

**THE STUDY ON
MONITORING AND EARLY WARNING SYSTEM
FOR LANDSLIDES AND FLOODS
IN SELECTED AREAS IN THE CAPITAL DISTRICT
OF BOGOTÁ AND SOACHA MUNICIPALITY
IN THE REPUBLIC OF COLOMBIA**

**FINAL REPORT
VOLUME 4 DATA BOOK 1
GIS MAP**

MARCH 2008

JAPAN INTERNATIONAL COOPERATION AGENCY

**PACIFIC CONSULTANTS INTERNATIONAL
OYO INTERNATIONAL CORPORATION**

GE

JR

08-041

**THE STUDY ON
MONITORING AND EARLY WARNING SYSTEM
FOR LANDSLIDES AND FLOODS
IN SELECTED AREAS IN THE CAPITAL DISTRICT
OF BOGOTÁ AND SOACHA MUNICIPALITY
IN THE REPUBLIC OF COLOMBIA**

**FINAL REPORT
VOLUME 4 DATA BOOK 1
GIS MAP**

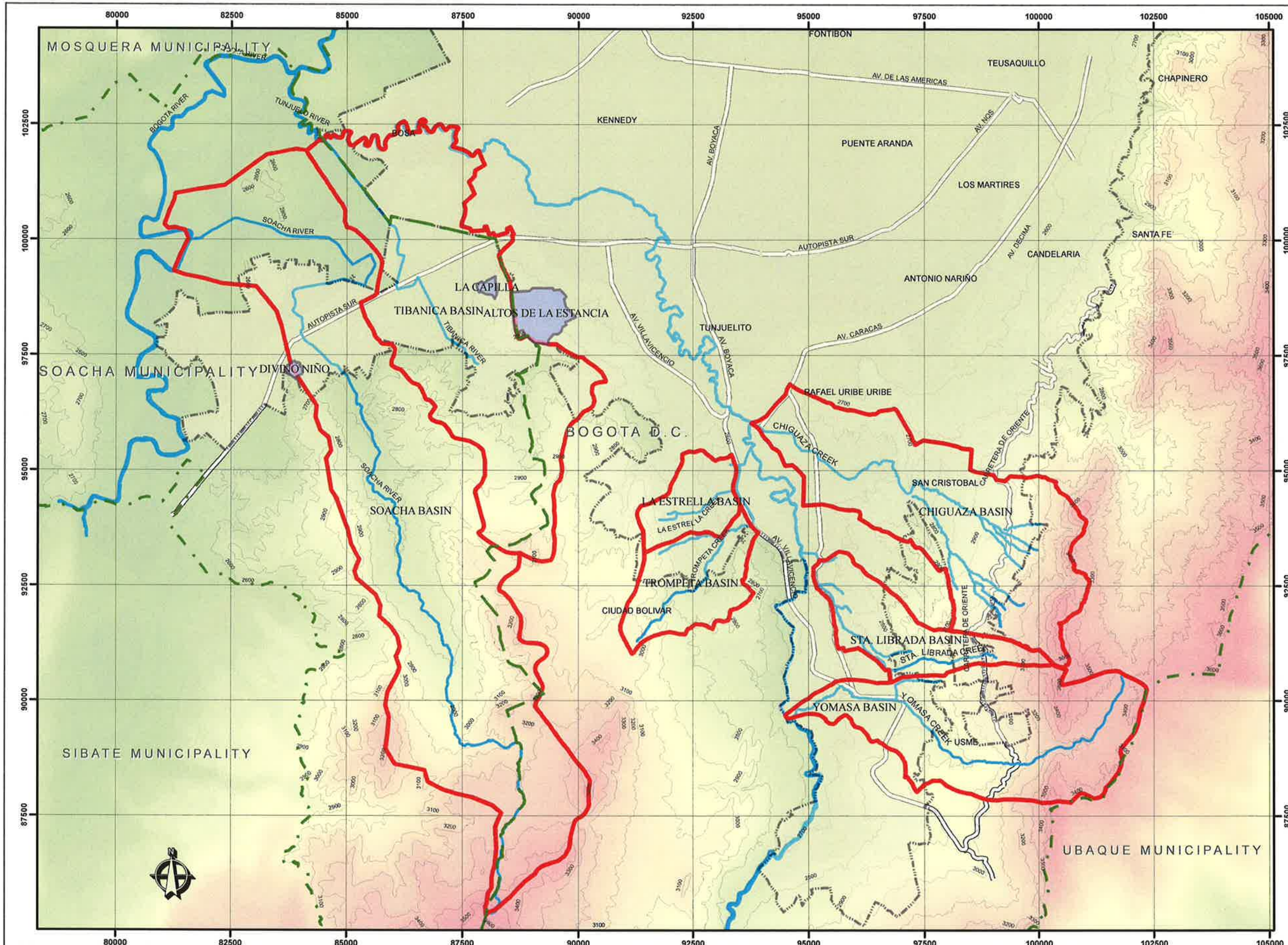
MARCH 2008

JAPAN INTERNATIONAL COOPERATION AGENCY

**PACIFIC CONSULTANTS INTERNATIONAL
OYO INTERNATIONAL CORPORATION**

TABLE OF CONTENTS OF DATA BOOK 1

Main Category	Coverage	No.	Title
General	All Study Area	G-1	Study Area
	All Study Area	G-2	Existing Monitoring Stations
	All Study Area	G-3	SPOT Image 2005 RGB False color
	All Study Area	G-4	Index Map of Aerial Photos
Bogota	Altos de Estancia	B-1	Compilation of Figures on Altos de la Estancia
	Altos de Estancia	B-2	Monitoring Plan by DPAE in Altos de la Estancia
	Altos de Estancia	B-3	Monitoring Plan by JICA Study
	Chiguaza	B-4	Catchment of Chiguaza Creek
	Santa Librada/Yomasa	B-5	Catchment of Santa Librada and Yomasa Creeks
	Estrella Trompeta	B-6	Catchment of La Estrella and Trompeta
	4 Creeks	B-7	Results of Flood Interview Survey
	Chiguaza	B-8	May 19, 1994 Affected Area
	Chiguaza	B-9	Monitoring Plan of Chiguaza Creek
	Yomasa	B-10	Yellow Zone for Flash Flood in Yomasa Creek
Soacha	Urban Area	S-1	Urban Area in Soacha City
	Altos de Cazuca	S-2	Hazard Map (Landslides Disaster) in Altos de Cazuca
	Altos de Cazuca	S-3	Distribution of Hazardous Cliffs (Landslides Disaster) in Altos de Cazuca
	El Divino Nino	S-4	Steep Slope Critical Zone Map El Divino Nino
	Altos de Cazuca	S-5	Steep Slope Critical Zone Map Capilla in Altos de Cazuca
	Altos de Cazuca	S-6	Community Hazard Map La Capilla
	Basins of Soacha and Tibanica	S-7	Basins of Soacha River and Tibanica River
	From Bogota River until Urban Area	S-8	May 11, 2006 Inundation Map
	From Bogota River until Urban Area	S-9	Flood Map in Soacha River (May 11, 2006 scale)
	From Bogota River until Urban Area	S-10	Area lower than EL. 2541.5 m
	Soacha River Basin	S-11	Monitoring Plan for Soacha
	Llano Grande to Autopista Sur	S-12	Community Hazard Map in Soacha River



ALCALDIA MAYOR DE BOGOTÁ D.C.
Secretaría de Gobierno

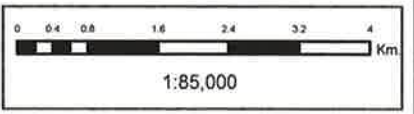
ALCALDIA MUNICIPAL DE SOACHA

jica Japan International Cooperation Agency



LEGEND

- MUNICIPALITY BOUNDARY
- BASIN STUDY AREA
- URBAN AREA
- HIDROGRAPHY
- LOCALITY BOGOTÁ
- CONTOUR LINES 100 m



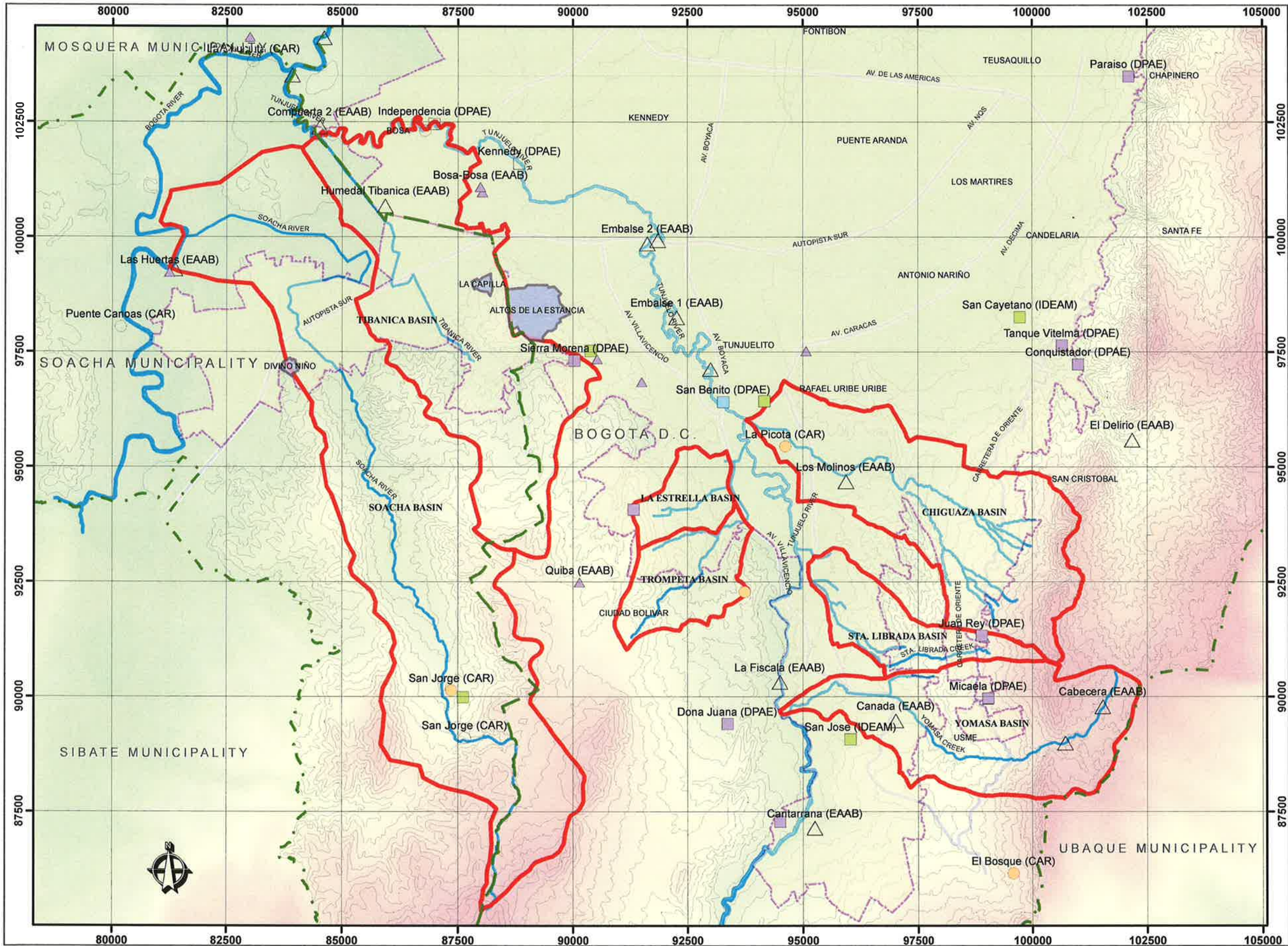
Projection System Parameters

PCS_CarMAGBOG
 Projection: Transverse_Mercator
 False_Easting: 92334.679000
 False_Northing: 109320.965000
 Central_Meridian: -74.146592
 Scale_Factor: 1.000000
 Latitude_Of_Origin: 4.680486
 Linear Unit: Meter

GCS_CarMAGBOG
 Datum: CGS_CarMAGBOG

G-1 STUDY AREA

STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS



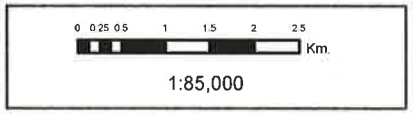







LEGEND

- MUNICIPAL BOUNDARY
- CAR Rainfall
- CAR W/Discharge
- DPAE Rainfall
- DPAE Rainfall
- EAB Rainfall
- EAB W/Discharge
- IDEAM Rain/Chms
- DPAE Water Level
- STUDY AREA LIMIT
- URBAN AREA
- LOCALITY LIMIT
- URBAN AREA
- HYDROGRAPHY
- CONTOUR LINES 50M



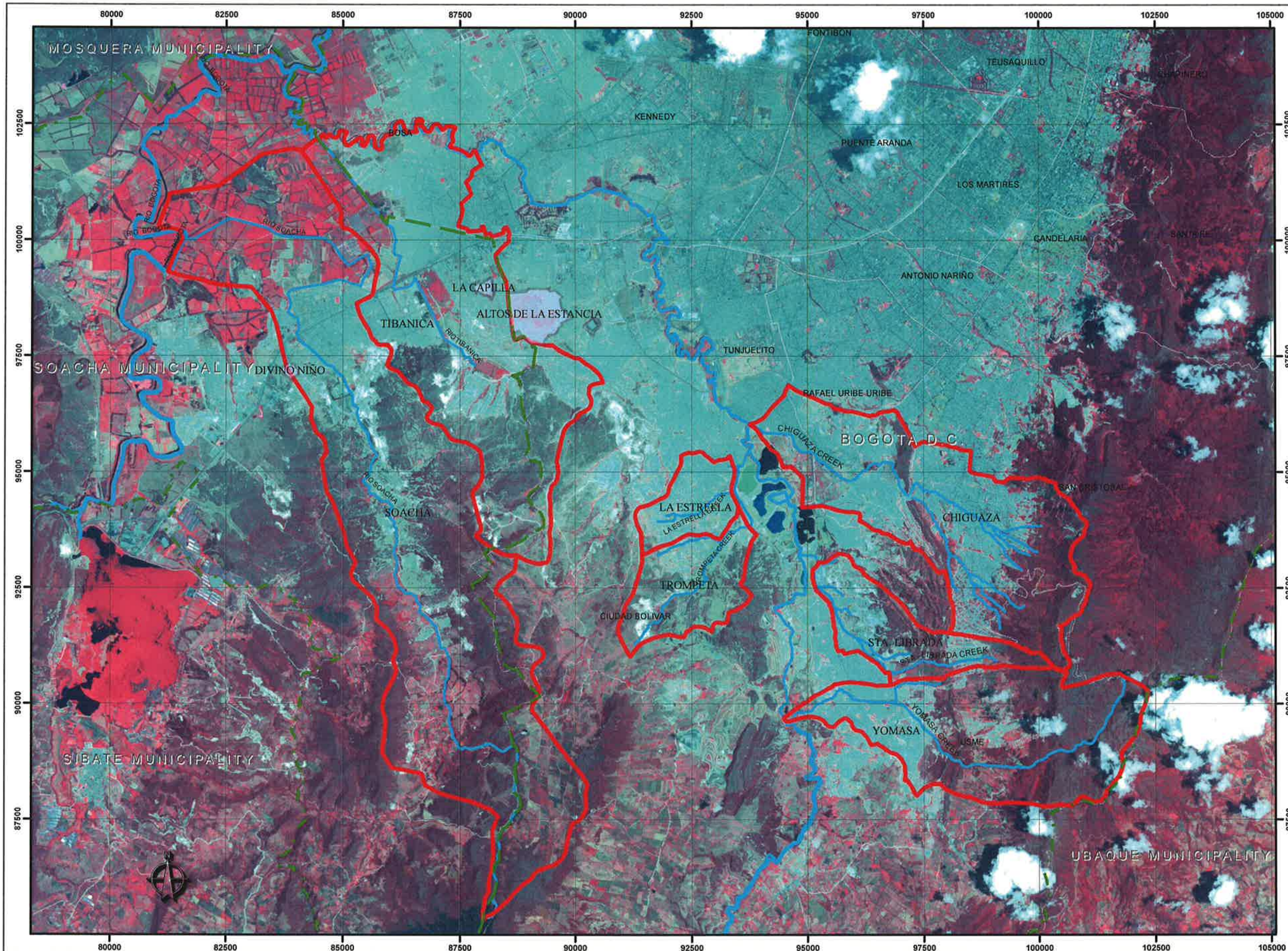
Projection System Parameters

PCS_CartMAGBOG
 Projection: Transverse_Mercator
 False_Easting: 92334.879000
 False_Northing: 109320.965000
 Central_Meridian: -74.146592
 Scale_Factor: 1,000000
 Latitude_Of_Origin: 4,660486
 Linear Unit: Meter

GCS_CartMAGBOG
 Datum: GCS_CartMAGBOG

G-2 EXISTING MONITORING STATIONS

STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS









ALCALDIA MAYOR DE BOGOTÁ D.C.
 Secretaría de Gobierno
ALCALDIA MUNICIPAL DE SOACHA





 Japan International Cooperation Agency

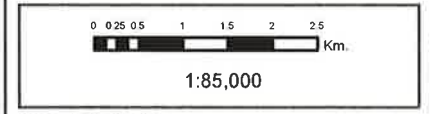


LEGEND

-  MUNICIPALITY LIMIT
-  STUDY AREA LIMIT
-  HIDROGRAPHY
-  LOCALITY LIMIT

SPOT IMAGE RGB

-  Red: Band_1
-  Green: Band_2
-  Blue: Band_3



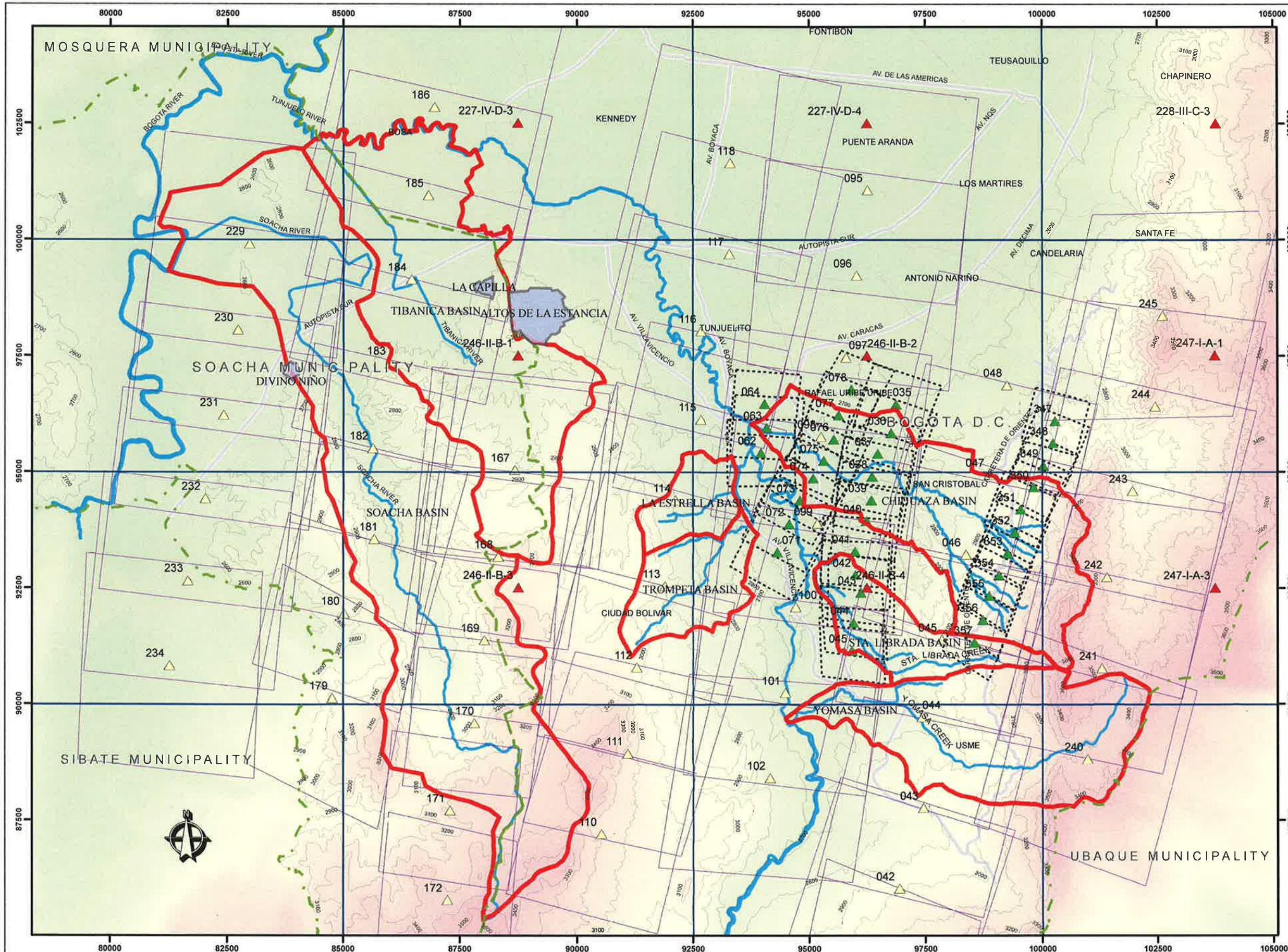
Proyección System Parameters

PCS_CartMAGBOG
 Projection: Transverse_Mercator
 False_Easting: 92334,879000
 False_Northing: 109320,985000
 Central_Meridian: -74,146592
 Scale_Factor: 1,000000
 Latitude_Of_Origin: 4,680486
 Linear Unit: Meter

GCS_CartMAGBOG
 Datum: CGS_CartMAGBOG

G-3 SPOT IMAGE 2005 RGB FAULSE COLOR

STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS



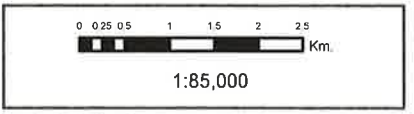







LEGEND

- MUNICIPALITY LIMIT
- BOUNDARY BASIN
- PHOTO YEAR
 - 1956
 - 1998
 - 2004
- HIDROGRAPHY
- LOCALITY LIMIT
- CONTOUR LINES 100 m
- ALTITUD
 - High : 3500
 - Low : 2400



Proyeccion System Parameters
 PCS_CarMAGBOG
 Projection: Transverse_Mercator
 False_Easting: 92334,879000
 False_Northing: 109320,965000
 Central_Meridian: -74,146592
 Scale_Factor: 1,000000
 Latitude_Of_Origin: 4,680486
 Linear Unit: Meter
 GCS_CarMAGBOG
 Datum: CGS_CarMAGBOG

G-4 INDEX MAP OF AERIAL PHOTOS
 STUDY ON MONITORING AND EARLY WARNING SYSTEM FOR LANDSLIDES AND FLOODS