

Terms of Reference

Environmental experts in response to the 2024 Hurricane season: Water Resource Specialists

UNEP/OCHA Joint Environment Unit

Background

The National Oceanic and Atmospheric Administration (NOAA) Weather Service of the United States of America has predicted an above-normal hurricane activity in the Atlantic basin for this year. NOAA's outlook for the 2024 Atlantic hurricane season, spanning from June 1 to November 30, forecasts an 85% chance of an above-normal season, with a range of 17 to 25 total named storms. Of those, 8 to 13 are expected to become hurricanes (winds of 119 km/h or higher), including 4 to 7 major hurricanes (category 3, 4, or 5; with winds of 178 km/h or higher).

This increased activity is influenced by several factors, including near-record warm ocean temperatures in the Atlantic Ocean, the development of La Niña conditions in the Pacific, reduced Atlantic trade winds, and less wind shear—all of which tend to favour tropical storms formation. An example of the current above-normal conditions is Hurricane Beryl in July 2024, the second named storm this season and the first major hurricane of the year, also notable as the earliest-forming Category 5 Atlantic hurricane on record in the Caribbean. Beryl's impact highlights the exceptionally active nature of the 2024 Atlantic Hurricane season.

Following the impact of Hurricane Beryl on Grenada, St. Vincent and the Grenadines, and Jamaica, and the subsequent response by the United Nations with strong support from the European Union Civil Protection Mechanism (UCPM), the Joint Environment Unit (JEU) is activating its preparedness and response mechanisms. This includes the pre-identification of experts in technical fields typically required to respond to environmental emergencies caused by hurricanes. These experts, in collaboration with OCHA and UNEP staff, will be part of UNDAC teams, JEU standalone environmental missions, or government-led missions, depending on the requests received from Caribbean Member States. The current document highlights the requirements for general environmental experts.

Responsibilities/Expected Activities

- Advise national and local authorities on environmental and human health impacts related to water pollution, sewage, and waste affecting human and animal health Identify and assess secondary environmental hazards and impacts following hurricanes, with a focus on those posing immediate life-threatening risks to humans and the environment.
- Provide technical advice to national authorities for addressing water-related issues, including identifying priorities for action and supporting the development of response, cleanup, remediation, and recovery plans to mitigate environmental damage.
- Analyse environmental data, reports, and assessments related to water quality and availability, and develop actionable recommendations for mitigating impacts.
- Coordinate with disaster responders, including clusters and local emergency management authorities, to identify significant environmental issues in relation to humanitarian objectives. Identify cross-cutting environmental concerns and facilitate collaboration between national authorities, clusters, and stakeholders.
- Provide timely and actionable guidance on urgent water resource issues, including dam safety and environmental impact mitigation, while collaborating with on-site experts to develop immediate and effective recommendations for safeguarding water resources and minimizing environmental impacts.
- Conduct thorough assessments of environmental impacts resulting from water-related issues, including water quality, ecosystem disruption, and downstream effects.



Perform other tasks in support of the operation as required, ensuring a comprehensive and effective response to water resource management issues arising from hurricanes.

Qualifications and skills

- **Educational background:** degree in environmental engineering, hydrology, water resource management, or related fields, with a focus on water resources, hydrology, or environmental sciences.
- Language proficiency: fluency in English is essential. Proficiency in other languages relevant to the affected region is an asset (this includes Spanish, French, and Portuguese).
- Water resource expertise: expertise in managing water resources during emergencies, including water quality assessment, contamination mitigation, and safe water supply management. Experience in addressing water-related hazards and impacts from natural disasters.
- **Interdisciplinary integration**: ability to integrate water resource management considerations across various disciplines, particularly within disaster response and recovery planning.
- **Environmental coordination**: experience in coordinating with international and local agencies involved in water resource management. Knowledge of humanitarian coordination frameworks and collaboration with relevant clusters is an asset.
- -**Team collaboration:** strong team skills for working in a multi-disciplinary, multi-national team in challenging field conditions. Capacity to assume leadership when necessary.
- **Training and certification:** completed relevant training courses, such as the Environment and Emergencies Training (EET), water resource management training, or trainings from standby partners.

Notes

- Contact with media, including interviews, will only be undertaken if authorized by the RC and with the support of OCHA/UNEP head of public information unit.
- Indicating availability and interest in these terms of reference does not constitute an obligation for actual deployment. The purpose of this process is to pre-identify and assess the availability of experts with the specified qualifications and skills. This pre-identification is intended to facilitate rapid mobilization should the need arise during the hurricane season. Being listed as available does not guarantee deployment, but ensures that experts are prepared and can be swiftly contacted if a situation demands their expertise.