

Dekadal Hydro Meteorology Bulletin



Foreword

This Dekadal 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 decision makers at all levels with updated and relevant hydro meteorological information. This Dekadal Bulletin reviews the November 1-10, 2026 climate condition and its impacts over the river catchments across the country and highlights the November 11-20, 2026 climate outlook along with the likely impact over the water dams and the river basins.

The information contained in this bulletin is believed to assist water professionals in 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 like. In addition to the aforementioned benefits, the bulletin also reveals the aridity levels of each basin, extreme heavy rainfall events and areas where a significant amount of moisture is lost through evapotranspiration. The impact outlook section of the bulletin provides the likelihood of the climate in the coming dekad and its potential impact on various aspects of the river basins, including hydraulic structures such as culverts, bridges, reservoir spillways, road embankments and dikes. It also indicates the measures that need to be taken as early actions to reduce the possible negative impact of the upcoming climate condition. Meanwhile, your comments and constructive suggestions are highly appreciated to make the objectives of this bulletin a success.

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 climate information and knowledge provided in this dekadal 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 the previous period's climate on each water basin and the associated climate risks observed during the period under review. In addition to the impact assessment, the bulletin also provides the expected climate condition for the coming period and its impact





on water resources. 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 the issues that hydro meteorologists are concerned with.

Hydro Meteorological Impact Assessment November 1-10, 2026

During the first dekad (ten-day period) of November, moderate to high surface water flows were observed across most of the Omo-Gibe, Baro-Akobo and Middle and Upper Abay basins, as well as parts of the Rift Valley basin. High surface water flows were recorded particularly over the Middle and Lower Omo-Gibe, Upper Baro-Akobo and Middle Abay basins. The analyzed hydro meteorological data indicate that these conditions strengthened soil moisture and surface water flow and made a good contribution to surface water resource inputs. In addition, low to moderate surface water flows were observed over parts of the Upper Tekeze, Middle Awash and Upper Abay basins, which brought a limited improvement to local water conditions. The remaining Wabi Shebelle, Ogaden, Genale-Dawa, Lower Awash, Aysha, Lower Tekeze, Lower Abay, Danakil and Lower Baro-Akobo basins remained mostly under dry conditions.

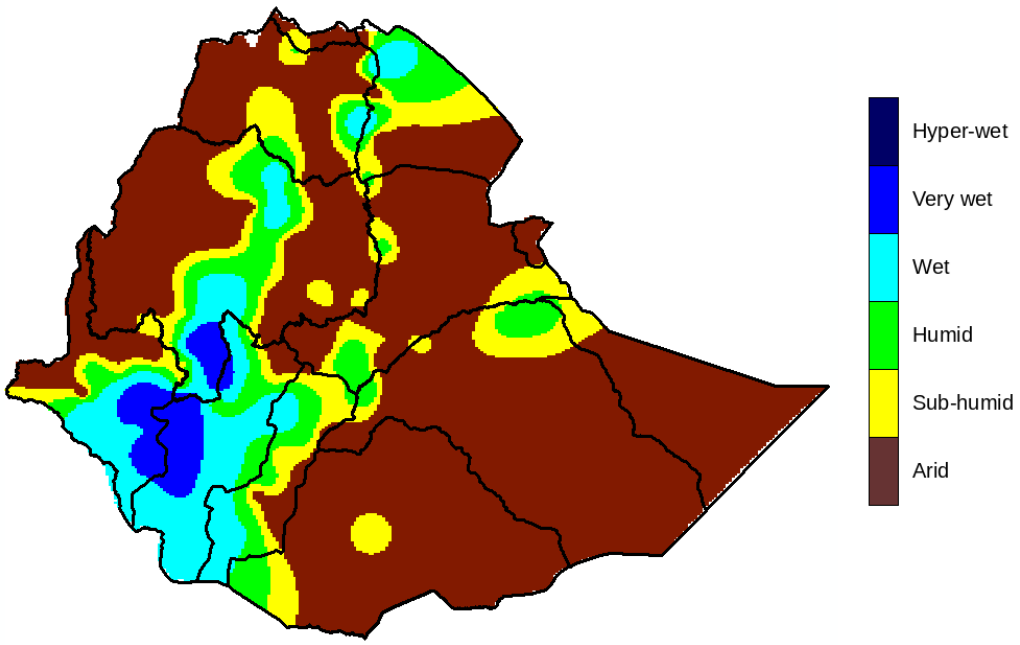

Figure 1 Dekadal Hydro Meteorological Assessment for November 1-10, 2026

Hydro Meteorological Impact Outlook for November 11-20, 2026

During the second dekad of November (November 11-20, 2026), moderate surface water flow is expected over the Genale-Dawa, Rift Valley, Baro-Akobo and Upper Omo-Gibe basins. Low to moderate flow is expected over the Lower Omo-Gibe, Wabi Shebelle, Ogaden, Abay and Upper and Middle Awash basins, whereas the Afar-Danakil, Lower Awash and Upper Wabi Shebelle basins will have dry surface water flow. Relevant stakeholders are therefore advised to follow the basin-specific hydro meteorological advisories below.

Expected Surface Water Condition	River Basins	Positive Impacts	Negative Impacts	Hydrometeorological Advisories
Moderate Surface Water Flow	Genale-Dawa, Rift Valley, Baro-Akobo and Upper Omo-Gibe basins	• Increased water levels in rivers and dams. • Improved water storage for irrigation and hydropower. • Increased surface and groundwater resources. • Moderate filling of rivers and small water reservoirs.	• Flash floods, soil erosion and sediment risk. • Contamination of water sources. • Blockage of drainage systems by waste.	• Issue flash flood early warnings and clean flood drainage channels. • Do not attempt to cross flowing water. • Harvest rainwater and monitor dam water levels.
Low to Moderate Surface Water Flow	Lower Omo-Gibe, Wabi Shebelle, Ogaden, Abay, Upper and Middle Awash, and Tekeze and Mereb-Gash (off-season light rain)	• Improved drinking water supply. • Moderate filling of rivers and small water reservoirs. • Improved soil moisture.	• Blockage of drainage systems. • Reduced water levels due to evaporation.	• Harvest rainwater from roofs and ground surfaces. • Use water resources wisely. • In basins with off-season rain, follow timely forecasts.





Dry Surface Water Flow	Afar-Danakil, Lower Awash and Upper Wabi Shebelle basins	• No flood or sediment risk.	• Low water flow and high evaporation.	• Use the available water resources wisely. • Harvest modest rainwater and protect water from wastage and contamination. • Prepare for dry-season water supply.



