

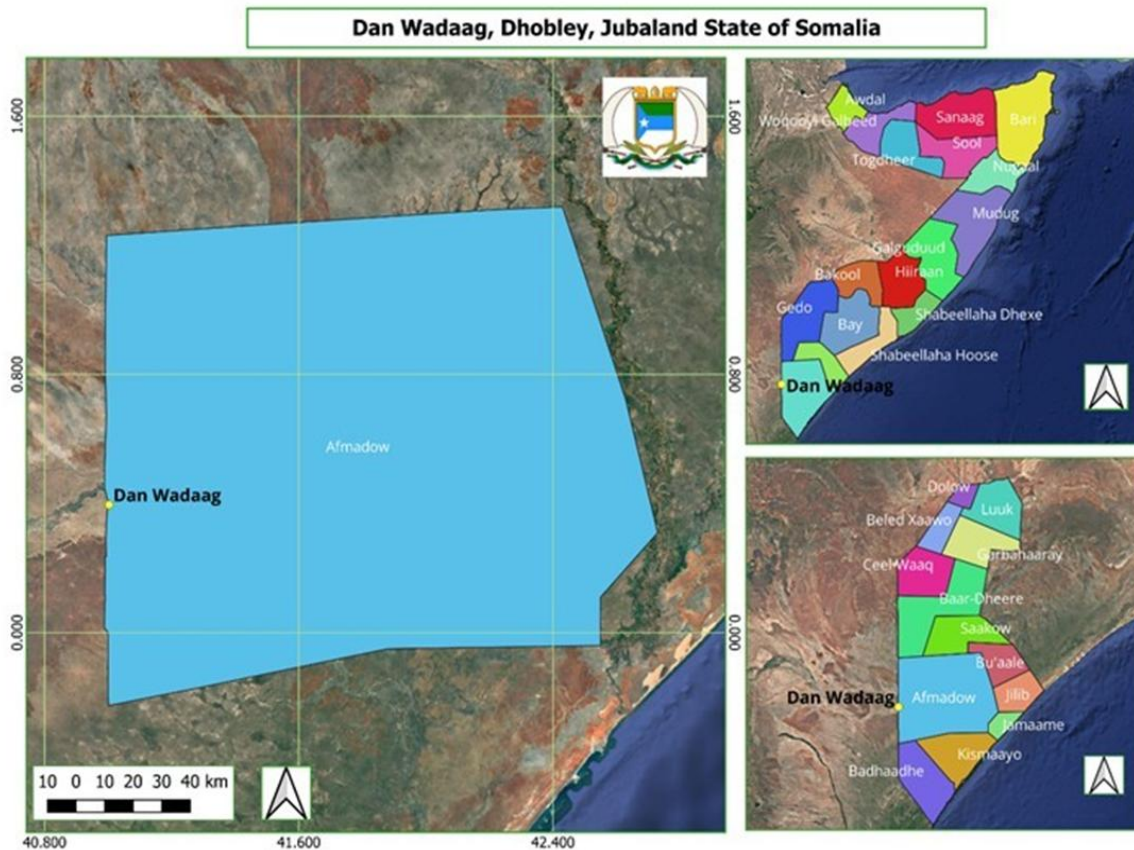


Federal Government of Somalia, Ministry of Energy and Water Resources

GROUNDWATER FOR RESILIENCE (GW4R) PROJECT

Environmental and social management plan (ESMP).

Dan Wadaag borehole, Dhobley, Lower Juba Region, Jubaland State of Somalia



Date: 31 AUG 2025

INTRODUCTION

Scope of the project and activity

The GW4R Project aims to improve groundwater access and management in the borders of the Horn of Africa in an environmentally conscious way. The project consists of three main components: (1) inclusive groundwater services to priority areas (2) groundwater data generation and national and regional groundwater institution improvement and (3) project management, knowledge-sharing, and operations support. There are sub-components and related actions for every component. Project beneficiaries will be communities that suffer from poor water conditions and that face increasingly future difficult conditions relating to climate change, a rapidly growing population, and increasing conflicts over scarce resources. The total number of beneficiaries in Somalia is estimated at 350,000. They will include rural communities, livestock owners, women and girl-children, and urban populations of Somalia.

As part of the Jubaland (JL) State Groundwater for Resilience (GW4R) project, the Ministry of Energy and Water Resources is planning to rehabilitate five strategic boreholes throughout JL State including Dan Wadaag in Dhoobley district. This site is located in Dan wadaag village within Dhoobley Location. Before the rehabilitation begins, it is essential to have the required documentation in place. In accordance with World Bank standards, an Environmental and Social Management Plan (ESMP) is mandatory. The ESMP is a crucial document designed to identify and mitigate potential environmental and social risks and impacts associated with the rehabilitation. An ESMP identifies and mitigates potential environmental and social risks and impacts associated with rehabilitation activities. Furthermore, the following reasons make this plan crucial:

1. **Identifying and Mitigating Environmental and Social Impacts:** The ESMP helps identify potential environmental and social impacts that the bore hole rehabilitation workers may have on its surroundings. The ESMP ensures that appropriate mitigation measures are in place to minimize any negative effects.
2. **Compliance with World Bank Safeguard Standards:** The World Bank requires projects it funds to adhere to environmental and social safeguard standards aimed at protecting the environment and local communities. The ESMP ensures that the site rehabilitation aligns with these policies and standards, making the project eligible for financial support from the World Bank if required.
3. **Worker Safety and Health (OHS):** Construction activities inherently pose health and safety risks to workers. The ESMP helps identify potential Occupational Health and Safety (OHS) risks and establishes measures to safeguard the well-being of workers involved in the project.
4. **Stakeholder Engagement and Transparency:** The ESMP emphasizes stakeholder engagement and communication. It ensures that local communities and relevant stakeholders are consulted about the project's potential impacts and help shape the mitigation measures as well as have a chance to voice their concerns or grievances. This fosters transparency and builds trust among stakeholders.
5. **Project Success and Sustainability:** Addressing environmental and social considerations through the ESMP contributes to the overall success and sustainability of the project. By minimizing negative

impacts and engaging with stakeholders, the project is more likely to progress smoothly, avoiding conflicts and delays that may arise from unaddressed issues.

6. Legal and Regulatory Compliance: An ESMP ensures that the project complies with relevant national environmental and social laws and regulations. Non-compliance can lead to legal complications and project disruptions.
7. Long-term Environmental and Social Performance: The ESMP lays the groundwork for ongoing monitoring and reporting on the project's environmental and social performance. This helps in making necessary adjustments and improvements throughout the project's lifecycle.

Site Description

The Danwadag Water Facility, situated in Dhobley town, Jubaland with the following Lat: 0.396107 and Long: 1.003004, currently supplies water to approximately 10,800 residents across 1,800 households directly (1000 HH) or indirectly (800 HH). In addition to households, the facility provides water to 4-madrasas, 5-mosques, 3-formal schools, 1-health center, 2-community halls, and a poultry farm.

Despite its critical role, the facility faces major operational challenges. Its infrastructure is deteriorating, power supply remains unreliable, and the water distribution system is inefficient. As a result, daily water rationing has become necessary to bridge the gap between limited supply and increasing demand, particularly from both the host population and internally displaced persons (IDPs).

The Dan Wadaag Borehole, drilled in 2017, is currently powered solely by solar energy. However, the system's output is frequently insufficient, especially during periods of low sunlight and heightened water demand in the dry seasons, significantly limiting the borehole's operational capacity. A backup diesel generator, owned by the neighboring Mowlid-Laqaye Borehole, is occasionally reclaimed by its owners for alternative use, further exacerbating water supply challenges during times of peak demand and inadequate solar output. When available, this generator is hired at a cost of USD 50 daily rental when used, imposing additional financial pressure on the water management system.





Existing Water Facilities – Dan wadaag

The water storage infrastructure at the Danwadag Water Facility comprises two elevated 40m³ concrete tanks each (6 meters high) and one 20m³ elevated tank (6 meters high), are in poor condition, with visible cracks and leaks compromising water quality, reducing availability, and increasing non-revenue water. The internal distribution network, especially pipelines, also requires urgent expansion to improve efficiency and connect 800 new households. This expansion will involve laying a 2.2-kilometer pipeline, to serve Laanta Hawada village, reducing reliance on manual and animal-based water transport.

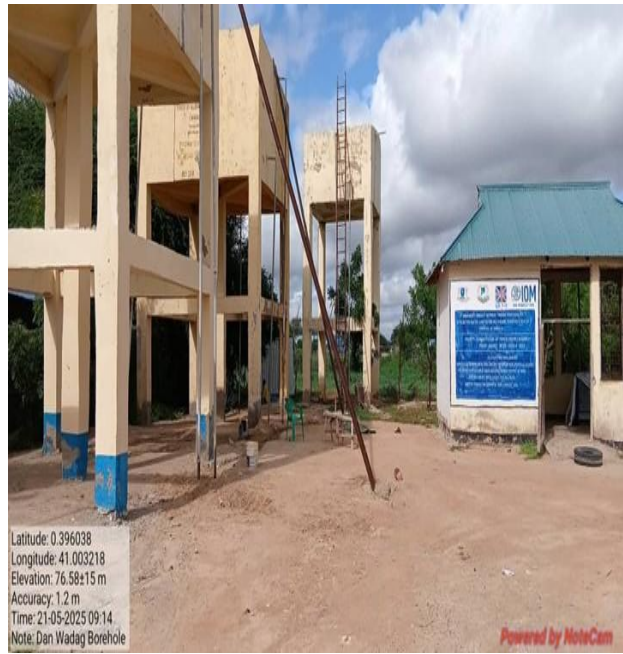
The facility's additional components, which include an aging 11-kW submersible pump, two generator rooms, and a caretaker's shelter. The internal water distribution system, particularly the pipelines, also requires urgent expansion and rehabilitation to enhance efficiency and ensure reliable access for users.

The borehole currently faces multiple critical challenges. Water output is steadily declining due to outdated infrastructure and an inefficient pumping system. Solar pumps function only between 9:00 am and 3:00 pm, while a borrowed generator covers early morning hours from 4:00 am to 9:00 am. Mechanical breakdowns are frequent, causing extended service disruptions. The damaged storage tanks limit water availability, and the weak distribution network restricts household coverage and leads to frequent rationing.

Without a comprehensive rehabilitation effort, including replacement of key components and major infrastructure upgrades, the Danwadag Water Facility will continue to operate inefficiently and fail to meet community needs. Immediate investment is essential to restore its full capacity and ensure consistent, safe, and clean water access.

SITE PHOTOS





PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE	
Country	Somalia -Jubaland state-DHoolley district lower Juba juba
Project title	GW4R: Rehabilitation and Upgrading of Danwadag -DHoolley town Existing Borehole
Scope of project and activity	<p>The Dan wadag Borehole, a critical public water source that serves approximately 10,800 residents across 1,800 households directly (1000 HH) or indirectly (800 HH). In addition to households, the facility provides water to 4-madrasas, 5-mosques, 3-formal schools, 1-health center, 2-community halls, and a poultry farm.</p> <p>In addition to households, the facility provides water to 4-madrasas, 5-mosques, 3-formal schools, 1-health center, 2-community halls, and a poultry farm.</p> <p>The proposed water project involves</p> <ul style="list-style-type: none">• Supply and installation of a 45-kVA generator to meet peak demand and support nighttime operations.• Rehabilitation of the borehole, including the provision and installation of a DN 63.5 mm pressure-rated PVC riser pipe with a secure locking mechanism.• Provision of a 11-kW submersible pump as a standby unit to supplement the existing pump, ensuring uninterrupted water supply during maintenance activities or pump downtime.• Rehabilitation of two existing generator rooms to shelter the generator and store spare parts.• Rehabilitation of existing caretaker room to shelter the operators.• Construction of a gender-segregated sanitation block with latrines for both male and female users to improve hygiene standards.• Establishment of a designated water point for filling water bowzers at the borehole site.• Rehabilitation of three elevated storage tanks: two 40 m³ reinforced concrete tanks and one 20 m³ elevated concrete tank.• Installation of a chain-link perimeter fence with a secure access gate to enhance safety and safeguard the facility.• Expansion of existing pipe network by laying a 2.2-kilometer pipeline to serve an additional 800 households in Laanta Hawada, Dhobley town and reduce reliance on human and animal-based water transport.

Institutional arrangements (Name and contacts)	<p>Project Management PIU – at Ministry of Energy and Water Resource</p> <p>Abdinasir Elmoge Ground Water for Resilience JL state operation manager elmoge.mower@gmail.com</p>	<p>Project Owner Ministry of Energy and Water Resource</p>
SITE DESCRIPTION		
Name of site	Site Name: Danwadag Borehole Rehabilitation, Dhoobley District of Lower juba -Region, Jubaland State of Somalia.	
Describe site location	Danwadag borehole is located in Dhoobely District lower juba Somalia. With specific Lat: 0.396107 and Long: 1.003004,	
Attach evidence of government ownership of land or land acquisition process and RAP	<p>Government Land/Ministry Energy and Water Resource of Juba Land's Land.</p> <p>The land certificate, duly approved by the Dhoobley district commissioner is attached and included as part of the ESMP. The designated land for Danwadag borehole rehabilitation is owned by the Dan wadag community with approval of DC certification letter in line with MOU as well as the VLD form agreed by the community with Ministry of Energy and Water Resources of the Juba Land State, Somalia. The signed VLD form is attached in Annex 1.</p>	
Has a site been visited by the social specialist to confirm that there will be no physical or economic displacement or disturbance including of squatters or informal traders? (when and conclusion)	<p>✓ Yes, The E&S team including the Social/ CDD specialist, Environmental specialist, have visited the site to confirm that there will be no physical or economic displacement or disturbance including of residents or informal traders.</p> <p>✓ The visit occurred on 23/01/2024. In conclusion, the ES has implemented several measures to ensure that the project will not cause any significant or major social impacts. These measures include:</p> <ul style="list-style-type: none"> ✓ Conducted a thorough site visit and verified ES screening checklist and confirmed that there will be no major physical or economic displacement or disturbance. ✓ Formulating a comprehensive monitoring plan to assess the effectiveness of the mitigation measures in place. ✓ Establishing a robust grievance mechanism that enables affected communities to voice their concerns and seek resolution in a transparent and accessible manner. ✓ Shared GRM postures including hotline number, which they can communicate us during and after the implementation/rehabilitation stage ✓ To facilitate effective communication during and after the implementation/rehabilitation stage, PIU GM focal points will regularly monitor and register any concerns/complaints regarding Danwadag Water Point. 	
Description of geographic, physical, biological, geological, hydrographic and socio-economic context	<p>Climate</p> <p>Danwadaag site experiences an arid to semi-arid climate characterized by high temperatures and low, erratic rainfall. The area has two rainy seasons, Gu April to June, Deyr October–December and two dry seasons including Jilaal from December to March, Haggaa from July–September. Prolonged droughts are common, affecting water availability and vegetation.</p> <p>Biological Environment</p>	

	<p>The site's vegetation consists mainly of drought resistant shrubs, acacia trees, and grassland patches. There are no significant plants and animal species present at the site of construction and the surrounding areas at the site.</p> <p>Social Environment</p> <p>Dan wadaag borehole is not located within an active rangeland or migratory grazing area. Instead, it is situated on community land in the central built-up area of Dhobley town, serving primarily as the main water source for the Dan-Wadaag IDP households and Laanta-Hawada host community.</p> <p>Furthermore, the wider rural surroundings of Dhobley town fall within the Southern Cattle Pastoral Livelihood Zone. However, the Dan wadaag borehole is situated on community land in the central built-up area of the town and does not lie within an active grazing or pastoral zone. Nonetheless, seasonal nomadic pastoralists migrate to the water point during the dry season, as the site is located within Dhobley town. It remains one of the most important water points in the town, providing water to surrounding permanent HHs, IDP camps, and public institutions as mentioned in the SSR.</p> <p>Cross-border trade with Kenya is a major economic activity, with Dhobley functioning as a strategic transit and market hub. The rehabilitation of the Dan wadaag water point is expected to significantly improve access to safe water for approximately 10,800 people across 1,800 households, including public institutions such as schools, health centers, and mosques.</p> <p>Geological Environment</p> <p>The site's geology is dominated by sedimentary formations, with shallow aquifers and deep groundwater reserves playing a critical role in water supply. Soils are generally sandy and loamy.</p>
Locations and distance for material sourcing, especially aggregates, water, stones?	<p>Distance for Material Sourcing: The construction material, especially aggregate, water and stones will be sourced from Dhoobley Town- Lower Jubba, the project should aim to source materials as locally as possible to reduce transport costs and environmental impact.</p>
	<p>The locations and distances for material sourcing, especially aggregates, water, stones, for the Dan wadaag borehole Rehabilitation will be from Dhoobley Town- Lower Jubba:</p> <ul style="list-style-type: none"> • Aggregates: The aggregates for the project will be sourced from a quarry located with the town. The quarry is open to public and has been operating for several years. The aggregates from the quarry are of good quality and are suitable for use in the construction of the well. To mitigate against child labor of these sites, the project will ensure that all material sourcing sites, particularly the quarry and the stonemason, are verified for compliance with child labor requirements. • Water: The water for the project will be sourced from the borehole.

	<ul style="list-style-type: none">• Stones: The stones for the project will be sourced from a local stonemason. The stonemason has been in business for many years and has a good reputation for providing quality stones. The stones will be used to rehabilitate the top protection of the well. The stonemason’s operations will be reviewed as part of the due diligence process. Verification will be done in coordination with local authorities and civil society actors to ensure the absence of child labor. <table><tr><th>Material</th><th>Location</th><th>Distance from the borehole site</th></tr><tr><td>Aggregates</td><td>Quarry</td><td>With in the Dhoobley town</td></tr><tr><td>Water</td><td>Well</td><td>Water point</td></tr><tr><td>Stones</td><td>Stonemason</td><td>With in Dhoobley town</td></tr></table> <p>The project team will need to obtain permits from the local government to source materials from these locations. The team will also need to ensure that the materials are sourced sustainably, are free from legal disputes, child labour and that extraction activities comply with national environmental regulations and do not lead to land degradation, biodiversity loss, or community conflict.</p>	Material	Location	Distance from the borehole site	Aggregates	Quarry	With in the Dhoobley town	Water	Well	Water point	Stones	Stonemason	With in Dhoobley town
Material	Location	Distance from the borehole site											
Aggregates	Quarry	With in the Dhoobley town											
Water	Well	Water point											
Stones	Stonemason	With in Dhoobley town											
LEGISLATION													
Identify national & local legislation & permits that apply to project activity	<ol style="list-style-type: none">1. Somalia National Gender Policy (2016)2. National Climate Change Policy, 20203. National Environmental Policy (2020)4. The Federal Republic of Somalia Provisional Constitution, 20125. National Water Resource Strategy (2021 – 2025)6. Environmental Protection and Management Act (2024)7. Environmental and Social Impact Assessment and Audit Regulations (ESIA) 20248. National Adaptation Programme of Action on Climate Change (NAPA) 20139. The Labour Code of 202510. The Somali Penal Code of 196211. The Urban Land Distribution Law of 197312. Draft Environmental Management Policy of FGS.13. Environmental Impact Assessment Law of Somalia14. Jubbaland Environmental Protection and Management Code (2018)15. Civil laws of FGS16. Juba land Water Law17. Other laws by Ministries of Public works at Juba land State.												
PUBLIC CONSULTATION													
When / where did the public consultation process take place (attach minutes describing how many people attended, what was discussed (including plans and potential social and economic	<p>During the Community consultation Meeting for the Jubaland GW4R Dan wadaag site rehabilitation various representatives came together to discuss the rehabilitation needs. The meeting aimed to gather input and support from the community, ensuring the project's success and sustainability. The community engagement meetings were conducted on 23 January 2024 and 30 July 2024.</p> <p>Key points discussed during the meeting included water management challenges, inadequate access to clean and safe water sources as reported by women and long distances to water points. For further details referrer from the SSR and CER.</p>												

impacts, GM and GBV) and categories and photos of the meeting)

The meeting participated and discussed with different representatives of the local community. The groups included the district administration and village administration, elders, youth, and women. This inclusive approach aimed to ensure that all members of the community had a chance to provide their needs and voice their concerns and interest. Throughout the community consultation process, several Environment and Social (E&S) activities and tools were completed. This included screening checklist, community consultation minutes, safeguard summary, and an Environmental and Social Management Plan (ESMP) specifically designed for the borehole rehabilitation project. These tools aimed to assess potential E&S impacts, as well as put in place measures to mitigate any adverse effects.

Outcomes of the meeting

- ✓ Expansion of Water Distribution Network - The community endorsed the extension of the existing pipe network through the installation of a 2.2-kilometer pipeline to reach an additional 800 currently unserved households in Laanta Hawadag, Dhobley town. This expansion aims to reduce reliance on human water transport, enhance last-mile delivery, and ensure equitable service to both IDP and host communities.
- ✓ Improved Water Storage and Supply Reliability. Participants supported measures to increase on-site storage capacity and ensure consistent pumping during peak-demand hours, thereby reducing shortages that disproportionately affect women, children, and vulnerable households.
- ✓ Health and Safety Risk Reduction - By extending the network and improving reliability, the project will reduce the health and safety risks faced by women and children who currently undertake long and often hazardous journeys to collect water, especially during the dry season.
- ✓ Strengthened Institutional between the Jubaland Water Agency (JUWA), local water service providers, and the Dan-Wadaag Water Management Committee (WMC) to improve operations, ensure transparent governance, and align with the principles of ESS4 (Community Health and Safety) and ESS10 (Stakeholder Engagement).
- ✓ Elders will be sensitized on inclusive governance models and encouraged to support the adoption of formalized water-sharing bylaws.

Separately women meeting

On 23 January 2024 and 30 July 2024, a GBV Specialist in Jubaland organized consultation sessions with local women residing near the Danwadaag borehole site to discuss water management, associated GBV risks, and mitigation strategies.

The consultations aimed to assess water management challenges and identify gender-based violence risks linked to water access while promoting women's participation in water-related decision-making.

Key issues raised included:

- Inadequate access to clean and safe water sources due to long distances and

- poorly maintained water points, resulting in contamination and health concerns.
- Limited inclusion of women in water resource management decisions, with strong interest expressed in participating in local water committees and receiving training on water management.
- GBV risks, including harassment and assault while fetching water from distant or isolated points, especially during early morning or late evening hours, compounded by limited community awareness of GBV prevention and support services. Proposed mitigation measures included improving water infrastructure, enhancing safety through lighting and community-based security, and conducting community sensitization campaigns on GBV risks and reporting mechanisms.



E&S management		
Who will orient and monitor E&S requirements of the project?	The project E&S unit together with the NPCU safeguard team specialists will orient & monitor the E&S requirements of the project.	
Who will be the onsite focal point for grievances with the contractor?	The contractor will have his own grievance focal point who will be closely working with the GW4R project grievance focal person.	PIU grievances focal Person Hotline number (9992) Juba land has the following FMS GW4R GM and GBV emails:
Will GM, GBV and Code of conduct posters be provided before works start?	Yes, GM, GBV and Code of conduct posters will be provided before work start.	GM Email: js.gw4r.grm@gmail.com GBV Email: jl.gw4r.gbv7@gmail.com
When will the contractor be oriented on the Geo-enabling Initiative for Monitoring and Surveillance (GEMS) form for monthly submission	Before the rehabilitation activity start or during the induction training for E&S Instruments.	GBV grievances focal person Khadra Hassan Ali

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
ESS 1: Environmental and Social Assessments								
ESS1	Social conflict	<ul style="list-style-type: none"> ✓ Ensure that Dan-wadaag IDP households are fully represented with at least two seats in the Water Management Committee (WMC). ✓ A 2.2 km pipeline extension is critical to address the water shortages faced by the host community. ✓ Strengthen customary procedures through an inclusive system that engages both IDP and host community elders. ✓ Bylaws should incorporate strict penalties for violations that undermine the agreed community water management structure. ✓ Conduct ongoing consultations between host and IDP representatives during to site groundbreaking to formalize a clear, community-endorsed water management structure that reflects 	PIU	During construction	<p>Number of conflict incidents</p> <p>Meetings minutes and sent with ESMP report</p>	No additional costs	FGS	Monthly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		<p>local needs and acceptance</p> <ul style="list-style-type: none"> Regular meetings on process and progress with VDC and elders. Transparency and neutrality and prompt resolution of concerns. Increased awareness and adherence to the measures outlined in the Memorandum of Understanding (MoU) between the community and the PIU. Reinforcing customary regulations. 						
	permanent settlement point	<ul style="list-style-type: none"> Ensure elders, VDC and local government have robust measures in place to mitigate and limit impact of influx of people and livestock including strengthening of bylaws, agreements and penalties. They are: WMC from the different community representatives must contribute to borehole maintenance either through fees or in-kind support (e.g., community clean-up, small repairs). During peak demand periods, 	PIU	Preparation and operation	No large scale influx of people or livestock	No additional costs	Contractor/PIU	Monthly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		<p>the WMC will implement rotas/scheduled access times to reduce long queues and ensure equitable distribution.</p> <ul style="list-style-type: none"> • Priority during emergencies (e.g., maternal health cases at the hospital, or fire outbreaks) will override normal schedules • <p>Strengthening Community Bylaws and Natural Resource Management Protocols</p> <ul style="list-style-type: none"> • Settlement Restrictions Explicitly prohibit any form of permanent settlement near the water point through locally endorsed bylaws. <p>Penalty and Enforcement Mechanisms</p> <ul style="list-style-type: none"> • Graduated Sanctions like Implement a tiered system of fines or sanctions for individuals or groups violating bylaws, with community consensus on enforcement. • Conflict Resolution Committees e.g., reactivate or 						

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		support existing customary institutions to handle disputes and violations efficiently.						
	Groundwater contamination	<ul style="list-style-type: none"> The proposed pit latrine at the rehabilitation site will be completely lined and carefully emptied on a regular basis utilizing a fully equipped vacuum truck designated for this purpose. The pit latrines will be gender segregated for both male and females. 	Contractor	During construction and operation	Record of appropriate measures taken	No additional costs	/ PIU	Monthly
	Disturbance of land or assets	<ul style="list-style-type: none"> Limit the vehicle movement and disturbance of areas. Use the appropriate roads and not create irregular paths during the rehabilitation. Make good any disturbance of soil, vegetation and assets 	Contractor	During the implementation	<p>All disturbance is rectified by the end of construction.</p> <p>No additional roads created during the rehabilitation works</p>	No additional costs	PIU	Weekly
	Risk of vegetation clearance	<ul style="list-style-type: none"> Avoid unnecessary clearance of vegetation Landscaping/greening of site following the construction works 	Contractor	During construction	Reduction of vegetation/unattractive landscape	No additional cost	PIU	Monthly
ESS 2: Labor and Working Conditions								
	Lack of occupational health and safety (OHS) for workers deployed at construction sites	<ul style="list-style-type: none"> Carry out a safety risk assessment and management plan and implement Provide OHS training/ Orientation for all the workers 	Contractor	Before construction	<ul style="list-style-type: none"> Safety risk assessment and management plan and implementation 	TBD	PIU	<p>Daily by the contractor site supervisor</p> <p>Monthly visits</p>

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		every week and visitors <ul style="list-style-type: none"> • Train all workers in safe handling of equipment and use of PPE • Limit extended work under direct sunlight, especially during excavation works and installation of solar panels. • Provide necessary personal protective equipment (PPE) to all workers • Posters displayed on key OHS hazards • Implement procedure of dealing with accidents and exposures • Record all incidents and corresponding Root Cause Analysis • Follow WBG environmental Health and Safety guidelines • Implement and monitor LMP in accordance with national law and international standards • Comply with Somalia OHS related laws and procedures. • Evacuation, medical treatment and compensation of all injuries sustained during construction activities are met by contractor. 			record <ul style="list-style-type: none"> • Training of workers on OHS including safe handling of equipment, traffic safety, security measures and use of PPEs • Daily toolbox meetings reinforce key safety protocols; • All incidents recorded • PPE issuance register • Monitoring reports • Pictures of posters displayed 			from PIU

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		<ul style="list-style-type: none"> Ensure that all site personnel are provided with an adequate supply of safe drinking water at all times 						
ESS2	Security risk for Project Workers	<ul style="list-style-type: none"> Implement and monitor the Security Management Plan (Sec MP). The Site SMP has been developed, and contractors are required to adhere it. The SMP/SRA will be shared with contractors as they are on boarded. Contractor's security orientation by the Security Specialist/SRMC before Commencement of any activity. 	Contractor	During construction	Number of security incidents reported and impacts	TBD	PIU/security officer	Weekly
	Traffic accidents cause injury or death of workers or community	<ul style="list-style-type: none"> All drivers undergo safe driving checks. Traffic safety protocols are closely adhered to. 	Contractor	During construction	Checks on drivers documented; Traffic safety awareness raising and monitoring are documented.	TBD	PIU	Weekly
	Risks of child and forced labour	<ul style="list-style-type: none"> Strict age verification process and documentation for all workers Ensure that all contracts have contractual provisions to comply with the minimum age requirements including penalties for non-compliance Include minimum age (18 years) 	site supervisor	During implementation	<ul style="list-style-type: none"> Labor register showing age and sex of persons engaged Worker's GRM in place Provisions in the contracts 	TBD	PIU	Weekly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		in procurement documents. <ul style="list-style-type: none"> • Raise awareness on child protection with contractors and in the communities. • Posters prohibiting child labour at all sites 			<ul style="list-style-type: none"> • Records of awareness sessions • Pictures of posters displayed 			
	Unfair employment practices and discrimination	<ul style="list-style-type: none"> • Employment of project workers under the project will be based on the principle of equal opportunity and fair treatment, • No discrimination based on personal characteristics unrelated to inherent job requirements with respect to any aspects of the employment relationship, such as recruitment and hiring, terms of employment (including wages and benefits), termination and access to training/promotion. • Awareness raising of all project implementers, contractors and primary suppliers on the requirements for equal opportunity and fair treatment. • Provision of maternity leave and nursing breaks • Provision of sufficient and suitable toilet and washing facilities, separate for men and 	Contractor	During implementation	<ul style="list-style-type: none"> • Records of workers and recruitment processes and criteria. • All employment related grievances and resolution times are logged. 	No additional cost	PIU	Monthly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		women workers.						
	Delayed payment of workers	<ul style="list-style-type: none"> Implement and monitor payment of workers as per contracts. Communication/awareness campaign of payment mechanisms Disseminate and orient the rights of workers Comply with Somaliland employment laws and procedures. 	Contractor/ PIU	During implementation	Record of appropriate measures taken	No additional costs	PIU	As and when occurs
	Lack of proper grievances channels	<ul style="list-style-type: none"> All workers have access to an impartial and functional grievance mechanism and there is an appeals process Channels for complaints and grievances are convenient for workers. To enable this, the project will have several channels for complaints and grievances including email, phone calls, texts, blogs, hotline and letter writing that will also be accessible to all workers. Information on the project GM will be made available to workers at all facilities. Posters on GM mechanism and channel displayed at all sites 	Contractor/ PIU	During implementation	All grievances and resolution times are logged. GEM E&S monitoring form is filled every month Picture of posters displayed on GM	No additional cost	PIU	Monthly
	Workers are not	<ul style="list-style-type: none"> Sensitize workers on 	Contractor	Before	<ul style="list-style-type: none"> Proper records 	No	PIU	Periodically

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
	observing safety requirements	importance of adherence to site safety protocols <ul style="list-style-type: none"> All workers sign a code of conduct including responsibilities and rights regarding GBV, Grievances, observing OHS and security protocols etc. 		implementation	of all signed forms <ul style="list-style-type: none"> Training records 	additional costs, posters will be provided by the project		
ESS 3: Resource Efficiency and Pollution Prevention Management								
ESS3	Generation of solid waste	<ul style="list-style-type: none"> Implement site solid waste management plan to include measures to: <ul style="list-style-type: none"> Reuse and recycling of the waste generated Provide on-site or off-site transportation of waste to prevent or minimize spills, releases and exposure to employees and public Appropriate designation of areas for disposal of solid waste consistent with the local and international requirements 	Contractor	During implementation	<ul style="list-style-type: none"> Waste management plan Records of amount of solid waste re-used, recycled, and disposed of 	No additional cost	PIU	Monthly
	Generation of dust and noise	<ul style="list-style-type: none"> Where feasible, construction sites, diversions and materials handling sites to be water- 	Contractor	During implementation	<ul style="list-style-type: none"> Number of sound machinery and 	No additional cost	PIU •Project Engineer	Weekly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
	Decreased air quality Increased levels of vibration from construction machinery	sprayed on dry and windy days to contain dust; <ul style="list-style-type: none"> • Cordon off construction sites to minimize dust migration to nearby facilities by wind; • Staff working in dust generating activities shall be provided with Personal Protective Equipment (PPE) • Use equipment with lower noise emissions • Routine maintenance of the vehicles to reduce noise and air pollution • Installing suitable mufflers on engine exhausts and compressor components • Installing acoustic enclosures for equipment casing • Planning activities in consultation with local communities so that activities with the greatest potential to generate noise are planned during periods of the day that will result in least disturbance 			equipment <ul style="list-style-type: none"> • Frequency of watering of surfaces to reduce dust related • Frequency & maintenance plan 		/supervising consultant •Environmental Specialist	
	Oil and lubricant contamination	<ul style="list-style-type: none"> • Properly store oil and lubricants • Avoid irregular dumping of used oil and lubricants. • All machinery and equipment be regularly maintained and 	Contractor	During the implementation	Proper records of oil & lubricant change.	TBD	•Project Engineer /supervising consultant	Monthly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
		serviced to avoid leak oils <ul style="list-style-type: none"> Designate a garage or workshop for oil change far from the water source. 			Proper dumping		• Environmental Specialist	
ESS 4: Community Health and Safety								
ESS4	Increased GBV/SEAH cases	<ul style="list-style-type: none"> Training of all workers on GBV/SEAH Enforce total adherence to the code of conduct Confidential reporting measures for SEA/SH 	Contractor / PIU/ SPTs/ MDAs	During implementation	<ul style="list-style-type: none"> Audit report in place Records in place 	No additional cost	PIU	Monthly
	Exposure of community members to physical/biological hazards on the project site, including unauthorized access	<ul style="list-style-type: none"> Undertake safety precautions to address safety hazards for the nearby community, including, safety/warning signage, safety barrier around the construction site, and safe driving practices Restrict access to construction and allow only authorized personnel Safety barrier around the construction site Safe driving practices Proper use & regular cleaning of the pit latrines 	Contractor	Prior to and during implementation	Records to show community sensitization on safety, in place	TBD	PIU	Prior to start of works, monthly during implementation

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
	Exposure of risk of communicable diseases	<ul style="list-style-type: none"> Limit open defecation in the borehole area. Awareness raising & promotion of hygiene practices in the community and communicable diseases. 	Contractor/ VDC	During implementation and post construction	<ul style="list-style-type: none"> Records to shows the awareness raising and sanitation, hygiene promotion 	TBD	PIU	Whenever there is work onsite
	Use of waste by community may cause harm	<ul style="list-style-type: none"> Ensure all waste is properly recorded, sorted and segregated, proper handling and disposal, and health and safety measures 	Contractor	During implementation	<ul style="list-style-type: none"> Waste management procedure in place Records of amount of waste disposed available 	No additional cost	PIU	Weekly
	Heat related illness	<ul style="list-style-type: none"> Limit the direct sun exposure during the mid time Advise the community members to stay hydrated Availability of potable water on site 	PIU	During the summer months	<ul style="list-style-type: none"> Awareness raising records 	No additional costs	PIU	Weekly
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement								
	Physical or economic displacement of legal and illegal residents or traders in or around the construction sites	<ul style="list-style-type: none"> Physical visit by social specialist before construction and confirmation during community meeting and ongoing monitoring and development of RAP/resettlement audit 	PIU	Before construction starts	Documentation by social specialist	Costed as per RAP and not paid for by project funds	PIU	monthly
ESS5	Blocked access to people in the area	<ul style="list-style-type: none"> Ensure that the local routes, drainage and community access are not blocked by construction 	Contractor	During construction	There have been no complaints on blocked access to the people in the	No additional cost	PIU	Weekly

Associated Project Activity office	E&S Risks and Impact	Mitigation Measures	Responsibility for implementation	Timing for mitigation	Monitoring Indicators	Mitigation Budget	Monitoring Responsibility	Monitoring Frequency
					area			
	Conflict over land	<ul style="list-style-type: none"> Before signing land agreements, consult all owners (private land) or users and residents (community land) and ensure that agreements and certificates are in place 	PIU	Before construction starts	Land agreements and certificates. Records of consultations with land owners and users	No additional budget is required.	PIU	Whenever necessary
ESS 10: Stakeholder Engagement and Information Disclosure								
ESS10	Inadequate, ineffective, and inappropriate stakeholder and community engagements and disclosure of information	<ul style="list-style-type: none"> Keep community leaders informed of progress/delays or activities that may impact community. Conduct regular community consultations as necessary Consultation to be held in culturally appropriate means and language 	PIU and contractor	Before and during construction	No outstanding complaints. Complaints resolved within 7 days	No additional cost	PIU	Monthly
	Poor access or low trust in GM	<ul style="list-style-type: none"> Poster of GM and contacts displayed outside site at all times. Grievances will be acknowledged within daysof receipt and resolved within 21 days including feedback to the complainant. Undertake consultations on the effectiveness of the GM 	PIU and contractor	Pri or to and during implementation	Availability of posters Number of GRM cases addressed within 21 days Minutes of meetings discussing GM issues with the community	No additional cost	PIU	Weekly

GM Contacts and awareness raising

Jubaland has the following FMS GW4R GM and GBV emails,

- GM Email: js.gw4r.grm@gmail.com
- GBV Email: jl.gw4r.gbv7@gmail.com

<u>GW4R GRM & GBV EMAILS</u>	LOCATION	REMARKS
E-mails	Category	State
js.gw4r.grm@gmail.com	Main GRM email	State Level
jl.gw4r.gbv7@gmail.com	GBV/SEAH complaints	State Level
HOTLINE NUMBER (FREE)	9992	National Level
		The free hotline number functions within 24 hours of the Project

These emails are managed by the PIU Social Safeguard and GBV specialists of the Ministry. Any complaints related to the Jubaland GW4R project implementation issues will be handled and registered according to GM procedures and regulations.

Additionally, Jubaland MOEWR plans to establish a state-level toll-free number for stakeholders and individuals with complaints to contact. Until this toll-free line is operational, clients will be able to access the national toll-free number at the FGs level **(9992)**.

Code of Conduct Obligations of the Project Contractors

Under the Horn of Africa Groundwater for Resilience Project failure to follow Environmental, Social and healthy Safety **(ESHS)** and Occupational and healthy Safety Standards **(OHS)**, or partaking in **GBV or VAC** activities, constitutes acts of gross misconduct and is therefore grounds for sanctions, penalties, or potential termination of employment. Prosecution of those who commit Sexual harassment **(SH)** or Sexual Exploitation, Abuse and Harassment **(SEAH)** or other types of GBV, or Violence against children **(VAC)** may be pursued if appropriate.

I, _____ acknowledge that adhering to environmental, social, health and safety (ESHS) standards, following the project's occupational health and safety **(OHS)** requirements, and preventing gender-based violence **(GBV) ESHS (VAC)** is important. All forms of **GBV or VAC** are unacceptable in the workplace or when interacting with communities.

Under the Horn of Africa Groundwater for Resilience Project failure to follow Environmental, Social and healthy Safety **(ESHS)** and Occupational and healthy Safety Standards **(OHS)**, or partaking in **GBV or VAC** activities, constitutes acts of gross misconduct and is therefore grounds for sanctions, penalties, or potential termination of employment. Prosecution of those who commit Sexual

harassment **(SH)** or Sexual Exploitation, Abuse and Harassment **(SEAH)** or other types of GBV, or Violence against children **(VAC)** may be pursued if appropriate.

I agree that while working on the Project I will:

- a. Attend an orientation training session related to **ESHS, OHS, HIV/AIDS, GBV and VAC** as requested by my employer.
- b. Follow my employers' guidance on prevention of the spread of infectious diseases.
- c. Follow my employers' guidance on security and safety including not causing conflict or exposing myself, other colleagues, stakeholders including community members, project facilities or assets to risks.
- d. Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
- e. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- f. Not participate in sexual contact or activity with children (anyone age 18 or under)– including grooming or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
- g. Not engage in any form of sexual harassment to a co-worker - for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior e.g., looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; giving personal gifts; making comments about somebody's sex life etc. Sexual harassment constitutes acts of serious misconduct and are therefore grounds for disciplinary measures, including summary dismissal
- h. Not engage in any form of sexual exploitation or abuse for instance, exchanging money, employment, goods or services for sex or sexual favors, or making promises or favorable treatment dependent on sexual acts – or other forms of humiliating, degrading or exploitative behavior. This includes any project-related assistance due to community members. Sexual exploitation and sexual abuse constitute acts of serious misconduct and are therefore grounds for disciplinary measures, including summary dismissal.
- i. Report through the Reporting Mechanism to any suspected or actual GBV or VAC to company management and employer, or any breaches of this Code of Conduct.
- j. The standards set out above are not intended to be an exhaustive list. Other types of sexually exploitive or sexually abusive behavior may be grounds for administrative action.

With regard to children under the age of 18, I will:

- a. Wherever possible, ensure that another adult is present when working in the proximity of children.
- b. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.
- c. Not use any computers, mobile phones, video and digital cameras to exploit or harass children or access child pornographic material (see also “Use of children's images for work related purposes” below).
- d. Refrain from physical punishment or discipline of children.
- e. Refrain from hiring children for domestic or other labor which is inappropriate given their age or developmental stage, or places them at significant risk of injury.
- f. Comply with all relevant local legislation, including Somali national labor laws in relation to child labor.

Use of children’s images for work related purposes

When photographing or filming a child for work related purposes, I will:

- a. Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images;
- b. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this, I must explain how the photograph or film will be used;
- c. Ensure photographs, films and videos present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not be seen as sexually suggestive;
- d. Ensure images are honest representations of the context and the facts.
- e. Ensure file labels do not reveal identifying information about a child when sending images electronically.

THE NEAREST GBV SERVICE PROVIDERS FOR HEALTH, PSYCHO-SOCIAL AND LEGAL SUPPORT IN THE AREA OF DAN WADAAG SITE:

Comprehensive healthcare services for women and girls, particularly in the context of Gender-Based Violence (GBV) response and prevention are delivered directly at the site in Danwadag. These services integrate reproductive and maternal health care to address both the physical and emotional needs of GBV survivors.

The primary contact for these services is **Fozia Ahmed** through this email:

FoziaA@weareligh.org 0613618674. In her absence, **Sahro Abdi Hassan** (0612009319) serves as the alternative contact.

Through collaboration with GBV sub-sector actors, survivors receive not only medical care but also psychosocial support and legal referrals.

Sustained support and resource allocation are essential to protect the rights, dignity, and well-being of women and girls in displacement-affected communities.

Annex-1 Attachments

- ✓ WMC Nomination letter.
- ✓ Land Certificate and Voluntary Land Donation (VLD)
- ✓ Attendance Sheet of Participants
- ✓ MOU



ENGINEERING INFRASTRUCTURE DESIGNS AND SPECIFICATIONS



DANWADAG PROPOSED PIPELINE PROFILES



END