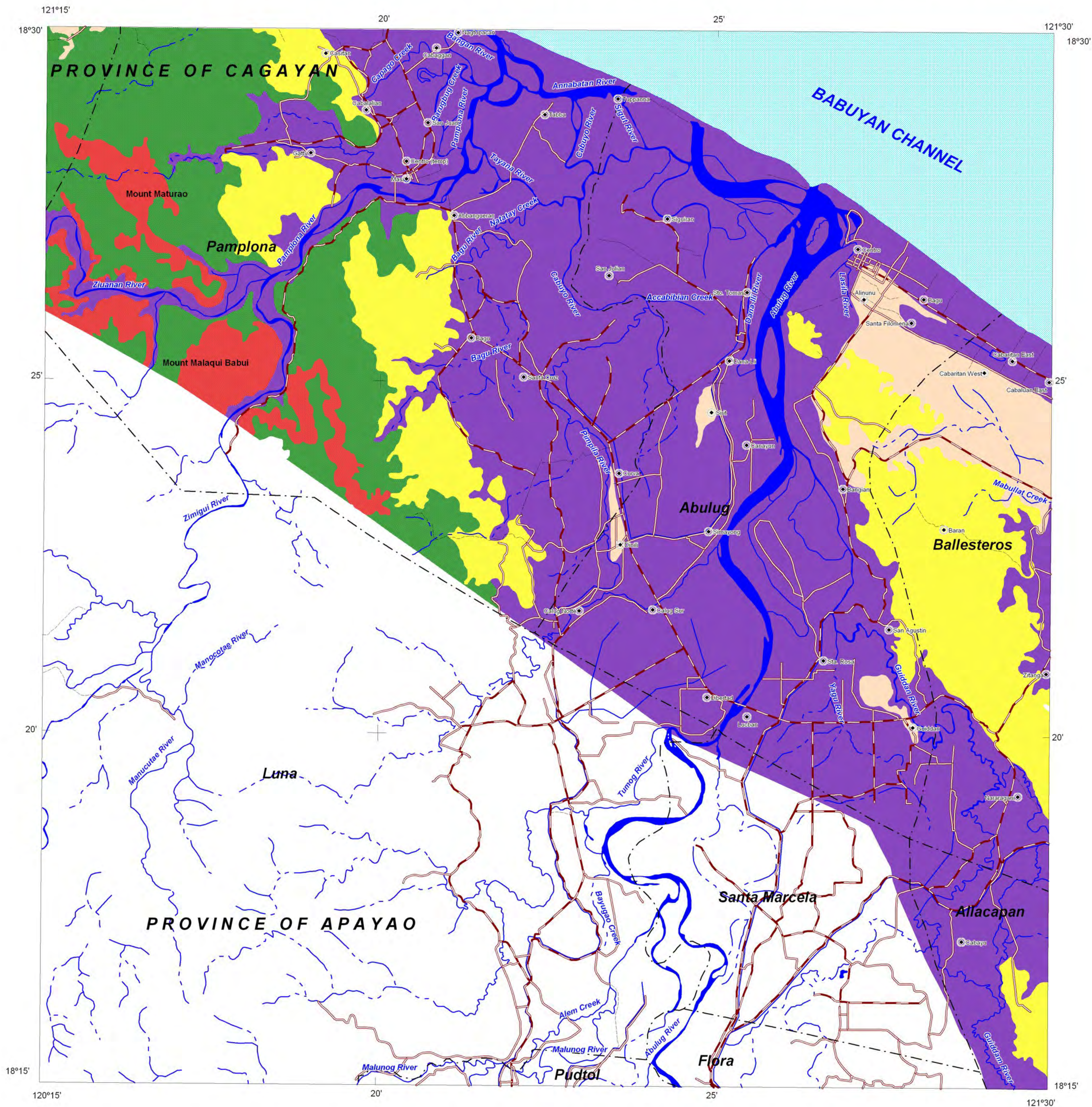
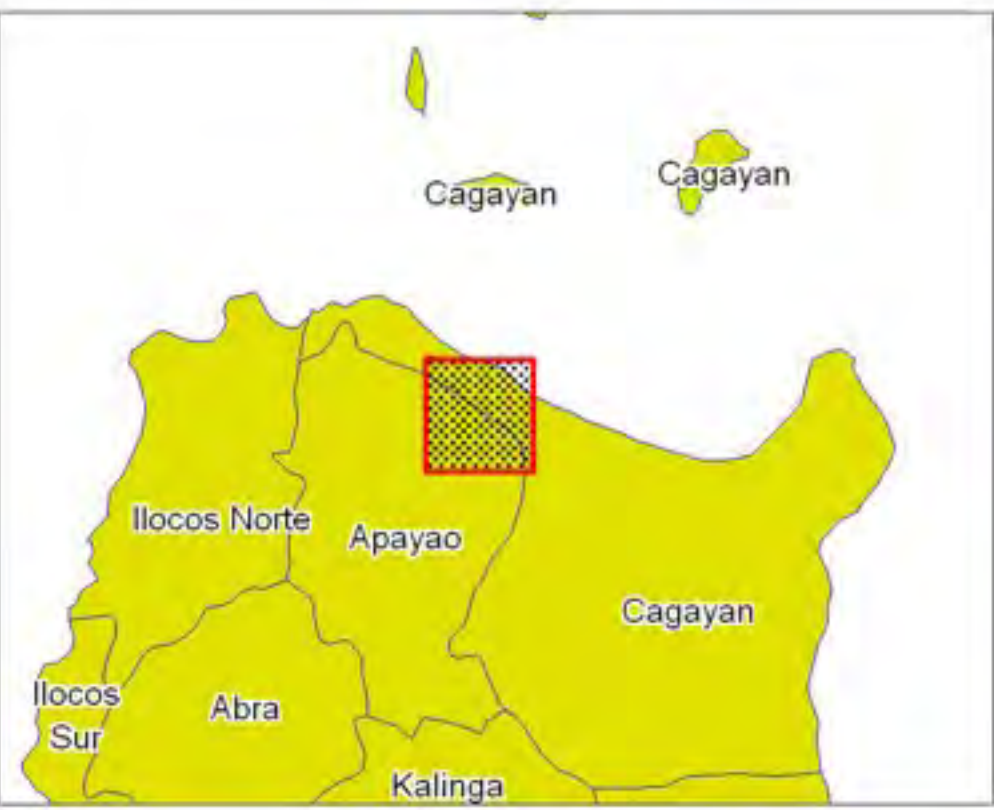


LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF ABULUG QUADRANGLE, CAGAYAN PROVINCE, PHILIPPINES



INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- Roads
River
Municipal boundary
Barangay center location



0 1.5 3
kilometers

TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

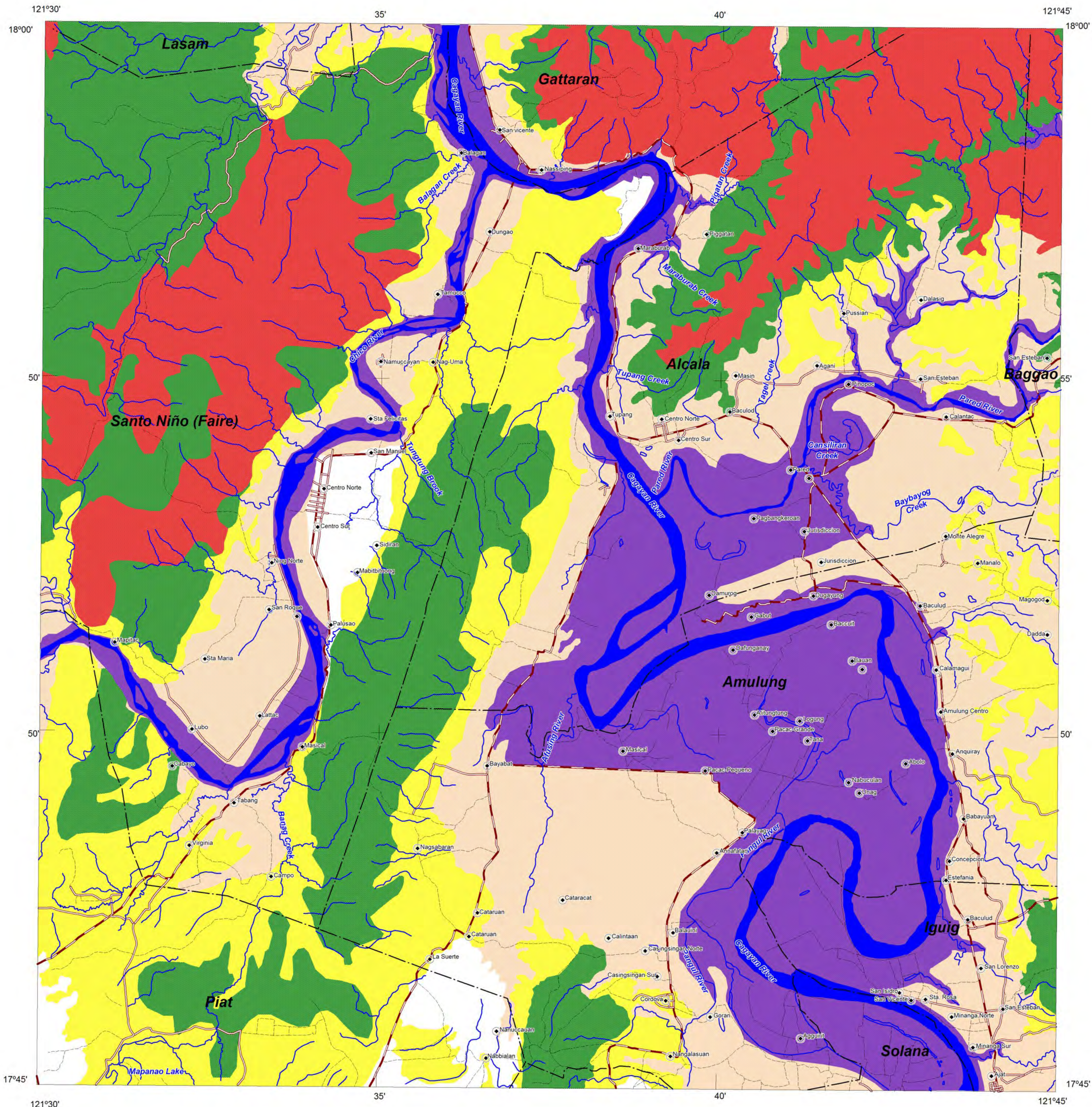
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7279 I "Abulug Quadrangle"

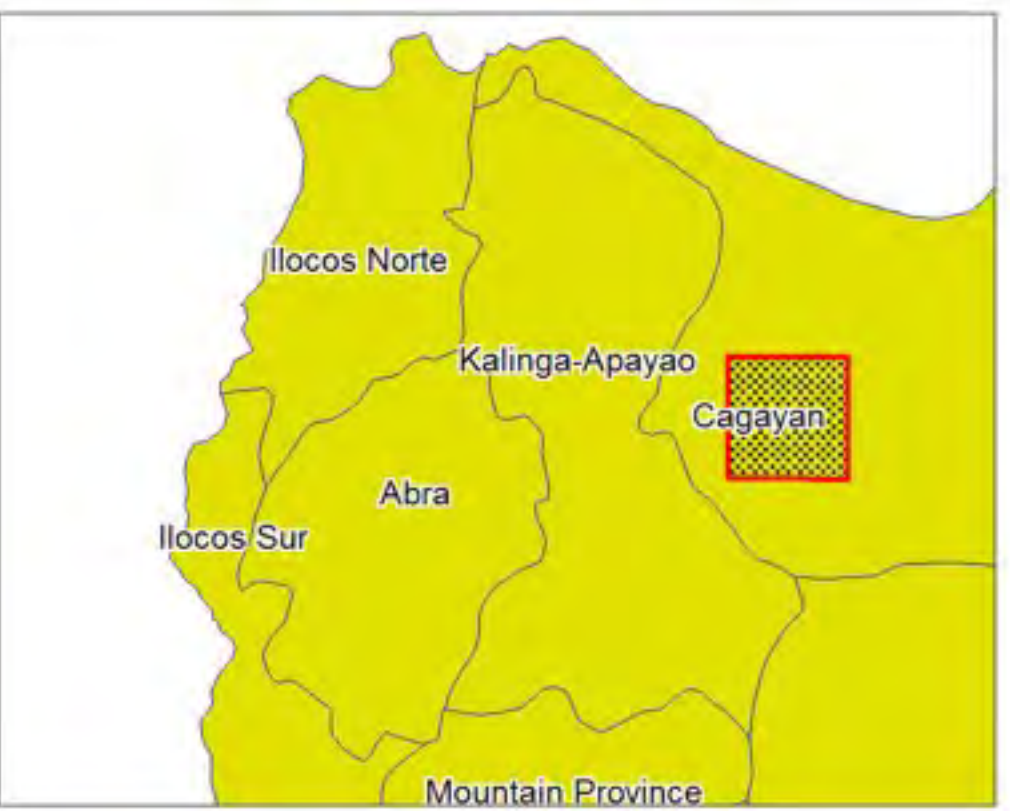


DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MINES AND GEOSCIENCES BUREAU
LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF ALCALA QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES

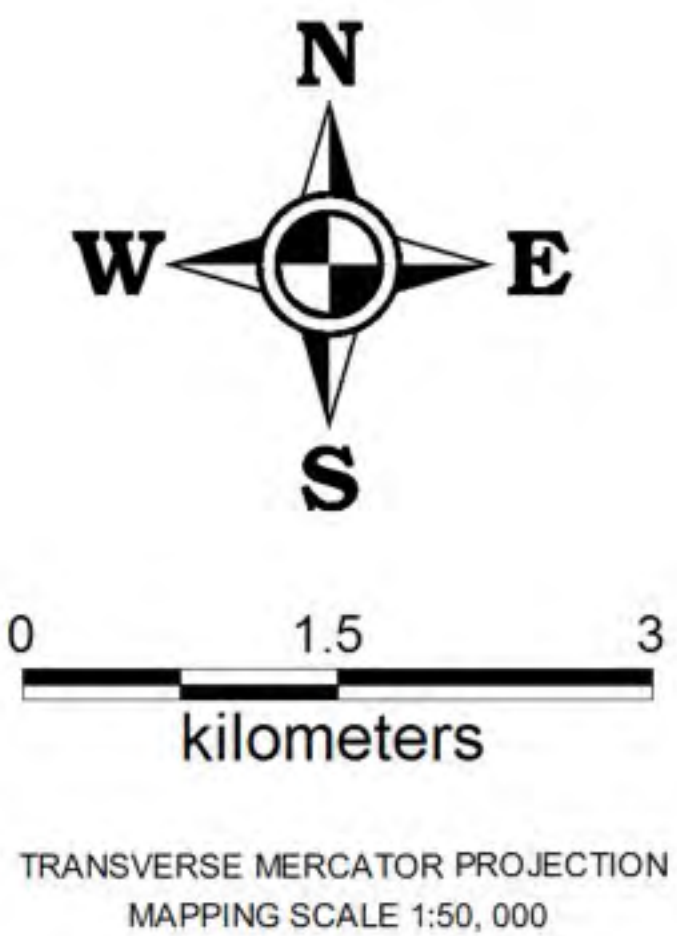


INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- Roads
River
Municipal boundary
Barangay center location

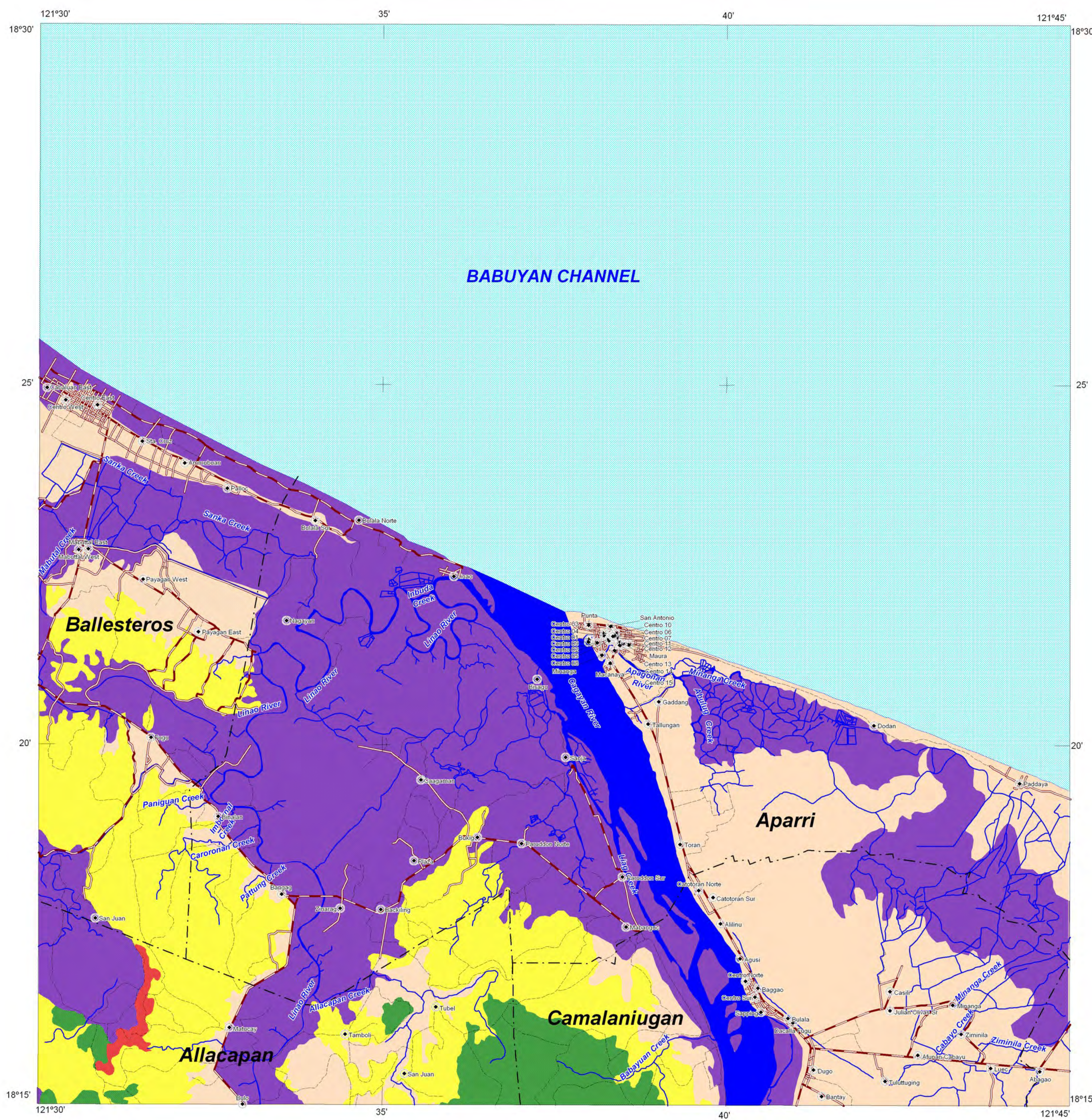


GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7378 IV "Alcala Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF APPARRI QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES

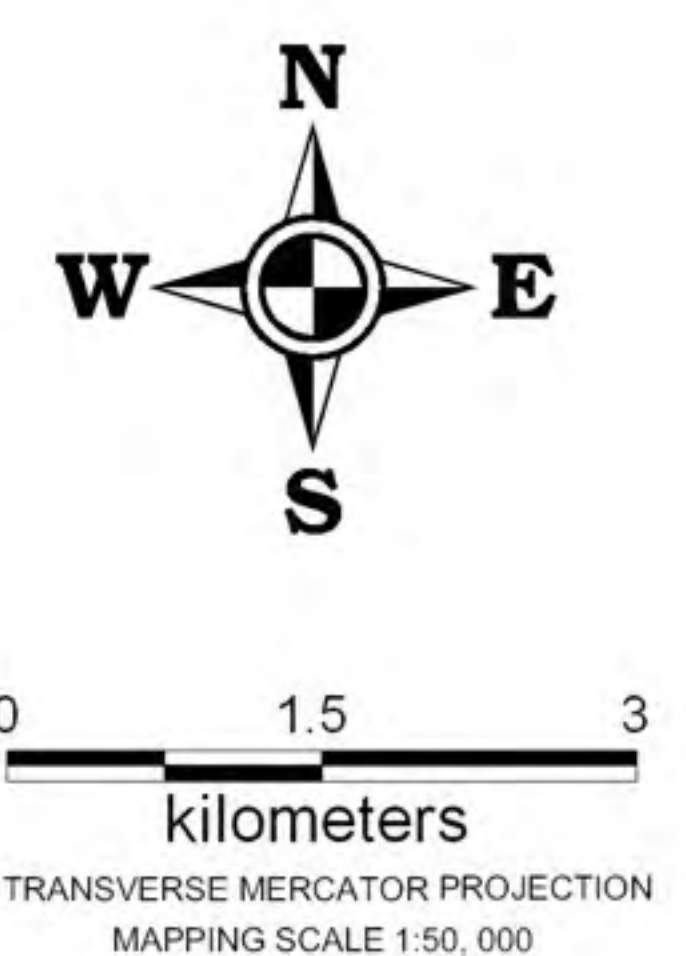


INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
- Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
- Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
- High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
- Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- Roads**
- River**
- Municipal boundary**
- Barangay center location**

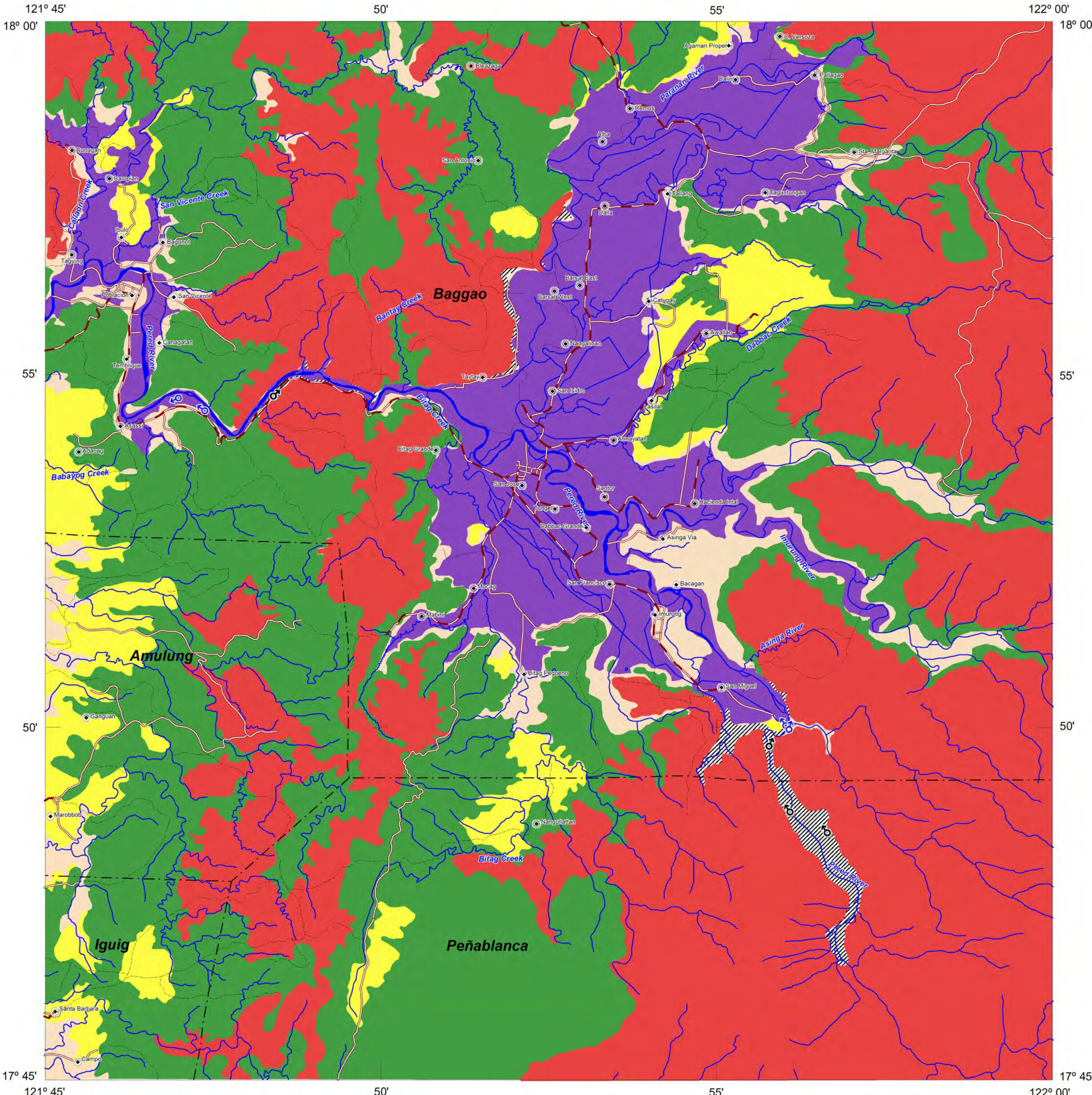


GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7379 IV "Aparri Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF BAGGAO QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES



INDEX MAP



LEGEND :

-  **High susceptibility to landslides**

Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.

 **Moderate susceptibility to landslide**

Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.

 **Low susceptibility to landslide**

Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.

 **Possible landslide debris accumulation zone**

These are areas where landslide debris could accumulate.

 **High susceptibility to flooding**

Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks, also prone to flashfloods.

 **Low to moderate susceptibility to flooding**

Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition



TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

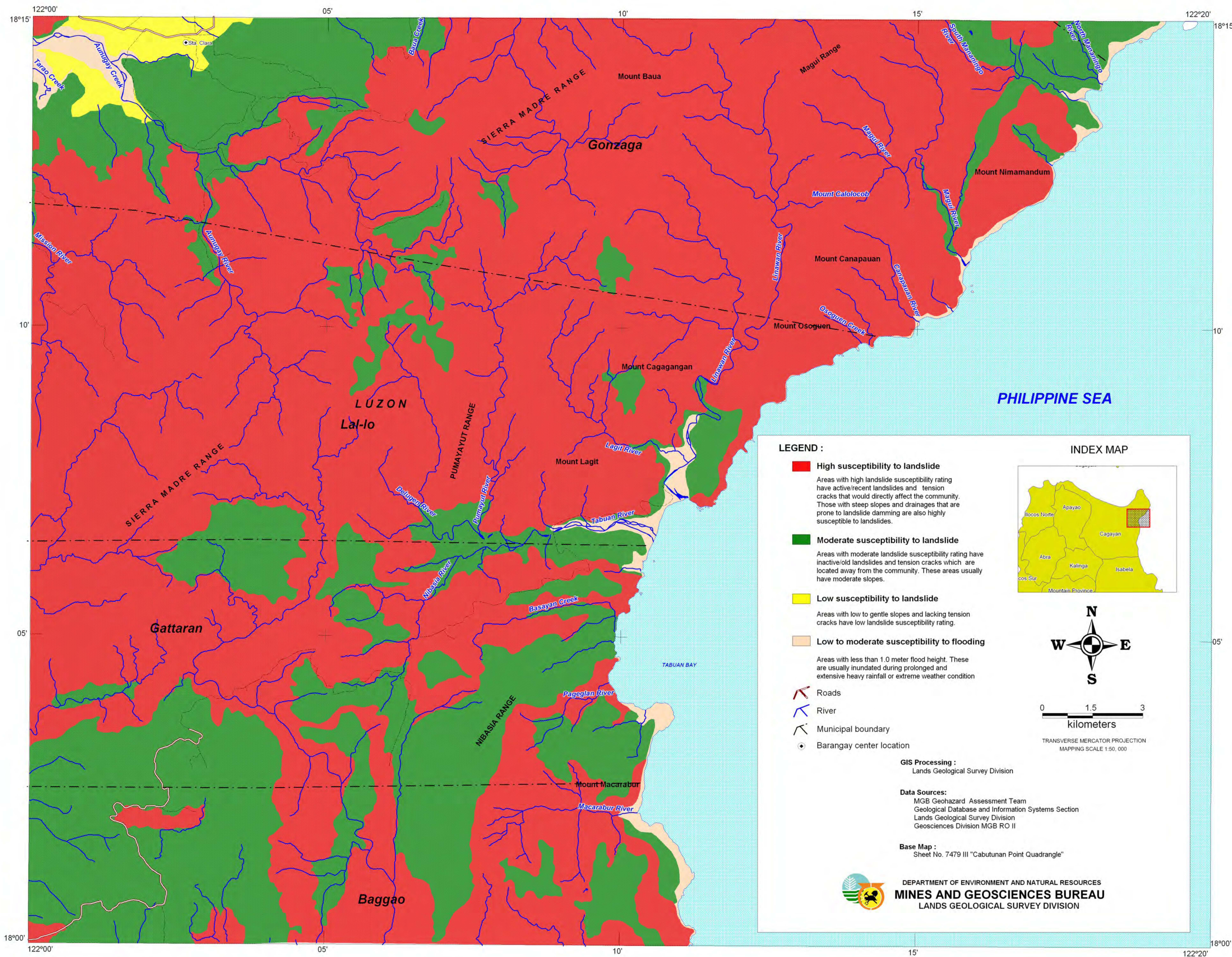
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7378 I "Baggao Quadrangle"

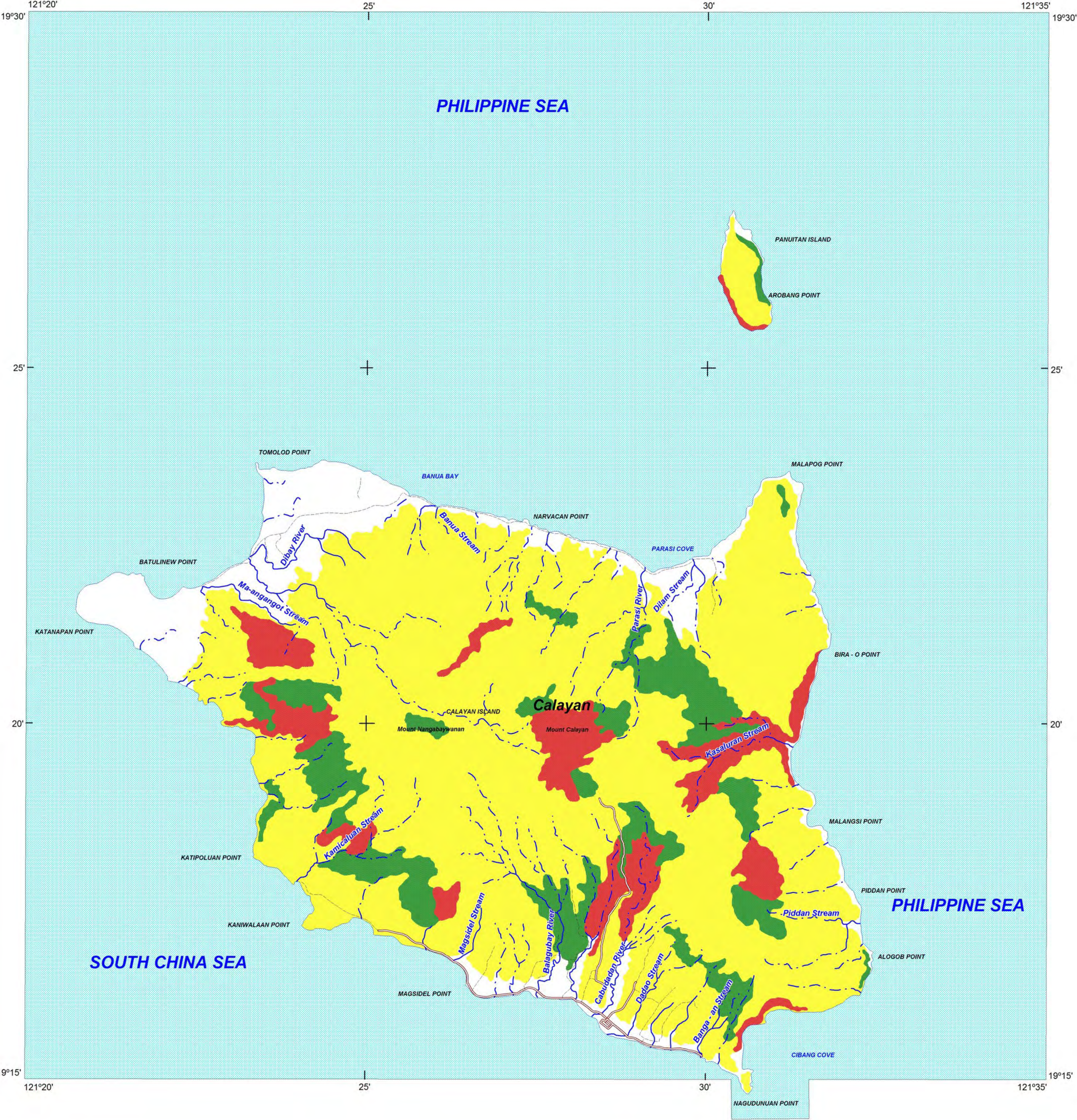


DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
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LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CABUTUNAN POINT QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES



LANDSLIDE SUSCEPTIBILITY MAP OF CALAYAN ISLAND QUADRANGLE BATANES PROVINCE, PHILIPPINES



INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
- Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
- Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.

- Secondary road
- Trail road
- River



0 1.5 3
kilometers

TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

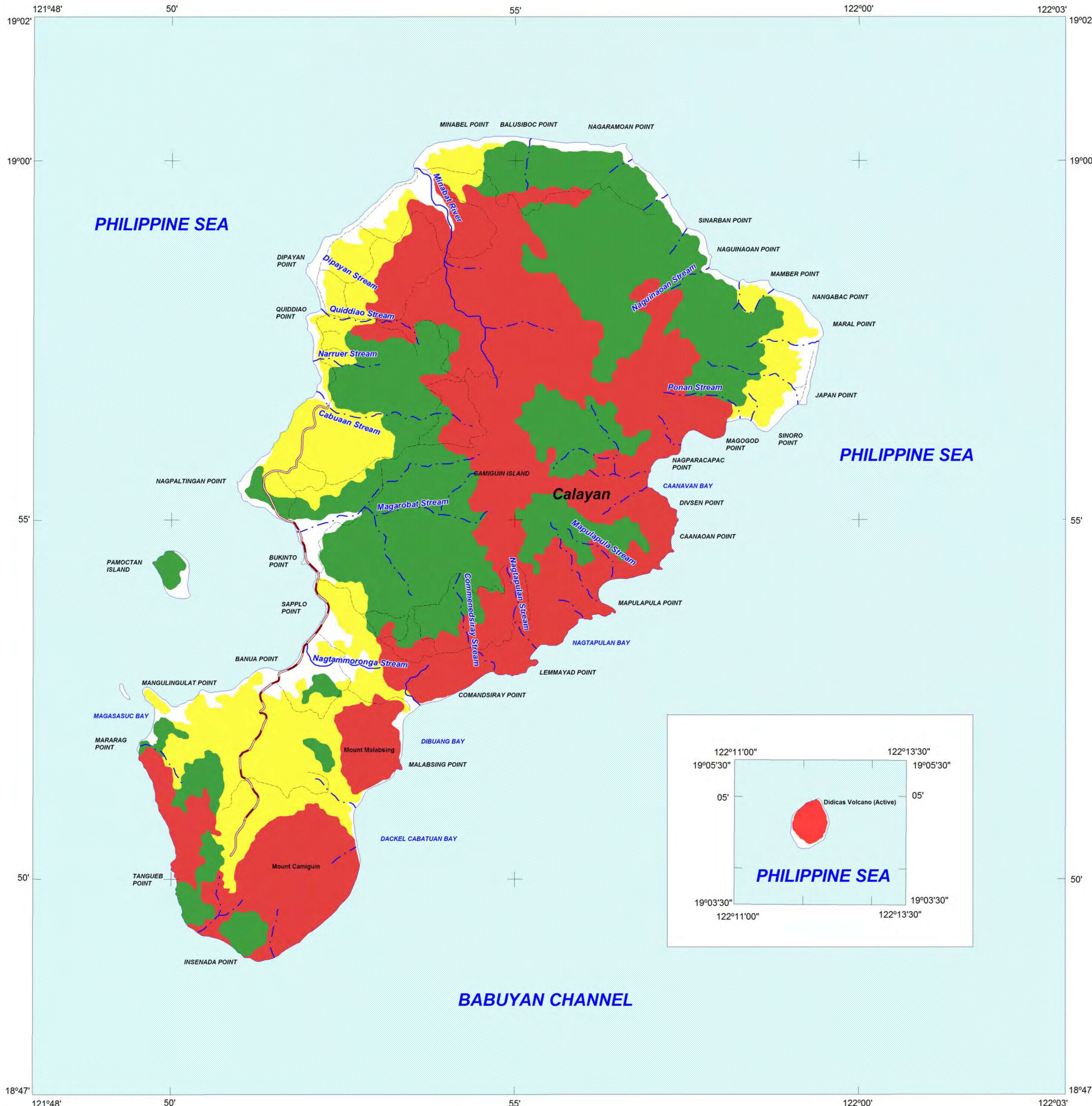
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7281-I "Calayan Island"



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
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LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE SUSCEPTIBILITY MAP OF CAMIGUIN ISLAND QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES



INDEX MAP



LEGEND

-  **High susceptibility to landslide**

Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 -  **Moderate susceptibility to landslide**

Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 -  **Low susceptibility to landslide**

Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.

-  Main road
-  Secondary road
-  Trail road
-  River



A horizontal number line with arrows at both ends. It has three major tick marks labeled 0, 1.5, and 3. Below the line, the word "kilometers" is written in a large, bold, sans-serif font.

TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

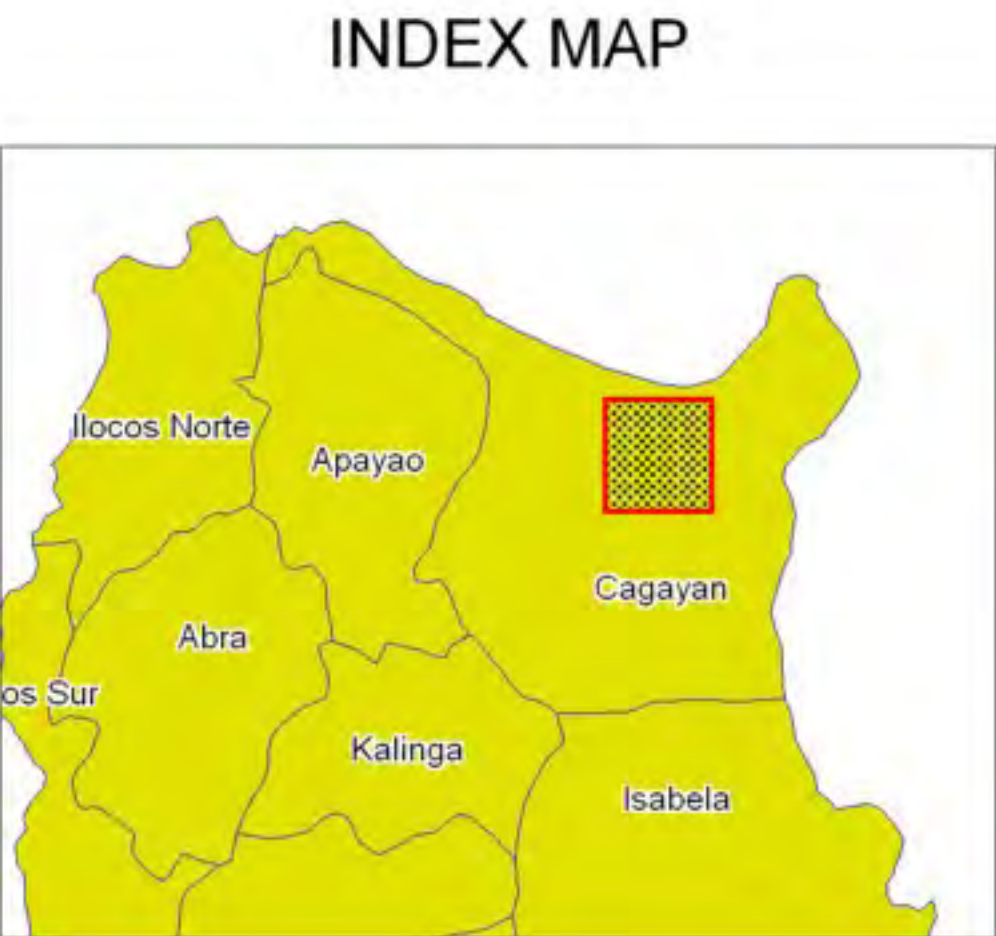
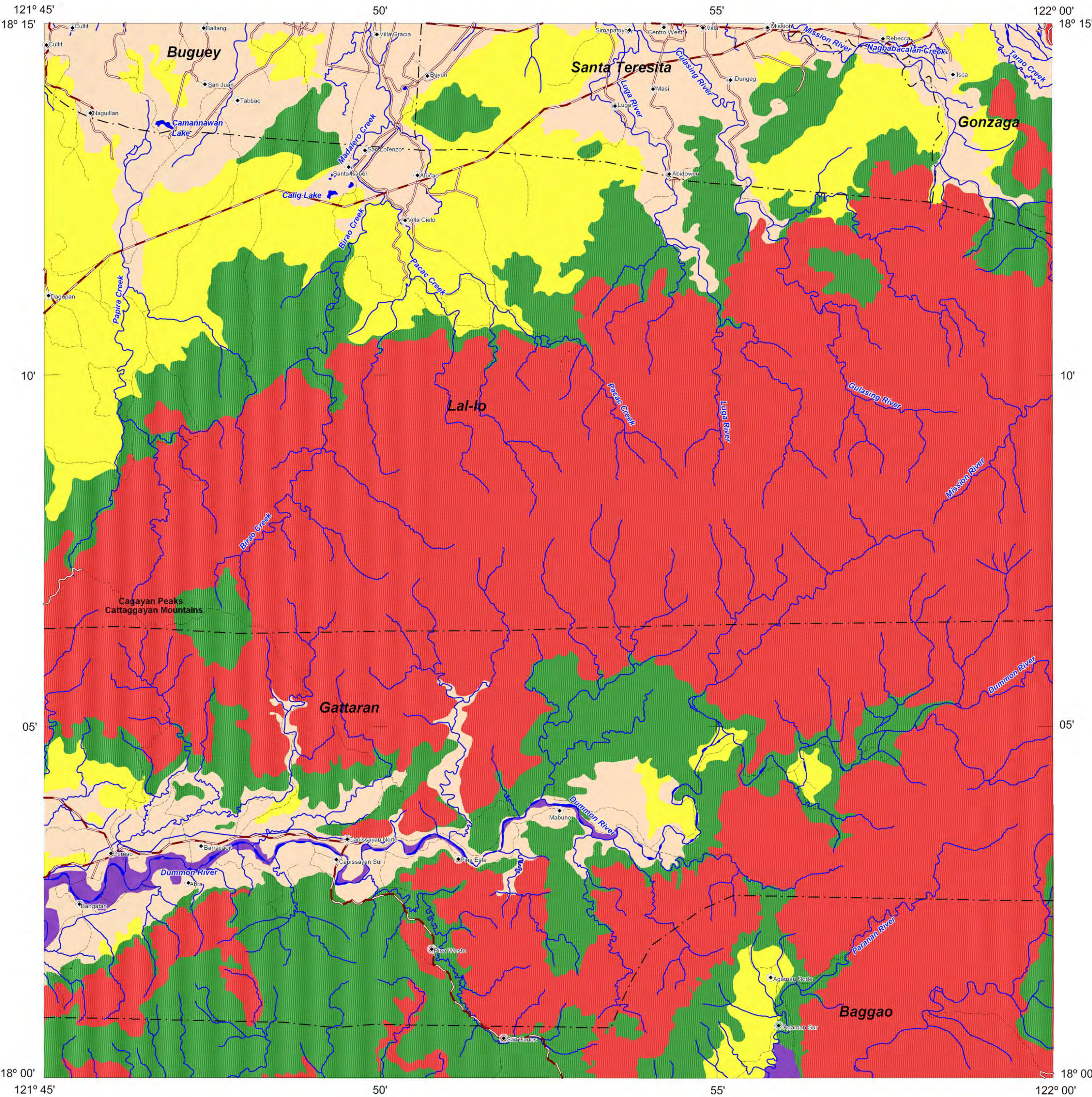
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7380 I "Camiguin Island Quadrangle"

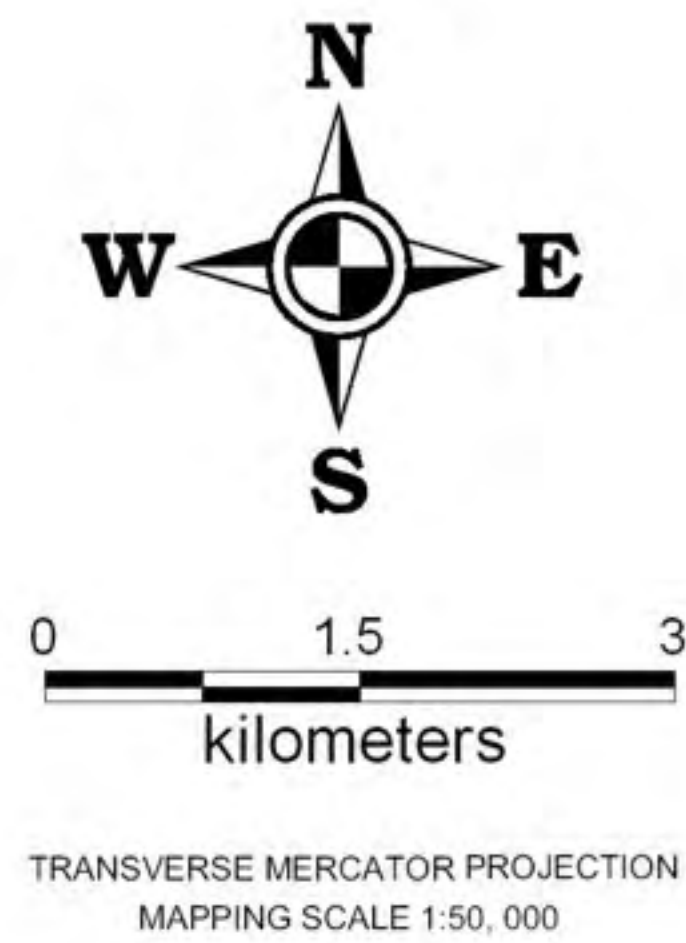


DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MINES AND GEOSCIENCES BUREAU
LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CAPISSAYAN QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition
- Roads
 River
 Municipal boundary
 Barangay center location

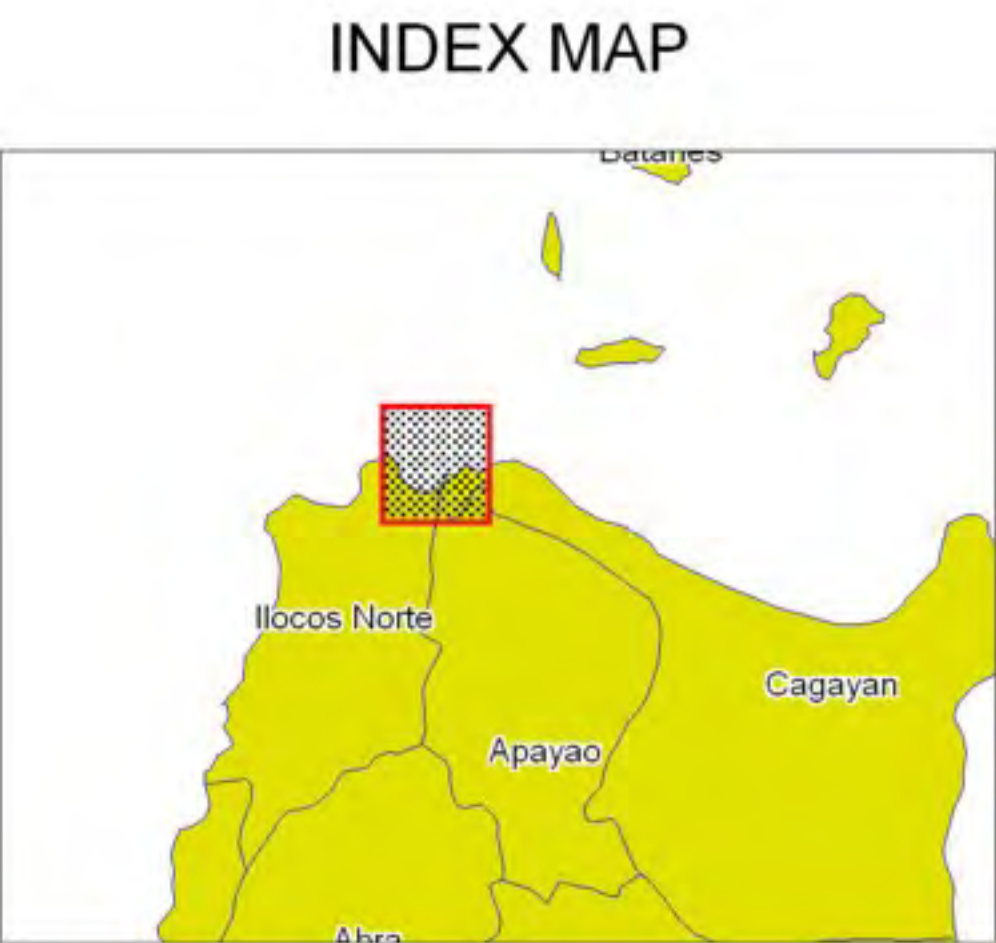
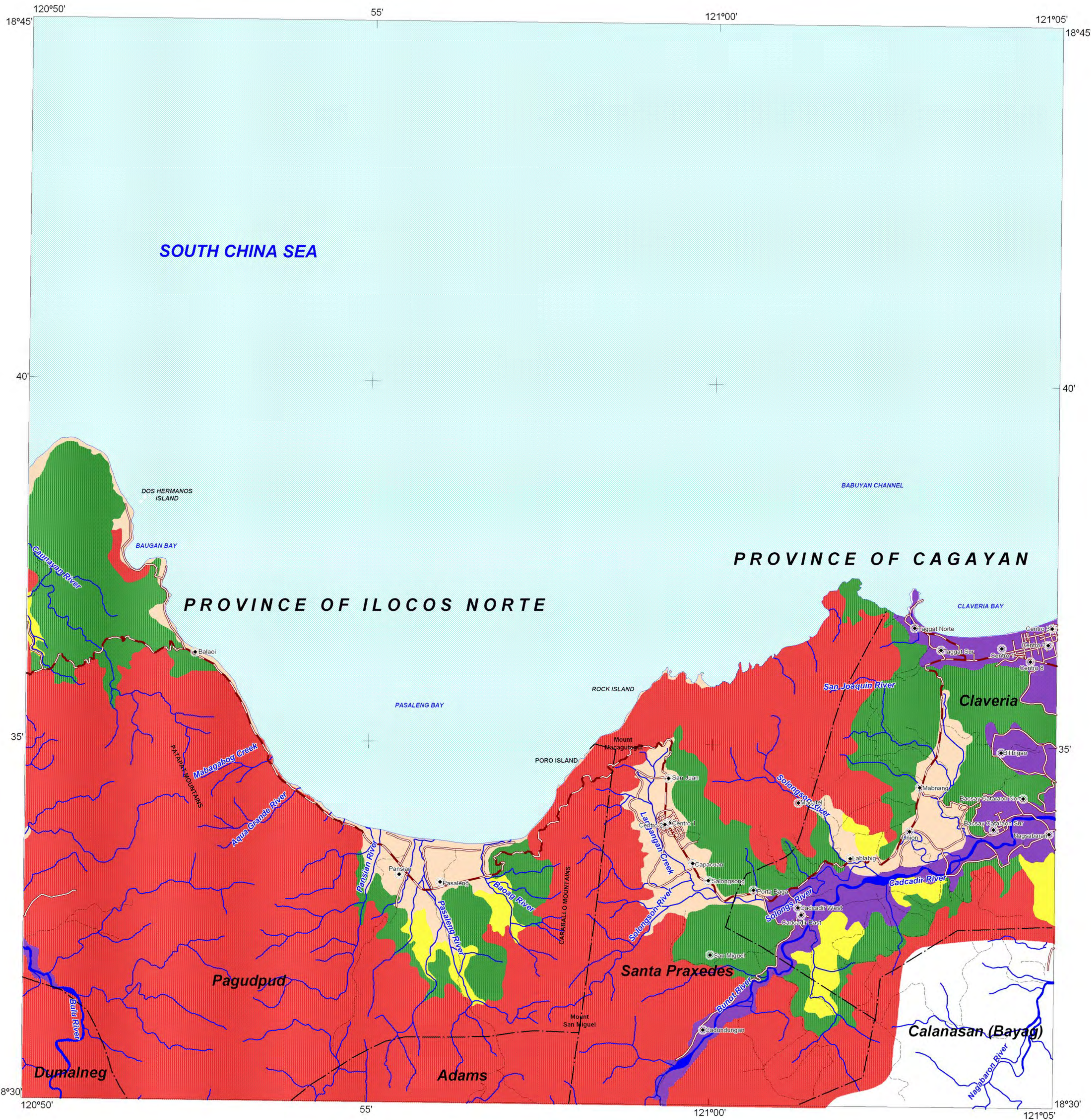


GIS Processing :
Lands Geological Survey Division

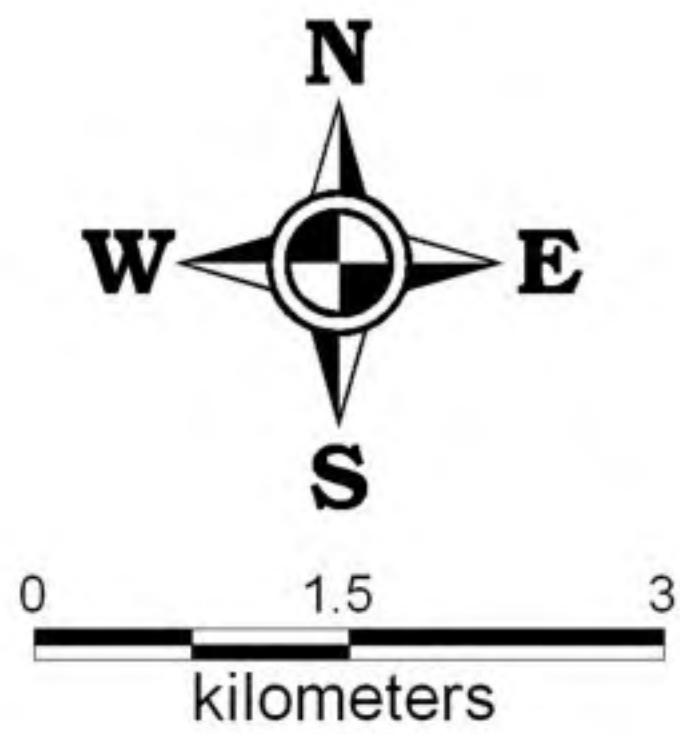
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7379 II "Capiissayan Quadrangle"

LANDSLIDE AND FLOOD SUSCEPTIBILITY MAP OF CLAVERIA QUADRANGLE ILOCOS NORTE AND CAGAYAN PROVINCES, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.
 - High susceptibility to flooding**
Areas with greater than 1 meter flood height. These areas are usually flooded for several hours during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; also prone to flashfloods.
 - Low to moderate susceptibility to flooding**
Areas with less than 1.0 meter flood height. These are usually inundated during prolonged and extensive heavy rainfall or extreme weather condition.
- Roads
 River
 Municipal boundary
 Barangay center location



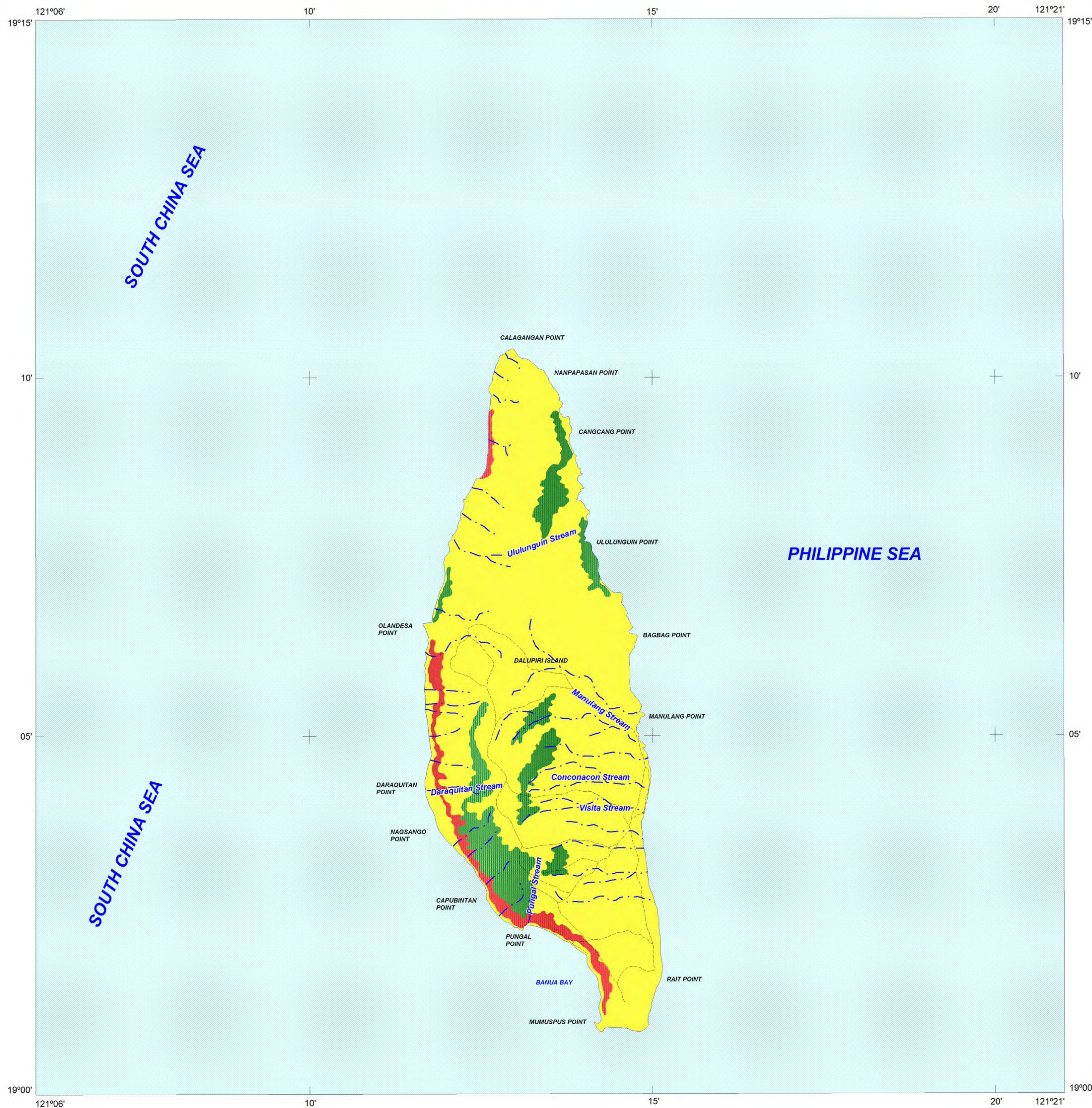
TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50, 000

GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO I and II

Base Map :
Sheet No. 7180 II "Claveria Quadrangle"

LANDSLIDE SUSCEPTIBILITY MAP OF DALUPIRI ISLAND QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES

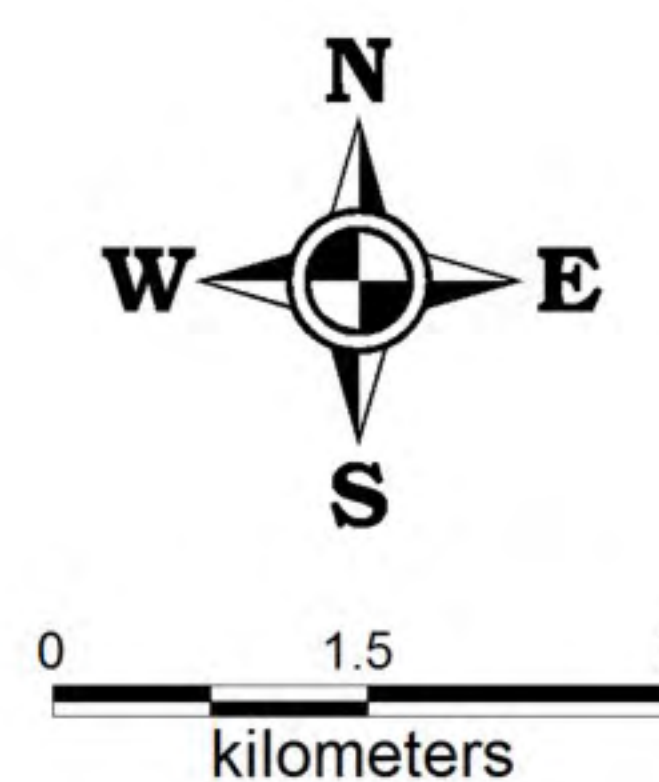


INDEX MAP



LEGEND :

- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
- Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
- Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.



TRANSVERSE MERCATOR PROJECTION
MAPPING SCALE 1:50,000

GIS Processing :
Lands Geological Survey Division

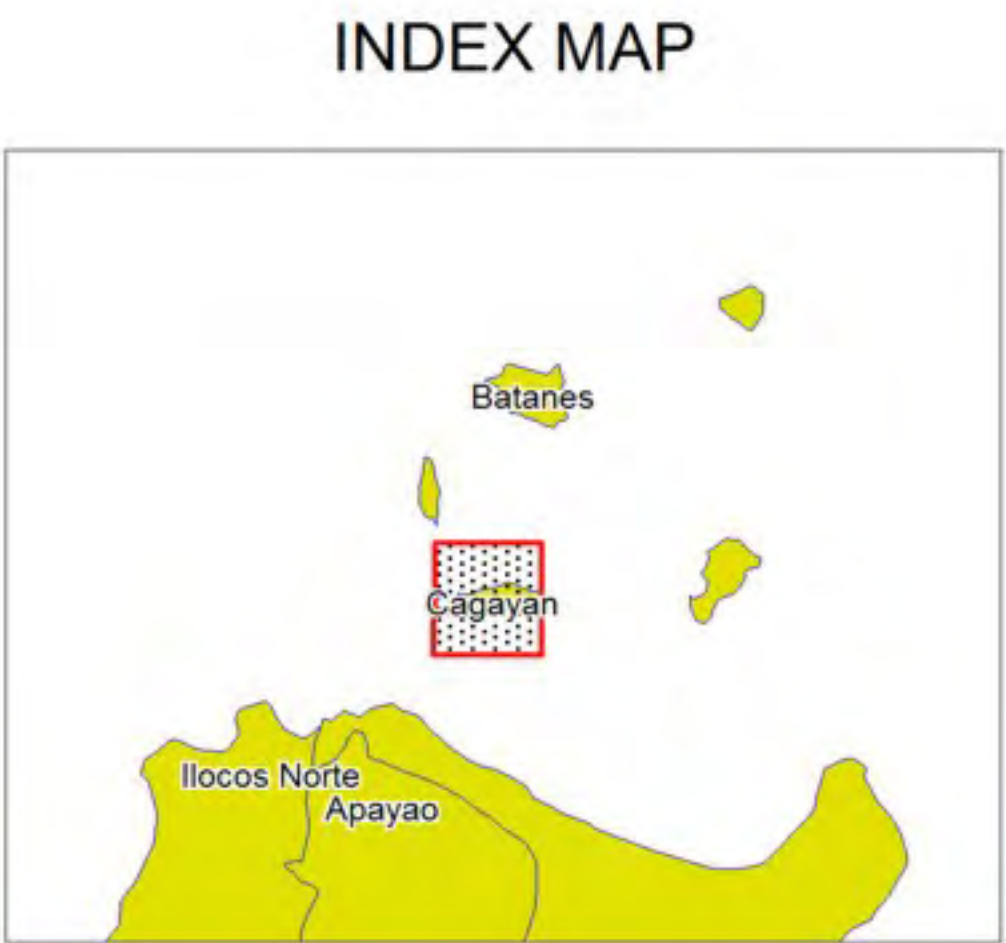
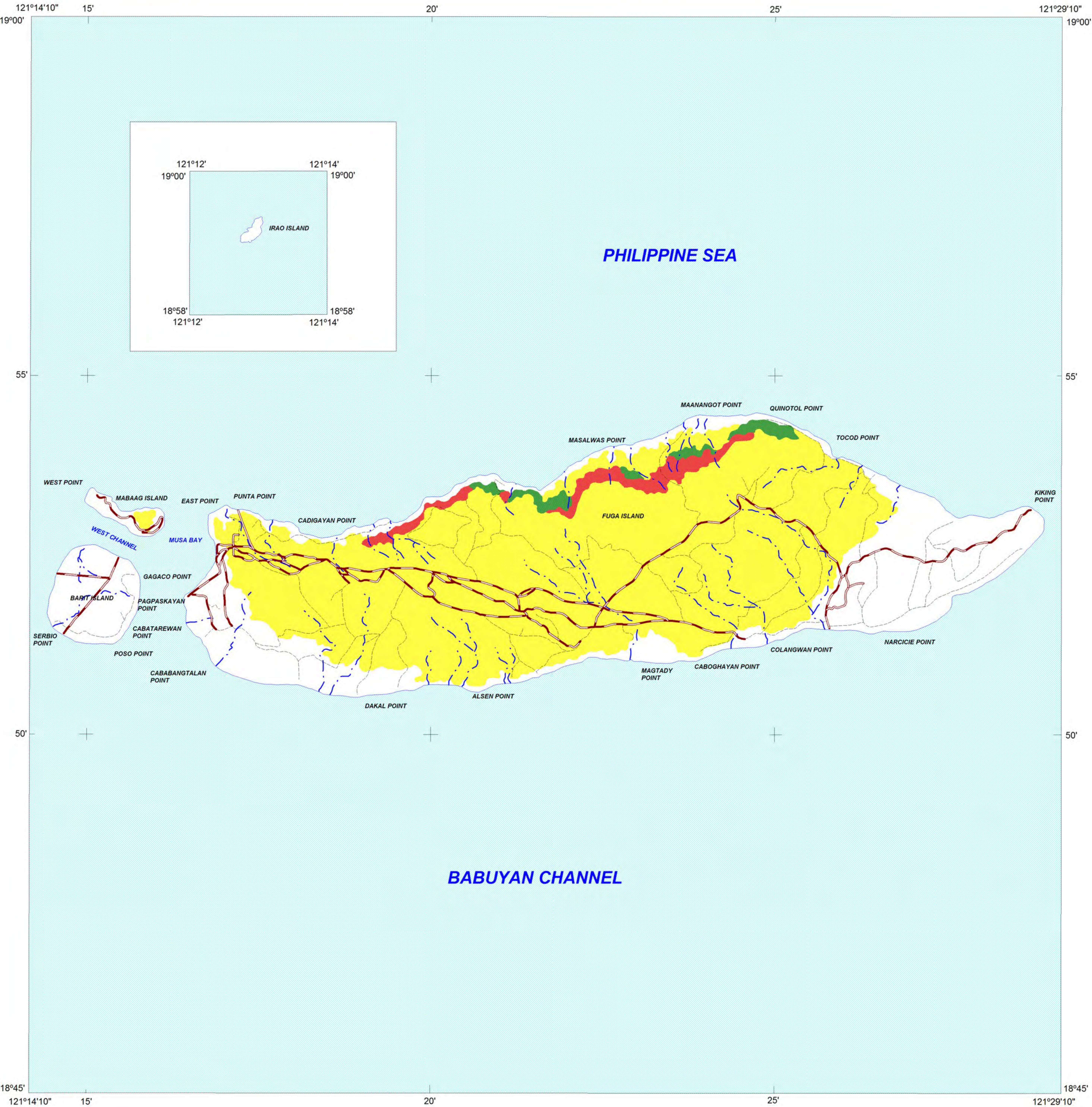
Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7281-III "Dalupiri Island Quadrangle"



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
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LANDS GEOLOGICAL SURVEY DIVISION

LANDSLIDE SUSCEPTIBILITY MAP OF FUGA ISLAND QUADRANGLE CAGAYAN PROVINCE, PHILIPPINES



- LEGEND :**
- High susceptibility to landslide**
Areas with high landslide susceptibility rating have active/recent landslides and tension cracks that would directly affect the community. Those with steep slopes and drainages that are prone to landslide damming are also highly susceptible to landslides.
 - Moderate susceptibility to landslide**
Areas with moderate landslide susceptibility rating have inactive/old landslides and tension cracks which are located away from the community. These areas usually have moderate slopes.
 - Low susceptibility to landslide**
Areas with low to gentle slopes and lacking tension cracks have low landslide susceptibility rating.



GIS Processing :
Lands Geological Survey Division

Data Sources:
MGB Geohazard Assessment Team
Geological Database and Information Systems Section
Lands Geological Survey Division
Geosciences Division MGB RO II

Base Map :
Sheet No. 7280-I "Fuga Island Quadrangle"