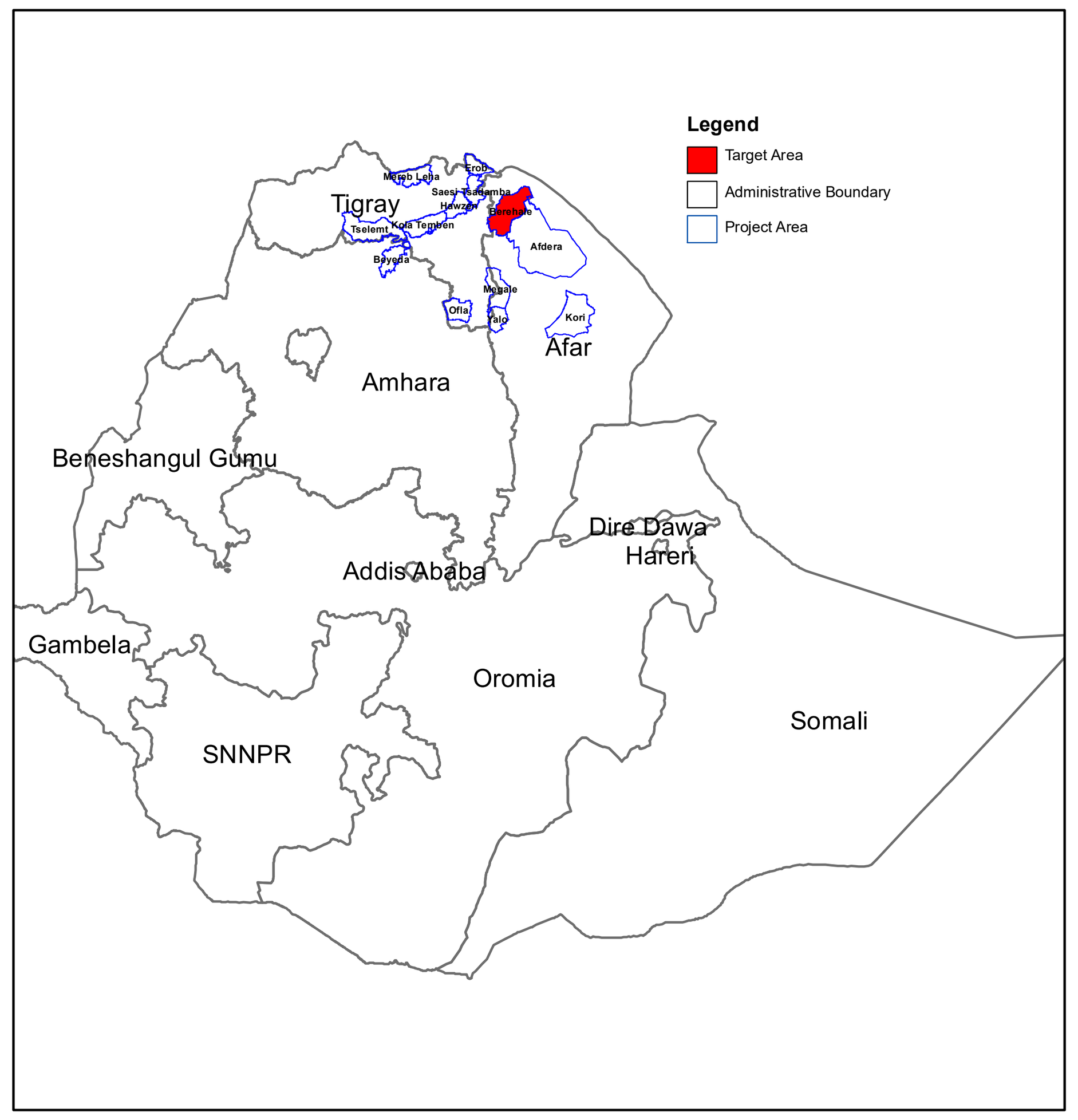
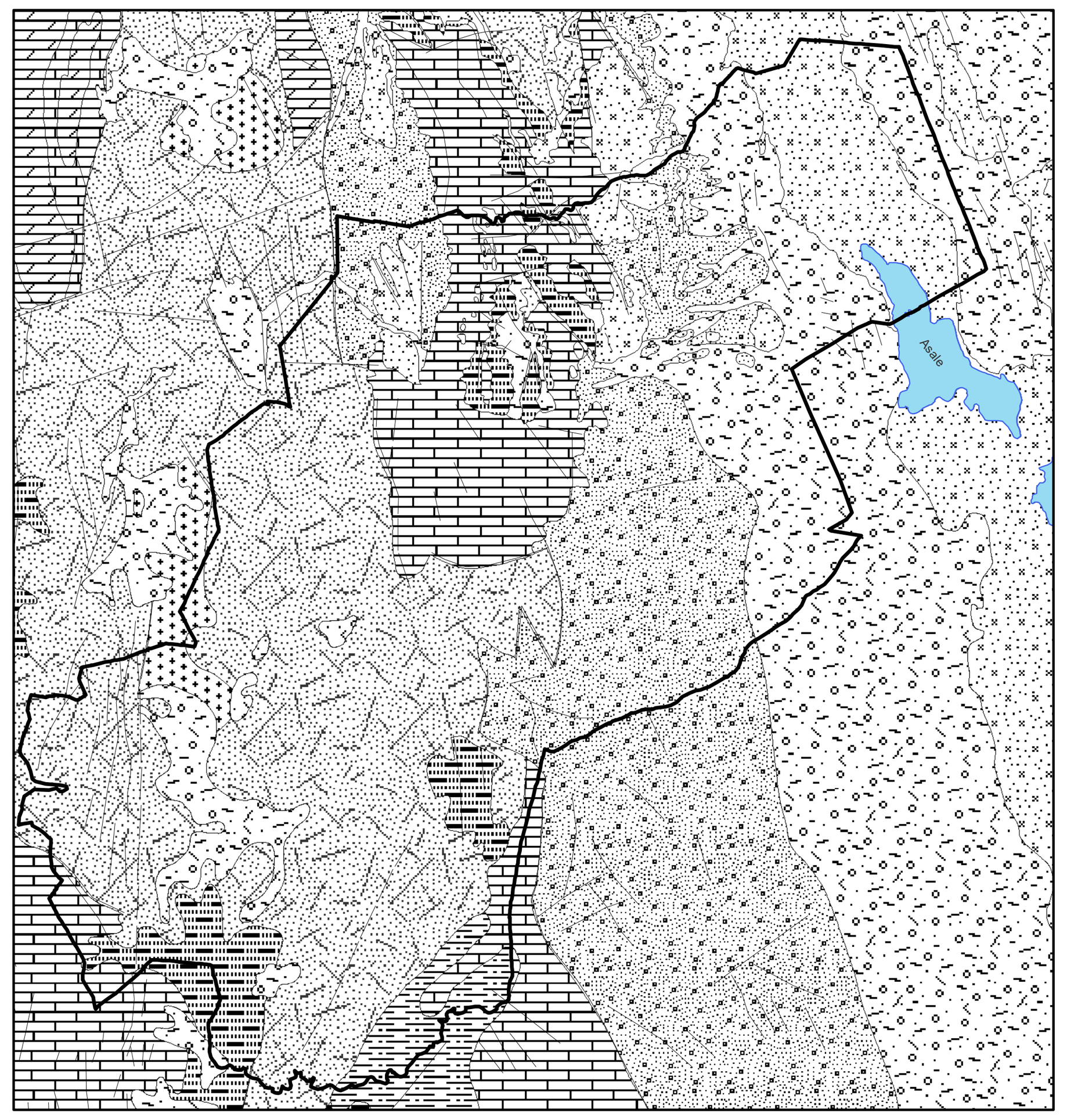
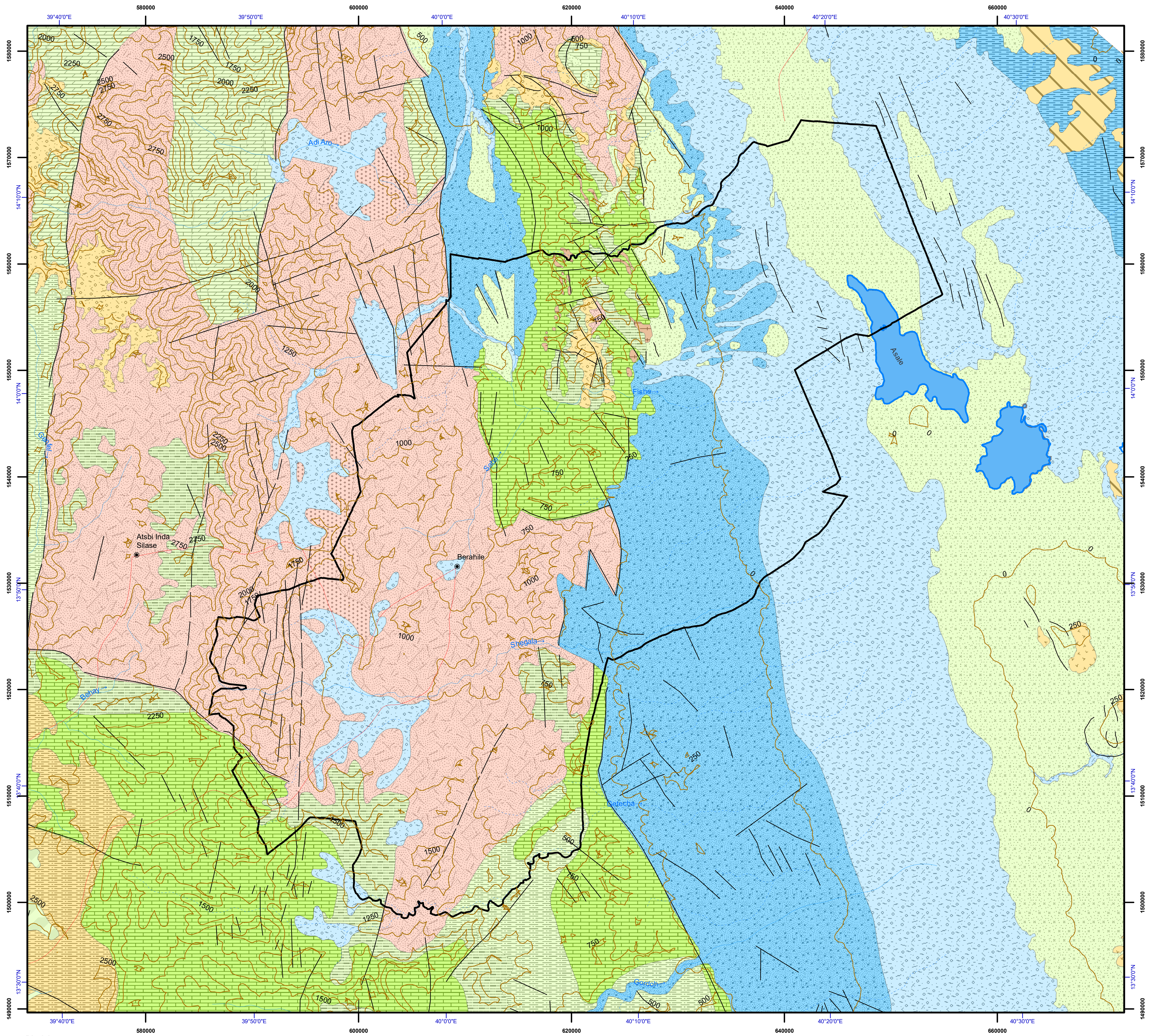
HYDROGEOLOGICAL MAP OF BEREHALE

PROJECT AREA



GEOLOGICAL MAP OF BEREHALE





Disclaimer:

This document was produced with the financial assistance of The Department for International Development, UK.
The boundaries in this map are not authoritative or political.

Geology compiled by Geological Survey of Ethiopia from 1971 to 2015
Hydrogeology compiled by: Jiri Sima, 2021
Digital Cartography: Shiferaw Ayele Mamo, 2021

0 5 10 20 Km

1:250,000

Horizontal Datum: WGS 1984
Vertical Datum: Mean sea level
Projection: Universal Transverse Mercator, Zone 37N

LEGEND

Aquifer Classification

- Highly productive porous aquifers (T = 10 – 100 m2/d, q = 1 - 10 l/s.m, Q = 5 - 25 l/s for wells and/or springs) or locally extremely productive aquifers
- Moderately productive porous aquifers (T = 1 - 10 m2/d, q = 0.01 - 1 l/s.m, Q = 0.5 - 5 l/s for wells and/or springs) or local or discontinuous but highly productive aquifers
- Highly productive fissured / karst aquifers (T = 10 - 100 m2/d, q = 1 - 10 l/s.m, Q = 5 - 25 l/s for wells and/or springs) or locally extremely productive aquifers consisting of sedimentary and volcanic rocks
- Moderately productive fissured aquifers (T = 1 - 10 m2/d, q = 0.01 - 1 l/s.m, Q = 0.5 - 5 l/s for wells and/or springs) or local or discontinuous but highly productive aquifers consisting of sedimentary and volcanic rocks
- Low productive fissured aquifers (T = 0.1 - 1 m2/d,q = 0.001 – 0.01 l/s.m, Q = 0.05 - 0.5 l/s for wells and/or springs) in which flow is mainly developed in irregular system of fissures & weathered mantle of a crystalline rock

- Perennial river
- Intermittent river
- lake
- Contour
- Fault
- Town
- Road
- Woreda Boundary

Lithology

- Alluvial and lacustrine sediments – clay and sand with gravel, dunes & other aeolian deposits (in Afar)
- High fluvial terraces - gravel and low cemented sandstone
- Basalt with minor trachyte and upper pyroclastic
- Limestone, undifferentiated slates, calcareous sediments, marble and fossiliferous and sand limestone
- Sandstone – Adigrat, Amba Aradom, Enticho
- Edaga Arbi Glacials/Tillite and Enticho sandstone
- Metamorphosed carbonates
- Low grade metamorphic rocks – phylite and slate- metavolcanics rocks - intermediate and basic lavas,tuffaceous slate, agglomerate, rhyolite and metasediments - black slate limestone,sandstone, siltstone and greywacke

Hydrogeological Mapping for Climate Resilient Wash in Ethiopia - Lot 1

Basins Development Authority
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ACACIA WATER
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