversity priority setting. One activity will be undertaken by the project:

- a. Stocktaking on lead species with particular attention to status Caspian seal, sturgeon and other faunal areas in the proposed Garabogaz marine protected area.

Anticipated activity to be implemented by MEP:

- b. Provide data and technical input for stocktaking of lead species and baseline assessments, particularly on Caspian seals, fish, and waterfowl populations.

Technical assistance to enhance the protected areas management system with the example of Garabogaz marine protected area. Four linked activities will be undertaken by the project:

- a. Carry out a technical study and recommendations for the overall protected areas system enhancement, including application of the GEF Management Effectiveness Tracking Tool (METT) approach in the Garabogaz marine protected area.
- b. In view of the creation of the Garabogaz marine protected area, support the consultation process led by MEP for the proposed Garabogaz marine protected area with participation of government, research, tourism, oil companies, fish companies, and civil society on MPAs and use of GEF promoted METT approach for Garabogaz marine protected area.
- c. Provide technical assistance to MENR to strengthen the management framework for the Garabogaz marine protected area, including support in drafting the management plan, and preparing related policies, charters, and legal instruments required to formalize the updated status and governance structure of the MPA.
- d. Preparation of site-specific environmental and social instruments for Garabogaz marine protected area.

Anticipated activities to be implemented by MEP:

- e. Support access to protected sites and relevant documentation needed for technical studies and assessments.
- f. Organize and lead stakeholder consultations and validation workshops related to the Garabogaz marine protected area and policy recommendations.

Capacity building for the Garabogaz marine protected area. Three linked activities will be undertaken by the project:

- a. Provide technical training for government, academia, NGOs and private sectors (including tourism) on issues related to MPA management with the Garabogaz marine protected area (incl. training plans, training/workshop and training on public communications, stakeholder consultations, and equipment).

- b. Procure selected equipment for Garabogaz marine protected area based on identified needs for the implementation of the METT approach, including support in defining technical specifications and providing training on the operation and maintenance of the procured equipment.
- c. Develop and implement awareness/outreach strategy on MPAs and biodiversity conservation highlighting Caspian seals and sturgeon regeneration. The target audience may include the private sector (including the tourism industry) to promote understanding of marine conservation, the planned Garabogaz marine protected area, the ecological importance of islands for seals, and river estuaries for fish habitats, at both local and national levels.

Anticipated activities to be implemented by MEP:

- d. Engage national institutions, research institutes, and park authorities in the preparation and review of the MPA management plan and environmental and social instruments.
- e. Coordinate across ministries and agencies to review and comment on draft policies, laws, and charters for the Garabogaz marine protected area updated legal status and management framework.
- f. Nominate staff and specialists to participate in capacity-building activities, technical training, and workshops on MPA management, stakeholder engagement, and equipment operation.
- g. Promote visibility and participation in awareness and outreach initiatives implemented by UNOPS of the private sector, including tourism, fisheries, and oil companies.

Component 3: Project Coordination, Monitoring and Evaluation

This component will ensure overall coordination of the technical implementation of the project activities. Coordination functions include project activity planning, procurement of technical assistance, M&E of project results, production of progress reports, management of ESF compliance including the establishment of the GRM. The PIU will be housed at UNOPS offices in Vienna, Austria, and will comprise professional, administrative, and support staff.

Specifically, the PIU will:

- a. Oversee the preparation of annual implementation/operating plans.
- b. Procure expertise and equipment per identified needs and workplan.
- c. Organization of the biannual project steering committee meetings.
- d. Prepare progress and other reports, as required by the GEF and the World Bank.
- e. Prepare required ESF instruments, and establishment and manage the Grievance Redress Mechanism (GRM).
- f. Identify and engage additional expertise needed to deliver agreed activities Identify additional expertise needed to support the acts required by the government.

2.3 Project Geographical Location

The Project will be implemented in Azerbaijan, Kazakhstan and Turkmenistan at the respective national levels as well as in selected project locations in the three countries.



Figure 1 Map of the Caspian Sea with Kazakhstan, Azerbaijan and Turkmenistan

2.4 Project Beneficiaries

The primary target group is the three Caspian Sea riparian countries — Azerbaijan, Kazakhstan, and Turkmenistan— which will benefit from the Project through direct GEF support for the implementation of the project activities that will help them meet the obligations under the Tehran Convention and its protocols. In addition, relevant ministries from the three Project Focus Countries identified as key stakeholders in each country will benefit from capacity building in biodiversity and pollution management under this project.

2.5 Institutional Arrangements

Regional Steering Committee (RSC). The project is proposed to have an RSC that would approve the annual work program and budget, identify links to relevant sectoral policies and programs in the region, and assist in resolution of any implementation issues. The RSC will be co-chaired on a rotating basis by one senior representative of the three countries designated by their respective focal point ministry and

one representative of UNOPS. Members will include representatives of national institutions related to the themes of the project (biodiversity and pollution) and a civil society representative from each country. The World Bank, UNEP and UNDP will be invited as observers. The RSC will be set up during the first six months of implementation of the project and will meet at least once a year. A detailed terms of reference for the RSC will be developed ahead of the first RSC meeting as part of the Project Operations Manual (POM).

An Ad hoc Technical Advisory Committee (TAC) will be established by UNOPS to advise on specific technical issues and guidance on coordinating technical matters with other ongoing activities. Members of the TAC would include representatives of academia, technical agencies, private sector, civil society organizations, and fisheries committee(s), including existing committees that are part of the Tehran Convention. It is envisioned that the TAC will convene at least once a year or at the frequency needed for technical questions that may arise.

The project will have a PIU housed at UNOPS in Austria. In each of the three countries, a national BCSP Focal Point will be designated by the government to ensure engagement of relevant national institutions and a designated national BCSP Liaison Person for communications and monitoring the project calendar. The UNOPS BCSP PIU will be responsible for the overall coordination of the project and will, among others, (a) oversee the preparation of annual work plans and (b) prepare progress and other reports, as required by the GEF through the World Bank, M&E, as well as E&S risk mitigation. The UNEP Project Implementation Unit is housed at the Tehran Convention Interim Secretariat (TCIS). The UNOPS BSCP PIU will coordinate with the UNEP PIU on a regular basis to provide updates and ensure cohesiveness of the two projects.

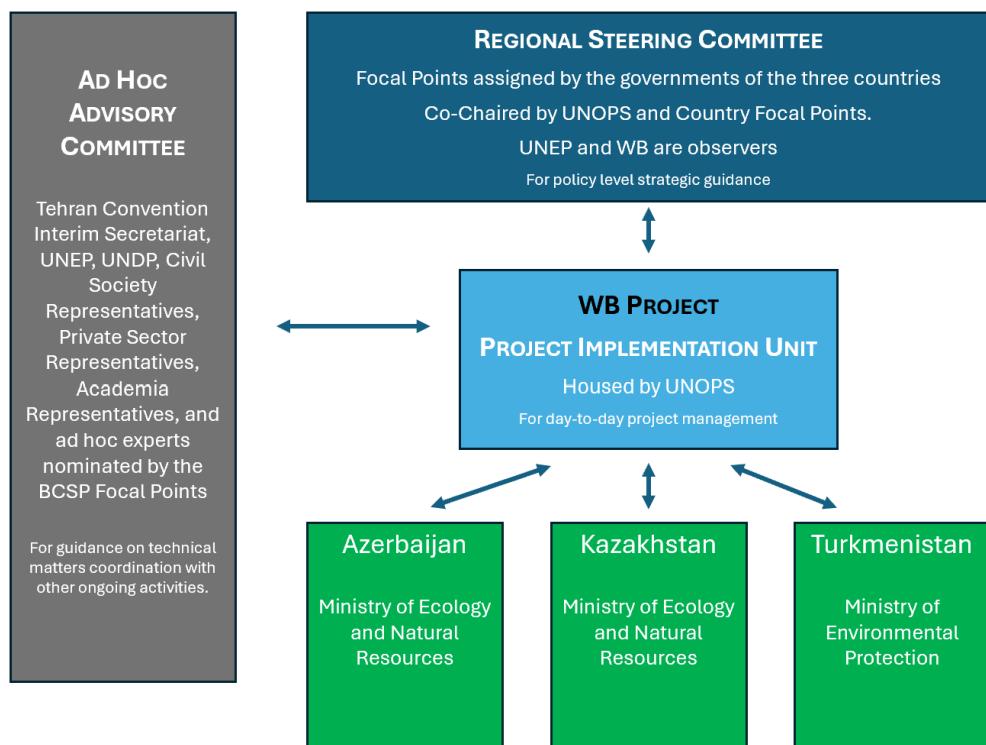


Figure 2 Organizational Chart

2.6 Objectives of the ESMF

The main objective of the ESMF is to help assess, manage and monitor E&S risks and impacts of the Project given that the full nature, scope and geographical locations are not exactly known at the time of preparing the ESMF. The ESMF establishes the screening processes and tools as well as exclusion criteria for specific sub-projects - to be directly implemented by the PIU in assessing the risks and impacts of the sub-projects or activity. This will facilitate the recommendation of appropriate mitigation and monitoring measures for each sub-project.

The ESMF describes the policy and legal framework in which the E&S Standards are embedded, including national legislation and policies as well as international commitments of the 3 countries, the World Bank Environmental and Social Framework (ESF) and supporting instruments. It further lays out an environmental and socio-economic baseline; assesses the E&S risks and tables E&S risks mitigation measures and monitoring modules in the format of a generic Environmental and Social Management Plan (ESMP). The document then explains the processes and institutional and implementation arrangements for the Project and for the ESMF. It also lists stakeholder engagement activities that have been undertaken, Project Grievance Redress Mechanisms (GRM) to be implemented and explains anticipated trainings and capacity development initiatives for E&S compliance. Additional E&S instruments have been prepared, including Labor Management Procedures (LMP), a Resettlement Policy Framework (RPF), a Stakeholder Engagement Plan (SEP) and a Process Framework.

2.7 Approach and Methodology

The methodology used to develop this ESMF was based on a review of the relevant literature and Project documentation, stakeholder consultations, as well as a preliminary E&S risk assessment of project activities. The results of this assessment are presented in this ESMF.

Relevant literature that was reviewed in order to understand the context in which the ESMF is applied. The review included the following documents:

- Azerbaijan, Turkmenistan and Kazakhstan relevant legislation, policies, laws, procedures, regulatory and administrative frameworks to determine the relevant legal requirements for the project;
- ESS of the WB in order to determine their applicability to the project;
- Existing documents related to the project, such as the Environmental and Social Commitment Plan - ESCP, Stakeholder Engagement Plan - SEP, the Project Appraisal Document (PAD);
- Documents and literature on environmental and social aspects of the project areas;
- Information on sensitive habitats and species.
- Good Practice Notes: World Bank Interim Guidance Note on Managing the Risks of Projects Involving Protected Areas, January 2025; Bank Guidance on Bank Financing of Fisheries Enforcement Activities: International Law Aspects.

Initial consultations were held in all three Project countries between May and August 2024 with a variety of governmental and civil society actors. Additional consultations were held in the countries in March and April 2025 (see Section on Stakeholder Engagements below).

3. Environmental and Social Policies, Regulations, and Laws

This ESMF is prepared in accordance with:

- the requirements of the World Bank's Environmental and Social Standards (ESS) and the International Financial Corporation (IFC) Environment, Health and Safety Guidelines (ESHG), and other guidelines and guidance;
- the respective national environmental and social laws and regulations of the participating countries.

Below sections details the World Bank and national requirements and their applicability to the project.

3.1 Legal Framework Azerbaijan

Table 1 Relevant Legal Framework Azerbaijan

Topic	Law	Description and Relevance to Project Activities
Environmental Protection	Law on Environmental Protection (1999)	This law establishes the legal basis for environmental protection in Azerbaijan, mandating pollution control, environmental monitoring, and sustainable use of natural resources. It's relevant to project activities related to pollution monitoring, identifying pollution hotspots, and implementing cleanup methodologies.
	Law on Environmental Safety (1999)	This law ensures environmental safety by regulating activities that may pose risks to the environment, with its provisions on pollution control and monitoring guiding the project's pollution management efforts.
	Water Code of Azerbaijan (1997)	Governs use and protection of water resources, and is relevant to the establishment of pollution monitoring stations and the development of national action plans for pollution management.
	Law on Environmental Impact Assessment (2018)	Requires environmental impact assessments for projects that may have adverse effects on the environment, and is applicable to the expansion of monitoring stations and other infrastructure development under the project.

Biodiversity	Law on Fauna (1999)	Governs protection and sustainable use of animal species and habitats, and is relevant to biodiversity activities, including expanding protected areas and developing management plans for the Absheron National Park.
	Law on Specially Protected Natural Areas and Objects (2000)	Provides the legal framework for the creation, management, and protection of natural parks and reserves, and will guide the planned expansion and improved management of the Absheron National Park.
	Law on Plant Protection (1996)	Focuses on protection of plant species, especially those under conservation status, and is especially relevant to the project's biodiversity conservation components.
Occupational Health and Safety	Law on Occupational Safety and Health (1999)	Establishes the framework for ensuring safe working conditions in Azerbaijan, and is relevant to the health and safety of staff and contractors involved in pollution monitoring and biodiversity management activities.
	Labor Code of the Republic of Azerbaijan (1999)	Provides occupational safety and health requirements for workplaces, and is relevant to the training of project staff and contractors on workplace safety.
Labor Laws	Labor Code of the Republic of Azerbaijan (1999)	Defines the rights and obligations of employers and employees, including conditions of work, wages, and social protection. This law is crucial for ensuring fair labor practices during project implementation.
	Law on Trade Unions (1994)	Provides for formation and operation of trade unions to protect workers' rights, and will be relevant for ensuring collective bargaining and protection of workers' rights in project activities.
Anti-discrimination Law	Law on Gender Equality (2006)	Promotes gender equality and prohibits discrimination based on gender, and is relevant to facilitate equal participation and opportunities in project activities, including capacity-building and employment.
	Law on Ensuring Rights and Freedoms of Persons with Disabilities (2018)	Protects the rights of persons with disabilities and ensures their inclusion in social and economic activities. This law is relevant to ensuring accessibility and non-discrimination in project activities and public consultations.
Land Laws	Land Code of the Republic of Azerbaijan (1999)	Regulates land relations, land ownership, use and protection. It established the legal framework for land distribution, management and state control.
	Law No. 155-IQ on Land Reform (1996)	Regulates land reforms. It defines the principles of land ownership, redistribution, and privatization,

		transitioning from Soviet-era collective farming to market-based land ownership systems.
	Law of the Azerbaijan Republic of April 20, 2010, No. 987 IIIQ, "About Withdrawal of Lands for the State Needs (as amended on 17-02-2023)"	Regulates the expropriation of land for public purposes. The law outlines the procedures for land acquisition, compensation mechanisms, and the rights and obligations of involved parties.

3.2 Legal Framework Kazakhstan

Table 2 Relevant Legal Framework Kazakhstan

Topic	Law Name	Description and Relevance to Project Activities
Environmental Protection	Environmental Code of the Republic of Kazakhstan (2021)	This code is the primary environmental law regulating pollution control, environmental monitoring, and natural resource management, and is directly relevant to pollution monitoring activities under Component 1 of the project.
	Law on Atmospheric Air Protection (2002)	Regulates reduction of emissions from industrial and marine sources, and is relevant for setting air pollution monitoring standards and practices under the project.
	Water Code of the Republic of Kazakhstan (2003)	Governs protection and use of water resources, and is critical for pollution control measures in the Caspian Sea and for development of water quality classification systems.
	Law on Environmental Impact Assessment (1997)	Mandates environmental assessments for projects impacting natural resources, and is relevant for assessing environmental risks in pollution control and biodiversity conservation activities.
Biodiversity	Law on Specially Protected Natural Areas (2006)	Regulates designation and management of protected areas, inclusive of marine reserves and national parks, and is crucial for biodiversity management under Component 2.
	Law on Protection, Reproduction, and Use of Wildlife (2004)	Protects flora and fauna species, and is relevant for conserving the Caspian Sea and other species through expansion of protected marine areas.
	Law on Flora and Fauna Protection (2004)	Focuses on sustainable use and conservation of Kazakhstan's biodiversity, and supports species monitoring and conservation activities under the biodiversity management component.

Topic	Law Name	Description and Relevance to Project Activities
Occupational Health & Safety	Labor Code of the Republic of Kazakhstan (2015)	Covers labor conditions, working hours, and occupational health and safety standards, and is relevant for ensuring safe working environments for project staff handling pollutants or monitoring.
	Law on Occupational Safety and Health (2004)	Establishes workplace safety measures and employer responsibilities, and is vital for mitigating health and safety risks in pollution monitoring and biodiversity research environments.
Labor Laws	Law on Employment (2016)	Regulates employment rights and ensures fair treatment of all workers, paramount to the hiring and management of project personnel and contractors.
Anti-discrimination	Law on Gender Equality (2009) Law on Prevention of Discrimination (2014)	Promotes gender equality and prohibits discrimination in employment and project implementation, ensuring equity in terms of participation of men and women in project activities. Prohibits discrimination based on ethnicity, social status, or other factors, facilitating inclusive participation in the project and equitable access to project benefits.
Land Laws	Land Code of June 20, 2003 No. 442-II - as amended on 22-11-2024	Regulates land relations. It establishes the principles of land ownership, land use, and land protection, ensuring the efficient and sustainable management of land resources.
	Law of March 1, 2011 No. 413-IV ZRK, "About State-Owned Property" (as amended on 10-01-2025)	Establishes the legal framework for managing state-owned property. The law delineates the legal regime of state property, the foundations for its management, and the procedures for acquiring and terminating state property rights.
	Order of the Government of the Republic of Kazakhstan of October 23, 2012 No. 1337, "About the Beginning of Compulsory Acquisition of the Parcels of Land for the State Needs and Some Questions of Provision of the Parcels of Land for Needs of Defense"	This order authorized the compulsory acquisition of specific agricultural land parcels in the Jambyl region to enhance the protection and security of the nation's borders.

3.3 Legal Framework Turkmenistan

Table 3 Relevant Legal Framework Turkmenistan

Topic	Law Name	Description and Relevance to Project Activities
Environmental Protection	Law on Environmental Protection (2014)	This law is the cornerstone of environmental management in Turkmenistan, setting regulations for pollution control, environmental monitoring, and preservation of natural ecosystems, and is relevant for the pollution monitoring activities and environmental control measures under Component 1.
	Law on Air Protection (2016)	Establishes measures to control emissions from industrial and other sources, and is vital for the project's air pollution monitoring and control under the pollution management component.
	Water Code (2004)	Regulates use and protection of water resources, and is key for monitoring water quality in the Caspian Sea and addressing point-source pollution as part of the pollution management activities.
	Law on Environmental Impact Assessment (EIA) (2015)	Requires environmental assessments for any development activities impacting natural resources, and is relevant for assessing risks and impacts of pollution and biodiversity conservation.
Biodiversity	Law on Specially Protected Natural Areas (2013)	Governs establishment and management of protected areas, essential for the proposed expansion of the Khazar Nature Reserve and designation of new protected areas under Component 2. For the first time, the law formalizes elements of the ecological network, including: land plots for health and recreational purposes; buffer zones of protected areas; ecological corridors; forest fund lands and hunting grounds. These areas are granted an environmental-legal status, which promotes the resilience of natural and cultural landscapes and enables comprehensive environmental monitoring
	Law on Flora and Fauna Protection (2012)	Focuses on conservation and sustainable use of biodiversity resources, inclusive of endangered species, and supports biodiversity management, especially for Caspian seals and sturgeon species.
	Law on Wildlife (2011)	Protects habitats and species of wildlife in Turkmenistan, and is relevant for managing biodiversity conservation actions and scientific research at Garabogaz.
	Law of Turkmenistan "On Nature Protection" (1991, amended in 2014)	Establishes the legal, economic, and organizational foundations for environmental protection. The main objectives are:

Topic	Law Name	Description and Relevance to Project Activities
		ensuring environmental safety; preventing harmful impacts of economic and other activities on ecosystems; conserving biological diversity; rational use of natural resources.
	Water Code of Turkmenistan (new edition, 2016)	Establishes the legal regime of water bodies, including water protection zones and aquatic ecosystems.
	Forest Code of Turkmenistan (1993)	Covers issues related to sustainable forest management, protection of forest ecosystems, their restoration, and conservation.
Occupational Health & Safety	Labor Code of Turkmenistan (2009)	Outlines labor standards, including working hours, employment conditions, and occupational safety, and is crucial for facilitating a safe working environment for staff conducting environmental monitoring activities.
	Law on Occupational Safety and Health (2013)	Sets safety measures for workers and employer obligations, and is important for safeguarding project staff handling pollutants and conducting field research under the biodiversity component.
Labor Laws	Law on Employment (2016)	Regulates employment rights and conditions for workers, ensuring fair treatment and inclusion of project personnel and contractors in accordance with national labor laws.
Anti-discrimination	Law on Gender Equality (2015)	Promotes gender equality and prohibits discrimination in all sectors, including project implementation. It ensures equal participation of men and women in all project activities.
	Law on Prevention of Discrimination (2014)	Prohibits discrimination based on ethnicity, social status, or other factors, and provides for inclusive participation in project benefits and fair treatment for all stakeholders.
Land Laws	Land Code (2004)	Established the legal, organizational and economic foundations for land management. Its primary objectives include promoting the rational use and protection of land, preserving and enhancing the environment, and regulating land relations to support various forms of economic activity.
	Law No. 306-V "On Property" (2015)	Defines the various forms of property ownership and establishes the legal and economic foundations governing property relations within the country.

3.4 International Conventions

The "Blueing the Caspian Sea" project operates within the framework of several international environmental and social conventions ratified by Azerbaijan, Kazakhstan, and Turkmenistan, critical for the project's implementation as pertains to setting guidelines for pollution management, biodiversity conservation, marine protection, and sustainable development.

Below is a comprehensive list of relevant conventions, categorized per country.

Table 4 International Environmental and Social Conventions Ratified by Azerbaijan, Kazakhstan and Turkmenistan

Convention	Azerbaijan	Kazakhstan	Turkmenistan	Description and Relevance
Tehran Convention on the Caspian Sea (2003)	Ratified	Ratified	Ratified	The primary regional legal framework for environmental protection of the Caspian Sea, governing pollution control and biodiversity conservation.
Convention on Biological Diversity (CBD) (1992)	Ratified	Ratified	Ratified	Global treaty for biodiversity conservation, supporting the development of biodiversity management plans and protected areas.
Ramsar Convention on Wetlands (1971)	Ratified	Ratified	Ratified	Promotes conservation and sustainable use of wetlands, crucial for Caspian biodiversity and habitat protection.
United Nations Framework Convention on Climate Change (UNFCCC) (1992)	Ratified	Ratified	Ratified	Framework for global climate change mitigation efforts, relevant for managing sea-level changes in the Caspian Sea.
Kyoto Protocol (1997)	Ratified	Ratified	Ratified	International agreement linked to the UNFCCC, focused on greenhouse gas emission reduction.

Convention	Azerbaijan	Kazakhstan	Turkmenistan	Description and Relevance
Paris Agreement (2015)	Ratified	Ratified	Ratified	Strengthens global efforts to combat climate change and adapt to its effects, critical for managing climate-related marine issues.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973)	Ratified	Ratified	Ratified	Protects endangered species by regulating trade, relevant for Caspian sturgeon and seal species conservation.
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention, 1972)	Ratified	Ratified	Ratified	Prevents marine pollution from dumping activities, critical for Caspian Sea pollution control.
United Nations Convention on the Law of the Sea (UNCLOS, 1982)	Ratified	Ratified	Ratified	Defines the rights and responsibilities of nations in marine environments, including pollution control and marine biodiversity.
Aarhus Convention (1998)	Ratified	Ratified	Ratified	Ensures public access to environmental information, public participation in decision-making, and access to justice.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)	Ratified	Ratified	Ratified	Regulates transboundary movement of hazardous waste, relevant for pollution management activities in the project.
Stockholm Convention on Persistent Organic Pollutants (2001)	Ratified	Ratified	Ratified	Addresses elimination and reduction of persistent organic pollutants, critical for Caspian Sea pollution management.

Convention	Azerbaijan	Kazakhstan	Turkmenistan	Description and Relevance
Convention on Migratory Species (CMS) (1979)	Ratified	Ratified	Ratified	Protects migratory species like Caspian seals and sturgeon, essential for biodiversity conservation.
Espoo Convention (1991)	Ratified	Ratified	Ratified	Requires EIAs for transboundary projects, promoting cooperation on shared environmental issues.
ILO Convention No. 87 on Freedom of Association and Protection of the Right to Organise (1948)	Ratified	Ratified	Not Ratified	Ensures workers' rights to form and join trade unions.
ILO Convention No. 98 on the Right to Organise and Collective Bargaining (1949)	Ratified	Ratified	Not Ratified	Protects workers from anti-union discrimination and ensures collective bargaining rights.
ILO Convention No. 100 on Equal Remuneration (1951)	Ratified	Ratified	Ratified	Ensures equal pay for work of equal value between men and women.
ILO Convention No. 111 on Discrimination (Employment and Occupation) (1958)	Ratified	Ratified	Ratified	Prohibits discrimination in employment based on race, gender, religion, and political beliefs.
ILO Convention No. 138 on Minimum Age (1973)	Ratified	Ratified	Not Ratified	Establishes the minimum age for employment to prevent child labor.
ILO Convention No. 182 on Worst Forms of Child Labour (1999)	Ratified	Ratified	Ratified	Requires elimination of slavery, trafficking, and child labor exploitation.
United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW, 1979)	Ratified	Ratified	Ratified	Comprehensive treaty for gender equality, ensuring women's rights in all sectors.
Beijing Declaration and Platform for Action (1995)	Adopted	Adopted	Adopted	Global framework for gender equality and women's empowerment.

Convention	Azerbaijan	Kazakhstan	Turkmenistan	Description and Relevance
United Nations Convention on the Rights of the Child (CRC, 1989)	Ratified	Ratified	Ratified	Ensures children's rights to health, education, and protection.
United Nations Convention on the Rights of Persons with Disabilities (CRPD, 2006)	Ratified	Ratified	Ratified	Protects rights and dignity of persons with disabilities.

3.6 World Bank Environmental and Social Standards and Key Gaps with the National Framework

The Project will follow the World Bank Environmental and Social Standards (ESSs), as well as the World Bank Group Environmental, Health and Safety Guidelines and the Interim Guidance Note on Managing the Risks of Projects Involving Protected Areas (January 2025).

The overall environmental and social risk of the project is categorized as substantial. The World Bank's ESSs applicable to project activities are summarized below.

The table below outlines the applicable World Bank ESSs relevant to project activities.

Table 5 Relevant World Bank ESS and Key Project Relevance

E&S Standard	Relevance to Project
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	ESS1 is relevant because the project activities may pose substantial environmental and social risks. The creation and expansion of MPAs may restrict access to natural resources for communities and businesses, potentially creating economic pressure on local communities and leading to illegal activities such as poaching and fishing. There could also be negative impacts on vulnerable groups of land appropriation and conflict between law enforcement and communities around the MPAs.
ESS2: Labor and Working Conditions	Relevant due to potential labor risks for Project workers, including (i) occupational health and safety, (ii) traffic and road safety issues, (iii) worker grievances, and (iv) fair employment terms.
ESS3: Resource Efficiency and Pollution Prevention and Management	Focus is on minimizing pollution and managing hazardous waste and emissions.
ESS4: Community Health and Safety	Relevant due to minimum civil works in proximity to the habitation near coastal areas.

ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Relevant as the project activities may require land acquisition and/or involuntary resettlement and may limit access to resources of communities adjacent to the MPAs.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant due to potential biodiversity impacts on marine and wetland ecosystems in the Caspian Sea.
ESS10: Stakeholder Engagement and Information Disclosure	ESS10 is relevant because stakeholders need to be consulted throughout the project preparation and implementation phases and also duly informed through disclosure of project related information.

Table 6 Gap Analysis between ESS and National Laws

ESS	Country	National Laws	Gaps	Proposed Actions
ESS1	Azerbaijan	<ul style="list-style-type: none"> Environmental Protection Law of 1999, No. 678-IQ; Law of the Azerbaijan Republic of June 8, 1999, No. 678-IQ, "About Environmental Protection (As amended on 08-10-2024); Law No. 1175-IVQ, "On Environmental Impact Assessment (2023) 	<ul style="list-style-type: none"> Limited cumulative impact assessments; weaker categorization for environmental risks 	<ul style="list-style-type: none"> Introduce risk categorization aligned with World Bank guidelines.
	Kazakhstan	<ul style="list-style-type: none"> Environmental Code of the Republic of Kazakhstan, No. 400-VI (as amended, 2021); 	<ul style="list-style-type: none"> Weak environmental and social risk categorization and monitoring 	<ul style="list-style-type: none"> Introduce enhanced risk categorization and monitoring aligned with World Bank standards.
	Turkmenistan	<ul style="list-style-type: none"> Law "on Environmental Protection" (2014); Law of Turkmenistan of August 16, 2014 No. 108-V, "About Environmental Assessment" (as amended on 25-11-2023) 	<ul style="list-style-type: none"> Limited risk screening and categorization 	<ul style="list-style-type: none"> Adopt ESF risk categories; Strengthen risk screening measures.
	Azerbaijan	<ul style="list-style-type: none"> Labor Code of the Azerbaijan Republic (Adopted by the Law of Azerbaijan Republic of February 01, 1999, N 618-IG) (1999); Law of the Azerbaijan Republic of November 2, 1999, No. 733-IQ, "About Technical Safety" (as amended on 08-07-2022) 	<ul style="list-style-type: none"> Limited grievance mechanisms; Limited occupational health provisions 	<ul style="list-style-type: none"> Develop grievance redress mechanism (GRM) for workers; Strengthen occupational health protocols.

ESS	Country	National Laws	Gaps	Proposed Actions
ESS2	Kazakhstan	<ul style="list-style-type: none"> Labor Code of the Republic of Kazakhstan (dated 23 November, 2015, No. 414-V); Law No. 528 of 28 February 2004 on Occupational Safety and Health 	<ul style="list-style-type: none"> Weak occupational health structures; Weak worker grievance mechanisms 	<ul style="list-style-type: none"> Create strong workers' GRM; Lay out OHS measures as per IFC ESHG in the ESMF.
	Turkmenistan	<ul style="list-style-type: none"> Labor Code of Turkmenistan of April 18, 2009, No. 30-IV (as amended on 30-11-2024); Law of Turkmenistan of December 14, 2002, No. 157-II, "About Protection of Public Health" (as amended of the Law of Turkmenistan of 29.08.2013) 	<ul style="list-style-type: none"> Weak grievance mechanisms; Weak occupational safety enforcement 	<ul style="list-style-type: none"> Implement workers' GRM; Lay out OHS measures as per IFC ESHG in the ESMF.
	Azerbaijan	<ul style="list-style-type: none"> Environmental Protection Law of 1999, No. 678-IQ; Law of the Azerbaijan Republic on June 30, 1998, No. 514-IQ, "About Waste" (as amended on 05-03-2024) 	<ul style="list-style-type: none"> Limited focus on pollution prevention; Limited hazardous waste management 	<ul style="list-style-type: none"> Include relevant ESS3 measures in the ESMF
	Kazakhstan	<ul style="list-style-type: none"> Environmental Code of the Republic of Kazakhstan (2007); Law of the Republic of Kazakhstan On Amendments and Addenda to the Law of the Republic of Kazakhstan "On Environment Protection"on Industrial and Consumption Waste (1997) 	<ul style="list-style-type: none"> Limited focus on energy efficiency; Limited focus on emissions control 	<ul style="list-style-type: none"> Include relevant ESS3 measures in the ESMF

ESS	Country	National Laws	Gaps	Proposed Actions
	Turkmenistan	<ul style="list-style-type: none"> · Law of Turkmenistan on the Conservation of Nature (2014); · Law of Turkmenistan of May 23, 2015, No. 225-V, "About Waste" (as amended on 08-06-2019) 	<ul style="list-style-type: none"> · Limited waste management; · Limited pollution control measures 	Include relevant ESS3 measures in the ESMF
ESS4 :	Azerbaijan	<ul style="list-style-type: none"> · <u>Law of the Republic of Azerbaijan on Civil Defence (1997)</u> · - Law of the Republic of Azerbaijan on Police (1999) 	<ul style="list-style-type: none"> · Gaps in disaster preparedness; · Gaps in community safety risk mitigation 	<ul style="list-style-type: none"> · Include relevant ESS4 measures in the ESMF
	Kazakhstan	<ul style="list-style-type: none"> · On Health and Healthcare", Code of the Republic of Kazakhstan No. 360-VI (2020) 	<ul style="list-style-type: none"> · Insufficient disaster preparedness; · Inadequate accident response mechanisms 	<ul style="list-style-type: none"> · Include relevant ESS4 measures in the ESMF
	Turkmenistan	<ul style="list-style-type: none"> · <u>Law of Turkmenistan on Public Associations (2003)</u> · International Disaster Response Law (2020) 	<ul style="list-style-type: none"> · Gaps in community safety plans and disaster preparedness 	<ul style="list-style-type: none"> · Include relevant ESS4 measures in the ESMF
ESS5 :	Azerbaijan	<ul style="list-style-type: none"> · <u>Land Code of the Republic of Azerbaijan (1999)</u> · Law No. 155-IQ on Land Reform (1996) · Law of the Azerbaijan Republic of April 20, 2010, No. 987 IIIQ, "About Withdrawal of Lands for the State Needs (as amended on 17-02-2023)" 	<ul style="list-style-type: none"> · Weak protection of informal land users · Limited compensation for non-titleholders 	<ul style="list-style-type: none"> · Adopt ESS5 as part of a Project Resettlement Policy Framework (RPF)

ESS	Country	National Laws	Gaps	Proposed Actions
			<ul style="list-style-type: none"> Weak livelihood restoration measures. 	
	Kazakhstan	<ul style="list-style-type: none"> Land Code of the Republic of Kazakhstan (of June 20, 2003 No. 442-II - as amended on 22-11-2024) Law of the Republic of Kazakhstan of March 1, 2011 No. 413-IV ZRK, "About State-Owned Property" (as amended on 10-01-2025) Order of the Government of the Republic of Kazakhstan of October 23, 2012 No. 1337, "About the Beginning of Compulsory Acquisition of the Parcels of Land for the State Needs and Some Questions of Provision of the Parcels of Land for Needs of Defense" 	<ul style="list-style-type: none"> Limited consultation and participation of affected persons. - No clear provisions for livelihood restoration. - Weak monitoring of resettlement outcomes. The code does not explicitly cover informal settlers as per ESS5 	<ul style="list-style-type: none"> Adopt ESS5 as part of a Project Resettlement Policy Framework (RPF)
	Turkmenistan	<ul style="list-style-type: none"> Land Code (2004) -Law No. 306-V "On Property" (2015) 	<ul style="list-style-type: none"> Lack of clear provisions for resettlement and compensation- Weak legal frameworks for grievance redress. - No clear differentiation 	<ul style="list-style-type: none"> Adopt ESS5 as part of a Project Resettlement Policy Framework (RPF)

ESS	Country	National Laws	Gaps	Proposed Actions
			<p>between voluntary and involuntary resettlement.</p> <ul style="list-style-type: none"> The code does not explicitly cover informal settlers as per ESS5 	
ESS6	Azerbaijan	<ul style="list-style-type: none"> Law on Plant Protection (1996) Forestry Code (1997) Law on Fisheries (1998) Law on Fauna (1999) Law on Environmental Protection (1999) 	<ul style="list-style-type: none"> Weak enforcement and implementation of laws Gaps in species protection and conservation planning Inadequate protection of wetlands and marine biology 	<ul style="list-style-type: none"> Adopt relevant ESS6 measures as part of this ESMF
	Kazakhstan	<ul style="list-style-type: none"> Law on Specially Protected Areas (2006) Forest Code (2003) Water Code (2003) Law on Conservation, Reproduction, and Utilization of the Animal World (2004) 	<ul style="list-style-type: none"> Weak enforcement and implementation of laws Limited protection of key ecosystems and species 	<ul style="list-style-type: none"> Adopt relevant ESS6 measures as part of this ESMF

ESS	Country	National Laws	Gaps	Proposed Actions
			<ul style="list-style-type: none"> Lack of marine and wetland conservation 	
	Turkmenistan	<ul style="list-style-type: none"> Law on Protected Areas (2012) Law on Environmental Protection (2014) Law on State Environmental Expert Review (1995) 	<ul style="list-style-type: none"> Weak enforcement and implementation of laws Limited protection of key ecosystems and species Insufficient protection of wetlands and water resources 	<ul style="list-style-type: none"> Adopt relevant ESS6 measures as part of this ESMF
ESS10	Azerbaijan	<ul style="list-style-type: none"> Public Participation in Environmental Decision-Making Regulations Law of the Republic of Azerbaijan on Public Participation (2014) 	<ul style="list-style-type: none"> Limited stakeholder engagement, especially with vulnerable groups 	<ul style="list-style-type: none"> Adopt Project Stakeholder Engagement Plan (SEP) in line with ESS10
	Kazakhstan	<ul style="list-style-type: none"> Law on Public Law of the Republic of Kazakhstan on Access to Information (2015) 	<ul style="list-style-type: none"> Limited mechanisms for ongoing stakeholder engagement 	<ul style="list-style-type: none"> Adopt Project Stakeholder Engagement Plan (SEP) in line with ESS10
	Turkmenistan	<ul style="list-style-type: none"> Law on Public Participation Law of Turkmenistan on Public Associations (2003) 	<ul style="list-style-type: none"> Weak stakeholder consultation mechanisms 	<ul style="list-style-type: none"> Adopt Project Stakeholder Engagement Plan (SEP) in line with ESS10

ESS	Country	National Laws	Gaps	Proposed Actions
				.

4. Environmental and Social Context and Baseline

The Caspian Sea is home to many species of fish, and the shores hold important wetlands, where numerous species of birds live. Even though the Caspian Sea is called a sea, it's actually the largest lake in the world. Long ago, it was connected to other seas (like the Mediterranean), though plate tectonics separated it about 5 million years ago. Now, the Caspian Sea is fed by great rivers, including the Kura, which flows through Turkey, Georgia and Azerbaijan. This keeps water flowing in, though the only way for water to leave is by evaporation as it does not have an outlet.

Caspian seals and Sturgeons: The Caspian seal (*Pusa capsica*) is a small, endangered seal species that is native to the Caspian Sea. It is the only marine mammal in the Caspian region. It is about 1.2-1.5 meters in size and weighs 50-70 kg, living around 30-50 years. It is only found in the Caspian Sea, including the coastal regions of Kazakhstan, Turkmenistan and Azerbaijan. It migrates seasonally, breeding in the northern ice areas in winter and moving to the warmer areas in the south in summer. It is endangered due to pollution, habitat destruction, climate change and overfishing.



Figure 3 Caspian Seal²

The Caspian sturgeon (*Acipenser gueldenstaedtii*) primarily inhabits the Caspian Sea, which is connected to river systems. The sturgeon is an anadromous fish, it migrates between saltwater and freshwater for spawning. The sturgeon is a large ancient fish belonging to the family of the Acipenseridae. They are one of the older fish in the world, having existed for over 200 million years. They grow up to 7 meters and live between 50-100 years. They are a cartilaginous skeleton, similar to sharks. They feed on small fish, mollusks, and crustaceans. They are listed as critically endangered due to overfishing, illegal poaching, and habitat destruction.

²

https://www.oceanconnections.org/pinniped_species/31



Figure 4 Caspian Sturgeon³

4.1 Turkmenistan

Climate: Turkmenistan is characterized by sharply continental and extremely dry and moderate climate of deserts: long dry hot summer, cool humid autumn and warm winter with little snow.⁴ It falls under the cold semi-arid climate classifications, with the Karakum Desert being the dominant feature of its topography. Its continental location means that summers are hot, dry and long, with average temperatures of 27-29°C between June and August and maximum temperatures occasionally approaching 50°C in the hottest parts of the country. Northern areas of Turkmenistan experience longer, colder winters and more snow, as well as shorter, relatively milder summer weather. Southern regions experience milder winters, with average temperatures well above freezing point, and hottest summers.⁵

While overall annual precipitation levels are low throughout Turkmenistan, there is a consistent seasonal trend. The bulk of the rain each year falls in the four months from January to April, whereas many parts of the country receive little or no rain during the months from June to September. The country's predominantly flat terrain allows for regular and strong winds which are favorable for the generation of dust storms.⁶

³ <https://www.science.org/content/article/caspian-creatures-dire-straits>

⁴ Third national communication of Turkmenistan under the United Nations framework convention on climate change (UNFCCC). Available at <https://unfccc.int/sites/default/files/resource/Tkmnc3.pdf>

⁵ Source: World Bank Climate change knowledge portal:

<https://climateknowledgeportal.worldbank.org/country/turkmenistan/climate-data-historical#:~:text=Its%20continental%20location%20means%20that,hottest%20parts%20of%20the%20country>

⁶ Ibid

Monthly Climatology of Average Minimum Surface Air Temperature, Average Mean Surface Air Temperature, Average Maximum Surface Air Temperature and Precipitation 1991-2020; Turkmenistan

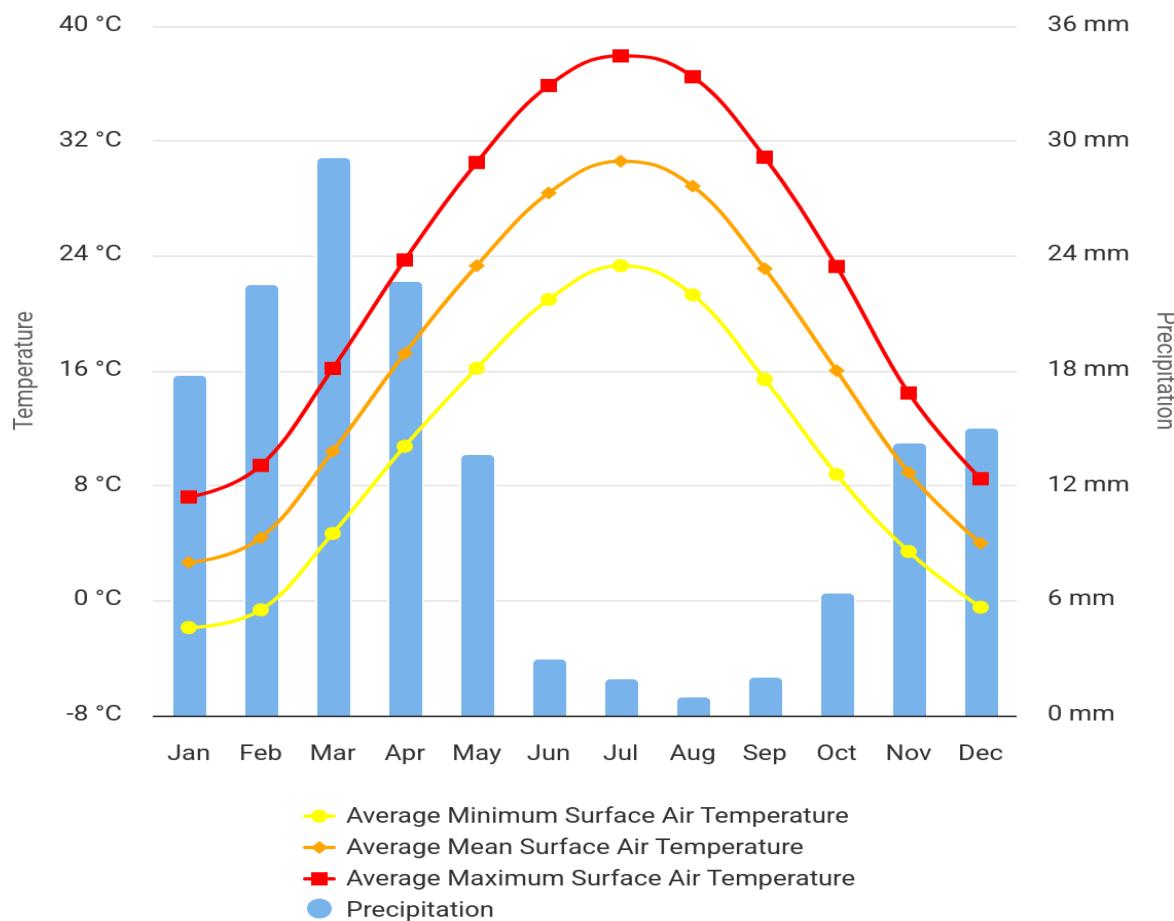


Figure 5 Monthly climatology of average minimum surface air temperature

Source: World Bank Climate change knowledge portal⁷

Physical Conditions: The dominant physical feature of Turkmenistan is the vast, sandy Karakum Desert, covering roughly 80 percent of the country, with the Kopet Dag Mountains rising in the south along the Iranian border, and the Caspian Sea bordering the west; the terrain is mostly flat and desert-like with only a small mountainous area in the south.⁸ Turkmenistan has several plains and plateaus which form parts of its physical features.

Water resources in Turkmenistan are mostly formed of surface runoff from the Amudarya, Murgab, Tejen, Kashan, Kushka, Etrek, and Sumbar rivers, which, together with small streams are flowing down from the North-eastern slopes of the Kopetdag, as well as groundwater. There are five major sources of

⁷ World Bank Climate change knowledge portal. Available at <https://climateknowledgeportal.worldbank.org/country/turkmenistan/climate-data-historical#:~:text=Its%20continental%20location%20means%20that,hottest%20parts%20of%20the%20country>.

⁸ Turkmenistan geography, maps, climate, environment and terrain from Turkmenistan Country Reports. Available at www.countryreports.org/country/Turkmenistan/geography.htm

water resources in Turkmenistan: The main trans-boundary rivers (the Amu Darya, Atrek, Murgab, and Tedjen); the small rivers of the north-western slope of the Kopetdag mountain range; freshwater aquifers; return and drainage waters from irrigation; some small natural lakes. The river runoff originating in the country is estimated at 1.0km³/year. Several rivers are found in Turkmenistan, most of them flowing into the country from its neighbors. The largest and most important waterway in Turkmenistan is the Kara Kum canal.⁹

Fauna: The fauna of Turkmenistan is also unique, including in the Central Asian leopards, argali, kulans, gazelles, red deer, desert monitor and hundreds of other species. A significant number of them are endemic, narrow-range species, rare or endangered, included in the Red Book of Turkmenistan and the Red List of Threatened Species of the International Union for Conservation of Nature and Natural Resources (IUCN).

Flora: Flora of Turkmenistan is made of relic forests, subtropics with a set of rare plants, picturesque nooks with preserved centuries-old vegetation. More than 2,500 plant species grow on the territory of Turkmenistan including about 700 ones in the KaraKum Desert. Among the most precious plants is a 2,000 years-old juniper (Turkmen ‘archa’) growing on inaccessible tops of the Kopetdag mountain. The unique country's grove called Unabi (Kugitang) has the trees whose age exceeds 200 years. Turkmenistan also has evergreen forest zones adorn the foothill valleys of the mountains, impenetrable blackberry bushes and lovely groves of deciduous trees.

Biodiversity: The country has over 3000 plant species, about 50 fish species and 279 animal species, as well as over 3 million hectares of forests which are under protection. The ancient Turkmen land is rich in the wild or cultivated plants and breeds of domestic animals. The ‘heavenly’ horses or the well-known Ahalteke horses, the Turkmen greyhound – tazy, the loyal companion of people – alabay, as well as grapes, pomegranates, and delicious Turkmen melons have enhanced the fame of Turkmenistan.

Protected Habitats: Turkmenistan is home to iconic and imperiled species and unique desert and mountain ecosystems that are increasingly under anthropogenic pressure compounded by climate change impacts that manifest themselves in the form of prolonged drought and other intense weather events.¹⁰ Turkmenistan has several protected habitats, including nature reserves, sanctuaries and national parks.

Hazar State Nature Reserve: The Reserve is a PA that is located on the southeastern coast of the Caspian Sea in the Balkan Province of Turkmenistan. It was established in 1932 and encompasses app. 2,690 km² of coastal wetlands, shallow bays and islands. Hazar State Nature Reserve has a rich biodiversity, including birdlife, marine life and flora. The marine life includes the Caspian seal and the sturgeon. The Reserve is recognized as an Important Bird Area (IBA) and was previously designated as a Ramsar site during the Soviet era. In 2009 it was nominated by Turkmenistan for inclusion in the UNESCO World Heritage Tentative List. Hazar State Nature Reserve (HSNR) is a unit in the Ministry of Environment Protection. The HSNR head office is on the Caspian Sea in Turkmenbashi, Balkan Welayat (Region).

⁹ UN Global Compact Water Action Hub Turkmenistan Water challenges. Available at <https://wateractionhub.org/geos/country/224/d/turkmenistan/#:~:text=The%20total%20internal%20renewable%20water.estimated%20at%200.025km%20B3%2Fyear>.

¹⁰ Centre for large landscape conservation Assessment of Wildlife and protected Areas of Turkmenistan 2023. Available at <https://largelandscape.org/wp-content/uploads/Assessment-of-Wildlife-and-Protected-Areas-of-Turkmenistan-2023.pdf>

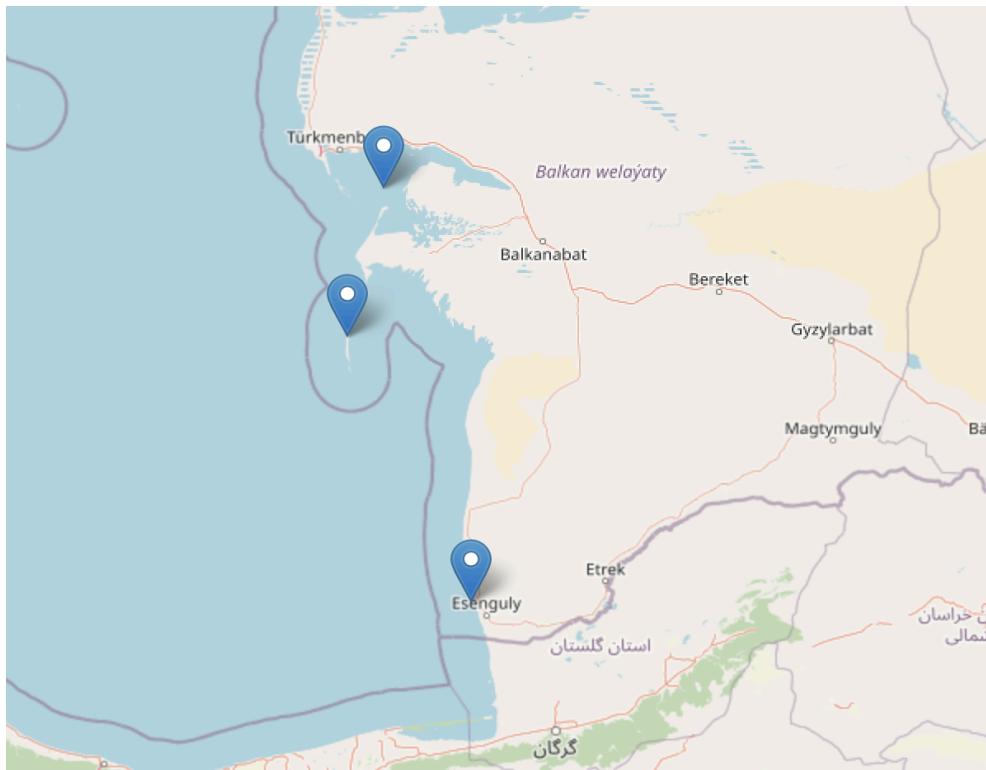


Figure 6 Map of Hazar State Nature Reserve

The Garabogaz area is located near the Reserve. It is a marine and land area extending from the Allatepe gulf to Cape Aim. The land area is a thin strip between the Garabogazköl Basin to the east and Caspian Sea to the west, north of Turkmenbashi and south of the border with Kazakhstan. The central core is a geographical extension of the key ornithological territory for migratory birds to the south in the Hazar State Nature Reserve. The coordinates are 41°03' N, 52°54' E with an approximate marine and terrestrial area of 70,237 hectares.

As part of this Project, the Government of Turkmenistan plans to designate an area of 80,000 ha as a Protected Area. HSNR will administer Garabogaz as a Wildlife Sanctuary under national law as a Specially Protected Natural Area.

The area is a location for migration of the Caspian seal, an IUCN Endangered category species. Other Red Data Book species include the caracal and goitered gazelle (djeyran) are found in the area. Additional species are typical of the Caspian desert region: long-eared hedgehogs, jerboas, gerbils, ground squirrels, sand hares (Tolai), foxes, and occasionally jackals and wolves. The area serves as a site for migration, wintering, and nesting for about 300 bird species. 34 species are included in the Red Data Book of Turkmenistan, 50 species are listed in the IUCN Red List, and 20 species are listed under CITES. The marine waters of the area serve as a migratory, feeding, and partial wintering grounds for sturgeon and semi-anadromous fish species. Among the species includes the ship sturgeon, Volga herring, Caspian brown trout (kumzha), and beloribitsa (whitefish) listed in the Red Data Book of Turkmenistan.

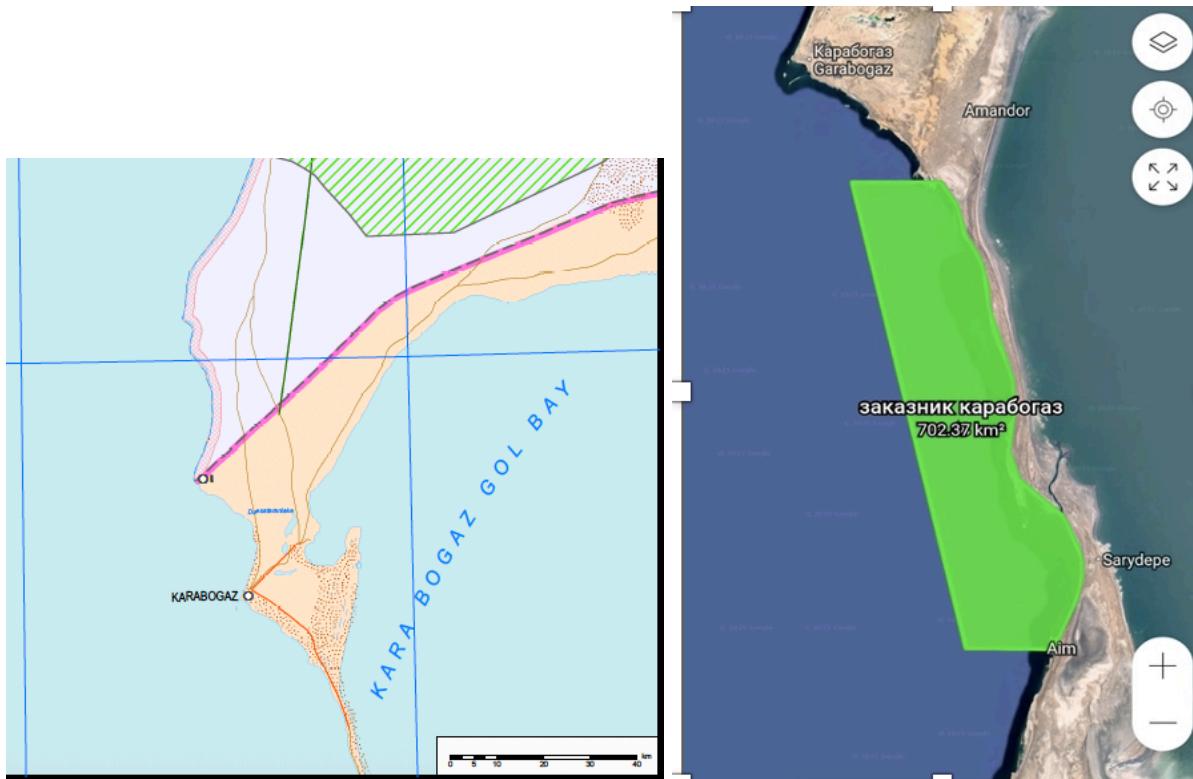


Figure 7 Maps of Garabogaz area in Turkmenistan

Population / Demographics: The current population of Turkmenistan is about 7,575,255 as 2025 which is equivalent to 0.09 percent of the total world population.¹¹ The country population is growing at a tremendous rate with its mid-year 2025 population estimated at 7,618,847 people with a population density of 16 people per Km2. The total land area is 469,930 Km2 (181,441 sq. miles) with at least 46.5 percent of the population living in its urban areas (3,540,511 people in 2025). The median age in Turkmenistan is 26.9 years.¹²

There is no population located around the Garabogaz area to be designated as a PA. There are no settlements, farms, or villages located within or adjacent to the proposed Garabogaz marine protected area as a protected area (PA). There are no residential or industrial facilities within the proposed PA boundaries. Due to the area's specific vegetation characteristics and the lack of freshwater sources, the territory is not used for livestock grazing.

Vulnerable Groups: In Turkmenistan the vulnerable groups are classified as religious minorities (particularly Christians), women and girls facing gender-based discrimination, people with disabilities, ethnic minorities and individuals forced into state-imposed forced labour. People with disabilities are also considered part of vulnerable groups most at risk of being left behind in Turkmenistan, often struggling to access social support, find employment and deal with daily discrimination and bias.¹³

¹¹ UN Dept. of Economic and Social Affairs-population Division. World population prospects: The 2024 Revision Worldometer elaboration. Available at <https://www.worldometers.info/world-population/turkmenistan-population/>

¹² Ibid

¹³ United Nations Turkmenistan. Different but equal overcoming bias and barriers for people with disabilities in Turkmenistan. Available at

Gender Equality: In Turkmenistan, 6.1 percent of women aged 20–24 years old who were married or in a union before age 18. The adolescent birth rate is 22.4 per 1,000 women aged 15–19 as of 2018, down from 27.46 per 1,000 in 2017. Turkmenistan ranks low in international gender equality rankings. Despite the lower ranking the Turkmenistan government has been putting in place robust measures in enhancing gender equality. However, despite efforts by the Turkmenistan government to promote gender equality as a strategy to achieve the sustainable development goal (SDG) No. 05; there are still some glaring challenges. They include: statistical gaps on gender-based violence reported cases, persistence of traditional patriarchal values and gender stereotypes, limited access to digital and financial services for women, limited access to driving licenses by women and lastly women are required to abide by formal dress codes.

Gender-based violence: Existing evidence from a first-ever national survey on the health and status of women in the family, supported by UNFPA, shows that GBV in Turkmenistan is still considered a sensitive public issue and gives grounds for a concern. For instance, 58.4 percent of women aged 15-49 years justify violence against women due to the established traditional gender roles of women in a family and society. According to a survey, 12 percent of women in Turkmenistan have experienced physical or sexual abuse by a partner while 16 percent of women have experienced some form of abuse by a partner.

Effects to this act of violence either physical, sexual or psychological torture/ violence have devastating effects on the physical and mental health of children negatively impacting their development. It is often the case that women justify violence against them due to traditional gender roles of women in a family and do not report cases of violence to the competent authorities due to also lack of information and knowledge on their rights and freedoms. The 2019 Turkmenistan Multiple Indicator Cluster Survey confirmed that women who experience domestic violence rarely reach out for help, a majority of women (58 percent) accept and justify intimate partner violence.

4.2 Kazakhstan

Climate: Kazakhstan experiences an extreme continental climate with long, hot summers and cold winters. Winter in the north of the country is long and cold – in some years the temperatures reached 52°C (Nur-Sultan), but there are also thaws up to 5°C. The shortest season in the north is spring, which lasts 1.5 months, while summer lasts 3 months and winter extends from October to April. Snow primarily falls in November but can continue through April.

Due to its great distance from the ocean, Kazakhstan has a highly continental climate and large intraday and annual fluctuations in temperature. This means that temperatures in the winter months (December to February) are extremely cold, with national averages between -9°C and -12°C, whereas summers are hot, with average temperatures of 22°C to 23°C in June, July and August. Precipitation is low throughout the year, with average monthly levels of between 14 millimeters (mm) and 30 mm, although flooding can occur during spring due to increased rain and the thawing of winter snow.

Temperatures throughout the year vary with latitude in Kazakhstan, with northern areas experiencing much colder winter temperatures than southern areas, and southern areas relatively hot summers. This

means that in January and February temperatures in the capital (Nur-Sultan, in the north of the country) can fall to -16°C , while in the most populous city (Almaty, in the southeast) average temperatures remain above -7°C . Similarly, the average temperature in July can vary from 20°C in parts of the north and northeast to 29°C in southern areas near the border with Uzbekistan.

Levels of precipitation can vary significantly between climate zones. Desert areas, such as the central Betpak Dala Desert and the southern Kyzylkum Desert, receive only 100-200 mm of precipitation per annum, whereas steppe areas receive 200-500 mm per year. Precipitation in the foothills and mountains vary between 500 and 1,600 mm per annum.

Monthly Climatology of Average Minimum Surface Air Temperature, Average Mean Surface Air Temperature, Average Maximum Surface Air Temperature and Precipitation 1991-2020; Turkmenistan

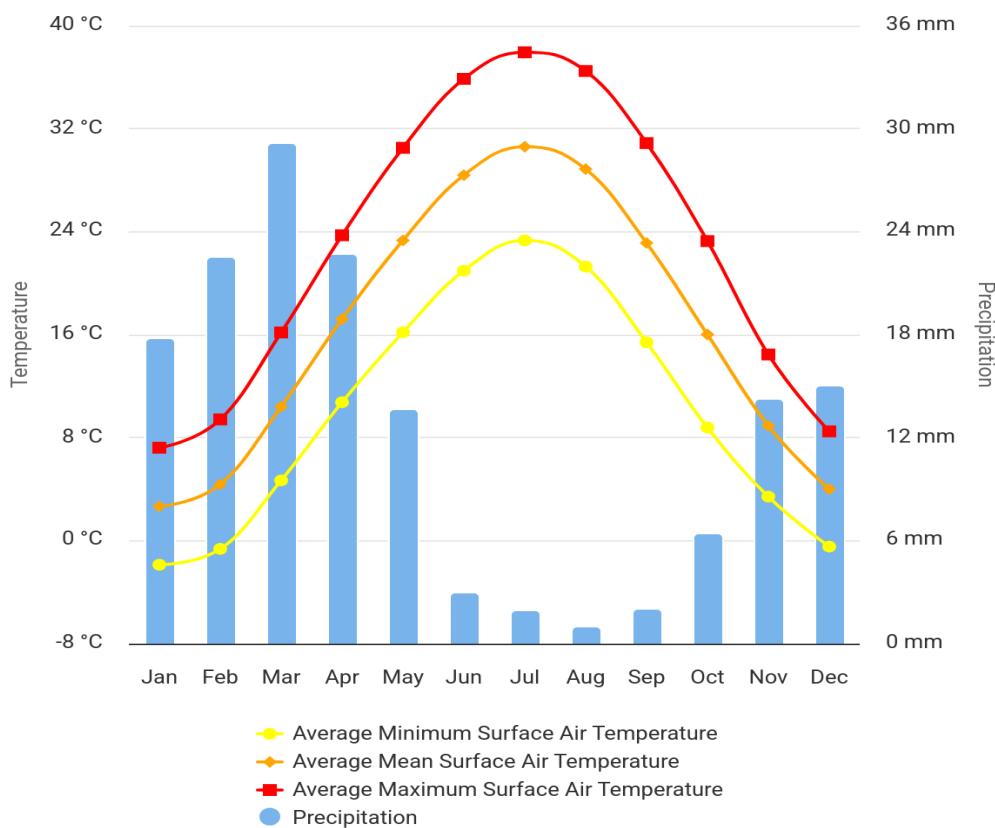


Figure 8 Monthly climatology of average minimum surface air temperature

Source: World Bank Climate change knowledge portal¹⁴

Physical Conditions: Flat or rolling terrain predominates throughout much of Kazakhstan, with lowlands accounting for one third of the country's total area and low mountains a further fifth. The exceptions to

¹⁴ World Bank Climate change knowledge portal. Available at <https://climateknowledgeportal.worldbank.org/country/turkmenistan/climate-data-historical#:~:text=Its%20continental%20location%20means%20that,hottest%20parts%20of%20the%20country.>

this topography are the very low-lying areas by the Caspian Sea in the west, and Altai Mountains that reach altitudes of 7,000 Meters on the eastern border with China and Kyrgyzstan.

Kazakhstan's surface is covered by 26 percent desert, 44 percent semi-desert, 6 percent forest and 24 percent steppe terrain, in addition to a few other landscapes. The South and East have great wild and mostly untouched mountain landscapes with the Tien Shan and Altai being the most prominent. The highest peak in the country is Khan Tengri at 7,013m above sea level.

Kazakhstan lies in the center of the European and Asian continents, and is approximately equal distance from the Atlantic and Pacific Oceans. More than a quarter of the land consists of a portion of the gentle steppes that stretch from central Europe to Siberia. The rest of the republic reflects the beauty of forests, mountains, rivers, lakes and reservoirs. The natural landscape is enhanced by thousands of plant and animal varieties found from the northern forest steppes to the high southern mountains.

Kazakhstan is a land of diverse landscapes that encompass much more than just the Great Steppe. From the towering mountains of the Northern Tien Shan with their stunning glaciers, snow-capped peaks, and alpine meadows, to the Altai Mountains of Eastern Kazakhstan, the Jungar Alatau Range in the Almaty region, and the Karatau Mountains in the Turkestan and Zhambyl regions, the country offers a variety of breathtaking vistas.

Flora: The flora of Kazakhstan includes 68 species of tree species, 266 species of shrubs, 433 species of semi-shrubs and semi-grasses, 2,598 species of perennial grasses, and 849 species of annual grasses. About 500 species are endemics. This means that they can be found only in Kazakhstan, and only in limited areas. For example, here grows a tree-bush *Haloxylon*, specific to the Central Asian deserts, the wood of which is so dense that it sinks in water; an amazing creation of nature - Greig tulip (*Tulipa gréigii*), petals which reach 12-15 cm (4.2-5.92 in), the famous blue Tien Shan firs, the wild Sivers apple tree (*Malus sieversii*), which is considered the progenitor of all modern apple varieties.

The landscape of Kazakhstan is mostly steppes, semi-deserts, and deserts. But some northern regions of Kazakhstan belong to the forest-steppe zone to a greater extent, and Kazakhstan's Altai is generally covered with real taiga forests. Forests, including *Haloxylon* forests, occupy only about 4.2 percent. of the territory of Kazakhstan. These are birch and aspen forests of the northern regions, island forests of the northwest and the right bank of the Irtysh, pine forests of the Kazakh shallow ground, mixed and coniferous forests of Altai, and Saur, Jungar Alatau, and the Tien Shan

Fauna: The animal world of Kazakhstan is no less diverse than the plant world. Many animals that live here are included in the Red Book: for example, the ibex (or snow leopard), saiga antelope, gazelle, steppe bustard. There are such rare animals as the Ustyurt mouflon or urial, honey badger of the family of the Mustelidae, Brandt's (long-needle) hedgehog, and wild cats: manul, caracal, sand cat (*Felis margarita*), and the famous Asian cheetah.

The desert and semi-desert areas of Central Kazakhstan are inhabited by small saiga and gazelle antelopes, and in the west by the Ustyurt mouflon. These are unpretentious animals that are content with scarce steppe vegetation. Among predatory animals, wolf, corsac, and desert lynx caracal live here. There are a lot of rodents and small animals, such as gophers, jerboas, sand mice.

Biodiversity: With a vast territory almost the size of Western Europe, Kazakhstan is endowed with an enormous diversity of mountain ecological systems due to high altitude zones. It has a great diversity of

natural conditions, ecosystems and species. Four major ecological systems can be defined: forest (2 percent of the country), steppe (28 percent), desert (32 percent), and mountain (7 percent). The rest comprises pastures (8 percent), fallow lands (4 percent), and agricultural land. Over 6,000 species of higher vascular plants, 5,000 species of mushrooms, 485 species of lichens, 2,000 species of sea weeds, 178 mammal species, 489 bird species, 12 amphibian species, and 104 fish species can be found in Kazakhstan. Mushrooms have a very high rate of endemism (3 endemic genus and 124 endemic species are found in the country). Fossil flora and fauna are also very rich; the Chu-Illiski mountains contain the oldest fossils (dating back 420 million years) discovered on Earth and are thus an important witness to the beginnings of flora on the planet. Many species are endangered, mostly due to habitat destruction and hunting. The Red Data Book of Kazakhstan lists 125 species of vertebrates (15 percent), 96 species of invertebrates, 287 species of higher plants (4.8 percent) and 85 species of insects. Rare hoofed animals, despite improved protection quality, are still declining, and the situation is generally critical for many species. These include the Tran Caspian argali (*ovis vignei argali*), the Kazakhstan argali (*ovis ammon collium*), saigas (antelopes) and gazelles. Poaching is the main cause of this rapid decline, which stems mainly from poor local communities with little choice for food, however also from groups that are better off socioeconomically.

Nature Reserves of Kazakhstan: The biodiversity of Kazakhstan if not well preserved it might go to extinct. To preserve it there are a number of nature reserved set aside to enhance its preservation. These reserves include: Aksu-Zhabagly State Nature Reserve is the first and oldest nature reserve in Kazakhstan and is located in Turkistan and Zhambyl regions. Almaty State Nature Reserve main purpose is to protect and study the natural complexes of the Northern Tien Shan. It is located in Almaty region. Naurzum State Nature Reserve is located on the territory of Kostanai region. Barsakelmes State Nature Reserve is the only reserve in Kazakhstan and the CIS with extreme environmental conditions. It is located in the zone of the ecological disaster on a global scale (decrease of the level and disappearance of the Aral Sea).

Korgalzhyn State Nature Reserve is included in the UNESCO World Heritage List as part of the Saryarka - Steppes, and Lakes of Northern Kazakhstan. It is located in Akmola and Karaganda regions. Markakol State Nature Reserve was found in East Kazakhstan region. Ustyurt State Nature Reserve is found in Mangystau region. West-Altai State Nature Reserve is found in the East Kazakhstan region. Alakol State Nature Reserve is located on the territory of Almaty and East Kazakhstan regions. Karatau State Nature Reserve is found in Turkistan region. It's the recently founded nature reserve Kazakhstani nature reserve.

Wildlife Conservation in Kazakhstan: In recent years, there has been a positive trend in wildlife protection in Kazakhstan. Significant progress has occurred in the conservation of valuable animal species, such as the snow leopard, the kulan and the Bukhara deer. Since 2004, the United Nations Development Programme (UNDP), both with the financial support of the Global Environment Facility (GEF) and through related grants with the Government of Kazakhstan, has implemented 10 large-scale initiatives in biodiversity conservation. The contribution to the conservation of globally significant ecosystems of Kazakhstan totals more than US\$29million.

Currently, UNDP-GEF, in partnership with the Government of Kazakhstan, are implementing a number of wildlife conservation initiatives. The measures are aimed at wild animal protection, including environmental protection measures; at fighting against poaching; creating ecological corridors; reforestation; monitoring and counting wild animals; improving environmental education among the public; and developing ecological tourism. UNDP accords special priority to the creation and development of a network of specially protected natural areas in Kazakhstan.

Today, the country has 14 national parks, 10 nature reserves, 7 reserves, home to a variety of animals and birds – the Tien Shan brown bear, black stork, Bukhara deer, Asian leopard and gray monitor lizard.

Since 2018, UNDP has been working to upgrade environmental institutions and to monitor wildlife using modern technologies, such as camera traps, thermal imagers, drones. To date, 294 trap cameras have been installed in 14 protected areas of Kazakhstan, which help specialists to conduct research on rare animal species, to keep records of their numbers and their migration routes and to identify potential threats.

The Mangistau Region is a Province in southwestern Kazakhstan located along the Caspian Sea. It is known for its unique desert landscapes, rich oil and gas reserves and as a historical crossroads for ancient trade routes.



Figure 9 Map of Mangistau Region

Itbalygy State Reserve: The project will contribute to Kazakhstan biodiversity planning through support to the newly created Caspian Itbalygy State Nature Reserve in the Mangistau Region that serves as an important habitat for the migratory Caspian seal. The Caspian Itbalygy State Nature Reserve will be

designated as a new marine Protected Area (PA) in the northern Caspian Sea. It will be an IUCN Category VI Protected Area with sustainable use of natural resources.

The coordinates of the Caspian Itbalygy State Nature Reserve boundaries are as follows:

Table 7 Coordinates of Itbalygy State Nature Reserve

"Prorva" site

Point number	Position (UTM Zone 39)		Length, km
	X	Y	
1	617052,03	5068492,96	3,72
2	620772,31	5068564,44	11,38
3	620911,54	5057182,88	2,5
4	619011,16	5056556,77	7,71
5	611297,33	5056434,15	0,71
6	611727,25	5056998,10	11,05
7	615877,91	5066234,19	2,56

"Seal islands" site

Point number	Position (UTM Zone 39)		Length, km
	X	Y	
1	409934,86	5002775,21	4,38
2	413496,31	5005322,51	6,55
3	419601,04	5007705,11	12,36
4	419436,83	4995349,65	43,34
B	462770,11	4994947,66	9,25
6	462827,45	5004194,94	17,13
7	478146,51	4996527,00	9,73
8	487368,84	4999627,40	24,90
9	504346,73	5017845,03	4,07
10	506365,55	5021387,15	30,14
11	506368,23	4991248,05	6,11
12	500336,53	4990293,92	46,10
13	454232,79	4990293,92	6,61
14	447816,03	4991881,42	12,77
15	435248,90	4989592,77	9,27
16	425988,46	4990029,33	3,52
17	422989,84	4986192,46	4,72
18	419814,84	4984699,95	4,83
19	415885,77	4981893,30	2,28
20	413605,09	4981893,30	21,20

The total area of the “Caspian Itbalygy State Nature Reserve” is 108,632.31 hectares. The map of the Protected Area is below with the geographical coordinates of the protected area. The boundaries fall within the recognized maritime boundaries of Kazakhstan.

There is a buffer zone around the PA (shown on the map), with buffers to the west and east. The principal area to the west is essentially marine with large, uninhabited sandbar islands to the immediate south. A future expansion of the PA would include these islands given their importance as winter birthing areas for the Caspian seal (*Pusa caspica*). The eastern island and marine area have been identified as another important site for seal winter pupping in the northern Caspian Sea. The northern Caspian in Kazakhstan is the main area for seal calving and initial feeding of baby seals. The area is also important for sturgeon and migratory waterfowl.

The Tyuleni Islands are a cluster of sandbar islands in the Caspian Sea. The largest of them is Kulaly Island, which is a long, narrow island covered with clay and sand hills up to 10 m high. The island has some plants typical of the semi-desert and desert zones. The soils are infertile and completely unsuitable for agricultural needs.

Although the PA will be created with the main goal of preserving the breeding grounds of Caspian seal, it will also play an important role in the conservation of sturgeons, and it will make its contribution to the conservation of rare species of birds living in the protected area.

The area has been managed by the Fisheries Committee of the Ministry of Agriculture of the Republic of Kazakhstan. It is also used for shipping purposes. There are also border service posts of the Republic of Kazakhstan. In particular, there is a borderpost on Kulaly Island. There is also a Marine Hydrometeorological Station on the Island. The selected locations for the PA are not used for legal fishing. There are no settlements in the PA, except for houses for border guards and hydrometeorological station workers.

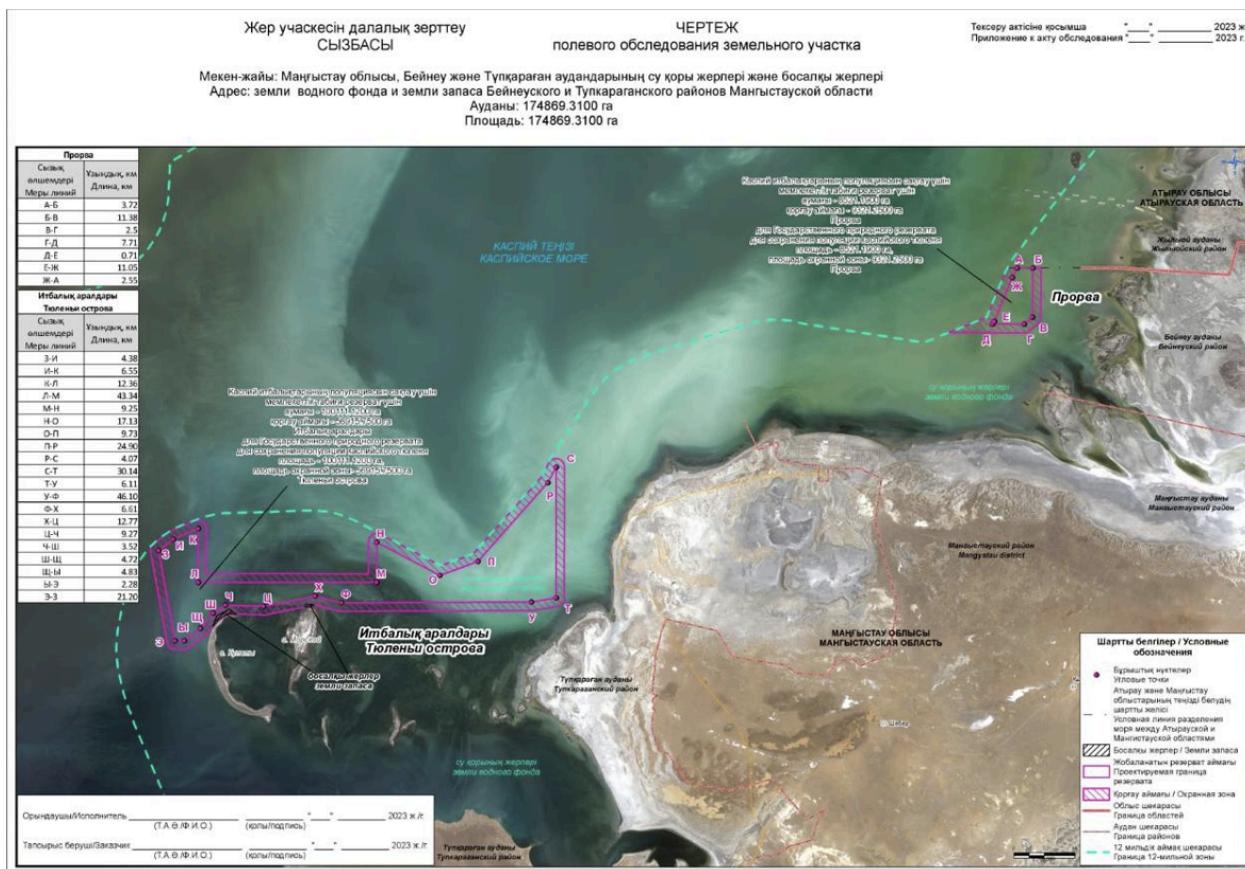


Figure 10 Map of Itbalygy State Reserve

General Population / Demographics: Kazakhstan is a multiethnic country where the indigenous ethnic group Kazakh's comprise the majority of the population. The demographics include a young population, diverse ethnicities and a mix of urban and rural areas. The current population of Kazakhstan is about 20,756,052 as 2025 which is equivalent to 0.25 percent of the total world population.¹⁵ Kazakhstan 2025 population is estimated to grow to 20,843,754 people by mid-year 2025. Kazakhstan ranks number 65 in the list of countries (and dependencies) by population. The population density in Kazakhstan is 8 persons per Km2 (20 people per mi2). Its total land area is 2,699,700 Km2 (1,042,360 sq. miles) with 55.1 percent of the population total population living in urban areas (11,494,249 people in 2025). The median age in Kazakhstan is 29.7 years.¹⁶

Vulnerable Groups: According to recent data, vulnerable groups in Kazakhstan include a significant portion of the rural population, particularly children from large families, with poverty rates in rural areas being significantly higher than urban centers; the Turkestan region is identified as having the highest poverty rate, and around 5.6 percent of the overall population lives below the poverty line, with a notable proportion of children experiencing multidimensional poverty, reaching 28.5 percent according to UNICEF reports. Though Kazakhstan has made progress in reducing poverty, income inequality remains a concern, with a growing gap between high and low-income households. As of 2024 Poverty rates in rural areas (11.4 percent) remain higher than in urban centers (6.6 percent). In 2021, 0.5 percent

¹⁵ UN Dept. of Economic and Social Affairs-population Division. World population prospects: The 2024 Revision Worldometer elaboration. Available at <https://www.worldometers.info/world-population/turkmenistan-population/>

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of the population in Kazakhstan (87,000 people) were multidimensionally poor while an additional 1.8% classified as vulnerable to multidimensional poverty (346,000 people in 2021).

Other vulnerable groups in Kazakhstan includes:

- Large families: Households with a large number of dependents largely faces poverty challenges as they are unable to meet their needs.
- Single mothers: Women raising children alone faces economic difficulties.
- People with disabilities: Access to adequate support and services for people with disabilities is limited although the country's administration is fighting to fight discrimination against persons with disabilities.
- Ethnic minorities: Some ethnic groups experience higher levels of poverty and social exclusion.

To address these inequalities within the vulnerable groups; the Republic of Kazakhstan has been improving the country's social policy in line with the Strategy "Kazakhstan 2050" and National Plan for the Realization of the Rights and Improvement of Life of Persons with Disabilities. This has been possible as a result of Promotion of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), Supporting the modernization of the system of social services whilst strengthening the strategic, analytical, and management capacities of the Ministry of Labour and Social Protection of Population.

Gender Equality: Kazakhstan is progressing well towards gender equality according to the international indicators used for measuring the progress and comparing results across the UN member states. In the annual UN Human Development Report 2021-2022 on the Gender Development Index, Kazakhstan is included in the 1st group of countries with very high equality in Human Development Index (HDI) achievements between men and women.

Measures put in place to enhance equality includes: promoting measures that offer more opportunities for women to participate in decision-making, enhance the capacity of the women by making them more competitive on the labour market, offering an opportunity for them to take leadership positions in the private sector while remaining abreast and united against gender-based violence.

Gender Based Violence (GBV): GBV is a pervasive issue in Kazakhstan, affecting women and girls at high rates. The country has made some progress in addressing the issue, but there is still much work to be done. 17 percent of women in Kazakhstan have experienced physical violence from a partner whilst 21 percent of women in Kazakhstan have experienced psychological violence. Almost a quarter of women have experienced all three forms of violence with girls and women with disabilities being at higher risk of violence.

In response to the GBV prevalence; Kazakhstan's president signed a law reinstating criminal penalties for domestic violence in 2024 which had been decriminalized back in 2017. Existing legal and policies for fight against GBV includes Kazakhstan's 2009 Law on the Prevention of Domestic Violence.

4.3 Azerbaijan

Climate: Azerbaijan's climate is highly varied, with different areas of the country containing examples of nine of the world's eleven climate zones. This includes semi-arid zones in the center and east of the country (including the capital, Baku), temperate zones in the north, continental zones in the west, and

tundra zones, meaning that there are marked variations in average annual temperature and precipitation in different regions. In general, more mountainous parts of Azerbaijan receive higher levels of precipitation and lower average temperatures than the central lowlands and Caspian Sea coast, where the climate is drier and hotter.¹⁷

Azerbaijan experiences hot summers (especially in lowland areas) and moderate winters. The average monthly temperatures vary significantly between different regions and altitudes across Azerbaijan. Average temperatures in Baku and other parts of the east and southeast reach approximately 27°C during the hottest months of July and August, while temperatures during these months remain between 15°C and 20°C in parts the mountainous north and west. Similarly, during the winter (December to February) temperatures in Baku average between 3°C and 4°C, whereas in western and northern areas average monthly temperatures fall to between -5°C and -10°C. Average rainfall in Azerbaijan follows a bimodal distribution throughout the months of the year, with average levels above 40 millimeters (mm) per month from April to June, and again in October. Precipitation is highest in May and June in the northern and western areas of Azerbaijan, where it can exceed 100 mm per month.¹⁸

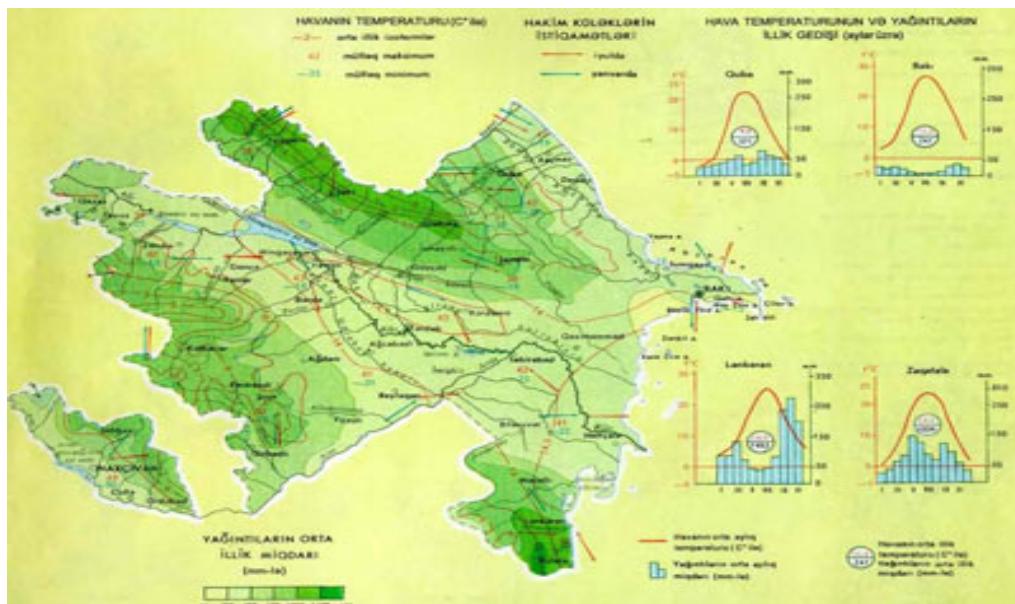


Figure 11 Climate-Azerbaijan

Source: Azerbaijan Country Profile¹⁹

Physical conditions: Azerbaijan's geography covers a diverse collection of landscapes, from wetlands to high mountains, deserts to fertile valleys. The center of the country is taken up by a broad valley, centered around the Kura River. This valley is bordered to the north by the Greater Caucasus Mountains, and to the south by the Lesser Caucasus Mountains, and opens in the east to the Caspian Sea. The

¹⁷ World Bank Climate change knowledge portal. Available at <https://climateknowledgeportal.worldbank.org/country/turkmenistan/climate-data-historical#:~:text=Its%20continental%20location%20means%20that,hottest%20parts%20of%20the%20country>.

¹⁸ Ibid

¹⁹ Geography- Climate. Available at https://www.azerbaijans.com/content_457_en.html

highest point in Azerbaijan is Bazarduzu Dagi, at 4,467 m (14,656 ft), and the lowest point is - 28 m (-92 ft), in the Caspian Sea.²⁰

When the water of the Caspian Sea evaporates, it leaves behind any salts or minerals, which is why the Caspian Sea is salty (though it's not as salty as the oceans). The Caspian Sea is also located below sea level, making Azerbaijan's lowest point 28 meters (92 ft) below sea level. There are beaches and resorts on the shores that are especially popular in the summer, as people come to swim and escape the summer heat. The Caspian Sea is also home to large oil reserves, and the first offshore oil wells in the world were built near Baku. Heading west from the Caspian Sea, the easiest route follows the Kura River. This river starts in the mountains of Turkey, then crosses Georgia, gains water from rivers in Armenia (without ever crossing into the country), before crossing Azerbaijan to flow into the Caspian Sea. There is a dam near Mingachevir, creating the Mingachevir Reservoir, the largest lake in Azerbaijan. The land around the Kura River is irrigated and relatively fertile, though there are also large semi-desert areas in the flatter parts of Azerbaijan.

The geography in Azerbaijan is dominated by the mountains. With the Greater Caucasus in the northern part of the country, and the Lesser Caucasus in the southern part, there are a variety of mountain landscapes. The Caucasus Mountains are part of a larger system that spans from Europe to Asia, and indeed the watershed of the Caucasus Mountains forms the official border between Europe and Asia. Lots of snow and rain falls in the Caucasus Mountains, with this precipitation being the source of much of the drinking water in the region. The lower slopes are home to richer deciduous forests (with oak, maple and ash trees), and higher slopes are home to more pine forests, and glaciers and open areas at the highest of elevations.

Relief: There are two main forms of relief in Azerbaijan: mountains and plains. The biggest geomorphological units the Great Caucasus, Lesser Caucasus, Talysh Mountain surround the Kura-Araz lowland from the north, west and south-east areas. The average altitude in Azerbaijan is 657 m. Bazardyuzy is the highest peak from the sea level – 4466 m, the low point is in the Caspian lowlands – (-28 m). Height amplitude reaches $4466 + 28 = 4494$ m.

The relief and climate play an important role in the formation of Azerbaijan's top-soil. As a result of the influence of these factors soil on the territory of Azerbaijan Republic is located in the vertical zones. Republican soils are of 25 types, and divided into 60 sub-types.

Flora: The territory of the Republic of Azerbaijan has a rich flora. In relatively large area all kinds of plants that are found in the world, are spread in the republic. About 4500 species of higher, spore-bearing flowering plants combined in 125 groups and 920 sorts. For the total number of species of the flora; Azerbaijan is richer than any other Caucasus countries. The territory of Azerbaijan is a center of origin for several globally important food crops, including wild rye, wheat, barley, millet, wild pears, cherry, and more than 200 varieties of grapes.

Fauna: Azerbaijan is situated on the junction of a number of zoogeographical zones, characterized by a specific fauna. The animals from Iran, Central Asia and the Mediterranean Sea have adapted to Azerbaijan thus enriching its nature. Due to the diverse natural conditions Azerbaijan formed a colorful

²⁰ Abbasov R.K, Allahverdiyev R., Zaynalov R., Habilov A., Aliyeva R., (eds.) (2023) Azerbaijan National Ecosystem Assessment. Baku, Azerbaijan: Government of Azerbaijan, RECC Azerbaijan Available at <https://www.ecosystemassessments.net/content/uploads/2024/03/AZERBAIJAN-NEA-SPM-2024.pdf>

animal kingdom. The dispersal of fauna in Azerbaijan is influenced by suitable conditions, change of vegetation, and location of water reservoirs. More than a thousand different species of animal can be found in Azerbaijan. Out of them 618 are vertebrate animal species, including 97 species of mammals. 58 species of animals are reptiles (5 species of poisonous snake), 11 species are amphibians, 357 species are birds, and the rest consist of invertebrate animals. There are also over 12 thousand species of insects.

Biodiversity: Azerbaijan is a biodiversity hotspot with a wide range of animal and plant species. The country's unique geography and diverse ecosystems contribute to its rich biodiversity. Situated at the juncture of several bio-geographical areas, the country contains species of European, Central Asian and Mediterranean origin and forms an integral part of the Caucasus Ecoregion (a region with exceptional levels of biodiversity according to the WWF's Global 200 Project).²¹ Azerbaijan also shares the Caspian Sea with four other countries (Russia, Iran, Turkmenistan and Kazakhstan). The number of endemic fish species in the Caspian Sea region is very high, and includes one lamprey species, 11 herring species, 24 species of Caspian gobies and five anadromous sturgeon species, all of which are fished commercially. The Caspian seal is the only resident endemic mammal.

The lakes and wetlands of Azerbaijan support high numbers of waterfowl species that migrate through or winter here, including the White-Headed duck and the globally threatened Lesser White-fronted Goose. Fifty-one Important Bird Areas (IBAs) – hosting 31 globally threatened species, 9 biome-restricted species and 15 congregator species – and one Endemic Bird Area (EBA) have been identified.²² Threats to biodiversity in Azerbaijan include habitat loss, pollution, and unsustainable exploitation of natural resources.

Protected Habitats: Over the last 10 years, the overall size of PAs in Azerbaijan has doubled, and PAs now cover more than 10 percent of the country's territory.²³ The Caucasus region has been adopted as the main global ecological area on a basis of such criteria as diversity of kinds, endemism and taxonomic uniqueness.

The system of the state territories protection is based on multistage structure with its various levels for use and protection applied in different categories like in the most countries. The categories are defined as per the Law on State Protected Areas and Objects (2000).²⁴

The protective figures are the following:

National parks: lands and water areas that are under the state property and have a special significance in terms of environment, history, etc. The territory of these areas is used for educational, scientific and cultural purposes.

Restricted areas: these territories are similar to the National parks but there is no need for them to be under the state property.

State Natural preserves are established with the aim to protect the nature, wild animals and vegetation, as well as the environment. Only scientific investigation is permitted.

²¹ Abbasov R.K, Allahverdiyev R., Zaynalov R., Habilov A., Aliyeva R., (eds.) (2023) Azerbaijan National Ecosystem Assessment. Baku, Azerbaijan: Government of Azerbaijan, RECC Azerbaijan. Available at <https://www.ecosystemassessments.net/content/uploads/2024/03/AZERBAIJAN-NEA-SPM-2024.pdf>

²² Ibid

²³ Development of the protected area network in Azerbaijan. Available at https://www.wwfcaucasus.org/our_work/protected_areas22/protected_areas_azerbaijan/

²⁴ The Republic of Azerbaijan's Fifth National Report to the Convention on Biological Diversity GEF and UNDP 2024. Available at <https://www.cbd.int/doc/world/az/az-nr-05-en.pdf>

State Natural Preserves are designed for conservation purposes of endangered species of either fauna or flora. As per the Law of Azerbaijan any industry development, intervention in animals or vegetation is strictly prohibited.

State hunting preserves: in these areas, sustainable exploitation of the wildlife by hunting is allowed.

Unique trees, caves or paleontological areas are protected under the name of "natural monuments".

Absheron National Park: The park is a peninsula in the Baku metropolitan area in the Khazar District to the east of the capital. It has a size of 783 hectares as a terrestrial park established 8 February 2005. The Management Authority is the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan. Its landscape is a Caspian coastal and desert, essentially flat and low-lying with marine wetlands sandbars. The climate is moderate in spring and autumn, with cold winters on the sea and hot summers. Mammals include the foxes and a few gazelles with seasonal migration of the Caspian seal on the sandbars and adjacent islands. It is a key habitat for migratory birds, such as gulls, terns, and raptors. The park attracts visitors for sight tourism and walking close to the principal city of Azerbaijan. Plant species such as wormwood, grass ivy, common reed, and *Juncus acutus* are widespread in the area. The park protects rare, endangered and endemic plants such as Baku cuzgunu (*Calligonum bakuense*) and Baku Astragalus (*Astragalus bakuensis*).

Absheron National Park is an important resting and feeding point for waterfowl located on a migratory route for birds. The park is home to terns, cormorants, ducks and other waterfowl. Among the birds, there are herring gull, whooper swan, red-headed goose, scaup, green-headed duck, white-eyed black duck, tufted grebe, great white wagtail, sandpiper, grebe, and marsh grebe.

The Caspian seal (*Phoca caspica*) is the main endangered species frequenting the park. It is endemic to the Caspian Sea and the smallest species of seal in the world. The Cape at the southernmost tip of the park, Suti Burnu, as an extension of the Shah Dili area, is one of the main places where seals seasonally stay and feed. They are mainly seen in this area from May to August. Among the mammals, there are also gazelle, wolf, jackal, steppe cat, raccoon, porcupine, fox, badger and hare inhabiting the coastal areas and waters of the Caspian Sea.

The park consistently monitors critically endangered flora and fauna on the Absheron Peninsula included in the national Red Book. The Caspian seal (*Phoca caspica*) migrates annually through the park area, resting on the uninhabited sand banks and nearby islands. The seal is classified in the IUCN Red List as Endangered (Category IUCN 3.1).

Given its proximity to Baku, the Absheron National Park is frequently used on weekends and during the summer period for recreational uses. It is currently used primarily for tourism and recreational fishing. Scientific activities are also carried out within the park. The location has an educational purpose for school groups and environmental awareness building for the greater metropolitan area.

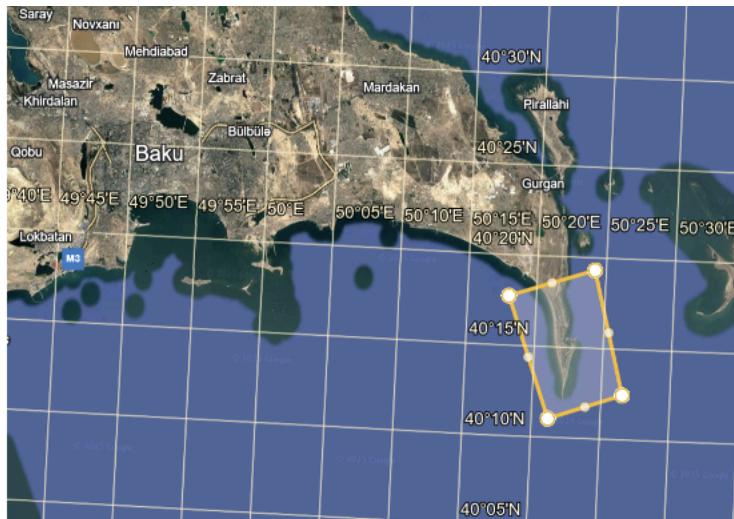


Figure 12 Current Absheron National Park with buffer zones

The buffer zone extends 3 km beyond the park boundary. The current terrestrial buffer zone will extend with the marine extension of the park including a 3 km marine buffer zone around the designated area.

Planned Marine Protected Area: The Project will support the establishment of a marine PA as part of the Absheron National Park. The full area of the proposed future park expansion is approximately 100,000 ha, first covering the southern, western and eastern marine areas adjacent to the current park boundaries, and with future expansion including islands and adjacent marine areas to the east and north. The exact boundaries, future extensions and process of classification of the park are still under consideration by the national authorities.

The area is visited seasonally by Caspian seals, which are most often there from May to September. Migratory waterfowl are also prevalent in the park. In addition, sturgeon and other fish species feed around Absheron. The main goal of extending the size of the park into the marine areas is to protect these species, as well as all the marine ecosystems and habitats, and to preserve the valuable landscapes of the Caspian Sea in a natural state.

The establishment of the Absheron National Park MPA is multi-faceted and multi-purpose. Along with the terrestrial landscape of the existing Absheron National Park, the valuable seascape will be protected. The main objectives of the MPA establishment are to protect biodiversity, protect the habitats of the valuable Caspian seal, protect the habitats of sturgeon, other fish and waterfowl, and eliminate sources of marine pollution.

The main management objective of the MPA is to promote the sustainable non-consumptive use of marine resources by local communities as well as to promote sustainable tourism in the region. The establishment of the expanded MPA will give impetus to biodiversity conservation and development of sustainable tourism in the area. In parallel, scientific and educational opportunities will also increase with the establishment of the expanded MPA.

The territory of the planned park covers relatively clean waters and coastlines of the Caspian Sea. However in some places domestic wastewater is being discharged into the sea. This wastewater is located quite far from the proposed park, mainly in the northern parts of the Absheron Peninsula. Its

source is mainly residential areas and recreational facilities. Currently, two large water treatment plants are planned to be put into operation in the northern and eastern areas of Baku (in Lokbatan and Pirshagi) to prevent wastewater discharge into the sea. The capacity of the currently operating Hovsan Aeration Station is also being increased.

Population / Demographics: The current population of Azerbaijan is about 10,376,658 as 2025 which is equivalent to 0.13 percent of the total world population.²⁵ The country population is growing at a tremendous rate with its mid-year 2025 population estimated at 10,397,713 people with a population density of 126 people per Km2. The total land area is 82,658 Km2 (31,914 sq. miles) with at least 58.7 percent of the population living its urban areas (6,101,378 people in 2025). The median age in Azerbaijan is 33.6 years.²⁶

Natural disaster risks: Azerbaijan is susceptible to earthquakes, droughts, and flooding, which disproportionately impact vulnerable communities whenever they occur.

Gender Equality: In Azerbaijan, 11 percent of women aged 20–24 years old who were married or in a union before age 18. The adolescent birth rate is 37.3 per 1,000 women aged 15–19 as of 2022. However, work still needs to be done in Azerbaijan to achieve gender equality. 66.7 percent of legal frameworks that promote, enforce and monitor gender equality under the SDG indicator, with a focus on violence against women, are in place. As of February 2024, only 18.1 percent of seats in parliament were held by women. In 2018, 5.2 percent of women aged 15-49 years reported that they had been subject to physical and/or sexual violence by a current or former intimate partner in the previous 12 months. Also, women and girls aged 15+ spend 25.4 percent of their time on unpaid care and domestic work, compared to 8.9 percent spent by men. Moreover, women of reproductive age (15-49 years) often face barriers with respect to their sexual and reproductive health and rights: in 2006, 21.5 percent of women had their need for family planning satisfied with modern methods.

The Government of Azerbaijan has actively undertaken measures to distribute opportunities equitably and to support the equal and balanced participation of women and men in public and social life. Specific budgetary allocations have been made to ensure a steady increase in the gender mainstreaming process and all State programmes and services committed to ensure gender equality at all levels and all spheres.

Despite these robust mechanisms to enhance equality there are still some challenges: women's status in the labor market is lower than men's, women are over-represented in subordinate positions, women's wages are 50–60 percent lower than men's wages, women and girls aged 15+ spend more time on unpaid care and domestic work than men and women of reproductive age face barriers to sexual and reproductive health and rights. The Azerbaijan republic is still committed to enhance gender parity.

Gender-Based Violence: GBV is a serious problem in Azerbaijan, with many women and girls lacking access to essential services. This includes a lack of support services and shelters for survivors. According to the WHO, one in three women in Azerbaijan has been beaten, coerced into sex, or abused in some other way. In 2018, 32 percent of women reported experiencing physical violence from a partner whilst 43 percent of women having experienced domestic violence. Many women and girls lack access to essential services, lack support services for GBV survivors and often face barriers with respect to their

²⁵ UN Dept. of Economic and Social Affairs-population Division. World population prospects: The 2024 Revision Worldometer elaboration. Available at <https://www.worldometers.info/world-population/turkmenistan-population/>

²⁶ Ibid

sexual and reproductive health and rights. To address these prevalence issues of GBV the Government of Azerbaijan has taken up some robust measures i.e. Adoption the 2010 Law on Prevention of Domestic Violence

5. Potential Environmental and Social Risk Impacts and Standard Mitigation Measures

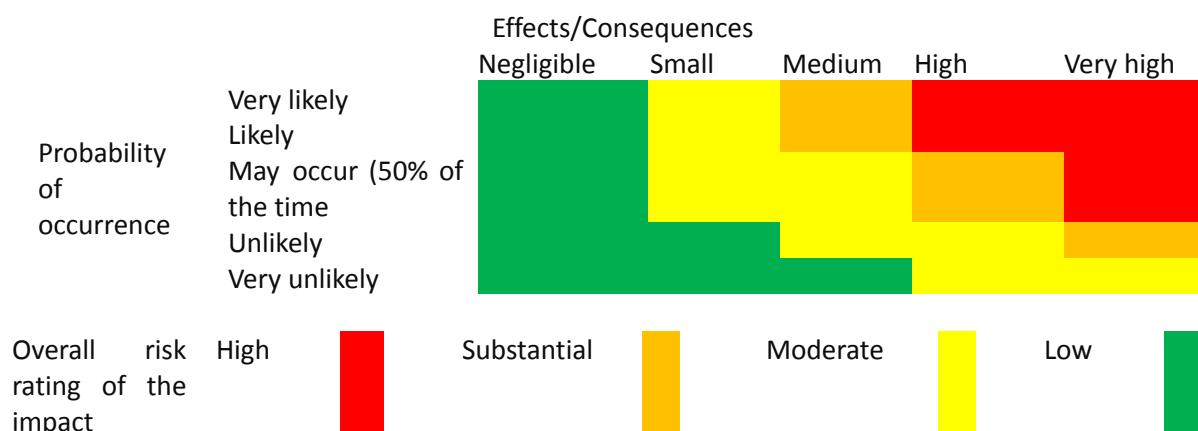
This section list relevant project activities that may have environmental and social risks and impacts. For each type of activity, it lists the environmental and social risks and impacts, as well as standard mitigation measures and processes that are expected to be applied.

The aim of this section is to describe the risks, impacts, and mitigation measures at a generic level for both Components. As part of Component 2, specific 'PA Management Plans' will be prepared for the establishments of MPAs. These will take specific risks and impacts into account.

5.1 Risk and Impacts Assessment Methodology

The assessment of impacts is an iterative process underpinned by four key questions: Prediction: what change to the physical, chemical or social environment will occur if the project is implemented?; Evaluation: what are the consequences of this change? How significant will its impact be on human and biological receptors; Mitigation: if it is significant can anything be done about it?; Residual Impact: is it still significant after mitigation? Where significant residual impacts remain, further options for mitigation will be considered and where necessary impacts are re-assessed until they are reduced. The figure below shows the methodology that will be used to assess impacts.

Table 8 Risk assessment methodology



5.2 Identification and Assessment of Risks and Impacts

The environmental and social risk classification for the project is Substantial.

Component 1 on Pollution Monitoring includes the involvement of detergents and chemicals in the pollution monitoring process. This poses risks of water pollution, soil contamination and bioaccumulation, as well as workers' health risks where workers are exposed to toxic, corrosive or carcinogenic chemicals; or community health risks where chemicals are stored improperly or through accidental spillage. Furthermore, restrictions on the polluter industry may cause loss of jobs.

Component 2 supports one recently created, and two proposed Marine Protected Areas (MPAs), which will positively impact biodiversity conservation, enhance ecosystem services, and support fish populations.

The creation and expansion of MPAs may restrict access to natural resources for communities and businesses, which may lead to economic pressure on local communities and to illegal activities, such as poaching and fishing. There could also be negative impacts on vulnerable groups through land appropriation for the expansion or creation of MPAs. Once the MPAs are created, conflict between law enforcement and communities could arise around the MPAs.

The project is proposed to work in three specific areas, and the potential risks of the expansions in terms of number of people displaced, number of people whose livelihoods may be affected, and estimated area of land to be expropriated is characterized as follows:

Azerbaijan, Absheron National Park. The boundaries for the expansion of the existing national park to include marine areas will be determined in year 1 of the project. It is possible that there is some minor land acquisition. Livelihoods are unlikely to be affected negatively as recreational fishing is likely to continue to be allowed.

Kazakhstan, Caspian Itbalygy State Nature Reserve: The boundaries of the marine reserve, which includes the "Seal Island" site and the "Prorva" site, were established by the government in 2024. No communities live in the area that was declared, and no people are expected to be displaced. Livelihoods are unlikely to be affected negatively as fishing with permits will likely continue to be allowed. There could be changes needed to shipping routes. No land is expected to be expropriated.

Turkmenistan, Garabogaz Marine Protected Area. The boundaries of the protected area have been proposed and will be confirmed in year 1 of the project. There are no settlements, farms, or villages located within or adjacent to the proposed MPA. As a result, there is currently no significant local human impact on the area's ecosystems through agriculture, fishing, or other resource-based activities. No land is expected to be expropriated.

Further risks and impacts through the creation of MPAs in regard to biodiversity include (i) alterations of ecosystem through predatory-prey disruptions, (ii) invasive fish species may take advantage or protected spawning zones competing with sturgeon for habitat, (iii) increased populations of invasive marine species, and (iv) overfishing and harming of marine life in other areas. Other social risks include lack of stakeholder inclusion and access to Grievance Redress Mechanisms especially where activities under Component 2 inflict the expansion or new creation of PAs, affecting people's access to resources in the new PA areas. During the operational period there may be use of force by enforcement agencies to

protect the MPAs. No enforcement agency will be funded by the Project, but the countries' will need to enforce the relevant restrictions through the MPAs.

The below Table presents the potential risks and impacts as per Component and assesses the risks.

Table 9 Assessment of Environmental and Social Risks

Component and subcomponent	Activity	Risk or Impact	Risk Assessment
Component 1: Strengthening Pollution Monitoring Subcomponent 1.1: Multi-country technical assistance to strengthen pollution monitoring	Multi-country activities Marine pollution roundtables and pre feasibility studies	Non-compliance with labor requirements and working conditions among consultants (ESS2)	
		Downstream social risks through TA (ESS1)	
		Exclusion of stakeholder (ESS10)	
		Lack of access to GRM (ESS10)	
Subcomponent 1.2 Pollution monitoring in Azerbaijan	Development of monitoring scheme Capacity building in monitoring scheme Procurement of equipment Awareness raising	Exclusion of relevant stakeholders (ESS10)	
		Non-compliance with labor requirements and working conditions among suppliers (ESS2)	
		Water pollution, soil contamination and bioaccumulation through use of detergents and chemicals (ESS3)	
		Workers' and community health risks through improper storage or spillage of chemicals (ESS2 and ESS4)	
Subcomponent 1.3 Pollution monitoring in Kazakhstan	Development of monitoring scheme Capacity building in scheme Procurement of equipment Awareness raising	Exclusion of relevant stakeholders (ESS10)	
		Non-compliance with labor requirements and working conditions among suppliers (ESS2)	
		Water pollution, soil contamination and bioaccumulation through use of detergents and chemicals (ESS3)	
		Workers' and community health risks through improper storage or spillage of chemicals (ESS2 and ESS4)	
Subcomponent 1.4 Pollution monitoring in Turkmenistan	Development of monitoring scheme	Exclusion of relevant stakeholders (ESS10)	

	Capacity building in scheme Procurement of equipment Awareness raising	Non-compliance with labor requirements and working conditions among suppliers (ESS2)	
		Water pollution, soil contamination and bioaccumulation through use of detergents and chemicals (ESS3)	
		Workers' and community health risks through improper storage or spillage of chemicals (ESS2 and ESS4)	
Component 2: Strengthening Biodiversity Planning Subcomponent 2.1: Multi country TA to strengthen biodiversity planning	Multi-country activities Keystone species approach Phased approach to marine protected areas Biodiversity finance for scale-up	Downstream environmental risks through TA (ESS1)	
		Downstream social and specifically resettlement related risks through TA (ESS5)	
		Non-compliance with labor requirements and working conditions among consultants (ESS2)	
		Lack of stakeholder inclusion especially local voices that can articulate traditional knowledge on species and habitat management (ESS10)	
		Lack of access to GRM (ESS10)	
Subcomponent 2.2: Biodiversity Planning in Azerbaijan	National biodiversity priority setting in Absheron MPA (studies) TA to enhance the PA management system Capacity building for Absheron National Park	Downstream E&S risks through TA (ESS1)	
		Non-compliance with labor requirements and working conditions among consultants (ESS2)	
		Negative impacts of land appropriation on vulnerable groups (ESS4) Potential use of force in the operational phase for the protection of the MPA and conflict between law enforcement and communities around MPA in operational phase (ESS4)	
		Restrictions on access to natural resources in legally designated MPA, causing economic losses through loss of access to resources (e.g. traditional fishing rights) (ESS5)	
		Land acquisition (ESS5)	
		Overfishing and harming of marine life in other areas (affecting aquatic biodiversity) (ESS6)	
		Increased populations of invasive marine species (ESS6)	

		<p>Invasive fish species may take advantage of protected spawning zones competing with sturgeon for food and habitat (ESS6)</p> <p>Alteration of ecosystem through predator-prey disruptions (ESS6)</p> <p>Lack of stakeholder engagement (ESS10)</p> <p>Lack of access to GRM (ESS10)</p>	
Subcomponent 2.3: Biodiversity planning in Kazakhstan	<p>National biodiversity priority setting, stocktaking and study of Itbalygy State Nature Reserve in Mangistau Region</p> <p>TA to enhance PA management system</p> <p>Capacity building in managing MPA</p>	<p>Downstream E&S risks through TA (ESS1)</p> <p>Non-compliance with labor requirements and working conditions among consultants (ESS2)</p> <p>Potential use of force in the operational phase for the protection of the PA and conflict between law enforcement and communities around PA in operational phase (ESS4)</p> <p>Creation of MPA may lead to restrictions of access to natural resources in legally designated MPA, causing economic losses through loss of access to resources (e.g. traditional fishing rights), (ESS5)</p> <p>Overfishing and harming of marine life in other areas (affecting aquatic biodiversity) (ESS6)</p> <p>Increased populations of invasive marine species (ESS6)</p> <p>Invasive fish species may take advantage of protected spawning zones competing with sturgeon for food and habitat (ESS6)</p> <p>Alteration of ecosystem through predator-prey disruptions (ESS6)</p> <p>Lack of stakeholder engagement (ESS10)</p> <p>Lack of access to GRM (ESS10)</p>	
Subcomponent 2.4: Biodiversity planning in Turkmenistan	<p>National biodiversity priority setting, including stocktaking and study on Garabogaz Marine Protected Area</p> <p>TA to enhance the PA management system</p> <p>Capacity building in managing MPA</p>	<p>Downstream E&S risks through TA (ESS1)</p> <p>Non-compliance with labor requirements and working conditions among consultants (ESS2)</p> <p>Potential use of force in the operational phase for the protection of the PA and conflict between law enforcement and communities around PA in operational phase (ESS4)</p> <p>Increasing the size of MPA may lead to restrictions of access to natural resources in legally designated MPA, causing economic losses through loss of access to resources (e.g. traditional fishing rights), (ESS5)</p> <p>Overfishing and harming of marine life in other areas (affecting aquatic biodiversity) (ESS6)</p>	

		Increased populations of invasive marine species (ESS6)	
		Alteration of ecosystem through predator-prey disruptions (ESS6)	
		Lack of stakeholder engagement (ESS10)	
		Lack of access to GRM (ESS10)	
Component 3: Project coordination, M&E, Reporting	FM, M&E, E&S risk management, GRM	Lack of stakeholder engagement (ESS10)	
		Lack of access to GRM (ESS10)	
		Lack of general awareness of E&S risk mitigation	

5.3 Environmental and Social Management Plan (ESMP)

In line with WB ESS1, for the elaboration and implementation of the environmental and social mitigation measures, the project is adopting the following mitigation hierarchy approach:

1. Anticipate and avoid risks and impacts;
2. Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
3. Once risks and impacts have been minimized or reduced, mitigate;
4. Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.

The below generic Environmental and Social Management Plan (ESMP) lists the prevention, minimization, mitigation and compensation activities for each activity's risks and impacts. It disaggregates them by ESS. The generic ESMP presents standardized management and mitigation procedures for handling environmental and social risks resulting from the project in the local context. The generic ESMP should therefore serve as a reference on risks and impacts in regards to the associated international industry best practices and mitigation measures that can be planned and implemented throughout the project life cycle. The items in the generic ESMP can serve as a template for site-specific mitigation and monitoring measures to be included in Component 1 activities. Under Component 2, the measures will guide the preparation of 'PA Management Plans' in each country.

Table 10 Project ESMP and Monitoring Table

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
ESS 1: Environmental and Social Assessment									
Downstream E&S risks emanating from TA	Ensure inclusion of E&S requirements in all TOR and contracts or grant agreements	X		% of RFPs or TOR contain all relevant	X			PIU	

²⁷

The costs cannot be fully determined at this stage. They will be calculated for each activity in the activity-specific ESMPs.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
	Review all TA products in view of downstream E&S risks			provisions on E&S					
ESS 2: Labor and Working Conditions									
Lack of appropriate OHS measures among suppliers	Ensure LMP requirements are included in all procurement contracts	X		% of contracts with appropriate obligations included		X		Supplier PIU	
Non-compliance with labor requirements and working conditions among consultants	Adopt and implement Labor Management Procedures (LMP)	X	X	# of workers grievances filed		X		All contracting entities / national authorities PIU	
Child labor and forced labor among suppliers and general Project workers	Request proof of age of the workforce Request that supplier implements workers' GRM Ensure UNOPS has workers' GRM channels available Create awareness of Project GRM	X	X	% of workers for which age check has been completed % of suppliers with		X		PIU	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
				workers' GRM # of UNOPS workers' GRM channels available					
Workers' and community health risks through improper storage or spillage of chemicals	Store incompatible chemicals separately Ensure all chemicals are clearly labeled Use ventilated and lockable cabinets for chemicals Provide appropriate PPE for workers Conduct mandatory training for workers on safe handling of chemicals Use spill-proof containers Prepare a chemical spill response plan	X		# of sites where chemicals are stored appropriately # of training sessions conducted # of chemical spills response plans prepared			X	Pollution monitoring agent National authorities	Costs of storage facilities, PPE Training sessions

ESS3: Resource Efficiency and Pollution Prevention and Management

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
Water pollution, soil contamination and bioaccumulation through use of detergents and chemicals	<p>Prevent chemical entry into aquatic systems</p> <p>Use environmentally friendly reagents</p> <p>Treat and test wastewater containing chemicals before releasing it into the water body</p> <p>Prevent leaching or direct contamination of soil.</p> <p>Apply proper storage infrastructure</p> <p>Collect excess chemicals in designated hazardous waste containers</p> <p>Eliminate persistence and exposure pathways for toxic substances</p>	X	X	# of sites with appropriate storage infrastructure			X	<p>Pollution monitoring agent</p> <p>National authorities</p>	<p>Costs of storage facilities, treatment supplies,</p>
ESS 4: Community Health and Safety									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
Potential use of force in the operational phase for the protection of the PA	<p>Conduct a desk review of publicly available information, media scan, and stakeholder consultations to assess reputational risks and the possible presence of factors that would require the reconsideration of subproject and incorporate mitigation measures in consultation with the local authorities and communities in the MPA biodiversity management plans. operational phase law enforcement.</p> <p>Assess risks through law enforcement and security forces as part of Phase 1 of Project (see below). Bank to set risk level and agree on mitigation measures</p>	X	X	# of assessments of law enforcement agencies conducted # of narrower desk assessments conducted		X		PIU/national focal points PIU	
Conflict between law enforcement and communities around MPA in operational phase	Assess risks through law enforcement and security forces as part of Phase 1 of Project (see below). Bank to set risk level and agree on mitigation measures		X	# of assessments conducted		X		PIU/national focal points PIU / WB	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
ESS5: Involuntary Resettlement									
Restrictions of access to natural resources in legally designated MPAs, causing economic losses through loss of access to resources (e.g. traditional fishing rights)	<p>Adopt and implement RPF</p> <p>Adopt and implement Process Framework (PF)</p> <p>Ensure preparation and implementation of Resettlement Action Plans (RAPs) and Livelihood Restoration Plans (LRPs) where necessary, as per RPF</p> <p>Conduct assessment on communities living in or near the MPAs and to what extent they depend on MPA resources for their livelihoods.</p> <p>As part of the RPF implementation, identify project-affected persons (PAPs) based on reliable and up-to-date socio-economic data on aspects such as where they are located, in what ways and how regularly they make use of the MPAs' resources</p>	X		<p># of RAPs or LRP prepared and implemented</p> <p>% of MPAs for which assessment on livelihoods of communities near MPAs were implemented</p> <p>% of MPAs for which data on illegal access for poaching was collected</p>			X	<p>PIU/national focal points and partners</p> <p>PIU</p>	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
	<p>and how dependent they are on those resources for their livelihoods and economic development, their social and political institutions (including long-standing conflicts or alliances among groups), demographics, relevant cultural practices, etc.</p> <p>Collect baseline data on illegal access to PA resources (e.g., poaching, illegal grazing, fishing, firewood).</p> <p>Assess to what extent communities will be adversely impacted by project activities' establishment or strengthening of access restrictions or stricter enforcement of existing ones.</p> <p>Identify existing stakeholder consultations and outreach mechanisms related to the enforcement of PA rules.</p> <p>Assess whether access restrictions induced by the</p>			<p>% of MPAs for which adverse effects on communities was assessed</p> <p>% of MPAs for which existing stakeholder consultations and outreach mechanisms were identified</p> <p>% of MPAs for which assessments were conducted that considered the consequences of access</p>					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
	<p>project may result in indirect or cumulative impacts within or outside the supported PAs (e.g., migrations or displacement of economic activity outside the PA).</p> <p>Assess any legacy issues related to customary rights or uses and whether they have been or can be resolved.</p>			restrictions for communities					
Land acquisition for creation of MPA in Azerbaijan	Prepare and implement RAPs, based on the RPF.	X		Successful implementation of RAP prior to establishment of MPA			X	National Focal Point UNOPS	Costs of RAP preparation and implementation (e.g. compensation payments)
ESS 6: Biodiversity Conservation and Sustainable Management of Living Resources									
Overfishing and harming of marine life in other areas (affecting aquatic biodiversity)	<p>Assess as part of activities under Component 2 and prepare measures as part of the MPA management plan.</p> <p>Where additional measures are required, prepare</p>		X	# of management plans prepared and implemented			X	PIU/National Focal Points PIU	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
	measures as part of the site-specific ESMP								
Increased populations of invasive marine species	<p>Assess as part of activities under Component 2 and prepare measures as part of the MPA management plan.</p> <p>Where additional measures are required, prepare measures as part of the site-specific ESMP</p>		X	# of management plans prepared and implemented			X	PIU/National Focal Points PIU	
Invasive fish species may take advantage of protected spawning zones competing with sturgeon for food and habitat	<p>Assess as part of activities under Component 2 and prepare measures as part of the MPA management plan.</p> <p>Where additional measures are required, prepare measures as part of the site-specific ESMP</p>		X	# of management plans prepared and implemented			X	PIU/National Focal Points PIU	
Alteration of ecosystem through predator-prey disruptions	<p>Assess as part of activities under Component 2 and prepare measures as part of the MPA management plan.</p> <p>Where additional measures are required, prepare measures as part of the site-specific ESMP</p>		X	# of management plans prepared and implemented			X	PIU/National Focal Points PIU	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase		Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) ²⁷
		Planning	Operation		Continuous	Monthly	Quarterly		
ESS 10: Stakeholder Engagement and Information Disclosure									
Lack of access to GRM	Implement GRM Create awareness about GRM Implement Process Framework	X	X	# of awareness sessions conducted # numbers and types of grievances received and resolved along with their timeframe		X		PIU	
Inadequate stakeholder engagement	Implement consultation and information dissemination events as per SEP and the Process Framework Include vulnerable groups into consultations	X		# of community consultations held # of vulnerable groups consulted	X			PIU/national focal points PIU	

6. Procedures and Implementation Arrangements

26. Under Component 2, a phased approach will be applied. A phased approach will be applied to ensure that the risks related to protected area planning are adequately evaluated and addressed. With support from the project, specific environmental and social assessments and mitigation measures will be put in place during implementation based on the final location of each protected area and its socioeconomic profile. The criteria determining the completion of a phase will be articulated in the project's guide for implementation of this component. The criteria are likely to consist of i) scientific evidence and ii) government commitment evidence. In collaboration with UNOPS and the concerned country, the Bank will review the path for the next phase, and if the requisite measures or resources cannot be put in place, halt support and restructure the project if necessary. The phases are:

- **Phase 1 - Conceptualization:** Precise conceptualization of the protected area. This includes biophysical and socioeconomic assessments, stakeholder engagement, confirming protected areas boundaries and existing uses by nearby communities, and drafting of management plan and necessary environmental and social instruments.
- **Phase 2 - Establishment:** Drafting and enacting legislation that defines the boundaries and regulations of the protected area. Identifying and securing funding sources is essential for the successful establishment of a protected area. Developing the necessary investment plan for infrastructure to support conservation efforts and community engagement.
- **Phase 3 – Management:** Implementing support to the management plan through concrete actions and initiatives. Training staff, including rangers, researchers, and educators. Conducting ongoing monitoring of ecological health and compliance with regulations.

Assessment of law enforcement practices. Each country has an agency which has the authority to enforce the regulations that apply for the proposed marine protected areas.²⁸ The risk related to law enforcement and security forces will be assessed as part of the Phase 1 on conceptualization of the protected area. In this phase the project will undertake the needed assessment, and the Bank supervision will establish the risk level. It is, however, expected to be low risk given there are few people living in the protected areas concerned. If the risk is deemed too high, the Bank will not authorize moving to Phase 2 and Phase 3. If new risks are identified during implementation, then adaptive management will be addressed by updating the ESCP and implementing measures accordingly.

6.1 Environmental and Social Risk Management Procedures

In summary, the E&S management procedures aim to do the following:

Table 11 Project Cycle and E&S Management Procedures

Project Stage	E&S Stage	E&S Management Procedures
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²⁸ Biodiversity Protection Service of the Ministry of Ecology and Natural Resources, and State Border Service (Azerbaijan), Management Authority for Nature Reserves in Aktau, and Border Service of the National Security Committee (Kazakhstan), and Ministry of Environment Protection, and State Border Service (Turkmenistan)

a. Assessment and Analysis: Site (MPA) identification	Social Screening Checklist Preparation of PA Management Plans Preparation of additional E&S instruments	Phase 1: <ul style="list-style-type: none"> - Biophysical and socioeconomic assessments, stakeholder engagement, confirming MPA boundaries and existing uses by nearby communities - Preparation of PA Management Plans - Preparation of additional site-specific E&S instruments, if necessary - Complete Social Screening Checklist (see Annex 1) - Assess risks related to law enforcement and security forces - Establish the risk level for site. - Request clearance from Bank to proceed to Phase 2.
b. Formulation and Planning: Planning for MPA management activities, including human and budgetary resources and monitoring measures	Planning	Phase 2: <ul style="list-style-type: none"> - Adopt relevant MPA Management Plan measures and other E&S instruments for implementation of the MPA; - For MPAs with ESS5-related impacts, implement the RPF (e.g. prepare RAPs prior to establishment of MPA). Submit the RAPs to the World Bank for no-objection. Ensure that the respective government has implemented the RAP prior to commencement of activities. - Adopt and implement stakeholder engagements outlined in the Process Framework and Stakeholder's Engagement Plan (SEP). - Train staff responsible for implementation and monitoring of PA Management Plans. - Train potential implementing partners on relevant procedures and plans.
c. Implementation and Monitoring: Implementation support and continuous monitoring of MPA management	Implementation	Phase 3: <ul style="list-style-type: none"> - Assist Governments with the implementation of PA Management Plans and other E&S instruments and requirements through site visits, regular reporting from the field, and other planned monitoring. - Track grievances/beneficiary feedback through Project GRM - Assist with establishment of MPA-specific local GRM - Continue awareness raising and/or training for relevant staff, implementing partners, government partners, communities.
d. Review and Evaluation: quantitative, and/or participatory data collection on a sample basis	Completion	Assess whether MPA Management Plans and other E&S instruments as well as stakeholder engagement requirements have been effectively implemented.

More detail for each stage is provided below.

6.3 Phase 1 and 2 - Planning

Based on the process above and the results of the E&S Screening Checklist, the UNOPS PIU and the national focal points will adopt the necessary environmental and social management measures already included in this ESMF in the preparation of PA Management Plans and, where necessary, other site-specific E&S instruments.

If additional site-specific E&S instruments are necessary, the UNOPS PIU or Government Focal Point will prepare these as needed. The UNOPS PIU will provide approval and compile E&S instruments and other applicable forms. The contents of the MPA Management Plans and additional E&S instruments will be shared with relevant stakeholders in an accessible manner, and consultations will be held with the affected communities on the formation of the MPA and environmental and social risks and mitigation measures. The PA Management Plans and E&S instruments will also be submitted to the World Bank for no objection.

At this stage, staff who will be working on the various MPA activities should be trained in the respective PA Management Plans and E&S instruments relevant to the activities they work on. The governmental Focal Points, with assistance from the UNOPS PIU should provide such training to field staff.

The UNOPS PIU should also ensure that all partners, contractors and vendors understand and incorporate E&S mitigation measures relevant to them as standard operating procedures. The UNOPS PIU will provide training to selected partners to ensure that they understand and incorporate relevant aspects of the MPA Management Plans and other E&S mitigation measures; and plan for cascading training to be delivered by Implementing Partners to sub-implementers.

6.4 Phase 3 - Implementation, Monitoring, Evaluation and Reporting

During implementation of the PA Management Plans, the UNOPS PIU and relevant national institutions will conduct regular monitoring visits based on a monitoring plan and frequency that is proportionate to the risks and impacts.

Monitoring practices include the E&S risks identified in the ESMF, PA Management Plans and other site-specific E&S instruments.

General E&S performance will be monitored as part of the Project monitoring, which will be carried out twice per year and is the responsibility of UNOPS. Monitoring will follow the Results Framework of the project including PDO-level indicators as well as the intermediate component-level indicators. UNOPS M&E will provide the overall monitoring of information collection with regards to the project activities progress as well as compliance with the ESF standards and fiduciary regulations. UNOPS will be responsible for fulfilling the M&E objectives, preparation of M&E plan and manual, and their implementation. UNOPS will provide project monitoring information for the Implementation Status Report (ISR). The M&E information will inform any policy adjustments and decision-making needed to successfully achieve project results.

At a minimum, the E&S reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder

engagement updates, in line with the SEP, (vi) public notification and communications, and (vii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the PA level will be submitted to the UNOPS PIU, where they will be aggregated and submitted to the World Bank on a quarterly basis.

Throughout the Project implementation stage, the UNOPS PIU will continue to provide training and awareness raising to relevant stakeholders, such as staff, national focal points, selected government partners, and communities, to support the implementation of the E&S risk management mitigation measures.

The UNOPS PIU will also track grievances/stakeholder feedback in line with the SEP during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

Upon completion of Project activities, the UNOPS PIU will review and evaluate progress and completion of project activities and all required E&S mitigation measures. The UNOPS PIU will prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

6.5 Incident Reporting

If the UNOPS PIU becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it will notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including SEA/SH incidents), violent community protests, violent incidents resulting from project activities (e.g., enhanced patrols, better demarcation or enforcement of PA boundaries, increase in seizures of property). Incident reporting will follow the World Bank's incident classification and reporting requirements as per the Bank's ESIRT.

6.6 Technical Assistance Activities

The UNOPS PIU will ensure that the consultancies, studies, capacity building, training, and any other technical assistance activities under the Project are carried out in accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs. It will also ensure that the outputs of such activities comply with the Terms of Reference.

6.8 Implementation Arrangements for E&S Risk Management

The Project will engage personnel to manage the requirements of the relevant ESS as well as government partners to support the implementation of the project in each country as required. The UNOPS PIU will be responsible for coordination, implementation, and monitoring and evaluation (M&E) of the project, as well as procurement, FM, and E&S risk management, including approving and tracking the distribution of funds and E&S management and monitoring. The PIU will include an Environmental and Social

Specialist that will mainly be responsible for the implementation of the E&S instruments.

The PIU E&S Specialists will be responsible for coordinating with each national Focal Point assigned by the respective Government for the execution of national-level activities in Azerbaijan, Kazakhstan and Turkmenistan. The national agencies include the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan, Ministry of Ecology and Natural Resources of the Republic of Kazakhstan and the Ministry of Environment Protection of Turkmenistan. The UNOPS PIU will mobilize/contract national expertise as needed to implement the E&S instruments including regular reporting. The national agencies will provide technical guidance for the overall implementation of the project in consideration of the RSC observation and in support of the PIU.

The table below summarizes the roles and responsibilities regarding the implementation arrangements for environmental and social risk management.

Table 12 Implementation Arrangements

Level/ Responsible Party	Roles and Responsibilities
UNOPS PIU – Regional Level	<ul style="list-style-type: none"> - Provide support, oversight, and quality control on E&S risk management. - Collect, review, and provide quality assurance and approval of Social Screening Checklist, PA Management Plans and other E&S instruments as relevant. Keep documentation of all progress. - Oversee overall implementation and monitoring of MPA Management Plans and E&S mitigation activities, compile progress reports from MPAs, and report to the World Bank on a quarterly basis. - Train staff and Government partners, who will be responsible for implementing the ESMF, PA Management Plans and E&S instruments. - Ensure that all bidding and contract documents include all relevant E&S management provisions (e.g. for procurement activities) - Facilitate the preparation of PA Management Plans and review E&S aspects - Support the preparation of various TA pieces. - Support stakeholder consultations - Implement Project-level GRM and assist with establishment of MPA-level GRM - Report incidents and accidents to the Bank - Prepare regular E&S reporting as part of the Project Progress Report
Government Focal Points – National Level (Azerbaijan Ministry of Ecology and Natural Resources)	<ul style="list-style-type: none"> - Establish MPA through legal instruments - Prepare PA Management Plans - Complete Social Screening Checklists for relevant subproject activities and submit forms to the UNOPS PIU. - If relevant, complete other E&S instruments for MPA creation and submit to the UNOPS PIU.
 (Kazakhstan Ministry of Ecology and Natural Resources)	<ul style="list-style-type: none"> - Conduct assessment of law enforcement and security agencies as part of the PA Management Plans. - Oversee daily implementation and monitoring of E&S mitigation measures, and report progress and performance to the UNOPS PIU on a monthly basis.
 (Turkmenistan Ministry of Environmental Protection)	<ul style="list-style-type: none"> - Provide training to any partners and communities on relevant E&S mitigation measures, roles, and responsibilities. - Lead on stakeholder engagement responsibilities - Implement GRM at MPA level - Appoint MPA-level E&S Focal Points from among relevant local government agencies.

	<ul style="list-style-type: none"> - Report Project-related incidents and accidents to UNOPS
Site-specific governmental Focal Points	<ul style="list-style-type: none"> - Oversee daily implementation and monitoring of E&S measures, and report progress and performance to the Government national FP and UNOPS PIU on a monthly basis. - Implement stakeholder engagement responsibilities - Implement MPA-level GRM - Assist with assessments where relevant

6.9 Proposed Training and Capacity Building

Successful implementation of the Project will depend, among others, on the effective implementation of the E&S risk management measures outlined in this ESMF. Training and capacity building will be necessary for the key stakeholders in order to ensure effective implementation of the ESMF, SEP, and other E&S instruments. An initial training approach is outlined in the Table below. To the extent possible, training on E&S risk management will be integrated into the project cycle and operational procedures.

Table 13 Proposed Training and Capacity Building Approach

Level	Responsible Party	Audience	Topics/Themes that May Be Covered
Regional Level	World Bank	PIU staff responsible for overall implementation of ESMF	<p>ESMF and approach:</p> <ul style="list-style-type: none"> - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures/instruments - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH measures - Application of SEP and the GRM
National level	UNOPS PIU	<p>National Focal Points and Government Partners</p> <p>Implementing Partners / Contractors</p>	<p>ESMF and approach:</p> <ul style="list-style-type: none"> - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH measures - Application of SEP and the GRM
Local/site and community level with a role in PA management	UNOPS PIU / national focal points	<p>Local governmental Focal Points, Community groups, NGOs, government institutions, companies, and any other groups e.g., police or military</p>	<ul style="list-style-type: none"> - Application of SEP and the GRM - ESMPs, as relevant - Community Health & Safety - Coordination of MPA

		that conduct joint PA patrols with PA authorities, local government agencies charged with land titling or resettlement.	
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6.10 Estimated Budget

The following table lists estimated cost items for the implementation for the ESMF, which have been included in the overall project budget. The Table excludes the costs of the SEP and the RPF, which are listed in the respective documents.

Table 14 Indicative ESMF Implementation Budget

Activity/Cost Item	Potential Cost (USD)
Training for staff (venue, refreshments etc.) (1 initial training, 1 refresher training, at PIU location and virtual: 2 x 300 USD for refreshments)	600
Training for Implementing Partners / contractors (venue, travel, refreshments, etc.) (national 1 initial training in each country, 1 local trainings at 6 sites) National: travel costs: 3 x 2,000; venue 3 x 1,000; refreshments 3 x 500; Local: 6 x travel costs 1,000, 6 x venue 500; 6 x refreshments 500	22,500
Printing of awareness raising materials / grievance redress materials (3 x 2,000)	6,000
Software for data collection / supervision / monitoring / grievance redress	2,000
Preparation of site-specific ESMPs, RAPs/LRPs and other site-specific plans (3 x ESMPs 20,000; 3 x RAPs/LRPs 10,000)	90,000
Cost of obtaining clearances or permits	1,000
Implementation of site-specific ESMPs and other site-specific E&S plans (3 x 10,000)	30,000
PIU E&S staff (4 years x 88,000)	352,000
National E&S focal points	On Govt budget
Travel and accommodation budget for E&S staff site visits (2 persons x 8 times x to 3 countries 6,000)	96,000
Preparation of various social assessments (as part of ESIA)	
Costs of stakeholder engagement (see SEP)	
Costs of GRM (see SEP)	
TOTAL	600,000

7. Stakeholder Engagement and Consultations

A separate Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on ESS10. ESS10 recognizes the importance of open and transparent engagement with all Project stakeholders, based on the recognition that effective stakeholder engagement can improve E&S sustainability of Project activities, enhance Project acceptance, and implementation, and allow stakeholders to contribute to

Project and activity design. The key objectives of stakeholder engagement include a) an assessment of the level of interest and support of the Project by stakeholders to promote effective and inclusive engagement with all project-affected parties and b) to ensure that Project information on E&S risks and impacts is disclosed in a timely and understandable way.

The SEP outlines all stakeholder engagements for the Project activities in a systematic way. It defines legal and policy requirements in regard to stakeholder engagements, provides a stakeholder analysis of all relevant project-affected parties, including members of vulnerable groups, and lays out the means and frequency with which the Project will disseminate information to different stakeholders as well as means and ways to continue to consult different stakeholder groups throughout the Project.

During the Project preparation phase a variety of stakeholder engagements have been undertaken in the three Project countries between April 2024 and May 2025 (see Annex 3 for more details). Key issues raised during the stakeholder consultations in the project preparation phase included the following:

Country	Key Issues Raised
Azerbaijan	<ul style="list-style-type: none"> - interest in the funding of international expertise to help bring respective ongoing initiatives in Azerbaijan to scale, including the understanding of integrated coastal management and maritime spatial planning tools - interest in the expansion of the marine part of the Samur-Yalama National Park, located in the north of the country, or possibly another national park such as Absheron; - interest in the elaboration of management plans for selected PAs, application of more effective PA management practices through the promotion of sustainable ecotourism practices; and the development of exchange platforms for national parks managers from the three participating countries with dedicated capacity-building sessions. - interest in improving pollution monitoring in the Caspian Sea, specifically: i) identifying the most suitable locations for monitoring stations, ii) supporting offshore monitoring by purchasing equipment for a monitoring vessel, iii) developing a legal framework for pollution monitoring following international standards, iv) developing guidance/methodology on coastal clean-up from oil exploration activities, v) supporting cross-learning among the participating countries and other regions on the monitoring of the marine environment, and vi) supporting the activities of the Working Group of the Tehran Convention on Monitoring and Assessment. - Confirmation that a new MPA in the marine area surrounding “Absheron National Park” would be created for a focus on biodiversity, including knowledge/studies to better understand how the habitat for migratory birds, Sturgeon, and Caspian seal. - inadequate coordination among countries and insufficient data sharing, as well as a low interest from stakeholders to cooperate with government institutions. The role of local communities in decision-making should be increased. - Anticipated social impacts: potential closures of polluting industries, unemployment may occur. Recommendation for diversity income

	<p>sources and rely more on sustainable incomes, like environmental tourism</p> <ul style="list-style-type: none"> - In case there are reduced fishing opportunities for local populations due to PAs, designated fishing grounds should be established in alternative areas with sustainable fishing opportunities, for example an increase of fish farms. Furthermore, awareness raising of local communities is very important. Recommended to organize an inception meeting. This meeting can ensure the participation of all interested parties. For example, such meetings can be organized in Absheron National Park and on the islands included in the territory of the National Park to be expanded, with local population, fishermen and industrial workers, as well as civil society institutions.
	<ul style="list-style-type: none"> - the most vulnerable stakeholders are local communities, some traditional tourism stakeholders, and women. Key stakeholders named are NGOs, government, fishermen, oil industry representative, tourism actors. Vulnerable stakeholders are women, local stakeholders, local families with low income. - Research institutions indica that one of the key challenges to pollution and biodiversity is the lack of infrastructure, informal settlements in areas close to the sea, lack of sewage systems, needs arising from low awareness levels of the local populations, and a lack of good coordination between countries. Strengthen cooperation between scientific institutions of the coastal countries and develop various scientific programs related to pollution and biodiversity. - investigate how pollution and biodiversity problems affect the situation of Caspian coastal communities. - Include "polluter pays" scheme. - representatives of the private sector and some industries located on the Caspian coast are concerned that their activities may be suspended. A number of job closures could increase unemployment. This is mostly related to polluter industries.
Kazakhstan	<ul style="list-style-type: none"> - The government expressed interest in improving Caspian Sea pollution monitoring, specifically i) increasing the motoring potential of the Kazhydromet, which is responsible for the state monitoring of the Caspian Sea environment; ii) supporting the monitoring of sea-based pollution (from offshore oil and gas exploitation and maritime transport) by purchasing satellite images and integrating them with the national monitoring structure and procedures; iii) developing a legal framework for pollution monitoring that follows international standards; iv) supporting cross-learning among the participating countries; and v) supporting the activities of the Working Group of the Tehran Convention on Monitoring and Assessment. The Caspian Sea Institute in Aktau is expected to also carry out relevant scientific research on the drivers, pressures, and measures related to pollution of the marine environment of the Caspian Sea. - Key challenge: The need to develop a state system of monitoring of pollution and biodiversity of the marine environment of the Caspian Sea

	<ul style="list-style-type: none"> - inform the population about the relevance of the problem of protecting these territories, their importance for the natural environment and the population, as well as awareness the population with the protection measures that the state is taking for conservation of these nature reserves - social risks connected to the Project in terms of aquatic biological resources are not envisaged - Key stakeholders on biodiversity conservation activities include local governments, specialized scientific organizations, as well as environmental and law enforcement agencies
Turkmenistan	<ul style="list-style-type: none"> - The government is considering the expansion of existing PAs and to this end, more scientific research is required to identify the rationale for the expansion of the PAs from ecological and biological perspectives - The government expressed interest in improving Caspian Sea pollution monitoring, specifically i) increasing the monitoring potential of the CaspEcoControl Service by improving the capacity and providing measuring methodologies of the laboratory facilities which would be aligned with ones of other Caspian countries; ii) supporting the monitoring of sea bottom sediments; iii) developing a legal framework for pollution monitoring that follows international standards; iv) supporting cross-learning among the participating countries; and v) supporting the activities of the Working Group of the Tehran Convention on Monitoring and Assessment. - pollution monitoring capacity needs to be strengthened in pollution surveyance, including revision of the pollution monitoring and reporting scheme, and equipment provided to the Caspian Environmental Control Service in Turkmenbashi - The government has decided to create a new protected area named “Garabogaz marine protected area” as protected habitat for Caspian seal and migratory birds, and for which the project will support the preparation of the management plan. - Participants expressed a desire for more meetings and discussion

8. Grievance Redress Mechanism

8.1 Objectives

The objective of the GRM is to allow an avenue for project stakeholders to comment on or express concern on matters relating to project implementation as well as PA implementation. In addition, it is intended to allow various stakeholders to pass important information to higher levels of project oversight and management in a neutral and, if necessary, anonymous way.

The GRM is based on six core principles:

Fairness: Grievances are treated confidentially, assessed impartially, and handled transparently.

Objectiveness and independence: The GRM operates independently of all interested parties to guarantee fair, objective, and impartial treatment in each case. GRM officials have adequate means and powers to investigate grievances (e.g., interview witnesses, and access records).

Simplicity and accessibility: The GRM does not use complex processes that create confusion or anxiety.

Responsiveness and efficiency: The GRM is designed to respond to all complainants' needs. Accordingly, staff handling grievances are trained to take effective action and respond quickly to grievances and suggestions.

Speed and proportionality: All grievances, simple or complex, are addressed and resolved quickly. The action taken is swift, decisive, and constructive.

Participation and social inclusion: A wide range of stakeholders is encouraged to bring grievances and comments to the attention of the Project staff. Special attention is given to ensuring that marginalized groups are able to access the GRM.

8.2 Approach to address grievances

This section guides the management of complaints and grievances under the Project. The purpose of this GRM is twofold: one the one hand it is to provide a centralized Project GRM where stakeholders of the Project can lodge their feedback, complaints, and grievances in regard to the general Project and have these resolved. World Bank-supported projects are required to facilitate mechanisms that address concerns and grievances arising from a Project. One of the key objectives of ESS10 (Stakeholder Engagement and Information Disclosure) is 'to provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow borrowers to respond and manage such grievances'.²⁹ On the other hand, it includes a GRM level that handles PA-related grievances, and that can assist in building a GRM for the PA, beyond the duration of the Project.

A 'PA GRM' shall initiate a local level mechanism that caters for grievances related to specific PAs that are established or expanded under the Project. The aim of the Project is that these PA GRM will become part of the PA management function and will be taken over by the respective Government as part of the current and future PA management. While during the Project implementation, both GRM are included as part of the Project, it is anticipated that the PA-level GRM will go beyond the duration of the Project.

A centralized Project GRM, where stakeholders of the Project can lodge their feedback, complaints, and grievances in regard to the general Project and have these resolved.

As per World Bank ESS, both GRM make the following distinctions:

²⁹

- a) Project-related grievances: it focuses on project-related complaints and grievances and defines the different steps of handling such.
- b) Sexual Exploitation and Abuse (SEA) / Sexual Harassment (SH) related grievances: grievances related to SEA/SH, given their sensitivities and special considerations, are reported to the Project GRM, but the grievances follow a different process. This counts for grievances from stakeholders and workers deployed by the project, other than those working in the PIU.
- c) Labor-related grievances: Grievances from project workers raising workplace concerns, terms of employment, and other related concerns shall be reported through the respective institutional channels or shall be filed through the GRM.
- d) 2nd Tier / Appeals mechanism: Grievances that cannot be solved by the first tier or have been escalated by complainants dissatisfied with the responses from the GRM. The Project GRM describes procedures addressing these grievances through an appeals mechanism.

This section outlines clear processes and procedures (including resolution processes and timelines), defines the grievance uptake, sorting and processing, acknowledgment and follow-up, categorization, verification, and investigation, monitoring & evaluation, and feedback for both GRM.

8.3 Grievance Redress Procedures

The PIU will ensure the information about the GRM is disseminated among all project stakeholders, including government entities, academia, CSOs/NGOs, private sector entities, etc. Means of communication are defined in the information dissemination strategy in the SEP. In addition, the PA-level GRM will be disseminated based on the needs of the specific stakeholders around each PA, as further defined in the Process Framework.

Step 1: Grievance Uptake

- a) Project GRM

The Project GRM provides the following means for people to file a grievance:

Online mechanism: An online mechanism will allow people to leave a message and request a call back from the Project. The mechanism will be clearly visible on the website. The PIU E&S Specialist will respond to the request for the call back via the online form. The Specialist will also register the grievance in a grievance log. After providing appropriate responses to the complainant and registering the grievance, the Specialist will transfer the grievance to the relevant entity responsible for the grievance-related activity.

Email address - an email address will be set up by the PIU and posted on the Project website, and/or the website must provide a way to file a grievance. The online mechanism will be administered by the PIU E&S Specialist. Grievances can be filed in writing through this method. The Specialist will register grievances in the grievance log.

- b) PA GRM

On site suggestion box – There will be suggestion boxes installed at relevant locations, such as community centers or government offices. This will allow the direct local submission of grievances or feedback for community members, especially members of vulnerable groups that may not have other means to communicate.

Local phone number – The authority responsible for the PA will be encouraged to set up a local phone number in order to receive grievances through phone calls in relation to the PA.

c) General

Details of Grievance logged: While grievances can be submitted anonymously, the more information is made available, the better the Project or the PA administrative authority can respond to the grievances, investigate the matter where necessary, or provide feedback to the aggrieved party. The minimum information that should be made available is the following (except for SEA/SH cases, which follow a different process as described below):

Table 15 Details of Grievance log

i. Name of complainant	
j. Decision and consent of complainant on whether the identity of the complainant should remain confidential or can be made available where necessary	
k. Contact details: physical address, telephone number, email address	
l. Details of the grievance: - What happened - Where did it happen - Parties involved - Time when it happened - Description of the case - Supporting documents if available.	

Submission of incomplete information for a grievance may not allow a case to be investigated or may delay investigations.

GBV/SEA/SH-related Grievance: Given the sensitive nature of GBV-related complaints, the GRM provides different ways to submit grievances and applies the survivor-centered approach. All grievance uptake channels can be used to report on SEA/SH-related grievances. The PIU or PA Officer receiving grievances will be trained in the handling and processing of SEA/SH-related grievances. Information on relevant legislation will be delivered to survivors before disclosing case details.

Confidentiality: The grievance recipients and anyone handling the SEA/SH-related grievances must maintain absolute confidentiality in regard to the case. Maintaining confidentiality means not disclosing any information at any time to any party without the informed consent of the person concerned. There are exceptions under distinct circumstances, for example, a) if the survivor is an adult who threatens his or her own life or who is directly threatening the safety of others.

Informed Consent: The survivor can only approve a case's processing when he or she has been fully informed about all relevant facts. The survivor must fully understand the consequences of actions when providing informed consent for a case to be taken up. Asking for consent means requesting the permission of the survivor to share information about him/her with others (for instance, with referral services), and/or to undertake any action (for instance, investigation of the case). Under no circumstances should the survivor be pressured to consent to any conversation, assessment, investigation, or other intervention with which she/he feels comfortable. A survivor can also at any time decide to stop consent. Where possible, the consent form can be used (in cases of direct person-to-person reporting). By signing this form, the survivor can formally agree (or disagree) with further processing the case. The form will clearly state how the information will be used, stored and disseminated. If a survivor does not consent to share information, then only non-identifying information can be released or reported on.

Step 2: Sort and Process

a) Project GRM

The grievances registered online and through the email mechanism will be sorted and processed by the E&S Specialist at the PIU. After the E&S Specialist has received and registered the complaint, he/she will categorize the complaint.

For grievances handled under the general Project GRM, the project will establish a Project Grievance Redress Committee (GRC) at the PIU level, consisting of the E&S Specialist, the Project Manager and one other selected Officer or any other relevant unit or officer or a national Focal Point where applicable. The E&S Specialist will share all necessary information with the Project GRC. Grievances handled elsewhere (e.g., at the court) will be excluded, records for the same will be maintained by PIU.

The E&S Specialist will transfer the grievance information into a more comprehensive grievance register. It will maintain a central grievance register for logging, managing, monitoring, and reporting grievances. All cases will be treated confidentially.

b) PA-level GRM

For grievances registered at the PA level in the respective countries, through suggestion boxes or other appropriate means, a GRM Focal Point will be appointed in the local authority that is responsible for the PA management. The GRM Focal Point will register the grievances and will assist in the formation of a PA Grievance Redress Committee (local GRC). The PA GRC should consist of relevant staff or government counterparts responsible for PA management, as well as representatives of the local communities and civil society organizations. The constitution of the PA GRC will be decided at the PA level prior to the commencement of project activities. The GRM Focal Point will share the registered grievances with the PA GRC during the sorting and processing step.

c) General

SEA/SH Cases: Under both GRM, all reporting will limit information in accordance with the survivor's wishes regarding confidentiality and in case the survivor agrees on further reporting, information will be shared only on a need-to-know-base, avoiding all information that may lead to the identification of the survivor and any potential risk of retribution.

Referrals are a process through which the survivor gets in touch with professionals and institutions regarding her or his case. Services can include health, psycho-social, security and protection, legal/justice, and economic reintegration support. The E&S Specialist will provide the survivor with contacts of the available referral services in the respective area. If the survivor wishes for any assistance with transport or payment for services, the grievance recipient will provide allowances. Referral services are provided even in cases where the survivor opts to not pursue the case through the GRM or through legal channels.

Step 3: Acknowledgement and Follow-Up

h. Project GRM

The E&S Specialist will carry out an initial screening review and confirm that the grievance is (i) a matter related to the Project; and (ii) a substantive issue that can be investigated. Any grievances that do not relate to the Project will be passed to the relevant institution. The E&S Specialist will prepare a response (i) acknowledging that the grievance has been received; (ii) notifying the complainant of what action will be taken; and (iii) stating the rights of the complainant.

At all times, the E&S Specialist will provide a response/acknowledgement of reception of the grievance promptly to the aggrieved party (unless the case was filed anonymously), within a maximum of five working days after the grievance is filed. A response can be provided over the phone, in writing or through the community facilitators. A response / acknowledgement can also be communicated through stakeholder meetings and beneficiary meetings during Project activities. For sensitive issues, feedback is given to the concerned persons bilaterally.

All responses are documented and categorized for reporting and follow-up if necessary.

i. PA GRM

At the PA level, the GRM Focal Point will carry out an initial screening review and confirm that the grievance is (i) a matter related to the Project or to the PA or both; and (ii) a substantive issue that can be investigated. Any grievances that do not relate to the Project will be handled at the PA level. Grievances related to activities funded by the Project will also be handled at this level, but they will be recorded and shared with the PIU. The GRM Focal Point will prepare a response acknowledging that the grievance has been received, notifying the complainant of what action will be taken and stating the rights of the complainant.

At all times, the GRM Focal Point will provide a response/acknowledgement of reception of the grievance promptly to the aggrieved party (unless the case was filed anonymously), within a maximum of five working days after the grievance is filed. A response can be provided over the phone, in writing or through the community facilitators. A response can also be communicated through stakeholder meetings

and beneficiary meetings during Project activities. For sensitive issues, feedback is given to the concerned persons bilaterally .

Step 4: Verify, Investigate and Act

a) Project GRM

The E&S Specialist will verify the case, as appropriate. Verification includes:

Check for the complaint's eligibility (objectively based on set standards and criteria) regarding its relevance to the project. Refer to the PAD, POM, ESMF, sub-project agreements, or other documentation to determine the validity of the grievance.

Escalate outright grievances that require specific interventions, such as SEA/SH cases.

Refer grievances outside of the Project's jurisdiction (e.g., refer to relevant external institution), for example where a grievance relates to a different project.

The PIU GRC, where applicable, will investigate the grievance. The investigation may include interviewing the complainant(s), project staff, and other stakeholders; and inspecting physical evidence and documents. All project staff must cooperate with the investigation, including sharing documents where necessary. If the complainant has requested to remain anonymous, the investigator(s) must not do anything that results in the disclosure of the complainant's name. Independent investigator(s) make no recommendation other than reporting the facts.

b) PA GRM

The PA GRC will investigate the grievance where necessary. The investigation may include interviewing the complainant(s), project staff, and other stakeholders; and inspecting physical evidence and documents. All project and PA staff must cooperate with the investigation, including sharing documents where necessary. If the complainant has requested to remain anonymous, the GRC must not do anything that results in the disclosure of the complainant's name. The PA GRC review the results and make final decisions for a resolution of the case, which is then communicated to the aggrieved party.

c) General

The investigation includes the following steps:

Collect basic information (reports, interviews with other stakeholders while ensuring triangulation of information, photos, and videos).

Collect and preserve evidence.

Analyze to establish facts and compile a report.

The responses will include the following elements and will be based on the following timelines

Table 16 Typed of GRM actions and timelines as per type of case

Type of Case	Actions Required	Response Required
Straight-forward cases with little anticipated complications	Minimal checks and consultations by GRM Focal Point or E&S Specialist	<ul style="list-style-type: none"> - GRM Focal Point or PIU E&S Specialist to acknowledge reception of the grievance, detail follow-up steps and set timelines (number of days) for follow-up activities: verify, and communicate outcomes and next steps based on outcomes - 1-3 days
Cases that require some minimal processes of verification and clarification	Analyze existing information and request clarification if necessary - GRM Focal Point or PIU E&S Specialist	<ul style="list-style-type: none"> - GRM Focal Point or PIU E&S Specialist to acknowledge reception of the grievance, detail the steps to follow, communicate outcomes - 7 -14 days
Cases that require investigation	Access and review of relevant documentation (reports, policy documentation), field-based fact findings missions (visits and interviews), analysis and preparation of reports, consultative sessions to rectify or adjust the implementation approaches – by PA GRC or PIU GRC.	<ul style="list-style-type: none"> - GRM Focal Point or PIU E&S Specialist to acknowledge reception of the grievance, provide follow-up steps and set timelines for a comprehensive response, initiate investigations, communicate response - 14 to 21 days
Cases that require escalation	GRM Focal Point to transfer case to the PA management; E&S Specialist to transfer case to Project Manager.	<ul style="list-style-type: none"> - GRM Focal Point or E&S Specialist to acknowledge reception of the grievance, provide the need for escalation of the grievance to the next level, and set timelines for a comprehensive response - 7-14 days
Cases that require referral to other institutions	PIU or PA authority to transfer case to relevant institution (National Police Service, Judiciary)	<ul style="list-style-type: none"> - GRM Focal Point or E&S Specialist to acknowledge reception of the grievance, provide the need for referral of the grievance to an appropriate institution, and set timelines for a comprehensive response on referral progress - 7 – 21 days

SEA/SH Cases: If a project worker allegedly committed the SEA/SH grievance, the grievance will be reported to the UNOPS Internal Investigation and Audit Group (IAIG) for further processing.

Where the survivor has opted to take a formal legal route with the case, the PIU will ensure that the survivor has all the support required to file a lawsuit in court. The GRM process will still proceed with the survivors' consent. Ensuring due process is a matter of the formal justice system and not the grievance handlers. Unlike other types of issues, it is not part of the GRM's remit to conduct investigations, make any announcements, or judge the veracity of an allegation. The GRM should refer the case to the domestic regulatory framework to process the claim if the consent of the survivor is received.

Case closure requires a) the case has been referred to GBV service providers (if the survivor consented) for support and appropriate actions, and appropriate actions have been taken against the perpetrator according to SEA mechanisms; b) the service provider has initiated accountability proceedings with the survivor's consent.

Step 5: 2nd Tier / Appeals Mechanism

a) Project GRM

If a complainant is dissatisfied with the response and solution provided by the Project GRC, he or she has the right to appeal. The appeal must be made in writing within 20 days of receipt of the decision. The purpose of the request is to provide an independent view of the complaint and to review the decision through an appeals body. the complainant can appeal to the UNOPS Multi Country Director, who will be engaged at critical points and will identify a representative who will be involved and follow the process. In both cases, appeals processes should be completed within 21 days.

b) PA GRM

If a complainant is dissatisfied with the response and solution provided by the PA GRC, he or she has the right to appeal to the Project GRC. The appeal must be made in writing within 20 days of receipt of the decision. The purpose of the request is to provide an independent view of the complaint and to review the decision through the Project GRC. The PIU E&S Specialist shall receive the written appeal to decide on the request, and advise the complainant in writing on the outcome of the appeal.

If a complainant is dissatisfied with the response and solution provided by the Project GRC, the complainant can appeal to the UNOPS Multi Country Director, who will be engaged at critical points and will identify a representative who will be involved and follow the process. In both cases, appeals processes should be completed within 21 days.

Step 6: Monitor, Evaluate and Provide Feedback

a) Project GRM

The PA GRM will report all Project-related cases to the Project GRM. The Project GRM will include those cases in its Project monitoring and reporting mechanisms.

Recording: The PIU will record all complaints and ensure their status is updated in internal recordings. Public records will be provided on the status, timeframe, feedback, resolution of complaints, and

summary reports. The information on complaints will be used for the project to improve its effectiveness.

Monitoring: The PIU has developed indicators and a methodology for monitoring the steps of the GRM value chain, tracking grievances, and assessing the extent to which progress is made to resolve them. The PIU may amend indicators as necessary. The following indicators will be applied:

Table 17 Indicators and targets

Indicator
IR3.1 Number of GRM awareness campaigns conducted (Number)
IR3.2 Percentage of grievances responded to within the stipulated timeline (Percentage)
IR3.3 Percentage of grievances resolved within the stipulated timeline (Percentage)
IR3.4 Percentage of grievances referred/ escalated timely (Percentage)

Reporting: The PIU will report on the status of all GRM cases and on the above indicators, as well as provide a trend analysis to the Bank every quarter – as part of the regular Project Progress report.

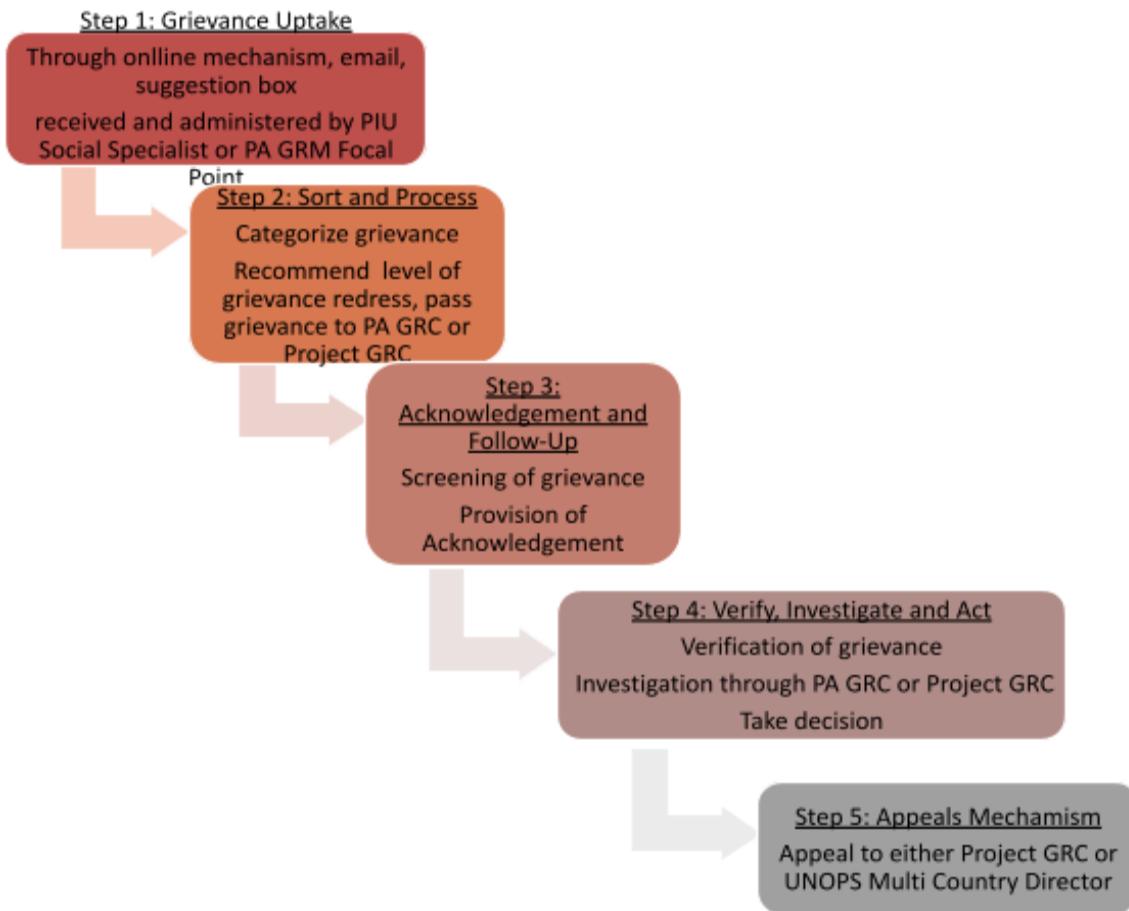


Figure 13 GRM Flowchart

Annex 1. Social Screening Checklist

The objective of the screening checklist is to guide the Project in 1) assessing the various environmental and social risks and impacts that the MPAs will pose, and 2) selecting the right environmental and social risk mitigation measures that will be applicable to the respective site activities..

Preliminary Social Screening Checklist Blueing the Caspian Sea Project

Sub Project Name:

Sub Project Location/s:

Name of Person / Agency Carried out Screening:

Part A: General Information About the Sub- project

1. Project Details:	
Type of proposed sub-project activity	:
Location of the subproject activity (Please attach a Map)	:
Project area (please include a brief description)	:
2. Information About IPs in the Sub-project Area	
Does the project site has indigenous people (Y or N):	
3. Information on Project area	
a. Sub Project components/ activities	:
b. Existing area of Protected Area (PA)	:
c. Area of Buffer zones and areas proposed to be converted to PAs	
d. Does the project work with or affect National Park(s) or any category of Protected Area(s) (PA) established through legal or other effective means (please add details)	
e. If there is more than one PA, break down information for each one as follows:	

-the name, location (coordinates), area (Km ² or hectares)		
f. How were the boundaries of each PA established		
<ul style="list-style-type: none"> - Legally declared/gazette (Yes/ No) - Physical markers/beacons present (Yes/ No) - Boundaries recognized by local communities (living inside or in adjacent areas including any buffer zone) (Yes/ No) 		

Part B: Social Screening

1.	Does the proposed sub-project activity require any private/ community land? If so, please include details	
2.	Are there any settlements or activities in the PA, buffer or adjacent areas and are these settlements or activities known or deemed to be legal or illegal?	
3.	Project impacts on:	
a.	villages and total estimated number of people?	
b.	Private structures, if so, type	
c.	Economic users (agriculture, resource gathering, grazing, hunting, fishing, water use, collection of firewood, timber, plants, fruits, medicinal materials, etc. Please mention estimated number.	
d.	Fishing activity or usage by fisherman / boat operators	
e.	Social religious and ritual uses. Please mention estimated number.	
f.	Seasonal or temporary users: nature, extent and frequency of use, and number of users	
3.	Are there areas with planned or prior incomplete or partial resettlement in PAs?	
4.	Buffer Zone, boundary information:	
a.	villages and total estimated number of people?	
b.	Private structures, if so, type	
c.	Economic users (agriculture, resource gathering, grazing, hunting, fishing, water use, collection of firewood, timber, plants, fruits, medicinal materials, etc. Please mention estimated number.	

d.	Fishing activity or usage by fisherman / boat operators	
e.	Social religious and ritual uses. Please mention estimated number.	
f.	Seasonal or temporary users: nature, extent and frequency of use, and number of users	
g.	Indigenous/pastoral users under any category	
5.	Information about IPs in the sub-project area	
a.	Are IPs present or do they have any interest in the project area? If so, what is the nature of their presence/use and number of people involved?	
6.	Are forest dwellers, ethnic minorities or other vulnerable groups present in the PA or adjacent areas?	
7.	What vulnerable groups will be affected by access restrictions and the creation of new PAs or imposition of new or enhanced restrictions?	
8.	Are legacy issues present, such as those related to the creation of the PA, resettlement (including pending or unfinished), alleged acts of violence, lack of recognition of IPs' customary and other rights, human-wildlife conflict, land claims; pastoralist customary claims/uses; displacement; conflict?	
9.	Stakeholder's consultation	
a.	Have all people who may be adversely impacted by access restrictions to PAs been informed/ consulted?	
b.	Were consultations broad and transparent so as to identify all relevant issues and stakeholders, and provide enough information for Project decision-making?	

Annex 2. Environmental and Social Management Plan (ESMP) Template

Environmental and social risks and impacts are linked to site location and scope of activities. This ESMP should be customized for each specific subproject location and activities.

1. Subproject Information

Subproject Title:	
Estimated Cost:	
Start/Completion Date:	

2. Site/Location Description

This section concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g., access roads, water supply, etc.). Please attach a map of the location to the ESMP.

3. Subproject Description and Activities

This section lists all the activities that will take place under the subproject, including any associated activities (such as building of access roads or transmission lines, or communication campaigns that accompany service provision).

4. ESMP Matrix: Risk and Impacts, Mitigation, Monitoring

This section should identify anticipated site-specific adverse environmental and social risks and impacts; describe mitigation measures to address these risks and impact; and list the monitoring measures necessary to ensure effective implementation of the mitigation measures. It may draw from the ESMF's pre-identification of potential risks/impacts and mitigation measures, as applicable, and drill down further to ensure relevance and comprehensiveness at the site-specific level. For subprojects involving construction, two sets of tables may be needed, for the construction phase and the operation phase.

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Impact/Mitigation Monitoring		
		Location/Timing/Frequency	Responsibility	Parameter to be monitored	Methodology, including Location and Frequency	Responsibility

5. Capacity Development & Training

Based on the implementation arrangements and responsible parties proposed above, this section outlines any capacity building, training or new staffing that may be necessary for effective implementation.

6. Implementation Schedule and Cost Estimates

This section states the implementation timeline for the mitigation measures and capacity development measures described above, as well as a cost estimate for the implementation. The cost estimate can focus on the line items that will be covered by the project implementing agency, with costs of mitigation measures to be implemented by the contractor left to the contractor to calculate.

IV. Review & Approval

Prepared By:(Signature)

Position: Date

Reviewed By:(Signature)

Position:Date

Approved By:(Signature)

Position: Date

Annex 3. Labor Management Procedures (LMP)

In accordance with the requirements of World Bank's ESS2 on Labor and Working Conditions, LMP have been developed for the project. The LMP set out the ways in which UNOPS will manage all project workers in relation to the associated risks and impacts. The objectives of the LMP are to: Identify the different types of project workers that are likely to be involved in the project; identify, analyze and evaluate the labor-related risks and impacts for project activities; provide procedures to meet the requirements of ESS2 on Labor and Working Conditions , applicable national legislation and UNOPS policies.

Overview of Labor Use on the Project

The LMP apply to all project workers, irrespective of contracts being full-time, part-time, temporary or casual. The types of workers that will be included in the project are listed below:

Direct workers – Staff and retainers directly hired by UNOPS to serve on the Project, either as part of the PIU or to complete specific tasks in relation to Project activities. It is anticipated that ca. 12 staff will be included in the PIU and app. 20 retainers (consultants).

Contracted workers – Workers recruited by contractors implementing specific activities of the Project. These will mainly include Government workers that will already be on Government contracts. Where contractors are involved, contracted workers will constitute the staff or consultants. They may be comprising an estimated 60 workers in total.

Primary supply workers – Workers recruited by suppliers that produce items to be procured by the Project. The numbers of supply workers are very limited and confined to some small procurement activities.

Labor Risks

The following potential labor risks are identified under the project:

Violation of worker's rights: Terms and conditions of employment of workers may not be consistent with national legislation or ESSs.

Violation of worker's rights: Non-discrimination and equal opportunity of workers may not be consistent with national legislation or ESSs.

General OHS risks

Use of child labor or forced labor among supply workers.

SEA/SH risks for workers.

SEA/SH risks for community members, from workers from outside the project areas.

Overview of Relevant Legislation

The legislation of the three countries has been reviewed and a gap analysis to the ESS2 has been undertaken in Section 3.6, Table 8, in this document.

Responsibilities

The UNOPS PIU will be responsible for the following:

- Implement these LMP for direct workers;
- Ensure that Implementing Partners responsible for research, assessments or TA comply with these LMP
- Monitor that the Implementing Partners and Contractors meet obligations towards contracted workers as included in the General Conditions of Contract the World Bank Standard Bidding Documents, and in line with ESS2 and national labour codes;
- Monitor implementation of LMP by Implementing Partners and contractors;
- Ensure that the GRM for project workers are established and monitor their implementation; and
- Monitor implementation of the workers' Code of Conduct.

The Contractors will be responsible for the following:

- Implement the LMP, OHS mitigation measures, SEA/SH actions and mitigation measures;
- Maintain records of recruitment and employment process of contracted workers;
- Communicate clearly job description and employment conditions to contracted workers;
- Implement workers' GRM;
- Have a system for regular review and reporting on labour, SEA/SH prevention and mitigation and OHS performance;
- Ensure that all contracted workers understand and sign the Code of Conduct prior to the commencement of works.

General Applicable Procedures

UNOPS will apply its Personnel Management Framework (OI.PCG.2023.01) for direct workers.

Contractors will apply the following guidelines when dealing with workers:

There will be no discrimination with respect to any aspects of the employment relationship, such as: recruitment and hiring; compensation (including wages and benefits; working conditions and terms of employment; access to training; job assignment; promotion; termination of employment or retirement; or disciplinary practices.

Harassment, intimidation and/or exploitation will be prevented or addressed appropriately.

Special measures of protection and assistance to remedy discrimination or selection for a particular job will not be deemed as discrimination.

Vulnerable project workers will be provided with special protection.

Contractors will provide job / employment contracts with clear terms and conditions including rights related to hours of work, wages, overtime, compensation and benefits, annual holiday and sick leave, maternity leave and family leave. Code of Conduct included in this LMP will be applicable for all project workers.

Contractors will ensure compliance with the Code of Conduct including providing briefings/awareness raising on the Code.

Contractors will ensure compliance with occupational health and safety procedures and specific procedures (see below) including that the workers are properly trained in application of the standards that are relevant to the work.

Contractors will ensure no person under the age of 18 shall be employed. Age verification of all workers will be conducted by the contractors.

Contractors will recruit contractors and labor locally to the extent that they are available.

Workers shall be recruited voluntarily, and no worker is forced or coerced into work.

Contractors will supervise and monitor to ensure compliance with the above requirements.

All workers will be made aware of the Worker's Grievance Mechanism (see below) to raise work related grievances, including any sensitive and serious grievances on SEA/SH.

Occupational Health and Safety (OHS) Procedures

The objective of the procedure is to achieve and maintain a healthy and safe work environment for all project workers (contracted workers) and the host communities.

On procurement for contractors, UNOPS will avail the ESMF to the aspiring contractors so that contractors include the budgetary requirements for OHS measures in their respective bids.

The contractor will develop and maintain an OHS management system that is consistent with the scope of work, which must include measures and procedures to address all the following topics listed below and in accordance with local legislation and GIIP (as defined by World Bank Group EHSGs). The management system must be consistent with the duration of contract and this LMP. Contractor will conduct workplace hazards identification and adopt all applicable E&S risk mitigation measures in accordance with local legislation requirements and WBG EHSGs.

Contractor designates a responsible person to oversee OHS related issues at the project site and define OHS roles and responsibilities for task leaders and contract managers.

Contractor should put in place processes for workers to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health, without fear of retaliation.

Contractor provides preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances informed by assessment and plan. Whenever PPEs are required for the work, it must be provided at no cost for the workers.

Contractor should assess workers' exposure to hazardous agents (noise, vibration, heat, cold, vapors, chemicals, airborne contaminants etc.) and adopt adequate control measures in accordance with local regulations and WB EHSGs.

Contractors provides facilities appropriate to the circumstances of the work, including access to canteens, hygiene facilities, and appropriate areas for rest. Where accommodation services are provided to project workers, policies will be put in place and implemented on the management and quality of accommodation to protect and promote the health, safety, and well-being of the project workers, and to provide access to or provision of services that accommodate their physical, social and cultural needs.

Contractor provides for appropriate training/induction of project workers and maintenance of training records on OHS subjects.

Contractor documents and reports on occupational incidents, diseases and incidents as per ESMF guidance.

Contractor provides emergency prevention and preparedness and response arrangements to emergency situations including and not limited to workplace accidents, workplace illnesses, flooding, fire outbreak, disease outbreak, labor unrest and security.

Contractor provides remedies for adverse impacts such as occupational injuries, deaths, disability and disease in accordance with local regulatory requirements and Good International Industry Practices.

Contractor shall maintain all such record for activities related to the safety health and environmental management for inspection by UNOPS or the World Bank.

Contractor Management Procedures

The objective of this procedure is to ensure that UNOPS has contractual power to administer oversight and action against Implementing Partners or contractors for non-compliance with the LMP.

UNOPS will make available relevant documentation to inform the Implementing Partner or Contractor about requirements for effective implementation of the LMP.

UNOPS will include the provisions of the ESMF, LMP and other relevant documents into the specification section of the bidding documents. The Implementing Partners or contractors will be required to comply with these specifications.

Implementing Partners or Contractors will raise worker awareness on the Code and Conduct.

Implementing Partners or Contractors will show evidence of OHS and Emergency Preparedness procedures.

UNOPS will monitor contract's E&S performance during its regular site visits utilizing Implementing Partners' or contractors' reporting or external monitoring/supervision consultants where available. Where appropriate, UNOPS may withhold contractor's payment or apply other contractual remedies as appropriate until corrective action(s) is/are implemented on significant non-compliance with the LMP, such as failure to notify UNOPS of incidents and accidents.

Procedures for Primary Suppliers

The objective of the procedure is to ensure that labor-related risks, especially child and forced labor as well as serious safety issues to the project from primary supply workers are managed. and all contractors will undertake the following measures:

Procure supplies from legally constituted suppliers.

To the extent feasible, conduct due diligence to ensure that primary suppliers conduct age verifications, employ workers without any force or coercion, and maintain basic OHS systems.

Institutional Arrangement for Implementation of the LMP

The UNOPS PIU will carry the main responsibility for the implementation and monitoring of the LMP. UNOPS will identify subproject activities, prepare subproject designs and bidding documents, as well as procure Implementing Partners and contractors. UNOPS and Implementing Partners will be responsible for contractor and site supervision, technical quality assurance, certification, and payment of works. They will ensure that labor management procedures are integrated into the specification section of the bidding documents and the procurement contracts.

Grievance Mechanism

There will be a specific Workers Grievance Redress Mechanism (Worker GRM) for project workers as per the process outlined below. This considers culturally appropriate ways of handling the concerns of direct and contracted workers. Processes for documenting complaints and concerns have been specified, including time commitments to resolve issues. Workers will be informed about the relevant Worker GRM upon their recruitment and their right to redress, confidentiality and protection against any reprisals from the employer will be stated in the contract.

Routine Grievances

The process for the Worker GRM is as follows:

Any worker may report their grievance in person, by phone, text message, mail or email (including anonymously if required) to the contractor as the initial focal point for information and raising grievances. For complaints that were satisfactorily resolved by the aggrieved worker or contractor within one week of receipt of complaint, the incident and resultant resolution will be logged and reported monthly to the responsible parties at the Implementing Partner or contractor.

If the grievance is not resolved within one week, the contractor (or the complainant directly) will refer the issue to UNOPS PIU. They will work to address and resolve the complaint and inform the worker as promptly as possible, in particular if the complaint is related to something urgent that may cause harm or exposure to the person, such as lack of PPE. For non-urgent complaints, the PIU will aim to resolve complaints within 2 weeks. For complaints that were satisfactorily resolved, the incident and resultant resolution will be logged by and reported monthly to the PIU as part of regular reporting. Where the complaint has not been resolved, the contractor will refer to the PIU for further action or resolution.

The workers will preserve all rights to refer matters to relevant judicial proceedings as provided under national labor law.

At the PIU level, each grievance record should be allocated a unique number reflecting year, sequence and location of received complaint. Complaint records (letter, email, record of conversation) should be stored together, electronically. The PIU will appoint a Worker GRM Focal Person, who will be responsible for undertaking a monthly review of all grievances to analyze and respond to any common issues arising. The Focal Person will also be responsible for oversight, monitoring and reporting on the Worker GRM.

Serious Grievances

In case a worker experiences serious mistreatment such as harassment, intimidation, abuse, violence, discrimination or injustice at the workplace, the worker may raise the case, verbally or in writing directly to the contractor. They will immediately refer the case to UNOPS PIU. The PIU will immediately investigate the case respecting confidentiality and anonymity of the worker.

All complaints received will be filed and kept confidential. For statistical purposes, cases will be anonymized and bundled to avoid identification of persons involved.

Code of Conduct

The following points have to be included in the Code of Conduct applied:

- Treat women, children (persons under the age of 18), and men with respect regardless of ethnicity, language, religion, political or other opinion, national, social origin, citizenship status, property, disability, birth or other status.
- Do not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Do not participate in sexual activity with community members.
- Do not engage in sexual favors or other forms of humiliating, degrading or exploitative behavior.
- Do not engage in any activity that will constitute payment for sex with members of the communities surrounding the workplace.
- Report through the Worker GM suspected or actual gender-based violence against a person of any gender by a fellow worker or any breaches of this Code of Conduct.
- Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass women, children or a vulnerable person through these medium.
- Comply with all relevant local legislation.
- Engaging in any of the prohibited activities above can be cause for termination of employment, criminal liability, and/or other sanctions.

Annex 4: Stakeholder Consultations and Stakeholders Engaged

Stakeholder Consultation Results

A joint scoping mission was conducted by the World Bank and the United Nations Environmental Program Tehran Convention Interim Secretariat (UNEP TCIS) in Azerbaijan from 16-18 May 2024 in order to discuss the utilization of the GEF for the Project with key governmental stakeholders. The stakeholder consultations were targeted to define the Project's interventions and identify focus areas. An orientation meeting was held with the Ministry of Ecology and Natural Resources (MENR). As well as a one-day stakeholder workshop, which was facilitated by MENR. The workshop included government agencies, civil society, academia, and members of the private sector (see SEP for details of stakeholders). A field trip was undertaken to the Samur-Yalama National Park, and to a trout fishery farm located next to the park.

Key issues discussed during the consultations were the application of the Bank's Environmental and Social Framework (ESF), which will include the preparation of an ESMF, LMP, RPF and ESCP to mitigate the Project's E&S risks and impacts. The government further expressed its interest in the funding of international expertise to help bring respective ongoing initiatives in Azerbaijan to scale, including the understanding of integrated coastal management and maritime spatial planning tools. The government further stated that it is working to expand four of its protected areas, namely Samur-Yalama National Park, Gizilaghaj National Park, Absheron National Park, and Hirkan National Park. The Bank team and the Government discussed several options for the project to support these ongoing efforts on biodiversity conservation, which can potentially include assistance with: the expansion of the marine part of the Samur-Yalama National Park, located in the north of the country, or possibly another national park such as Absheron; the elaboration of management plans for selected protected areas, applying more effective protected area management practices through the promotion of sustainable ecotourism practices; and the development of exchange platforms for national parks managers from the three participating countries with dedicated capacity-building sessions. The government further expressed interest in improving pollution monitoring in the Caspian Sea, specifically: i) identifying the most suitable locations for monitoring stations, ii) supporting offshore monitoring by purchasing equipment for a monitoring vessel, iii) developing a legal framework for pollution monitoring following international standards, iv) developing guidance/methodology on coastal clean-up from oil exploration activities, v) supporting cross-learning among the participating countries and other regions on the monitoring of the marine environment, and vi) supporting the activities of the Working Group of the Tehran Convention on Monitoring and Assessment.

Another joint scoping mission was conducted by the World Bank and the UNEP TCIS in Kazakhstan, from 20-24 May 2024. Key issues discussed during the consultations were also the application of the Bank's Environmental and Social Framework (ESF), including the preparation of an ESMF, LMP, RPF and ESCP to mitigate the Project's E&S risks and impacts. Furthermore, the team visited the Karagiye-Karakol'skiy Gosudarstvennyy Zakaznik, as well as the Port of Aktau to assess the potential inclusion of the former into the project and consult with the Port. Subsequently, a meeting was convened by the Oblast Akimat (governor of the province) with the participation of the respective local stakeholders to discuss their role in the project preparation. Following the meeting, the team visited Kendirli Bay, which is a natural reserve of the Oblast, located close to the border of Turkmenistan, to assess a potential inclusion of the work on this reserve in the project. On the last day of the visit to Aktau, the team met with representatives of the local fishery association to discuss their role in the conservation of marine

resources. In Astana, a one-day workshop was held with stakeholders from the government, civil society, and academia to present and discuss the project's objectives and timeline, the WB ESF and the proposed institutional arrangements for the project.

In view of biodiversity protection, the Government of Kazakhstan is working to expand Kazakhstan's PA surface. A new marine PA is to be established next to Port Shevchenko to enhance the conservation of the Caspian Seal. The government is also considering the expansion of existing protected areas and to this end, more scientific research is required to identify the rationale for new protected areas from ecological and biological perspectives. The government is also working on applying more effective PA management practices while promoting sustainable ecotourism practices. It expressed that the project could provide assistance in elaborating the management plans of selected existing or new PAs.

The government expressed interest in improving Caspian Sea pollution monitoring, specifically i) increasing the monitoring potential of the Kazhydromet, which is responsible for the state monitoring of the Caspian Sea environment; ii) supporting the monitoring of sea-based pollution (from offshore oil and gas exploitation and maritime transport) by purchasing satellite images and integrating them with the national monitoring structure and procedures; iii) developing a legal framework for pollution monitoring that follows international standards; iv) supporting cross-learning among the participating countries; and v) supporting the activities of the Working Group of the Tehran Convention on Monitoring and Assessment. The Caspian Sea Institute in Aktau is expected to also carry out relevant scientific research on the drivers, pressures, and measures related to pollution of the marine environment of the Caspian Sea.

The joint WB and UNEP TCIS team further undertook consultations in Turkmenistan from 11-15 August 2024. The objective was to discuss with key government stakeholders the scope of the Turkmenistan part of the proposed Project.

At the invitation of the Ministry of Environment Protection (MEP) and Ministry of Foreign Affairs (MFA) of Turkmenistan, the team attended the International Caspian Day held in the city of Turkmenbashi. In Turkmenbashi, the mission attended a round table facilitated by the MEP to discuss the project's potential interventions and identify areas of focus with related government agencies, academia, civil society and fish production units. Beyond the project's interventions the mission presented and discussed the ESF requirements. Together with MEP, the team visited the Khazar State Reserve and the laboratory of the Caspian Ecological Control Service under MEP.

The government expressed that it is working to expand Turkmenistan's PA surface. The government is considering the expansion of existing PAs and to this end, more scientific research is required to identify the rationale for the expansion of the PAs from ecological and biological perspectives. The government is also working on applying more effective protected area management practices while promoting sustainable ecotourism practices. The government also indicated the need for assistance in developing National Convention Action plan under the Tehran Convention as well as law enforcement and harmonization activities.

The government expressed interest in improving Caspian Sea pollution monitoring, specifically i) increasing the monitoring potential of the CaspEcoControl Service by improving the capacity and providing measuring methodologies of the laboratory facilities which would be aligned with ones of other Caspian countries; ii) supporting the monitoring of sea bottom sediments; iii) developing a legal framework for pollution monitoring that follows international standards; iv) supporting cross-learning

among the participating countries; and v) supporting the activities of the Working Group of the Tehran Convention on Monitoring and Assessment.

From 15 – 30 April 2025, the World Bank and UNOPS undertook a Technical Mission to all three countries with the objective to confirm all elements of project design, including the prepared draft E&S instruments. The team met with the Ministry of Ecology and Natural Resources (MENR) in Baku, Azerbaijan; the Ministry of Ecology and Natural Resources (MENR) in Aktau, Kazakhstan; and the Turkmenistan Ministry of Environmental Protection (MEP). The mission included site visits to Absheron National Park in Azerbaijan and to Fort Shevchenko, Kazakhstan, for visual inspection of the sites and discussions on stakeholder risks associated with protected areas management.

The mission confirmed the following the countries: Project PDO, indicators, components and activities; Budget allocation; Implementation and governance arrangements (incl. implementation arrangements between UNOPS and the three countries); Provisions, content, and consultation requirements for the Project's ESF Instruments; Location and areas of Marine Protected Areas (MPA) to be supported by countries and related risks. Based on mission meetings, site visits, and Google Earth views, the Bank engagement in these MPAs is assessed as Low to Moderate risk and will be reviewed when the assessments of the PAs have been completed.

The Government of Azerbaijan confirmed the priority activities to strengthen the pollution monitoring capacity at the Caspian Environmental Monitoring Unit under the Ministry of Ecology and Natural Resources. Biodiversity: The Government confirmed that a new MPA in the marine area surrounding "Absheron National Park" would be created for a focus on biodiversity, including knowledge/studies to better understand how the habitat for migratory birds, Sturgeon, and Caspian seal.

The government of Kazakhstan expressed interest in improving Caspian Sea pollution monitoring by supporting the recently created Kazakh Scientific and Research Institute of the Caspian Sea (KSRICS) located in Aktau. The mission visited the building provided by the government for the institute. On October 24, 2024, Kazakhstan adopted a resolution to create the "Caspian Itbalygy State Nature Reserve". The project would support the development of the management plan of the MPA in which studies would clarify what management measures are needed to benefit the Caspian seal which is an endemic, migratory and a transboundary bioresource.

Turkmenistan requested the Caspian Environmental Control, which is responsible for monitoring that associated laws are respected in practice. For this, the pollution monitoring capacity needs to be strengthened in pollution surveillance, including revision of the pollution monitoring and reporting scheme, and equipment provided to the Caspian Environmental Control Service in Turkmenbashi. The government has decided to create a new protected area named "Garabogaz Marine Protected Area" as protected habitat for Caspian seal and migratory birds, and for which the project will support the preparation of the management plan.

Furthermore, UNOPS undertook stakeholder consultations from March-April 2025. In Turkmenistan a stakeholder consultation meeting was held 28-29 April in Turkmenbashi City. More than 40 participants attended the workshop, including representatives of State enterprises in Turkmenbashi: Turkmenbashi Oil Refinery Plant (TORP), departments of the ministry in the Balkan velayat, "Turkmenchemistry" State Corporation, representatives of the Khyakimlik (city administration), representatives of public associations, NGOs, the Nature Conservation Society of the Balkan velayat (region), fishermen, local

citizens, etc. The audience was very interested in environmental issues and solutions to these issues. Participants expressed a desire to have more such meetings and discussions.

Stakeholder meetings in Azerbaijan were held between 2-8 April 2025, including with the Ministry of Ecology and Natural Resources, State Agency on Water Resources, the Institute of Geography, EkoLife Public Union, Public Council under the MENR, Nardaran Community, the 'My Beach' Hotel in Novkhani, and the Amuran Resort. During the consultations, the Ministry pointed out that there is inadequate coordination among countries and insufficient data sharing, as well as a low interest from stakeholders to cooperate with government institutions. It recommended that the role of local communities in decision-making should be increased.

In terms of social risks, the Ministry anticipates that due to potential closures of polluting industries, unemployment may occur. There is a need to diversify income sources and rely more on sustainable incomes, like environmental tourism. In case there are reduced fishing opportunities for local populations due to PAs, designated fishing grounds should be established in alternative areas with sustainable fishing opportunities, for example an increase of fish farms. Furthermore, awareness raising of local communities is very important. The most effective way is to organize an inception meeting. This meeting can ensure the participation of all interested parties. For example, such meetings can be organized in Absheron National Park and on the islands included in the territory of the National Park to be expanded, with local population, fishermen and industrial workers, as well as civil society institutions. The Ministry further named the most vulnerable stakeholders: local communities, some traditional tourism stakeholders, and women.

Research institutions were consulted as part of civil society. They indicated that one of the key challenges to pollution and biodiversity is the lack of infrastructure, informal settlements in areas close to the sea, lack of sewage systems, needs arising from low awareness levels of the local populations, and a lack of good coordination between countries. It is necessary to strengthen cooperation between scientific institutions of the coastal countries and develop various scientific programs related to pollution and biodiversity. Participatory governance should be strengthened in all areas. They recommended that the connection of local communities with the Caspian Sea should be studied. In addition, it should be investigated how pollution and biodiversity problems affect the situation of Caspian coastal communities. For this, it is necessary to conduct surveys or field interviews. Key stakeholders named are NGOs, government, fishermen, oil industry representative, tourism actors. Vulnerable stakeholders are women, local stakeholders, local families with low income.

Private sector entities, including from the tourism sector, were consulted and listed challenges and potential solutions to pollution, including that certain activities can be included through the "polluter pays" scheme. On the other hand, collecting wastewater and treating it through the private sector should also be considered as a solution. Asked to list the E&S risks of the project, they responded that representatives of the private sector and some industries located on the Caspian coast may be concerned that their activities may be suspended. Many tourism facilities need to be renovated, but this must be done in a way that does not cause financial losses to the private sector. A number of job closures could increase unemployment. This is mostly related to polluter industries.

Stakeholder consultations in Kazakhstan were held on 2 April 2025. The meeting included government entities, private sector entities, NGOs, civil society and academia. Government representatives named as the key challenge: The need to develop a state system of monitoring of pollution and biodiversity of the marine environment of the Caspian Sea. However, it should be mentioned that some measures are

already being taken. In particular, on the instructions of the President of Kazakhstan, the Kazakh State Research Institute of the Caspian Sea is being created. Furthermore, there is need to provide appropriate state agencies with specialized sea vessels that would allow them to monitor the state of the Caspian Sea environment. One sea vessel is being built at the expense of the state budget, which will be ready for operation in 2027. There is a lack of modern devices and equipment to control pollution of the marine environment and biological resources of the Caspian Sea

All participants thought there were no E&S risks that would come from the project. All participants noted that the main activities to raise public awareness are related to informing the population about the relevance of the problem of protecting these territories, their importance for the natural environment and the population, as well as awareness the population with the protection measures that the state is taking for conservation of these nature reserves.

Consultations with the Fisheries Committee in Kazakhstan were held on 3 April 2025. The Committee responded that social risks connected to the Project in terms of aquatic biological resources are not envisaged. The main activities to raise awareness among the population include holding regular meetings and public hearings on draft regulations concerning the conservation of biodiversity. Key stakeholders on biodiversity conservation activities include local governments, specialized scientific organizations, as well as environmental and law enforcement agencies. The Committee believes that the best way to consult with stakeholders is to hold joint meetings both offline and online.

Stakeholder Engaged:

The following stakeholders were met during the mission from 15-30 April 2025:

#	Name/surname	Position
1	Mr. Allanazar Kajarov	Leading specialist of the Division of State Environmental Expertise, Licensing, Environmental Certification and Permits of the Ministry of Env. Protection. <i>Focal Point for the project</i>
2	Mr. Jumamyrat Saparmyradov	Institute of Deserts, Flora & Fauna; Academic Secretary; <i>Contact person of the project.</i>
3	Mr. Abdyrakhman Baimuhammedov	Officer of the Department of Coordination of International Environmental Cooperation and Projects; <i>Contact person of the project.</i>
4	Mrs .Gozel Orazdurdyeva	National Consultant
5	Mr.Merdan Mammedov	Hazar State Reserve
6	Mr.Mergen Yusupov	Deputy Head, Department of Coordination of International Environmental Cooperation and Projects, Ministry of Environmental Protection of Turkmenistan
7	Nuryyev Rustem	Head of Flora & Fauna Department Protection
8	Mr Dovran Yagmurov	Head of Environment Protection Department
9	Mr. Alexandr Sherbina	Freelance Consultant for the Hazar State Reserve
10	Mr. Nury Jumashov	Deputy Minister

11	Mr.Nurmyrat Mammedov	Head of the Service, CasEcoControl
12	Ms.Amangul Mammedova	Head of the Service laboratory, CasEcoControl
13	Representatives of the Ministry of Economy and Finance	Names are still identified by the ministry, but you can already send the link.
14	World Bank local Office	VC room number in Ashgabat: Ashgabat WB 08-04 or as a link below Ashgabat_8_304_14_VC_internal_use_only@worldbank.org
15	Mr. Meret Bairamov	Officer of the International projects' coordination Department
16	Mrs. Elena Romantseva	Head of a laboratory of CaspEcoControl

Stakeholders met in Azerbaijan, 16-18 May 2024:

Ministry of Economy of the Republic of Azerbaijan

2. Ministry of Foreign Affairs of the Republic of Azerbaijan
3. Ministry of Ecology and Natural Resources (National Hydrometeorology Service, Caspian Complex Ecological Monitoring Department, State Environmental Security Service Biological Diversity Protection Service)
4. Ministry of Agriculture of the Republic of Azerbaijan
5. Ministry of Digital Development and Transport of the Republic of Azerbaijan
6. Ministry of Science and Education of the Republic of Azerbaijan to the Institute of Geography named after Academician Hasan Aliyev
7. Institute of Zoology of the Ministry of Science and Education of the Republic of Azerbaijan
8. State Border Service of the Republic of Azerbaijan
9. Food Safety Agency of the Republic of Azerbaijan
10. Azerbaijan State Water Resources Agency
11. State Tourism Agency of the Republic of Azerbaijan
12. Azerbaijan Caspian Sea Shipping Closed Joint Stock Company
13. Baku International Sea Trade Port Closed Joint Stock Company
14. State Oil Company of the Republic of Azerbaijan
15. ADA University
16. Baku City Executive Authority
17. Sumgayit City Executive Authority
18. FAO representatives
19. UNDP representatives
20. Samur Yalama National Park

Stakeholders met in Turkmenistan, 20-24 May 2025:

Aigerim Kuat

Director of the Department of International Cooperation, MENR

1.	Natalia Ivanovna Dauletiyarova	Acting Director of the Department of Environmental Policy, MENR
1.	Alena Nikolaevna Sakabaeva	Head of the Department of Environmental Policy, MENR
1.	Nurman Nurtasuly Tanatov	Head of the Department of Green Technologies and Projects, Department of Climate Policy and Green Technologies, MENR
1.	Aliya Altaevna Sadvokasova	Chief Expert of the Department of Environmental Policy, MENR
1.	Kuat Khazievich Chumakaev	Chief Expert of the Department of Specially Protected Natural Areas, Committee of Forestry and Wildlife, MENR
1.	Danabek Bakitgereyevich Jangunisov	Head of the Department of State Environmental Control, Committee of Environmental Regulation and Control, MENR
1.	Asem Orazbayevna Bagdauletova	Lead Engineer of the Department of Surface Water Data Analysis, Department of Environmental Monitoring, RSE 'Kazhydromet', MENR
1.	Didar Nurlubekovich Karimssakov	Chairman of the Board, NAO 'International Center for Green Technologies and Investment Projects'
1.	Erlan Edgeevich Tasbaev	Deputy Chairman of the Board, NAO 'International Center for Green Technologies and Investment Projects'
1.	Temirlan Muratkhanovich Atarbayev	Director of the Department of Project Management, NAO 'ICGTIP'
1.	Syrim Seilbekovich Nurgaliyev	Project Manager of the Department of Project Management, NAO 'ICGTIP'
1.	Nurgazy Seilbekovich Abdulmanov	Head of the Digitalization Service, NAO 'ICGTIP'
1.	Aliya Bauyrzhanovna Abdildina	Director of the Department of International Cooperation, NAO 'ICGTIP'
1.	Aidar Maratovich Yesembaev	Chief Expert of the Department of International Cooperation, NAO 'ICGTIP'
1.	Muslim Rysmakhanovich Zhiembaev	Director of the Department of Science and Innovative Technologies
1.	Edil Abraimov	Head of the Department of Innovation Policy

		Deputy Chairman of the Committee of Fisheries
1.	Ayan Kairatovich Bakhiyanov	
	e. Askhat Zhubayev	Head of the Department of Fish Resources Reproduction and Scientific Support
1.	Serik Kabdualiyevich Akhmetov	National Liaison Officer with the Tehran Convention
1.	Kanat Kulyzhanov	Deputy Akim of Mangystau Region
1.	Assel Balmanova	Head of the Department of Natural Resources and Environmental Regulation of Mangystau Region
1.	Arman Muldashev	Head of the Fisheries Department of Mangystau Region
1.	Armat Zhussupkaliev	Head of the 'Department of Ecology for Mangystau Region' State Institution
1.	Akzhanis Imanbaeva	Director of the 'Mangystau Experimental Botanical Garden' RSE under the Committee of Science and Higher Education of the Republic of Kazakhstan Head of the Mangystau Regional Forestry and Wildlife Inspection
1.	Gabas Dosatov	
1.	Zhalgas Ustadov	Head of the Science, Information and Monitoring Department, Ustyurt State Nature Reserve
1.	Adilbek Kozybakov	Head of the Human Capital Development Department of the Mangystau Region Chamber of Entrepreneurs, Member of the Public Council of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan Caspian University of Technologies and Engineering named after Sh. Esenov
1.	Samal Syrlybekkyzy	
2.	Orinbasar Tokzhanov	Chairman of the Environmental Council under the 'AMANAT' Party Mangystau Regional Branch

Stakeholders met in Turkmenistan 11-15 August 2024:

№	Names/surname	Job title
1	Mr. Nury Jumashov	Deputy Minister, Ministry of Environment Protection
2	Mr. Begench Meminov	Deputy Minister, Ministry of Environment Protection
3	Mr. Berdy Berdyev	Head of the International Department, Ministry of Environment Protection
4	Mr. Mahtumkuli Akmyradov	Advisor, Department of International Cooperation, Ministry of Foreign Affairs
5	Mr. Murad Atajanov	Director of the Caspian Sea Institute
Mr. Rustem Nuryyev	Department of Flora and Fauna Conservation, Ministry of Environment Protection	
6	Mr. Juma Saparmuradov	Officer of the Institute of Deserts, Flora and Fauna
7	Ms. Joragul Halbaeva	Chief Lawyer, Ministry of Environmental Protection
8	Mr. Mergen Yusupov	Deputy Head of the International Department, Ministry of Environment Protection
9	Mr. Dovran Yagmurov	Head of the Environmental Protection Department, Ministry of Environment Protection
10	Mr. Rustem Nuryev	Head of the Flora and Fauna Department, Ministry of Environment Protection
11	Ms. Gozel Orazdurdyeva	National Tehran Convention Liaison Officer
12	Ms. Jemal Durdykova	UNDP "Sustainable Cities" Project
14	Mrs. Victoria Akopova	UNDP "Sustainable Cities" Project
15	Mr. Mekan Akmuradov	Turkmenbashi International Port
16	Mr. Nuryagdy Orazgulyev	Turkmendenizyollary Agency
17	Mr. Muhammet Komekov	Turkmenbashi International Port
18	Mr. Nurmyrat Esengulyev	Turkmendenizyollary Agency
19	Mr. Dayanch Aydogdyev	Director of the Hazar State Reserve
20	Mr. Merdan Mammedov	Head of the Scientific Department of the Hazar State Reserve.
21	Mr. Kemal Akhmedov	Ecological service "Caspecocontrol"
22	Ms. Yazgul Khankelova	JSC "Hazarbalyk", Financial specialist
23	Mr. Parahat Shadurdyev	JSC "Hazarbalyk", Safety engineer
24	Mr. Merdan Arazmedov	Nature Protection Society of Turkmenistan
25	Mr. Ovlyakulyev O	Nature Conservation Society of Turkmenistan of the Balkan Velayat
26	Mr. Guvanch Garadzhaev	State Administration for the Protection of Fish Resources and

27	Mr. Bayramgeldy Gylyjov	Control of Aquatic Bioresources (Gosrybokhrana) Acting Director of the Balkan Velayat Branch
28	Mr. Nurmyrat Mamedov	State Administration for the Protection of Fish Resources and FControl of Aquatic Bioresources (Gosrybokhrana), Inspector for small-sized vessels
29	Mr. Ata Chapaev	Head of the "Caspecocontrol" Service
30	Ms.Galina Romanova	Head of the Department of Finance and Development of Economic Sectors, Ministry of Finance and Economy
30	Mr. Maksat Ovezov	Head of the Consolidated Department of Public finance and economic policy, Ministry of Finance and Economy
31	Mr. Jumamuhammet Geldiev	Head of Financial Analysis Division of Agro-Industrial Complex, Department of Finance and Development of Economic Sectors, Ministry of Finance and Economy
32	Mr. Khydirmuhammet Orazmuhammedov	Chief Specialist of the Division of Agro-Industrial Complex, Department of Finance and Development of Economic Sectors, Ministry of Finance and Economy
		Head of the Department of Fishery Facilities, Agency for Economy Risk Mitigation, Ministry of Finance and Economy

UNOPS Stakeholder Consultations in 28-29 April 2025 in Turkmenistan:

**List of participants of the meeting for 28-29April 2025 Turkmenbashi city
"Blueing the Caspian Sea"**

No	Name/surname	Position
1	Yakhmammedov Balakhmet	Specialist Department of Finance and Economy of the Balkan Velayat, Ministry of Finance and Economy of Turkmenistan
2	Nazarov Guychgylych	Head of Fisheries Protection of the Balkan Velayat
3	Guvadzhaev Sahetgylych	Senior Fisheries Protection Specialist of the Balkan Velayat
4	Begench Tagangeldiyev	Executive Environment Petronas Carigali Sdn. Bhd
5	Kurbanov Ovlyakuli	Chairman of the Nature Conservation Society of the Balkan Velayat
6	Kurbanov Mekan	Specialist of the Nature Conservation Society of the Balkan Velayat
7	Musaev Ashirgeldi	Head of the Hunters and Fishermen Society

8	Shiriev Vepamammed	Chief Specialist of Nature Conservation of the Turkmenbashi Oil Refinery
9	Bagdasaryan Evelina	
10	Arjikov Tuvakdurdy	Chief Specialist of Special Works of the Public Association "Senagat Plastik"
11	Аманклычева Алия	Power Engineer of the Public Association "Senagat Plastik"
12	Mammedov Amanshah	Manager of the Turkmenbashi City Administration
13	Shadzhanov Tachnazar	Specialist of the Turkmenbashi City Administration
14	Ataeva Nurjemal	Chief specialist of the safety department of the state concern "Turkmenhimiya"
15	Kurbanaliev Ashyr	Public Association "Toverek"
16	Tochilina Elena	Head of Laboratory
17	Mammedova Amangul	Head of Laboratory
18	Dosmetov M.	Deputy Director of Individual Enterprise "Deniz Yelkeni"
19	Kakyshova G.	State Inspector "Kaspiekokontrol"
20	Keriev R.	Hotel Charlak Controller
21	Gylyjov P.	Hotel Charlak Controller
22	Saryev D.	Citizen of Turkmenbashi city
23	Ovezgeldiev G.	Citizen of Turkmenbashi city
24	Markizov Serdar	Citizen of Turkmenbashi city
25	Mammedov Sahetmurad	Khazar State Reserve, Head of the Scientific Department
26	Sherbina Alexander Alekseevich	Freelance Ecologist
27	Kabitov Hummet	Fisherman
28	Geldimammedov K.	Fisherman
29	Nobatov N.	Fisherman
30	Kurbanov K.	Fisherman
31	Orazova G.	Microbiologist
32	Bashimova J.	Accountant
33	Fatellaev V.	
34	Griko Elena	Public Association
35	Zakharova Victoria	
36	Vepaeva Alarm	Public association "Yash tebigatchi"
37	Shikhmadova Leili	
38	Nurmukhammedova Guldzhemal	Director
39	Kupraev Rakhman	Public Association "Ynanch Vepa"
40	Gylyjova Maral	Khazar Balyk
41	Saryguliev Annaberdi	"Gundogar" Public Association
42	Aydogdiev Dayanch	Manager Environment Petronas Carigali Sdn Turkmenistan
43	Orazgeldiev N.	Director of the Khazar State Reserve
44	Bagshieva Zeynep	Specialist of the Balkan Hydrogeological Expedition
45	Komekova Gunchagul	Specialist of the Khazar State Reserve

List of the participants: stakeholder consultations in
Aktau, Kazakhstan 2-3 April 2025

- Akimat of Mangystau oblast (local authorities)
- Mangystau Department of the Ministry of Environment and National Protection
- Mangistau Regional Territorial Inspectorate of Forestry and Wildlife
- Fisheries Department of Mangistau Region
- Mangystau Department of Hygrometeorology
- Center of Caspian Seals Protection
- University named in honor of Essenov
- The Enterprise "Морской порт" (Sea Port)
- Mangystau MynaiGaz (Oil Company)
- NGO "Eco Mangystau"

- List of participants in the meeting in Aktau on April 2, 2025

Name of participants	Title of the Institution	Position
Dzhusupkaliev A.Zh.	Department of Ecology of Mangistau Oblast	Head of the Department of Ecology of Mangistau Oblast
Galymov M.H.	Department of Ecology of Mangistau Oblast	Head of the Division of State Environmental Regulation
Adilbaev E.E.	Department of Ecology of Mangistau Oblast	Head of the State Environmental Control Division
Nadirbek K. N.	Department of Ecology of Mangistau Oblast	Head of the Laboratory and Analytical Division
Dzhanalieva N. Sh.	Caspian University of Technology and Engineering named after Sh. Yessenov	Senior Lecturer, Department of Ecology and Geology
Akhmetov S.K.	International Water Assessment Centre	Deputy Director, National Expert UNOPS
Алиев Д.	Неправительственное учреждение «Эко Мангистау»	Менеджер по проектом
Bisikenov A. O.	The Party "Baitak"	Acting Chairman of the Party
Shapagatov T.Zh.	Mangistau Regional Territorial Administration of Forestry and Wildlife	Head of Division
Sarsenbaev N.S.	Hydrometeorological center in Mangistau Oblast	Deputy Head
Markina O. V.	Mangistau Nuclear Power Plant	Head of the Division of Environmental Protection
Tuleushov H. M.	Department of Natural Resources and Nature Management of the Mangistau Oblast	Deputy Head of the Division of Natural Resources and Nature Management
Kushakbaeva E.K.	North Caspian Operating Company (NCOC)	Permit Coordinator
Igilmanova N. B.	Aktau International Sea Trade Port	Main Environmental Officer

Photos of the stakeholder consultations in Kazakhstan:



Figure 14 Stakeholder Consultations in Kazakhstan in April 2025