



Dekedal Hydro Meteorology Bulletin



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 July 11- 20 2026-month climate condition and its impacts over the river catchment across the country and highlights the July 21-31, 2026 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.



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.

Hydro Meteorological Impact Assessment July 11-20, 2026

During the second dekad of July, exceptionally high surface water flow conditions were observed in most parts of the Abay (Blue Nile), Omo Gibe, Baro Akobo, Tekeze, Upper and Middle Rift Valley, Upper and Middle Wabi Shebele, and Upper Genale Dawa river basins. In addition, very high surface water flow levels were recorded in the Tekeze, Abay, Upper Awash, Middle Omo Gibe, and Rift Valley basins. Moderate surface water flow was also observed in the Middle Awash, Afar Danakil, Lower Omo Gibe, Upper Tekeze, Aysha, and some parts of the Upper Ogaden basins.

According to analyzed hydrometeorological data, these conditions made a significant contribution to improving surface and groundwater availability, irrigation potential, hydropower generation, and drinking water supply. On the other hand, dry conditions prevailed over most parts of the Ogaden, Afar Danakil, Middle and Lower Wabi Shebele, Genale Dawa, Awash, and Rift Valley basins.



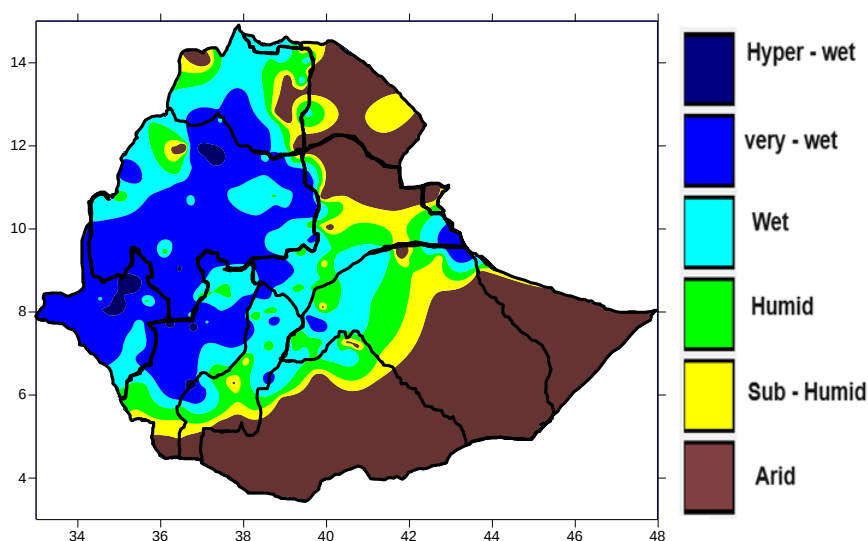


Figure 1 Decadal Hydro Meteorological Assessments from July 11-20, 2026

1.2 Hydro Meteorological Impact Outlook for July 21-31, 2026

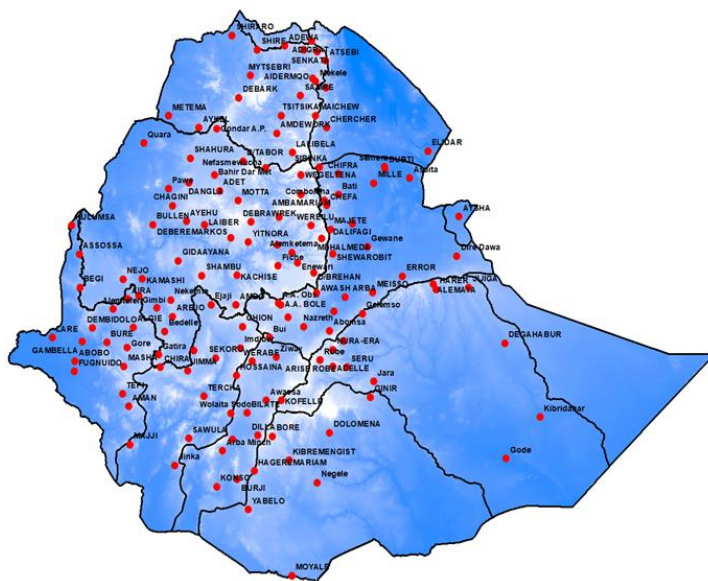
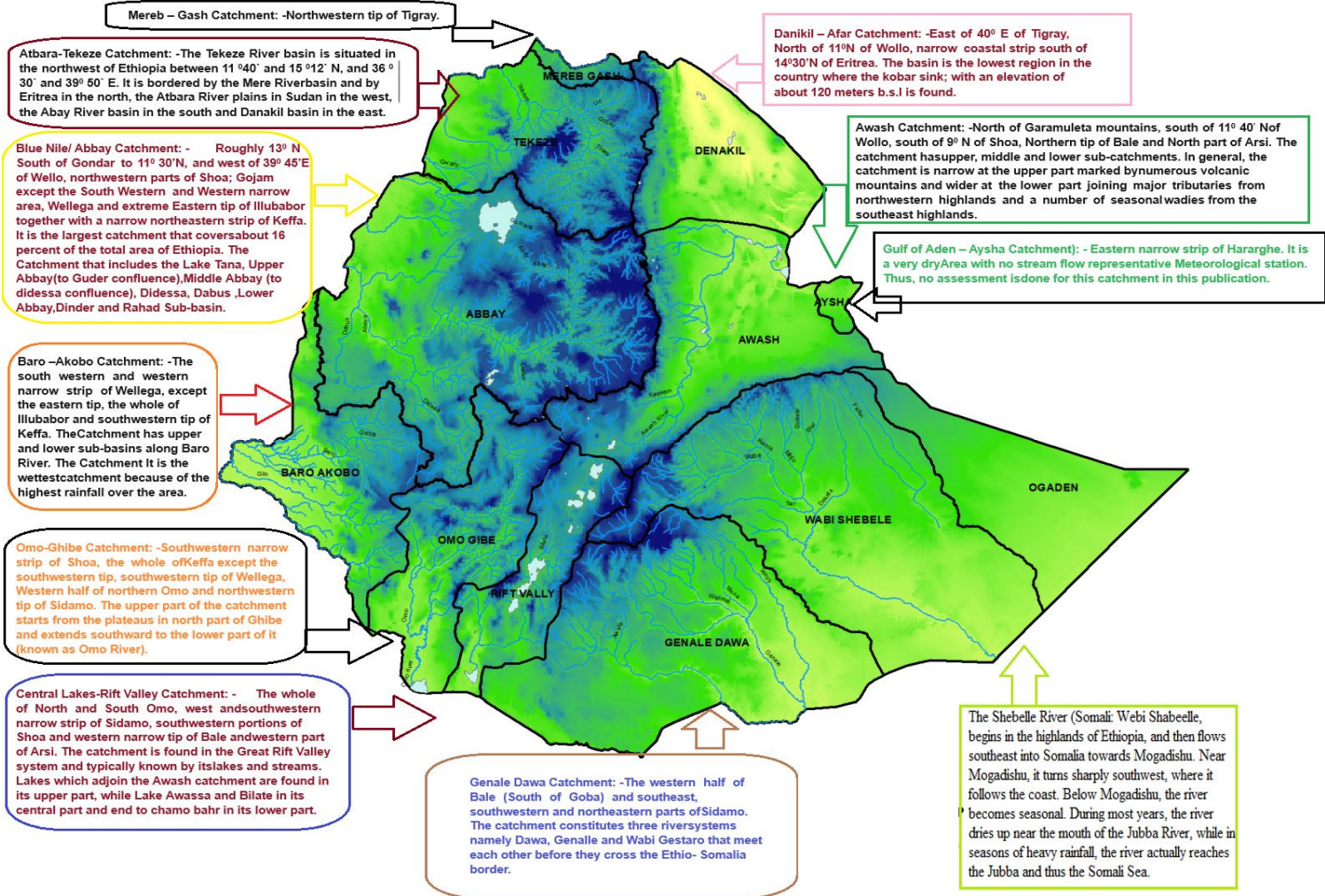
Looking ahead to the third ten-day period (dekad) of July, surface water conditions are expected to improve across most Kiremt rainfall-dependent river basins, with moderate to high surface runoff anticipated. Therefore, relevant sectoral institutions and stakeholders are advised to maximize the expected opportunities while minimizing associated risks by implementing the following basin-specific Hydro Meteorological Advisories and Actions.

Expected Surface Water Condition	River Basins	Positive Impacts	Negative Impacts	Hydro meteorological Advisories
Moderate to High Surface Water Flow	Upper and Middle Abay, Omo-Gibe, Baro-Akobo, Middle and Lower Tekeze, Upper and Middle Rift Valley, Awash, and Genale-Dawa basins	• Improved surface water availability. • Increased groundwater recharge. • Enhanced water storage in irrigation and hydropower reservoirs.	• Flash floods and river flooding. • Increased sediment transport. • Deterioration of water quality. • Road inundation and traffic disruptions. • Blockage of drainage systems	• Avoid crossing flowing water on foot or using light vehicles. • Harvest and store rainwater whenever possible. • Treat and use drinking water sources properly. • Clean and maintain drainage channels. • Prepare flood diversion channels and emergency flood protection measures.



		• Improved drinking water supply.	- by debris and waste. • Increased risk of damage to infrastructure.	• Regularly monitor weather forecasts and hydro meteorological advisories.
Low to Moderate Surface Water Flow	Mereb-Gash, Upper and Middle Tekeze, Middle and Lower Awash, and Upper Wabi Shebelle basins	• Slight improvement in surface water availability. • Reduced risk of flooding and excessive sediment transport.	• Relatively low river flows. • Moderate water shortages in moisture-deficit areas. • Insufficient water availability in some locations. • Reduced inflow to some water storage facilities.	• Efficiently utilize available rainfall. • Promote rainwater harvesting and storage practices. • Collect and store rooftop rainwater where possible. • Closely monitor weather and hydrological information. • Practice efficient water use and conservation.
Dry Surface Water Conditions	Ogaden, Aysha, Lower Rift Valley, Genale-Dawa, and Wabi Shebelle basins	• Minimal risk of flooding and sediment-related hazards.	• Reduced surface water availability. • Declining water levels in natural and artificial reservoirs. • Reduced groundwater recharge. • Increased evaporation losses from surface water bodies.	• Ensure reliable water access in areas affected by water shortages. • Manage available water resources efficiently and economically. • Promote sustainable utilization and conservation of surface water resources.





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