

ALCALDIA MAYOR DE BOGOTÁ D.C. Secretaría de Gobierno

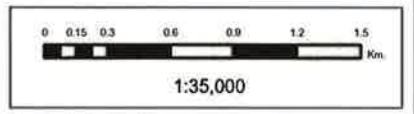
ALCALDIA MUNICIPAL DE SOACHA

JICA Japan International Cooperation Agency



LEGEND

- MUNICIPALITY LIMIT
- HIDROGRAPHY
- CONTOUR LINES 50M
- COMUNA SOACHA
- URBAN BOUNDARY SOACHA
- BASIN STUDY AREA
- PROPERTY SOACHA



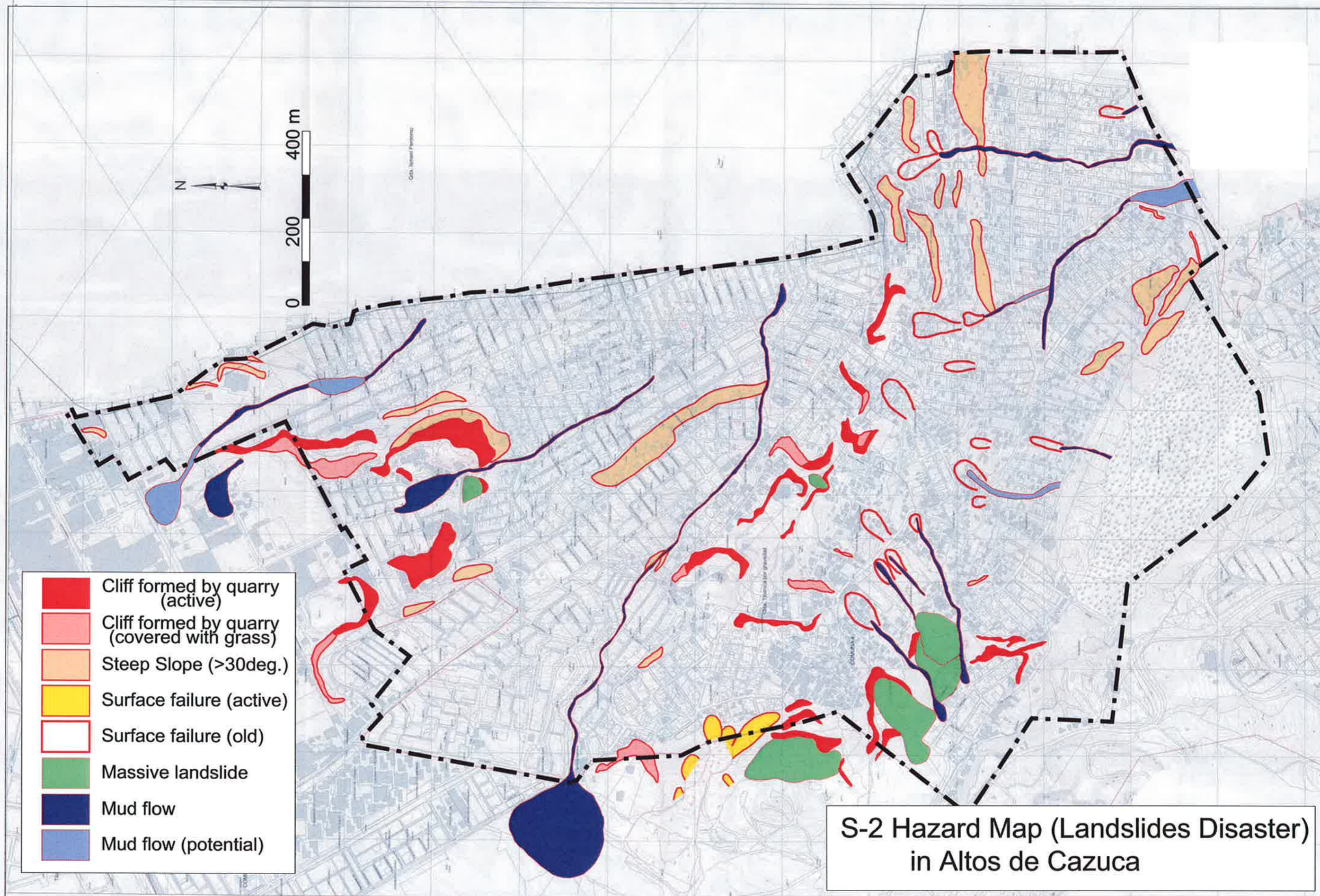
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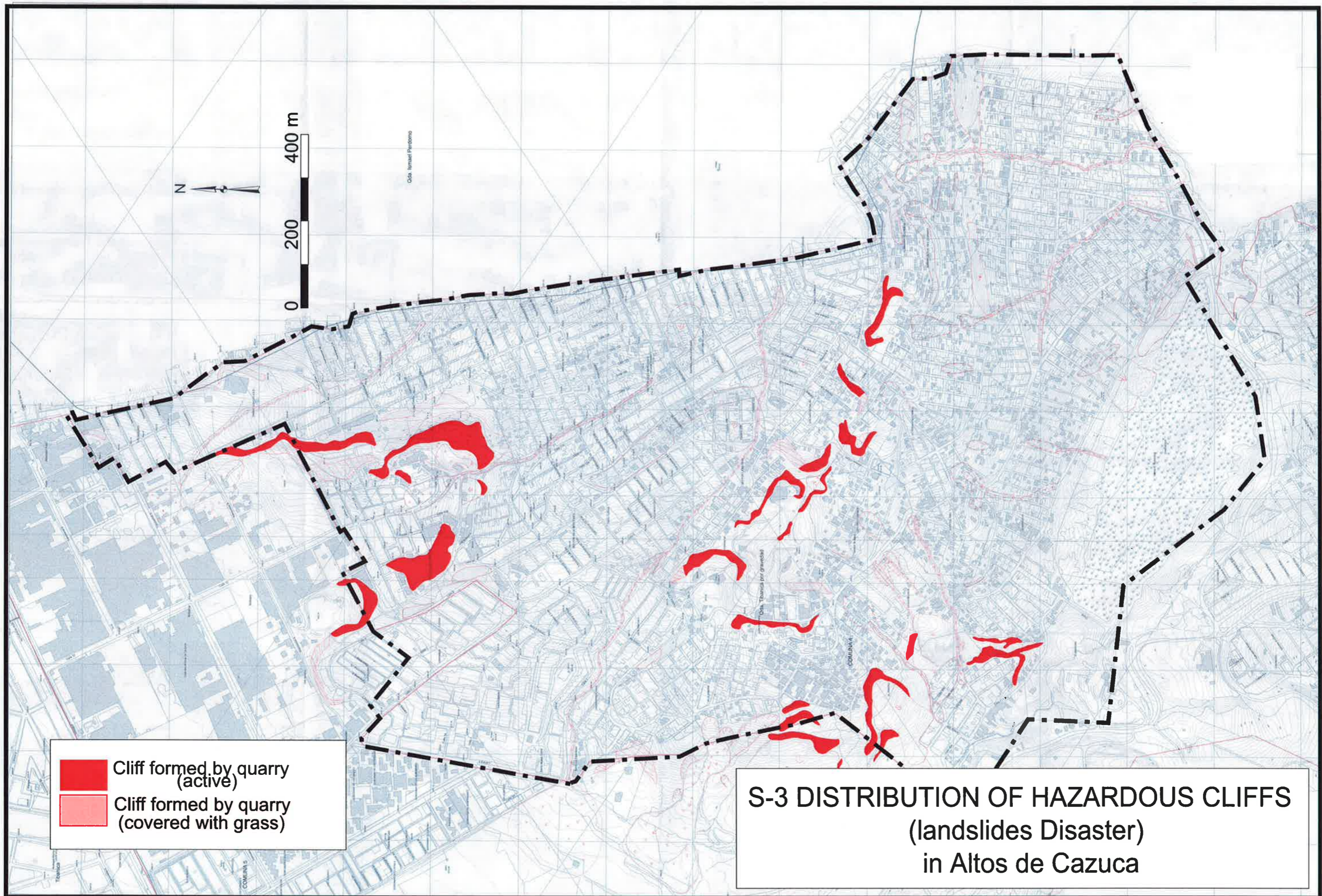
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 Linear Unit: Meter

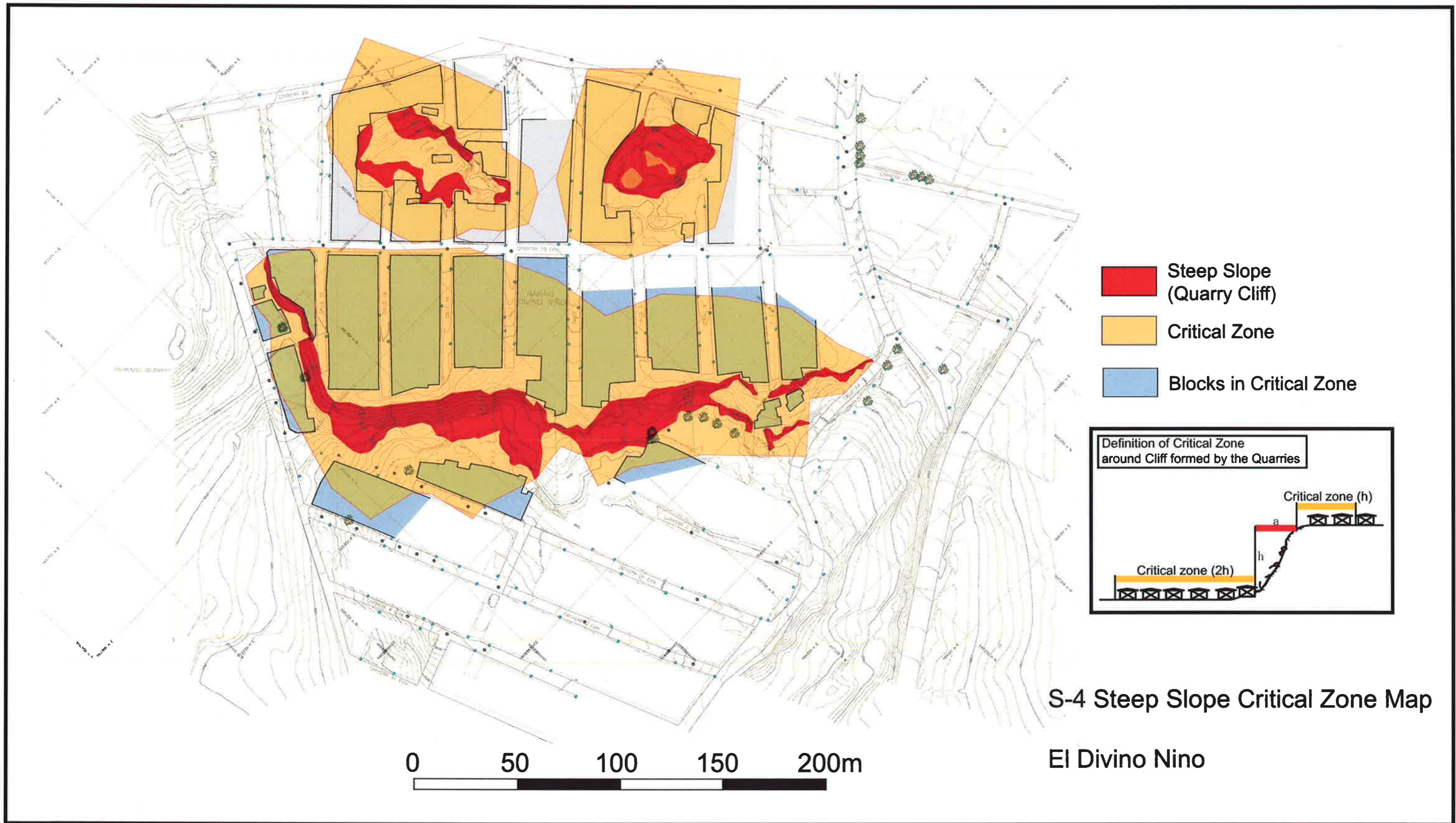
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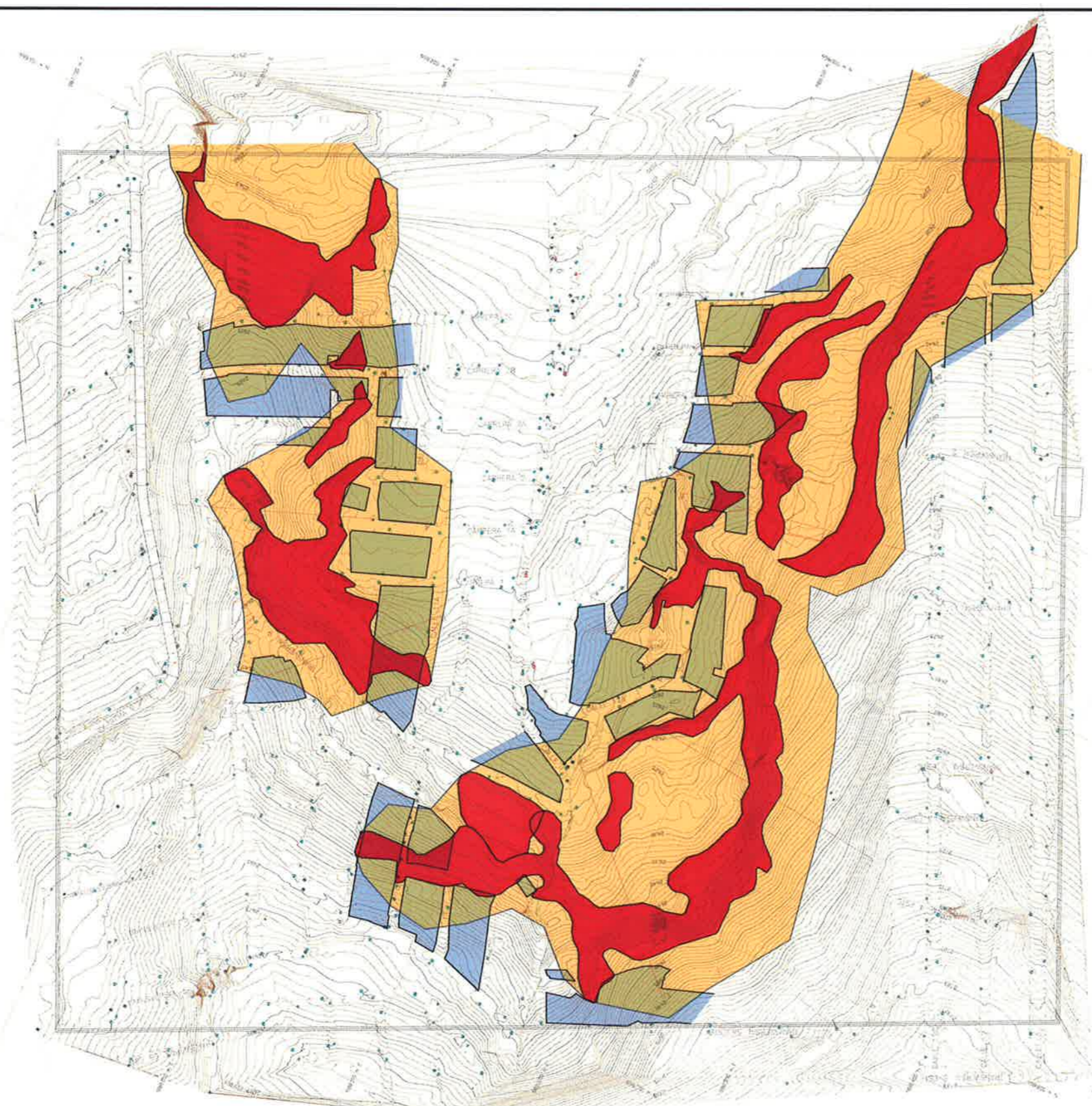
S-1 URBAN AREA IN SOACHA CITY

STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS

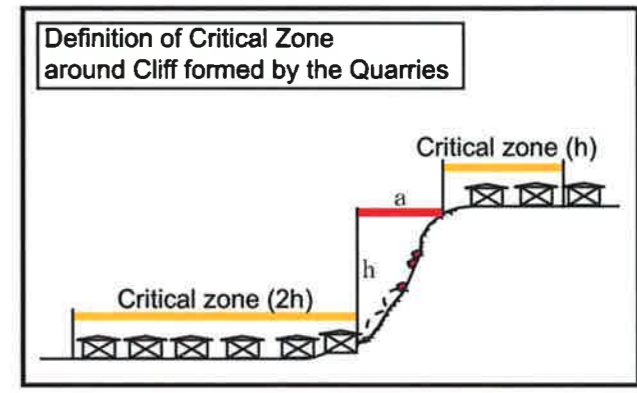








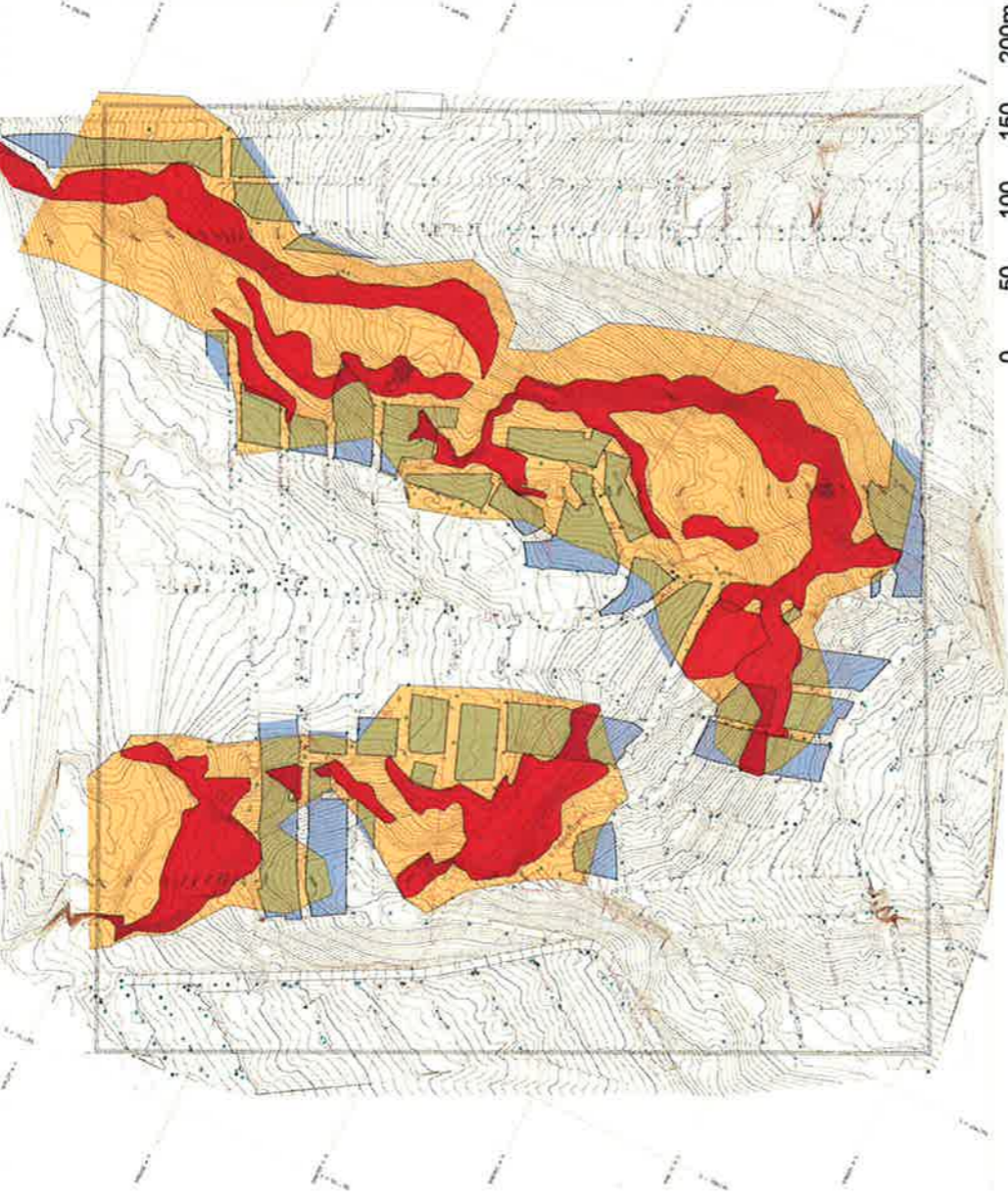
- Steep Slope (Quarry Cliff)
- Critical Zone
- Blocks in Critical Zone



S-5 Steep Slope Critical Zone Map
 Capilla in Altos De Cazuca

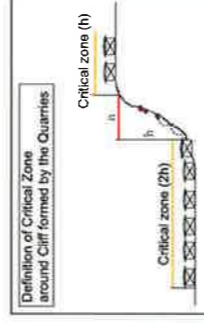
COMMUNITY HAZARD MAP - LA CAPILLA-

DANGEROUS PLACES IN LA CAPILLA



There are many traps in La Capilla. The places colored in red in this map shows dangerous slopes. The places colored in yellow shows places in danger under/above the dangerous slopes. The blocks colored in blue are always jeopardized. Please always remind that you and your family are jeopardized if you live in blue blocks.

- Steep Slope (Quarry Cliff)
- Critical Zone
- Blocks in Critical Zone

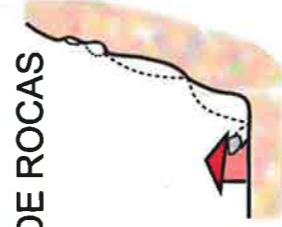


TYPES OF LANDSLIDE

Landslide disasters shown below have been occurred around Soacha Municipality

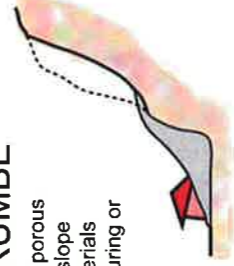
Tipo 1 CAIDA DE ROCAS

Free fall or rolling down of a rock or few rocks individually from a steep slope or cliff.



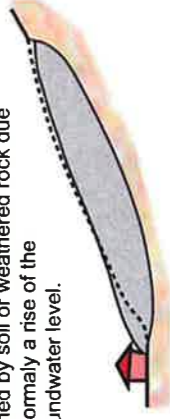
Tipo 2 DERRUMBE

Failure of loose and porous soil and rocks from slope when the loose materials are filled by water during or after heavy rainfall.



Tipo 3 DESLIZAMIENTO

Large-scale and slow slipping of a slope formed by soil or weathered rock due to normally a rise of the groundwater level.

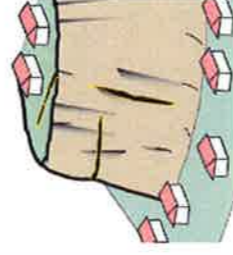


SIGNS OF SERIOUS LANDSLIDE

Always look at the slope, and precautions should be taken along the slopes, when following phenomena is seen on / around the slopes.

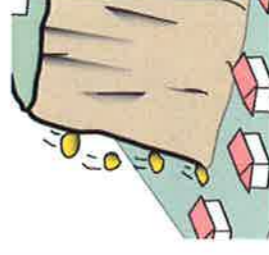
CRACKS

Cracks on the slope can be a sign of larger landslide



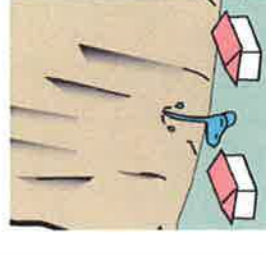
ROCK FALLS

Rock falls from the slope can be a sign of larger landslide



WATER LEAK

Water leak from the slope can be a sign of larger landslides

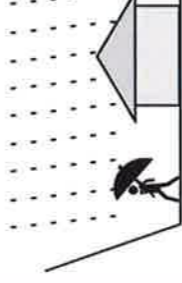


WHAT YOU SHOULD DO WHEN IT RAINS

Slopes might become unstable when it rains.

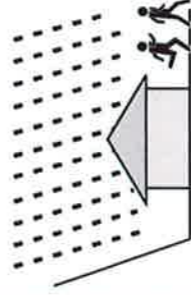
WATCH THE SLOPE

When it rains, please watch the slope be normal sometimes.



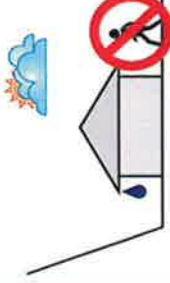
RUN AWAY

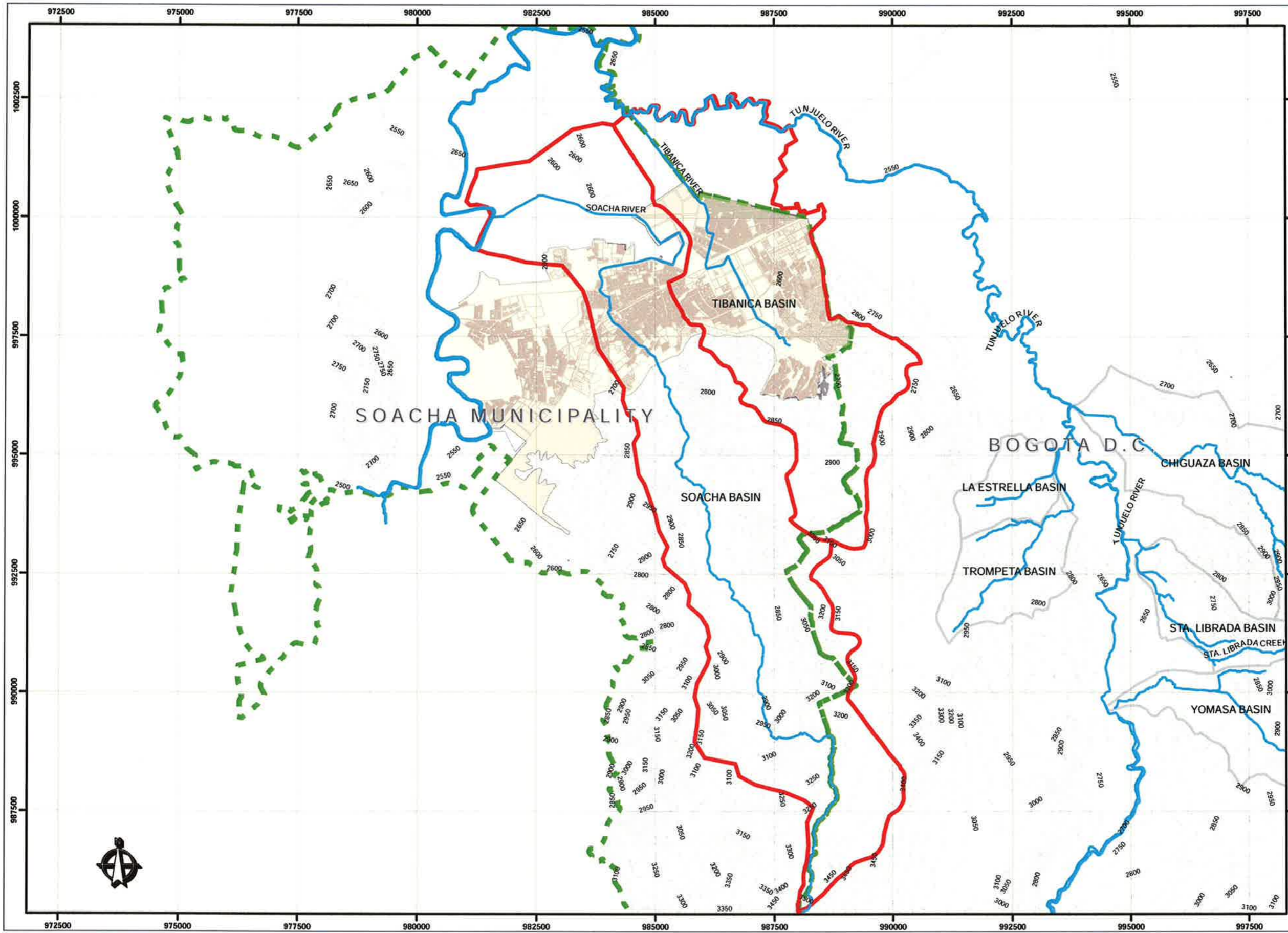
Please run away for the time being when rain becomes violent.



DO NOT RETURN SOON

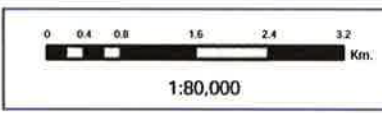
Once you took refuge from your house, do not return to your house at once even the rain stops.





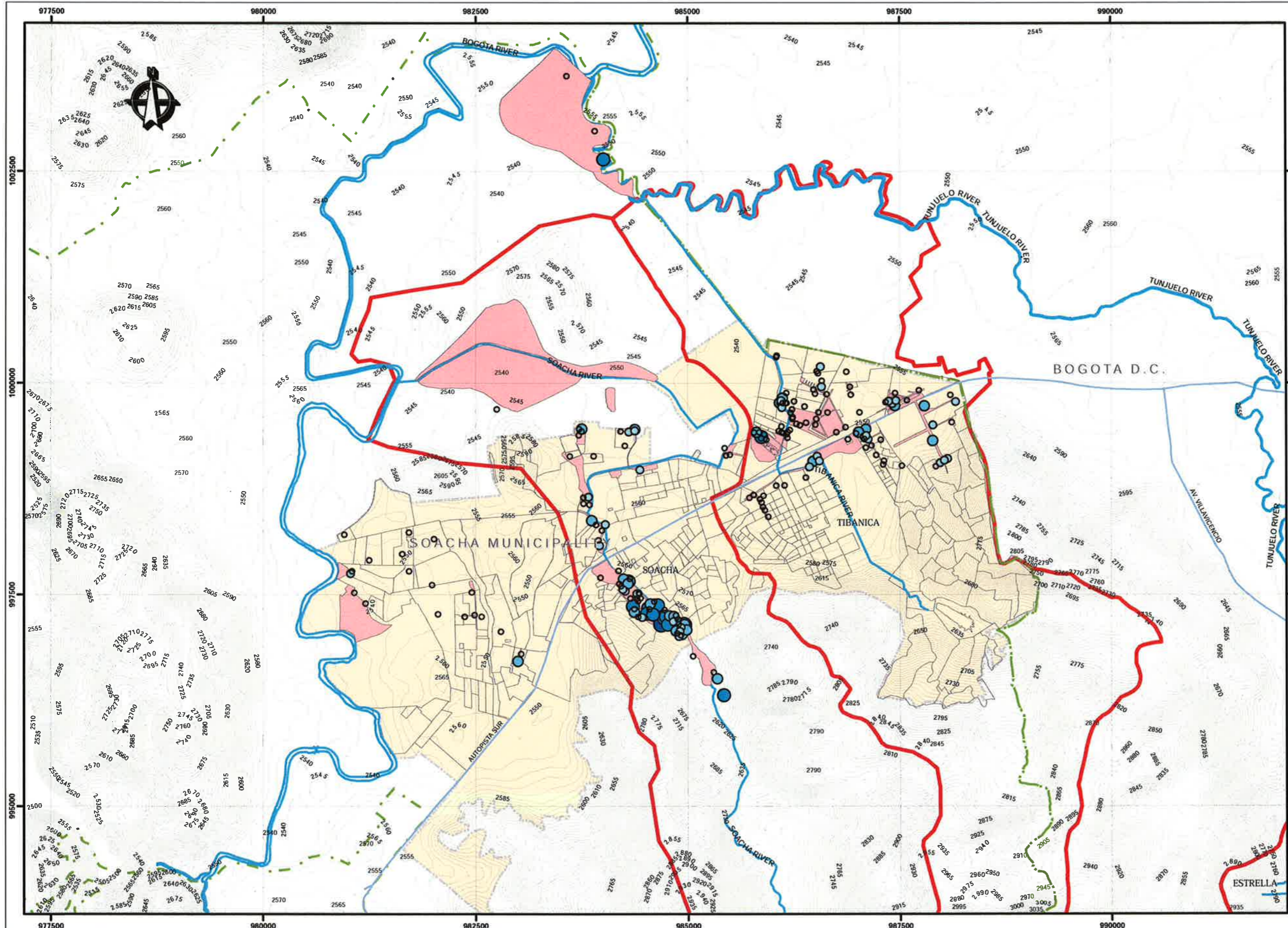
LEGEND

- HIDROGRAPHY
- CONTOUR LINES 50M.
- LIMIT OF BASIN
- URBAN AREA OF SOACHA
- MUNICIPALITY LIMIT
- PROPERTIES



Projection System Parameters:
 PCS_GKMAGB
 Projection: Transverse_Mercator
 False_Easting: 1000000.000000
 False_Northing: 1000000.000000
 Central_Meridian: -74.077508
 Scale_Factor: 1.000000
 Latitude_Of_Origin: 4.596200
 Linear Unit: Meter
 CGS_SIRGAS
 Datum: CGS_SIRGAS

S-7 BASINS OF SOACHA RIVER AND TIBANICA RIVER
 STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS



LEGEND

- FLOOD URBAN
- CONTOUR LINES 5M.
- NEIGHBORHOOD SOACHA
- BASIN STUDY AREA
- URBAN BOUNDARY SOACHA

SURVEY DEEP (cm)

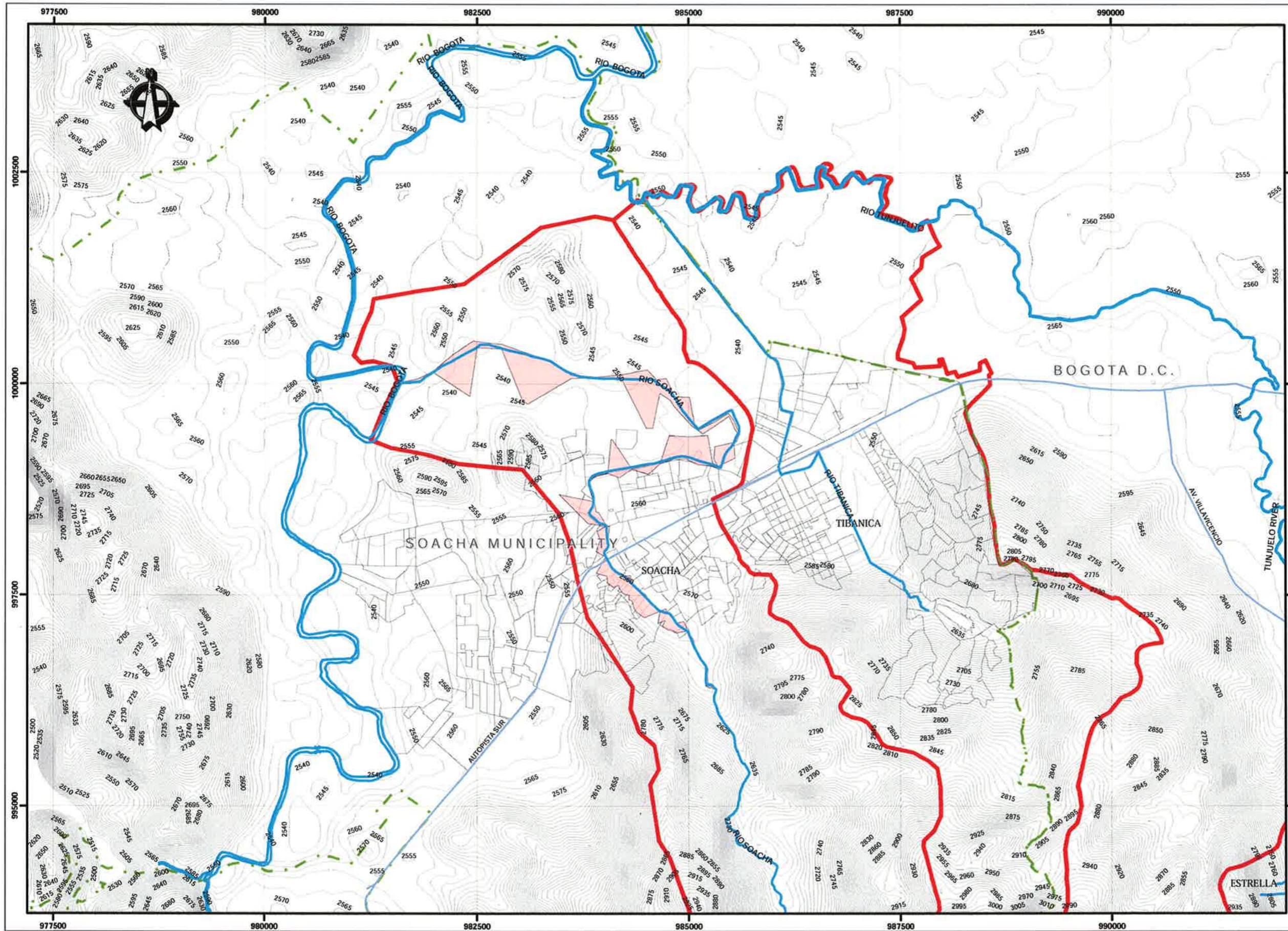
- 130 - 0
- 1 - 20
- 21 - 50
- 51 - 100
- 101 - 280



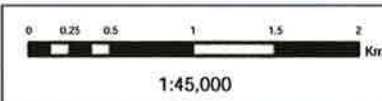
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 Scale_Factor: 1.000000
 Latitude_Of_Origin: 4.596200
 Linear Unit: Meter

CGS_SIRGAS
 Datum: CGS_SIRGAS



- LEGEND**
- MUNICIPAL BOUNDARY
 - BASIN STUDY AREA
 - NEIGHBORHOOD LIMIT
 - FLOOD SOACHA RIVER
 - CONTOUR LINE 5M



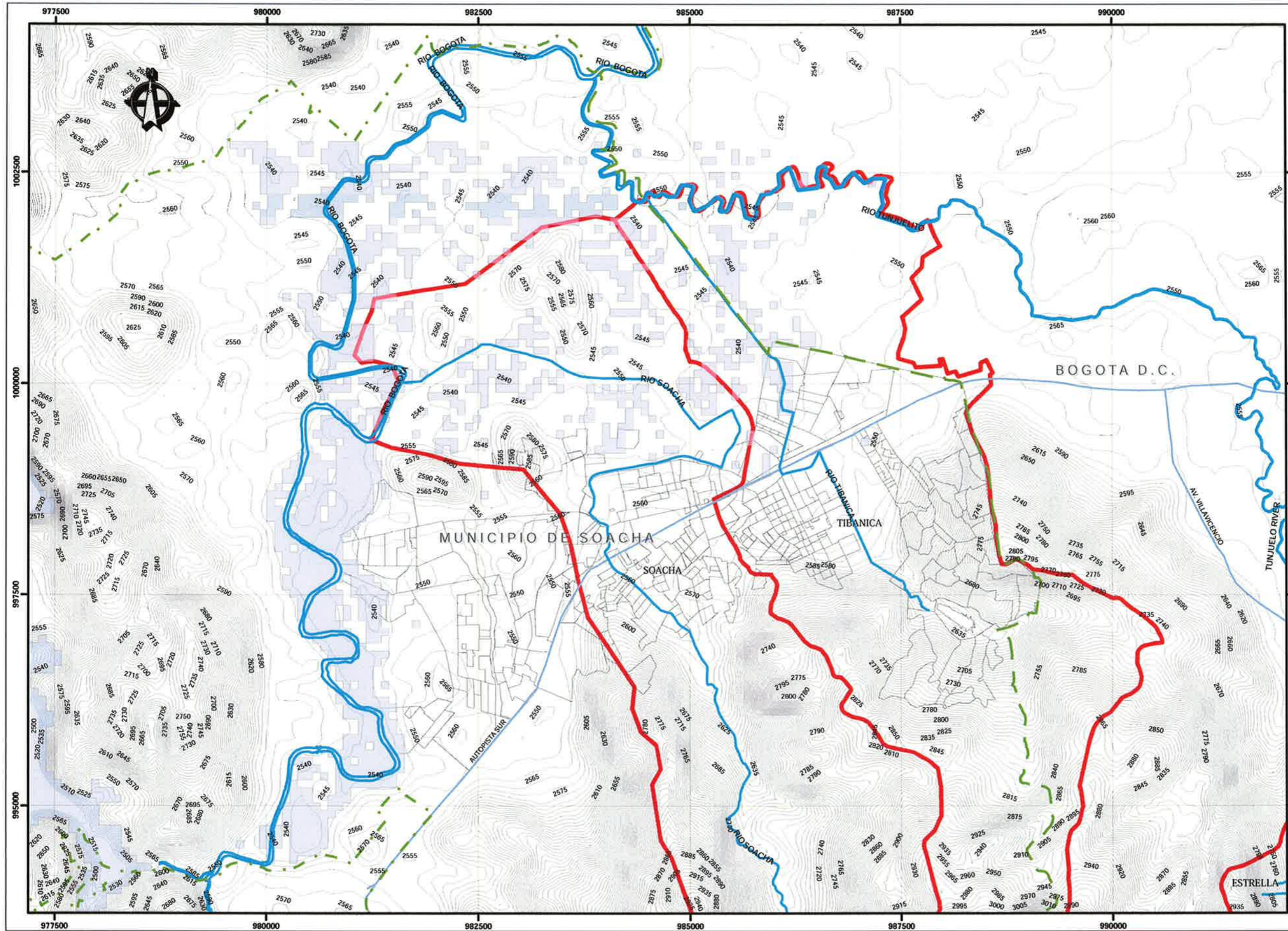
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 Latitude_Of_Origin: 4.596200
 Linear Unit: Meter

CGS_SIRGAS
 Datum: CGS_SIRGAS

**S-9 FLOOD MAP IN SOACHA RIVER
 (MAY 11, 2006 SCALE)**

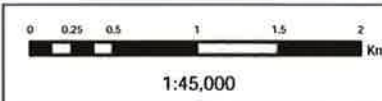
STUDY ON MONITORING AND EARLY WARNING
 SYSTEM FOR LANDSLIDES AND FLOODS



jica Japan International Cooperation Agency



- LEGEND**
- MUNICIPAL BOUNDARY
 - AREA BELOW 2541.5 m.
 - CONTOUR LINE 5M
 - NEIGHBORHOOD LIMIT
 - BASIN STUDY AREA



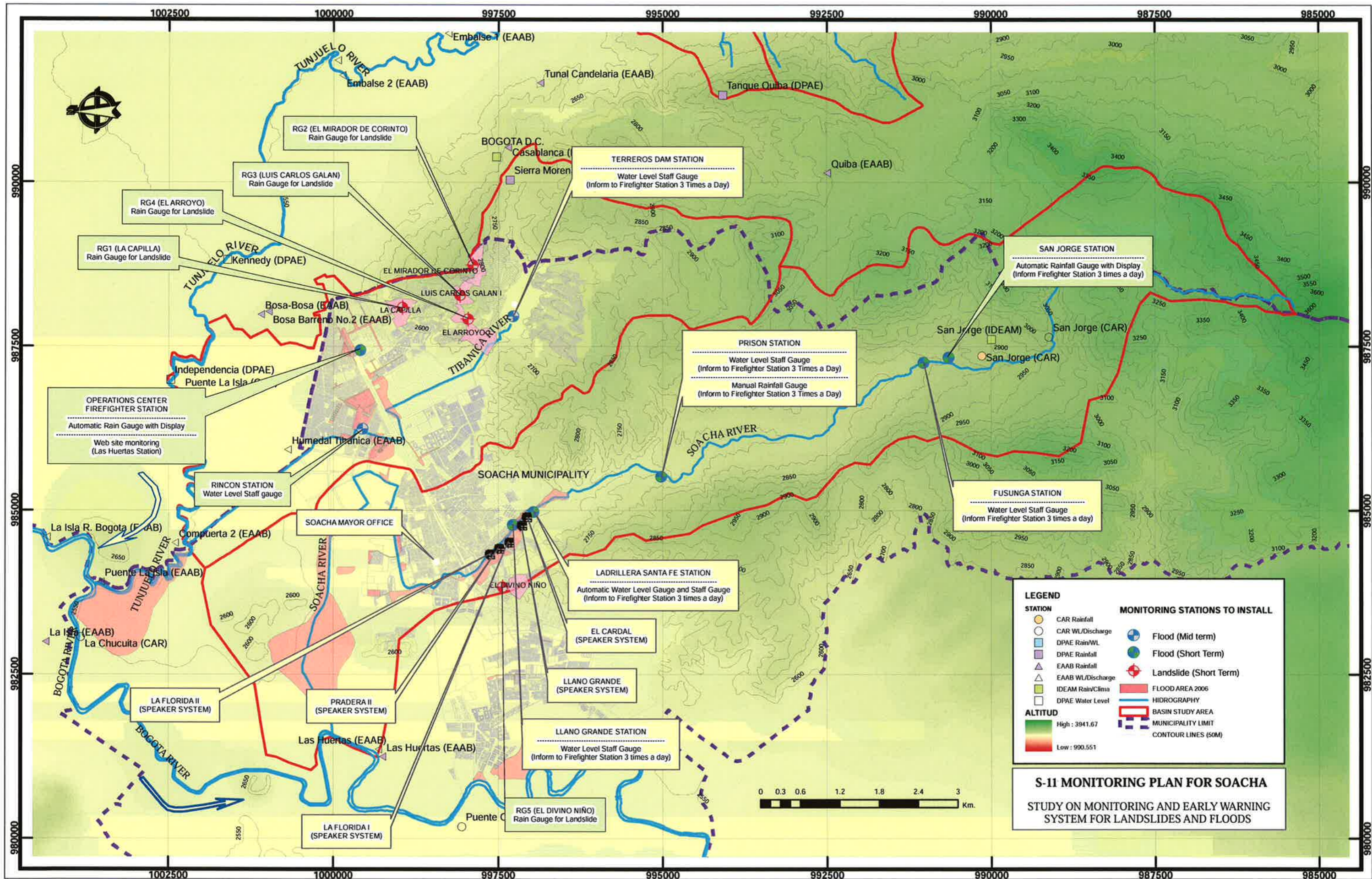
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 Latitude_Of_Origin: 4.596200
 Linear Unit: Meter

CGS_SIRGAS
 Datum: CGS_SIRGAS

S-10 AREA LOWER THAN EL. 2541.5 M.

STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS

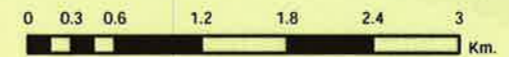


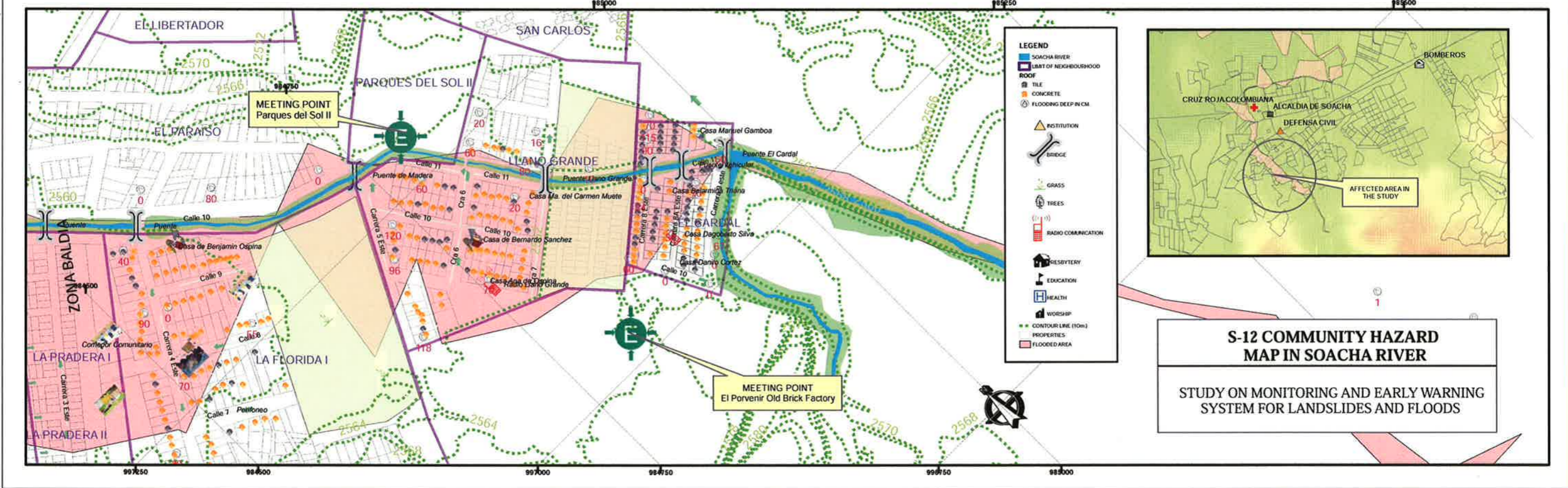
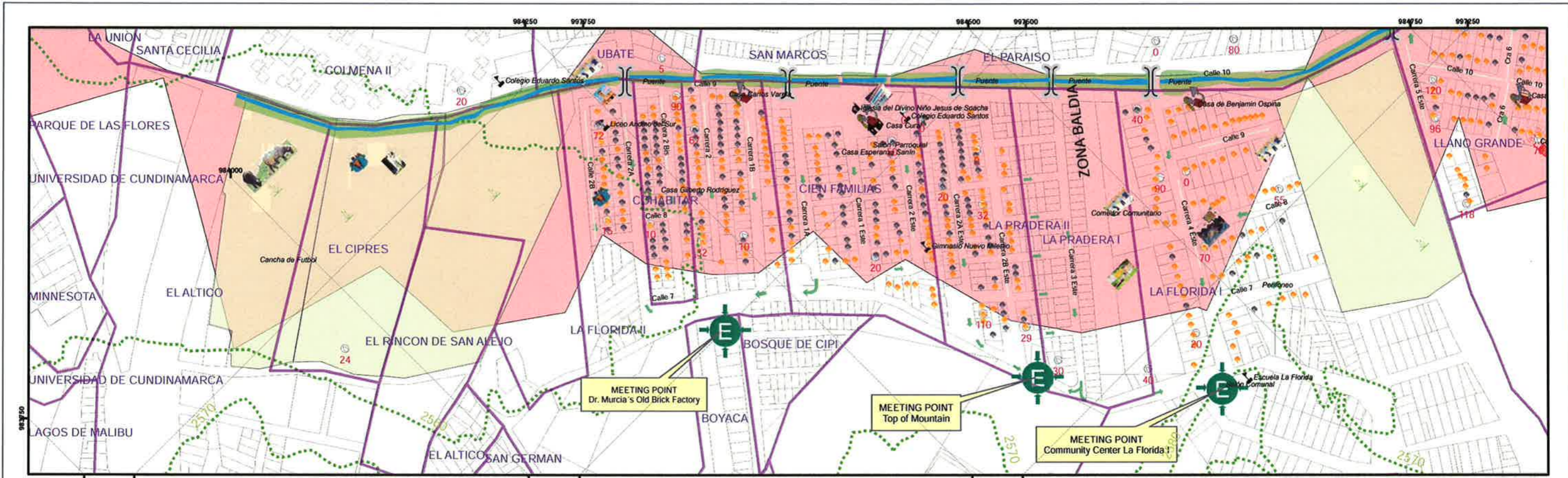
LEGEND

STATION	MONITORING STATIONS TO INSTALL
○ CAR Rainfall	⊕ Flood (Mid term)
○ CAR WL/Discharge	⊕ Flood (Short Term)
□ DPAE Rain/WL	⊕ Landslide (Short Term)
□ DPAE Rainfall	■ FLOOD AREA 2006
△ EAAB Rainfall	— HIDROGRAPHY
△ EAAB WL/Discharge	— BASIN STUDY AREA
□ IDEAM Rain/Clima	— MUNICIPALITY LIMIT
□ DPAE Water Level	— CONTOUR LINES (50M)

ALTITUD
 High : 3941.67
 Low : 990.551

S-11 MONITORING PLAN FOR SOACHA
 STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS





S-12 COMMUNITY HAZARD MAP IN SOACHA RIVER
 STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS