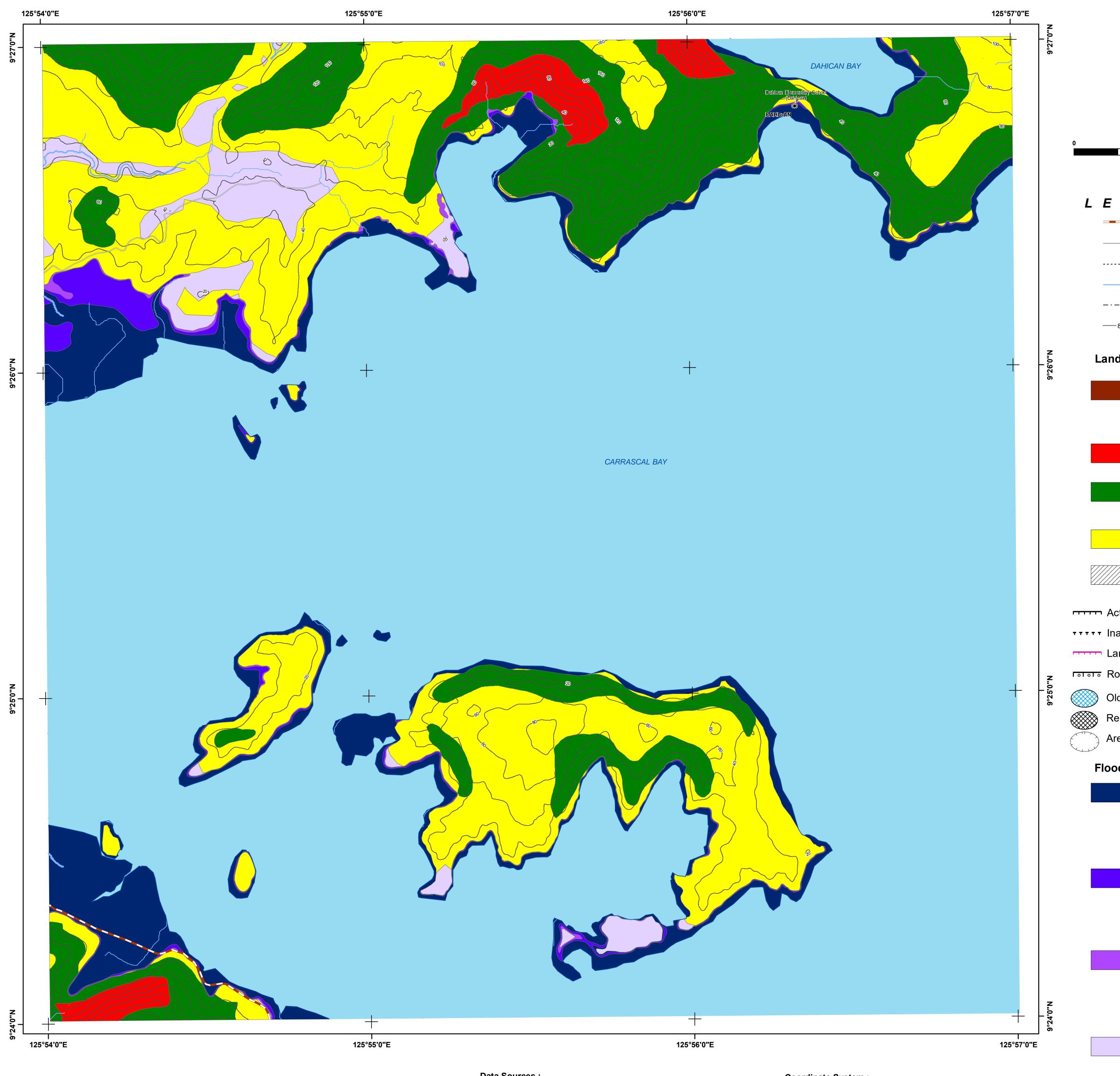# DETAILED LANDSLIDE AND FLOOD HAZARD MAP OF CARRASCAL, SURIGAO DEL SUR, PHILIPPINES
## 4119-I-9 DAHICAN QUADRANGLE

**INDEX MAP:**

| 4119-I-3 CLAVER | 4119-I-4 | 4119-I-5 |
| 4119-I-8 | 4119-I-9 | 4119-I-10 |
| 4119-I-13 CARRASCAL | 4119-I-14 | 4119-I-15 |

DAHICAN BAY

DAHICAN

CARRASCAL BAY

0   0.5   1   2
Kilometers

## LEGEND:

| | | | |
|---|---|---|---|
| Main road | | POBLACION ⊙ | Barangay center location |
| Secondary road | | So. Magaling (Poblacion) ▲ | Purok/Sitio location (Barangay) |
| Track; trail | | | School |
| River | | H | Hospital |
| Municipal boundary | | ✚ | Church |
| —80— Contour (meter) | | ▣ | Proposed relocation site |

### Landslide

**Very high landslide susceptibility**
Areas usually with steep to very steep slopes and underlain by weak materials. Recent landslides, escarpments and tension cracks are present. Human initiated effects could be an aggravating factor.

**High landslide susceptibility**
Areas usually with steep to very steep slopes and underlain by weak materials. Areas with numerous old/inactive landslides.

**Moderate landslide susceptibility**
Areas with moderately steep slopes. Soil creep and other indications of possible landslide occurrence are present.

**Low landslide susceptibility**
Gently sloping areas with no identified landslide.

**Debris flow / Possible accumulation zone**
Areas that could be affected by landslide debris.

| | |
|---|---|
| Active landslide | → Creep |
| Inactive landslide | Tension crack |
| Landslide area with mitigating measure | Gully |
| Rock fall/Rock slide prone area | Riverbank erosion |

Old landslide deposits
Recent landslide deposits
Areas susceptible to ground subsidence/sinkhole development

### Flood

**Very high flood susceptibility**
Areas likely to experience flood heights of greater than 2 meters and/or flood duration of more than 3 days. These areas are immediately flooded during heavy rains of several hours; include landforms of topographic lows such as active river channels, abandoned river channels and area along river banks; also prone to flashfloods.

**High flood susceptibility**
Areas likely to experience flood heights of greater than 1 up to 2 meters and/or flood duration of more than 3 days. These areas are immediately flooded during heavy rains of several hours; include landforms of topographic lows such as active river channels, abandoned river channels and area along river banks; also prone to flashfloods.

**Moderate flood susceptibility**
Areas likely to experience flood heights of greater than 0.5m up to 1 meter and/or flood duration of 1 to 3 days. These areas are subject to widespread inundation during prolonged and extensive heavy rainfall or extreme weather condition. Fluvial terraces, alluvial fans, and infilled valleys are areas moderately subjected to flooding.

**Low flood susceptibility**
Areas likely to experience flood heights of 0.5 meter or less and/or flood duration of less than 1 day. These areas include low hills and gentle slopes. They also have sparse to moderate drainage density.

Direction of rising floodwater
Direction of receding floodwater
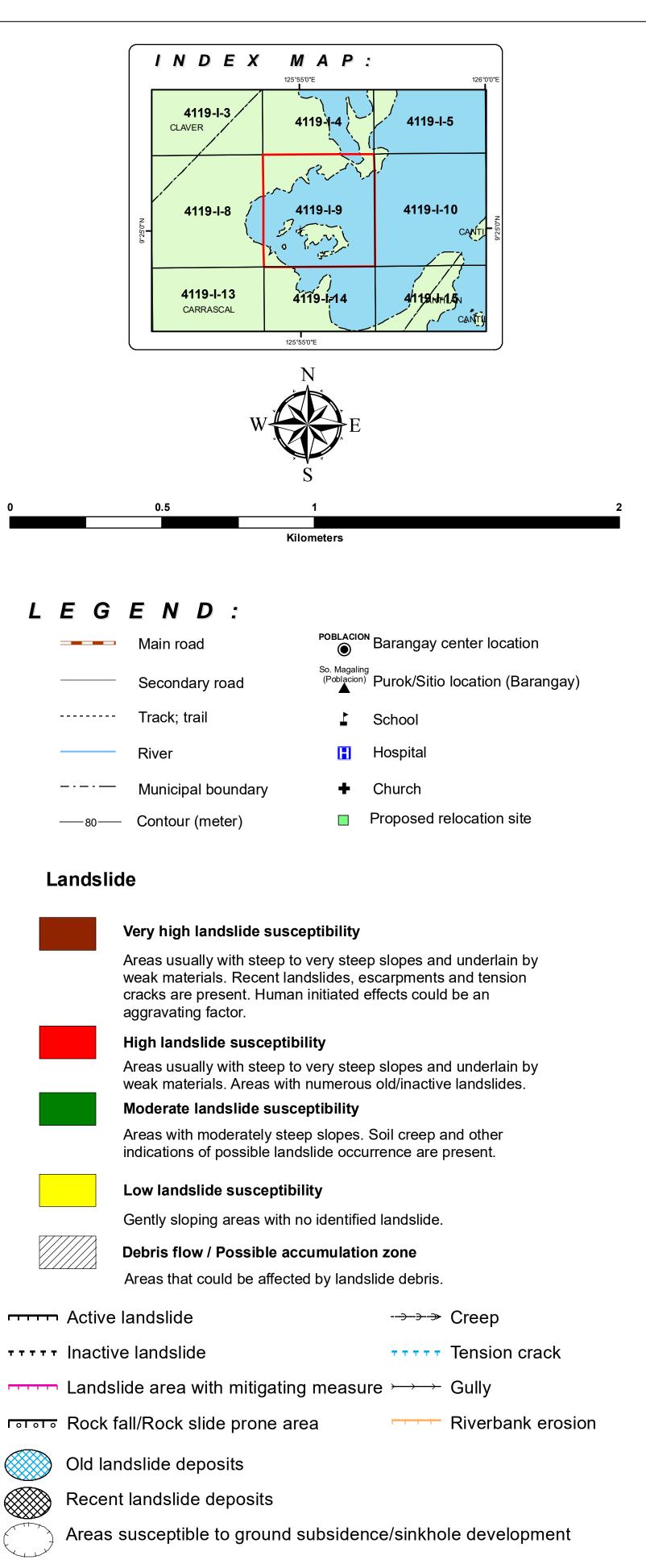Flood depth (meter)
Flashflood exit point

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**MINES AND GEOSCIENCES BUREAU**
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**Data Sources :**
MGB Geohazard Assessment Team
Lands Geological Survey Division
Geosciences Division MGB Regional Office XIII
National Mapping and Resource Information Authority

**GIS Processing :**
Lands Geological Survey Division

**Coordinate System :**
Spheroid : . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Clark 1866
Projection : . . . . . . . . . . . . . . . . . . . . . . . . Transverse Mercator
Datum : . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Luzon 1911

Mapping scale 1:10,000