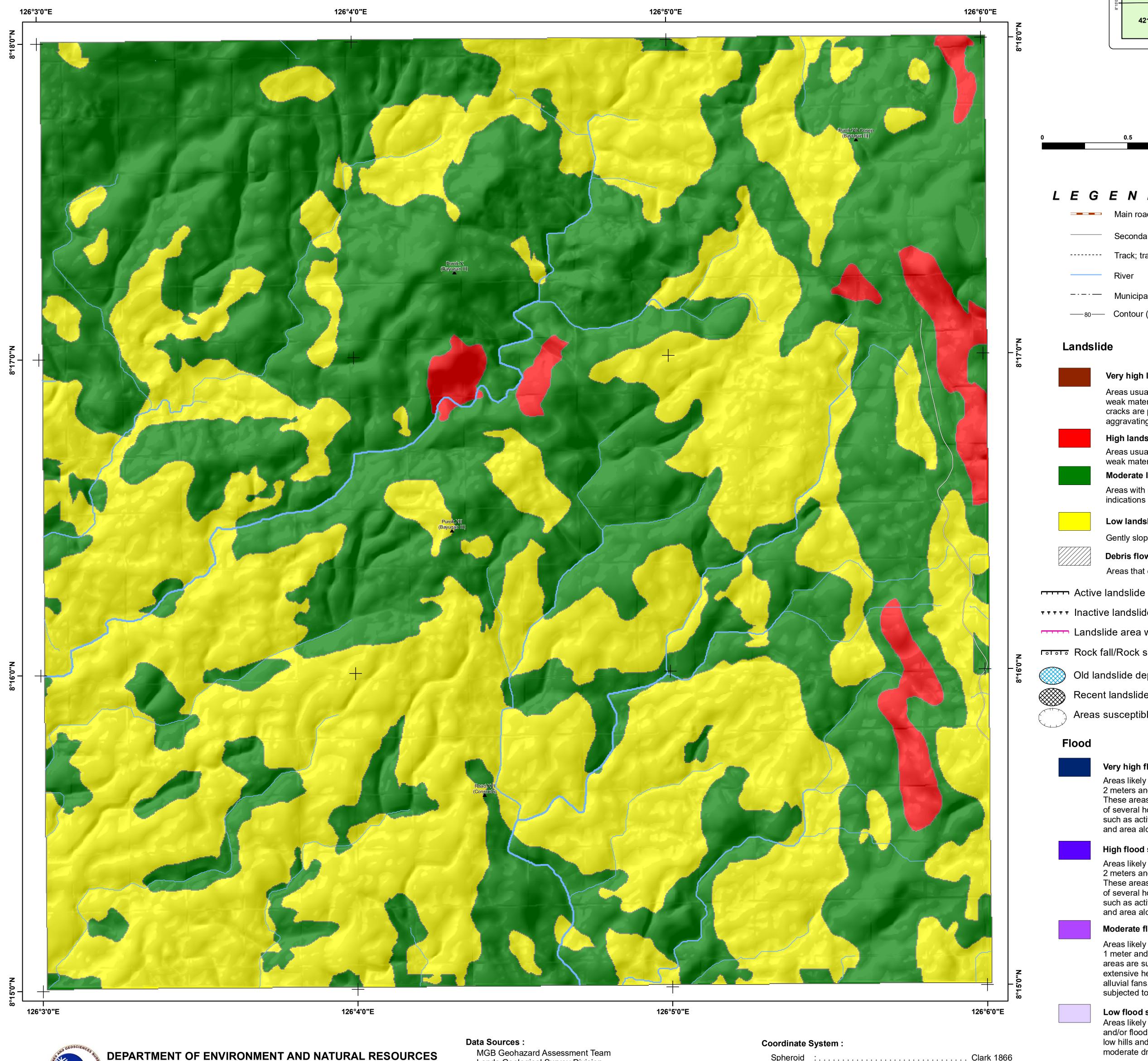
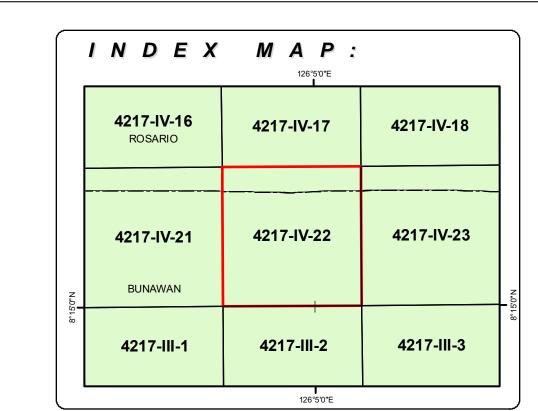
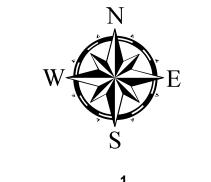


## DETAILED LANDSLIDE AND FLOOD HAZARD MAP OF BUNAWAN AND ROSARIO, AGUSAN DEL SUR, PHILIPPINES 4217-IV-22 SAN ANDRES QUADRANGLE







So. Magaling
(Poblacion) Purok/Sitio location (Barangay) Track; trail

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.

-→->-> Creep

Low landslide susceptibility

Gently sloping areas with no identified landslide.

Debris flow / Possible accumulation zone

Areas that could be affected by landslide debris.

TTTT Inactive landslide TTTT Tension crack

Landslide area with mitigating measure  $\longrightarrow$  Gully Riverbank erosion Rock fall/Rock slide prone area

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

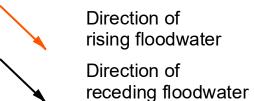
Areas likely to experience flood heights of greater than 1 up to 2 meters and/or flood duration of more than 3 days. These areas are immediately flooded during heavy rains of several hours; include landforms of topographic lows such as active river channels, abandoned river channels and area along river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

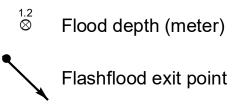
Moderate flood susceptibility

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.





Spheroid :..... Clark 1866 Lands Geological Survey Division Projection : . . . . . . . . . . . . . . . . Transverse Mercator Geosciences Division MGB Regional Office XIII Datum :..... Luzon 1911 National Mapping and Resource Information Authority

Mapping scale 1:10,000

**GIS Processing:** 

MINES AND GEOSCIENCES BUREAU

North Avenue, Diliman, Quezon City

**ALL RIGHTS RESERVED PUBLISHED DECEMBER 2015** 

Lands Geological Survey Division