



Hydro-meteorological and Flood Monitoring Bulletin: 2nd Dekad Assessment & 3rd Dekad Impact Outlook, October 2025



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Forward

This Dekedal Hydro Meteorological Bulletin is prepared and disseminated by the Ethiopia Meteorological institute (EMI). The ultimate objective of producing and disseminating this bulletin is to inform all level decision makers with the updated and relevant hydro meteorological information. This Dekedal Bulletin reviews the October11-20, 2025-month climate condition and its impacts over the river catchment across the country and highlights the October21-31, 2025 climate outlook along with the likely impact over the water dams and the rivers basins.

The information contained in this bulletin is believed to assist the water professionals for planning the capacity expansion of reservoirs, water supply, ecosystem restoration as well as rehabilitation of existing systems including dams, irrigation, canals, pumps, wetlands and the likes. In addition to the aforementioned benefit the bulletin also reveals the aridity levels of each basin, extremes heavy rainfall events and areas where significant amount of moistures loss through evapotranspiration. In the impact outlook section of the bulletin it provides the likelihood of the climate in the coming month and its potential impact over various aspect of the river basins including the hydraulic structures such as culverts, bridges, reservoir spillways, road embankments and dikes. It also indicates the measures need to be taken as the early actions so as to reduce the possible negative impact of the upcoming month climate condition. Meanwhile, your comments and constructive suggestions are highly appreciated to make the objectives of this bulletin a success.



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1. Introduction

The provision of hydro meteorological services can contribute a significant role toward water resource management and socio-economic development. Both surface water and groundwater management are essentially linked to climate variability. Therefore, the provided climate information and knowledge in this monthly hydro meteorological bulletin have a critical importance for efficient, equitable and sustainable development and management of the national water resources and for coping with any climate related risks. The information illustrates the impact of previous month climate on each and every water basins and the associated climate risks observed during the month under review. In addition to the previous month impact assessment, the bulletin also provided the expected climate condition for the coming months and its impact on the water resource. The design of water-use and flood-control facilities, mainly dams and reservoirs, is frequently based on these analyses. Estimating the likelihood of precipitation, the distribution of precipitation and the rate of evaporation in location and time, the heavy rainfall and the subsequent runoff, extreme temperature and wind are among issues that hydro meteorologists are concerned with.

1.1 Hydro-Meteorological Impact Assessment (October 11-20, 2025)

During the period from October 11 to 20, 2025, most parts of the Baro-Akobo, Abay, Omo-Gibe, Central Rift Valley, Genale-Dawa, Ogaden, Upper and Middle Wabi Shebele, and the Middle and Lower Tekeze River basins experienced humid to wet conditions. In particular, the Middle Abay, Baro-Akobo, Omo-Gibe, Upper and Middle Central Rift Valley, and Upper Genale-Dawa basins recorded very wet moisture conditions. These conditions played a positive role in replenishing surface and ground water resources, enhancing the storage capacity of man-made reservoirs, and improving subsurface water availability across the affected basins. Conversely, the Afar-Danakil Depression, pocket areas of the Upper Ogaden, Awash Basin, Upper Wabi Shebele, and Upper Tekeze Basin remained under dry conditions, indicating limited moisture availability and reduced hydrological activity in these regions.



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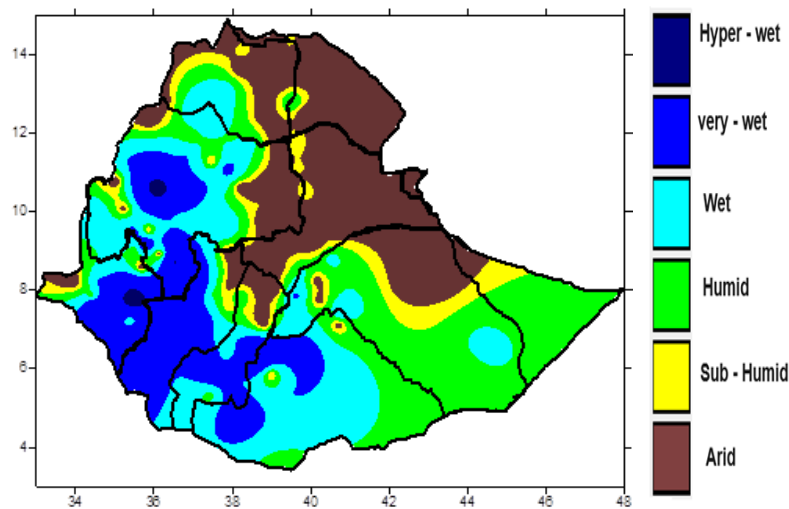


Figure 1 Dekad Hydro-Meteorological Assessments from October 11-20, 2025

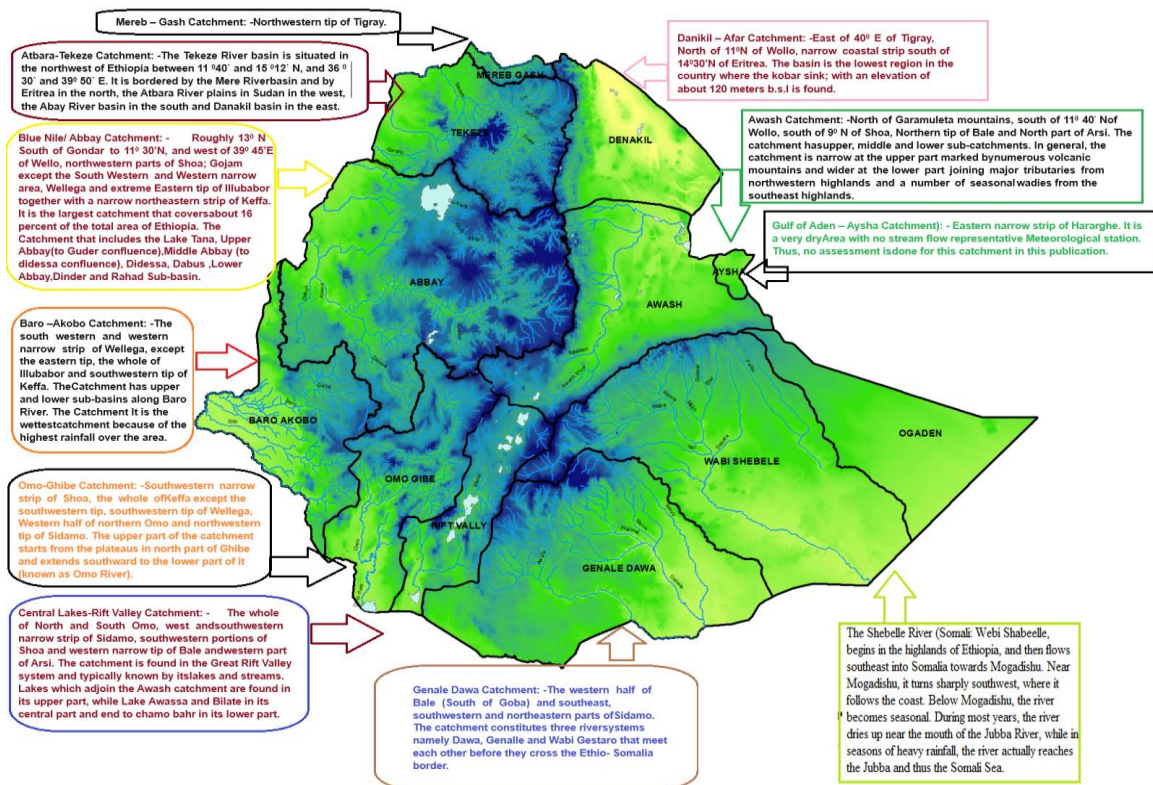
1.2 Hydro-Meteorological Impact Outlook (October 21-31, 2025)

During the third dekad of October (21-31, 2025), moderate surface water flow is anticipated across the Lower Tekeze, Middle and Lower Abay, Baro-Akobo, Omo-Gibe, Middle and Upper Central Rift Valley, Upper and Middle Wabi Shebele, Genale-Dawa, and Lower Ogaden basins. As a result, river water levels and reservoir storage particularly in dams that still require additional inflow are expected to show a gradual increase. Given that this period marks the transition into the early Bega season, it is crucial to effectively store the available water in regions likely to experience reduced surface runoff and limited rainfall in the coming weeks. This will play a vital role in ensuring sustainable water availability for domestic, agricultural, and energy purposes during the dry months ahead. Conversely, most parts of the Afar-Danakil Depression, the Awash Basin, the Upper Ogaden, and the Tekeze highlands are expected to remain under dry conditions. Hence, proper water resource management and efficient utilization are strongly advised to mitigate potential water shortages in these areas.

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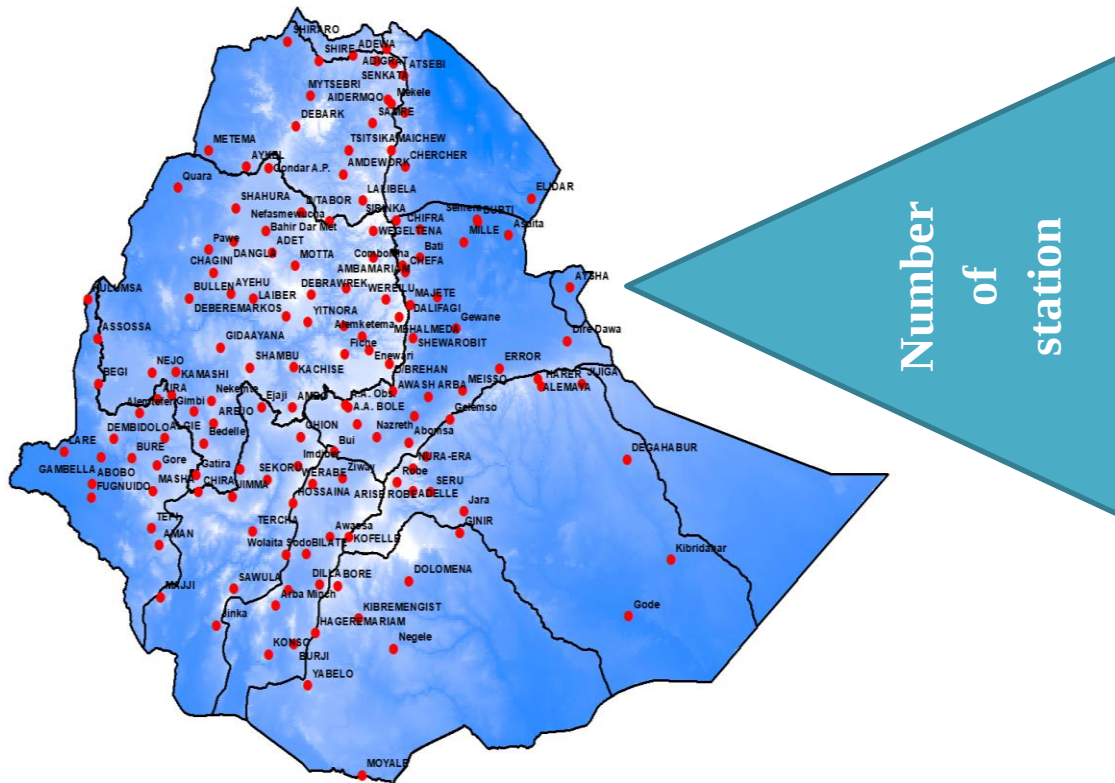




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