

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

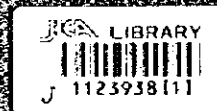
FEDERAL MINISTRY OF WATER RESOURCES
AND RURAL DEVELOPMENT
FEDERAL REPUBLIC OF NIGERIA

THE STUDY ON THE NATIONAL WATER RESOURCES MASTER PLAN (NWRMP)

SATELLITE IMAGE ANALYSIS

VOLUME FIVE

GEOLOGY (4 SHEETS)
GEOMORPHOLOGY (4 SHEETS)
LAND COVER (4 SHEETS)



MARCH 1995

SANYO CONSULTANTS INC.
SUMIKO CONSULTANTS (P) LTD

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

FEDERAL MINISTRY OF WATER RESOURCES
AND RURAL DEVELOPMENT
FEDERAL REPUBLIC OF NIGERIA

**THE STUDY ON THE NATIONAL WATER
RESOURCES MASTER PLAN (NWRMP)**

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COMPOSITION OF THE REPORT

The Final Report on the Study on the National Water Resources Master Plan (NWRMP) for the Federal Ministry of Water Resources and Rural Development in the Federal Republic of Nigeria comprises the following volumes:

- Volume One : SUMMARY AND MAIN TEXT
- Volume Two : SECTOR REPORT

This contains 12 Chapters, each of which has been presented in an independent manner for the sub-sector designated compiling all the requirements concerned, while major findings and recommendation of each sub-sector along with inter-sub-sectoral relations and basin-wide considerations are summarized in Volume 1:

CHAPTER 1. NWRIS and SIA	Part 1
CHAPTER 2. Socio-Economy and Land Use	
CHAPTER 3. Water Resources and Management	
CHAPTER 4. Water Source Works	
CHAPTER 5. Irrigation and Drainage	
CHAPTER 6. Water Supply and Sanitation	
CHAPTER 7. Gully Erosion and Flood Control	Part 2
CHAPTER 8. Hydropower Generation	
CHAPTER 9. Inland Navigation	
CHAPTER 10. Inland Fisheries	
CHAPTER 11. Environmental Management	
CHAPTER 12. Institution and Legislation	

- Volume Three : WATER RESOURCES INVENTORY SURVEY
- Volume Four : WATER RESOURCES DATABASE MAPS
- Volume Five : SATELLITE IMAGE ANALYSIS

This is Volume Five: SATELLITE IMAGE ANALYSIS

It may be noted that all the findings and recommendation contained in this Report are those made by the Study Team with the members of Sanyu Consultants Inc. and Sumiko Consultants Co., Ltd. and do not imply any authorization by the Japan International Cooperation Agency or the Government of Japan.



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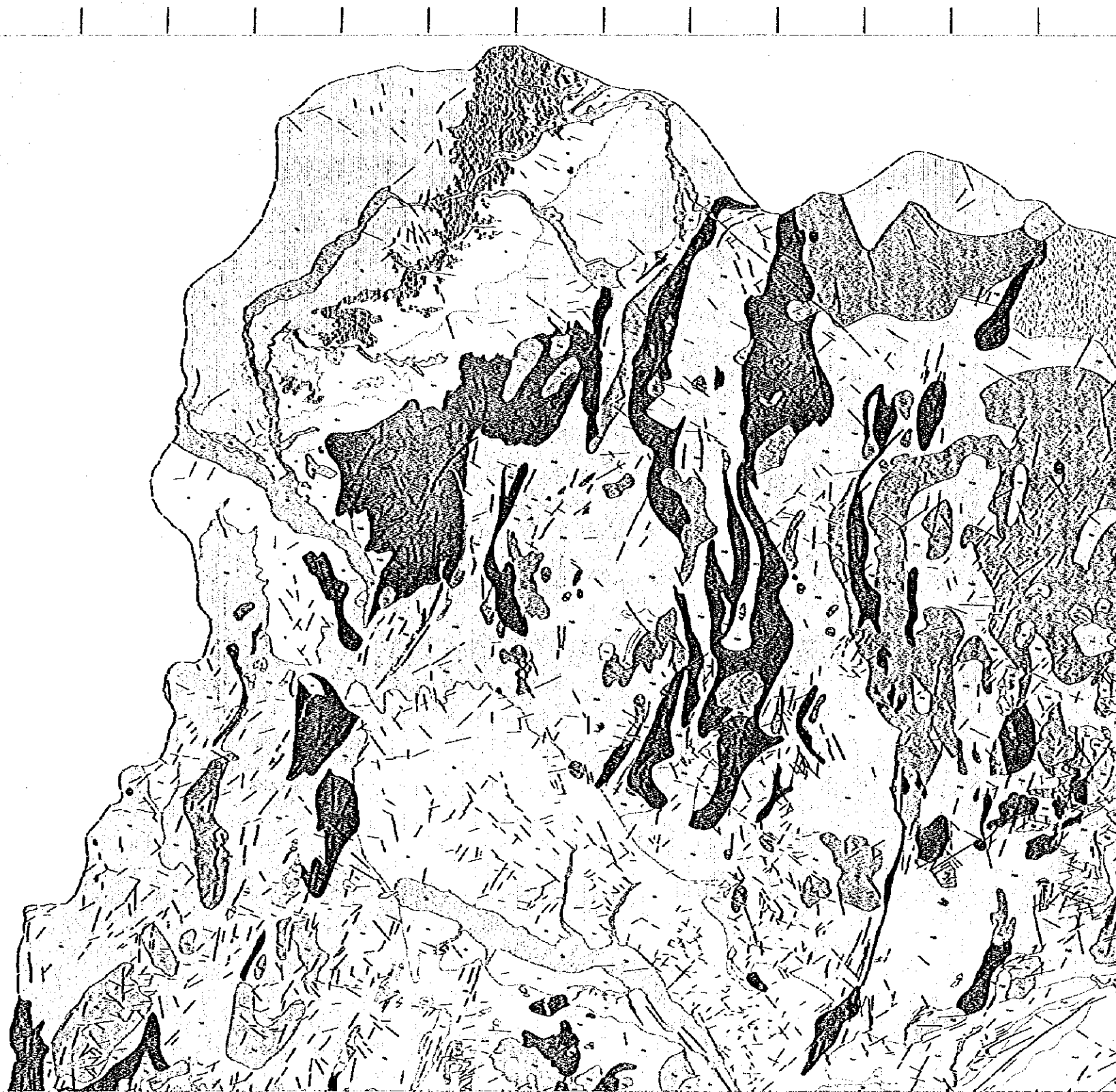
GEOLOGY

Sheet 1

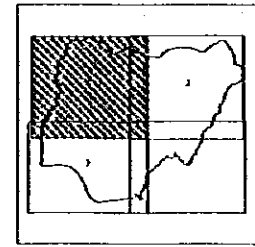
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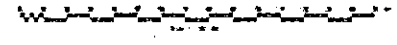
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The National Water Resources Master Plan (NWRMP) in the Federal Republic of Nigeria
Lithological identifications and symbols are modified from the 1:2,000,000 scale
Geological Map of Nigeria compiled and published by the Geological Survey of Nigeria
1984



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SA	14.5 8.5	100	SI	9.5 3.1	997	SI	9.5 3.1	997	SI	9.5 3.1
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SC	14.5 8.5	100	SI	9.5 3.1	997	SI	9.5 3.1	997	SI	9.5 3.1
SD	14.5 8.5	100	SI	9.5 3.1	997	SI	9.5 3.1	997	SI	9.5 3.1
SE	14.5 8.5	100	SI	9.5 3.1	997	SI	9.5 3.1	997	SI	9.5 3.1
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SG	14.5 8.5	100	SI	9.5 3.1	997	SI	9.5 3.1	997	SI	9.5 3.1
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GEOLOGY

Sheet 2

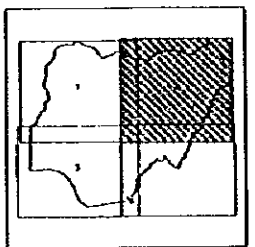
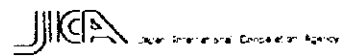


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The National Water Resources Map (NWRM) in the Federal Republic of Nigeria. Lithological units and symbols are modified from the 1:200,000 scale Geological Map of Nigeria compiled and published by the Geological Survey of Nigeria 1984.

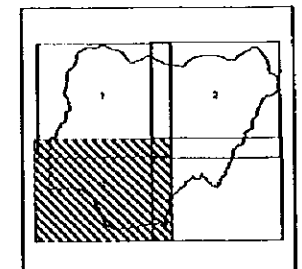


GEOLOGY

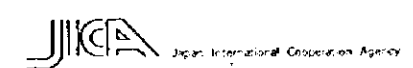
Sheet 3



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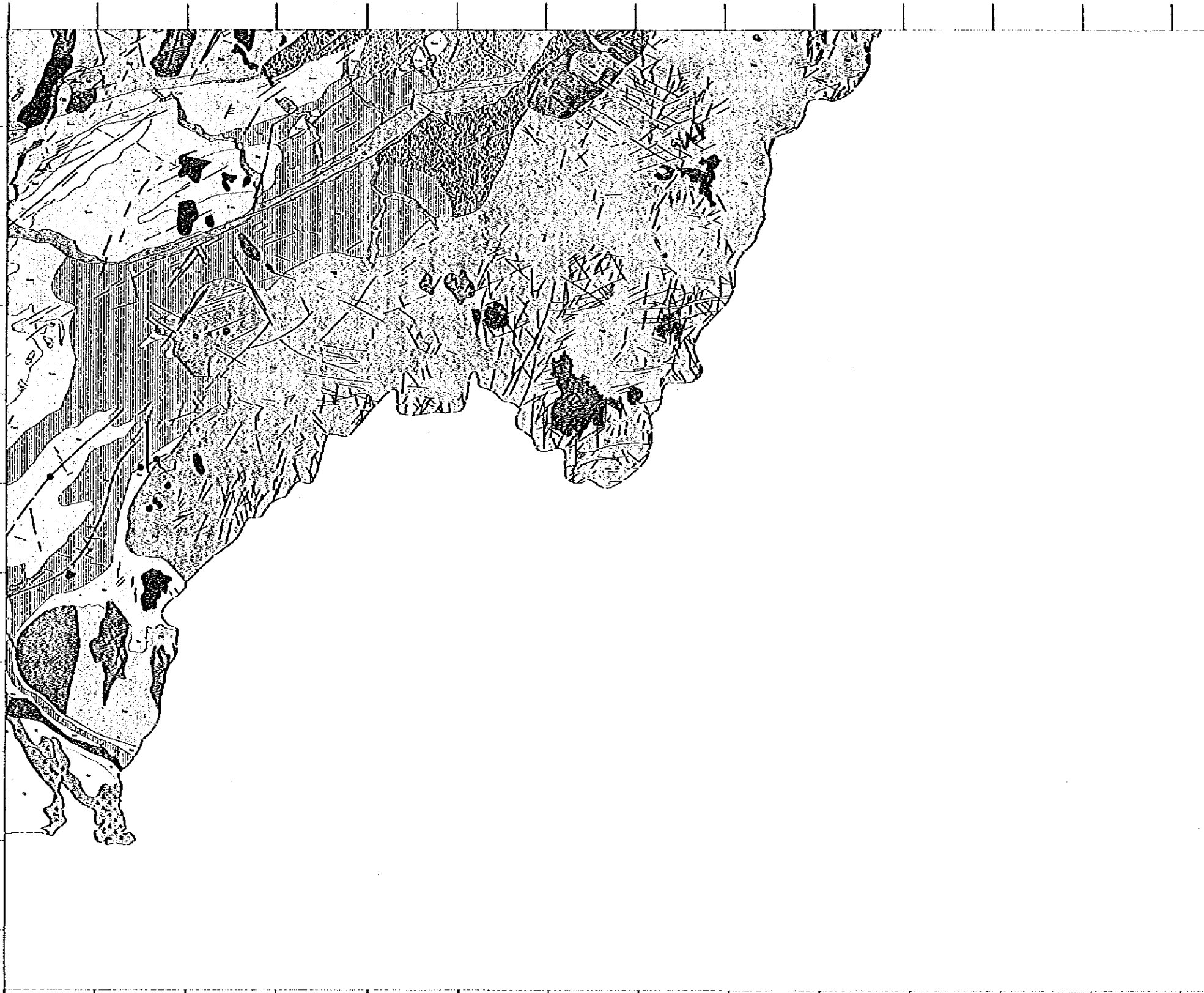


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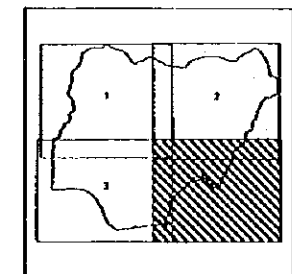
Sheet 4

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| Tr | Kt |
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E3 40'

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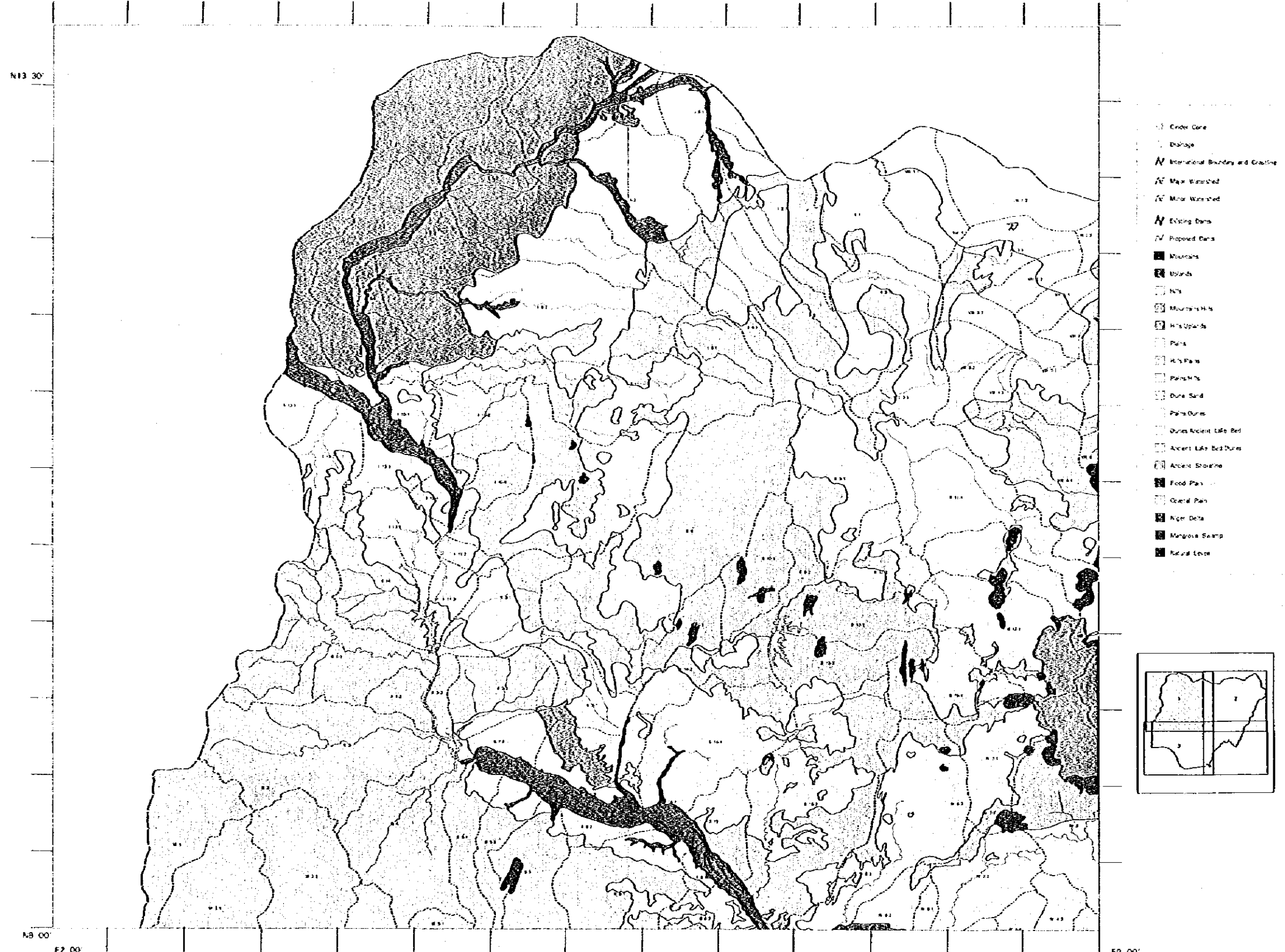
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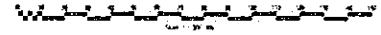
JICA Japan International Cooperation Agency

GEOMORPHOLOGY - WATERSHEDS

Sheet 1



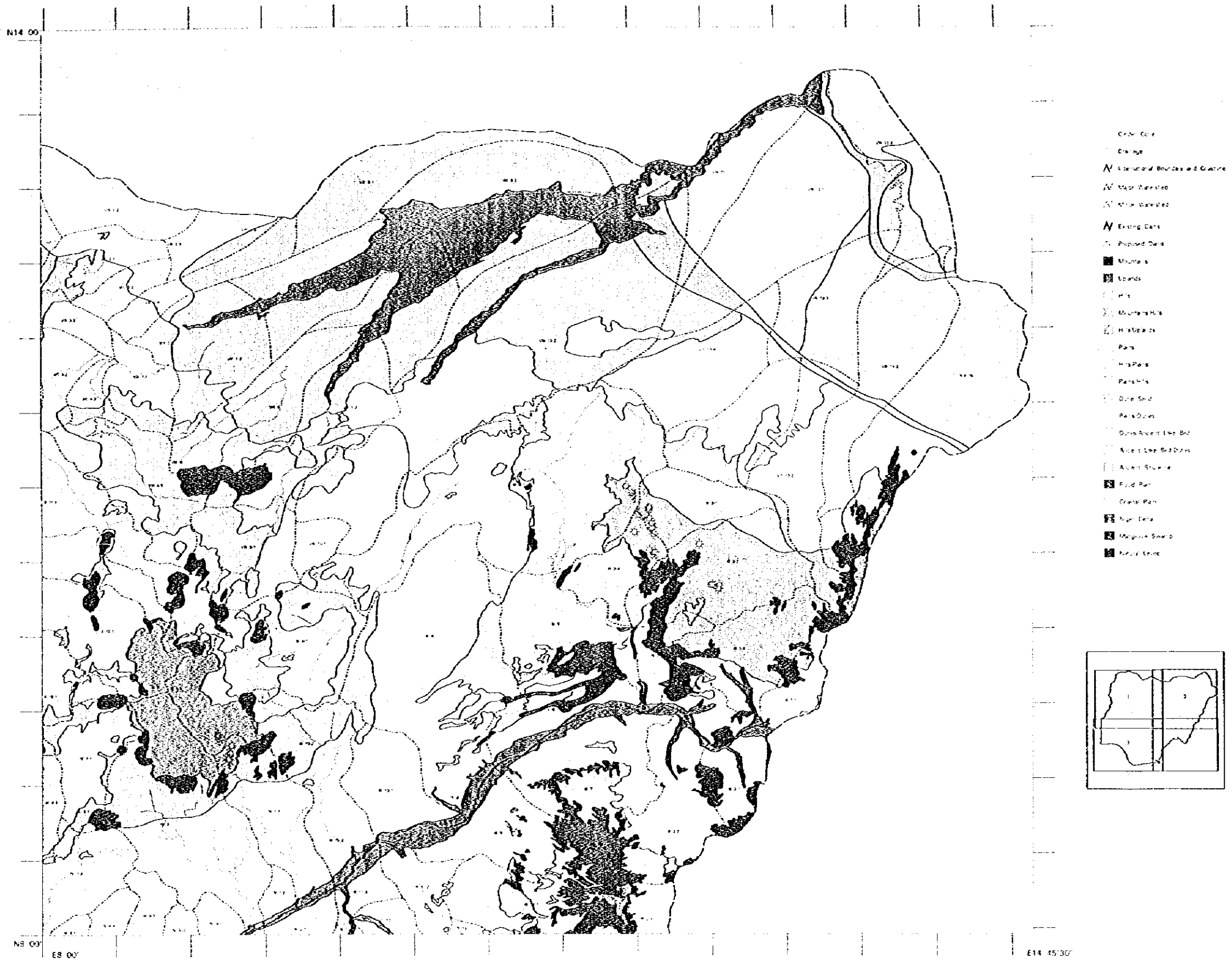
The National Water Resources Master Plan (NWRMP)
in the Federal Republic of Nigeria



JICA Japan International Cooperation Agency

GEOMORPHOLOGY - WATERSHEDS

Sheet 2

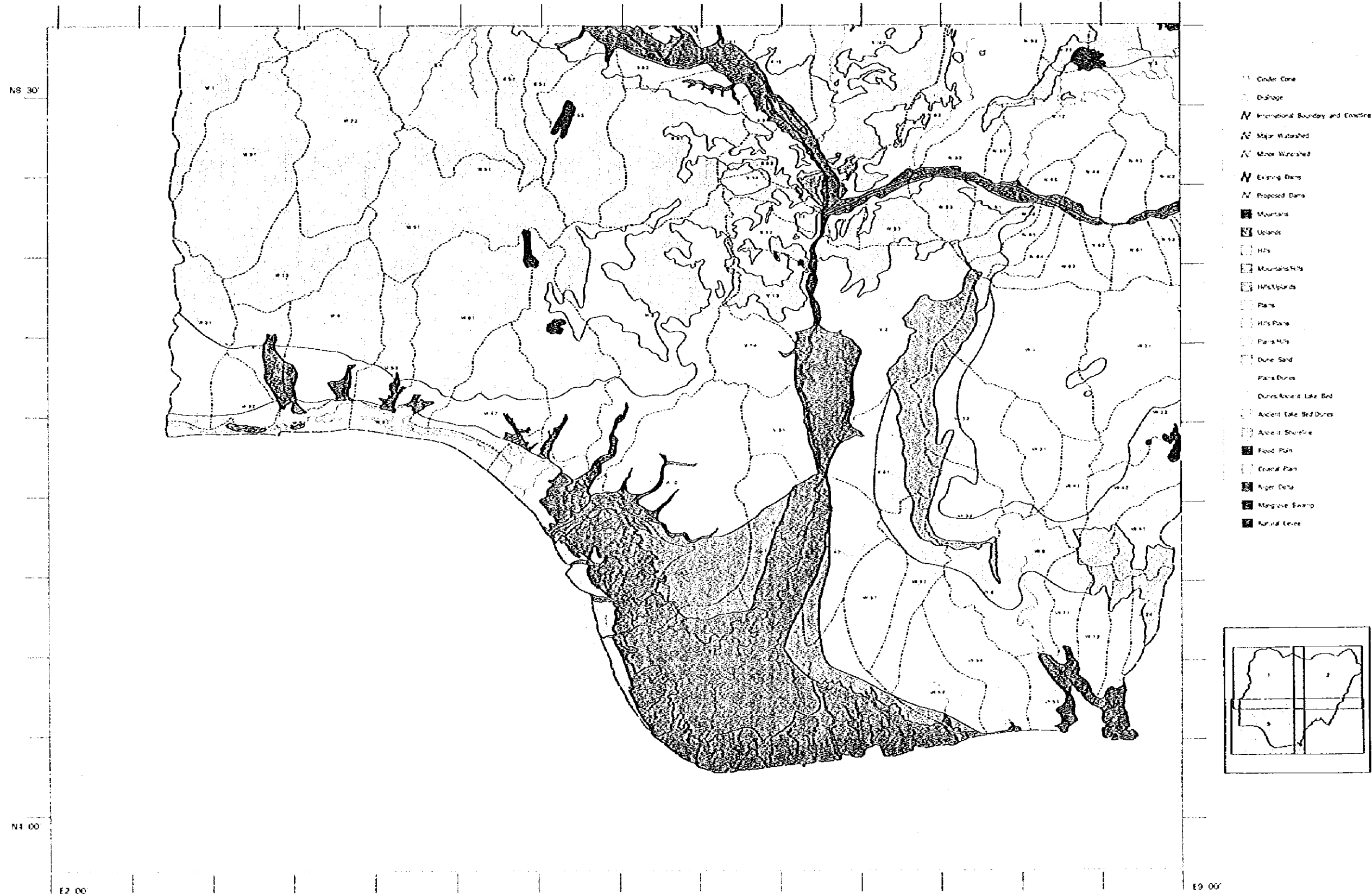


The National Water Resources Master Plan (NWRMP)
in the Federal Republic of Nigeria

JICA Japan International Cooperation Agency

GEOMORPHOLOGY - WATERSHEDS

Sheet 3



LAND COVER

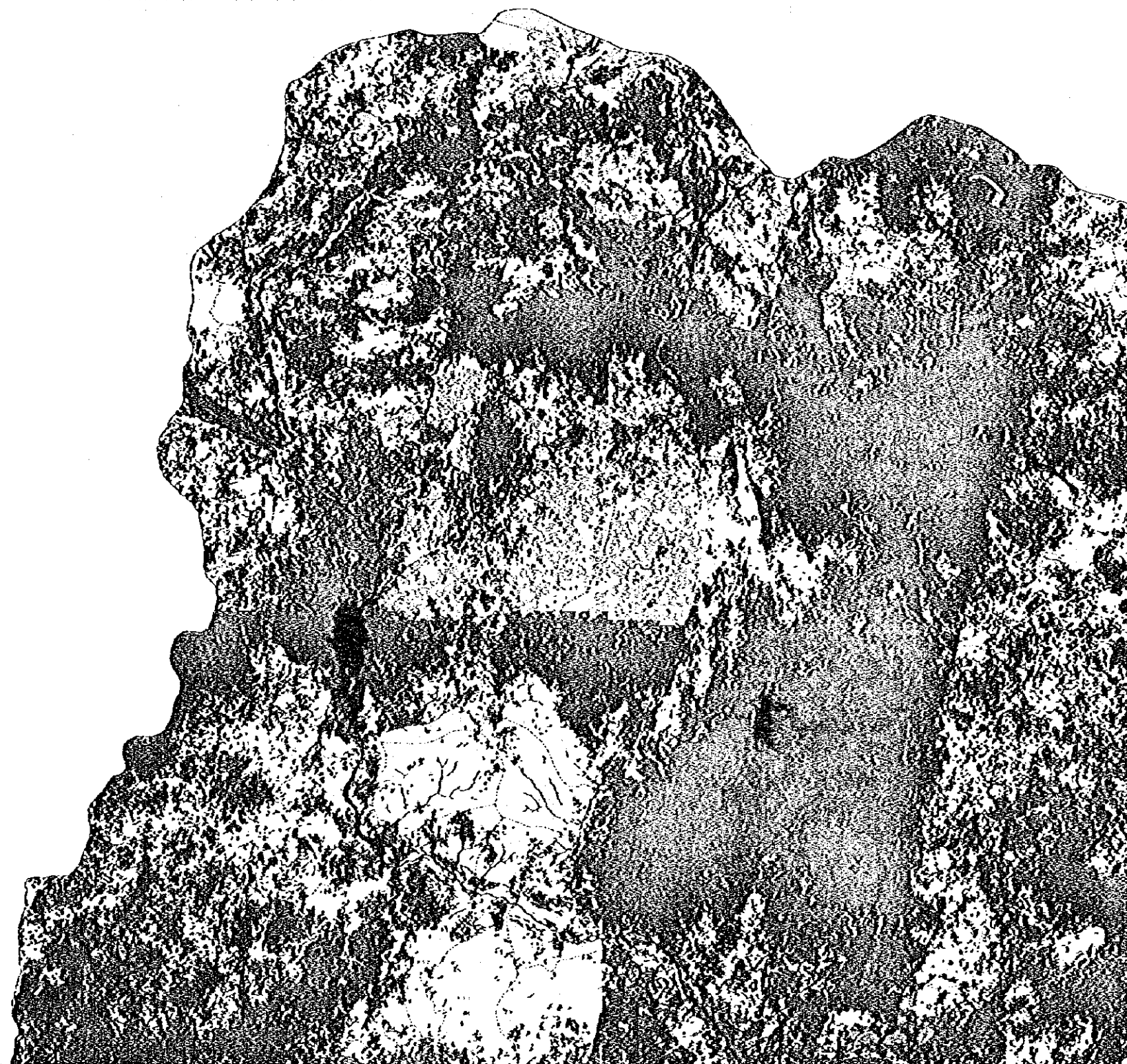
Sheet 1

N13 30

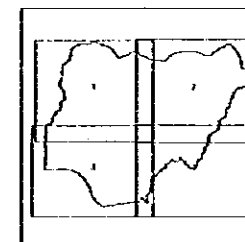
N13 00

E2 00

E3 00



- N1 National Boundaries and Centre
- N2 Major Districts
- N3 Minor Districts
- N4 Existing Data
- N5 Proposed Data
- M1 Mangroves
- M2 Tropical Rain Forest
- M3 Grassland Savanna
- M4 Deciduous
- M5 Semi-deciduous
- M6 Woodland
- M7 Agriculture
- M8 Urban
- M9 Urban District



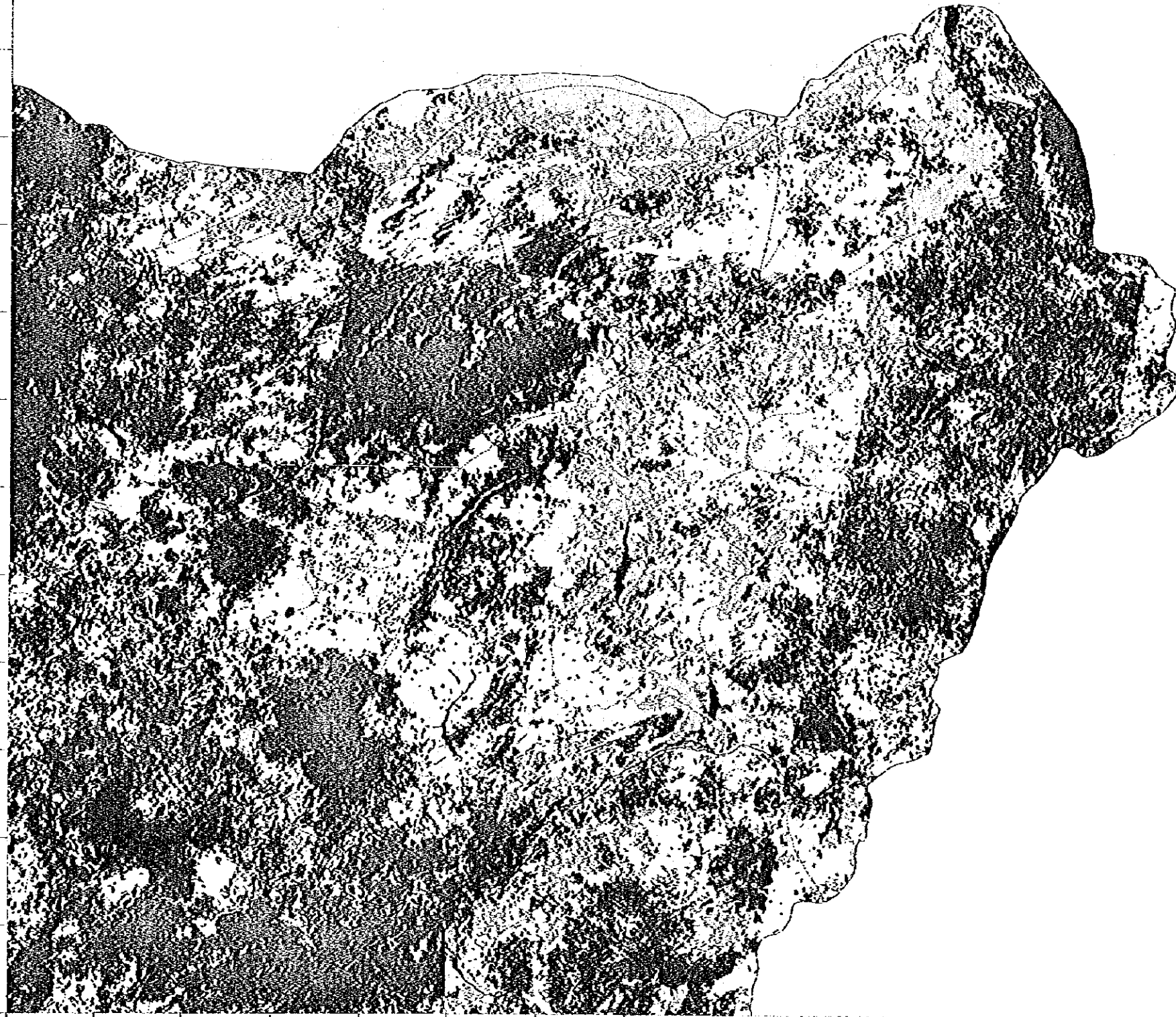
LAND COVER

Sheet 2

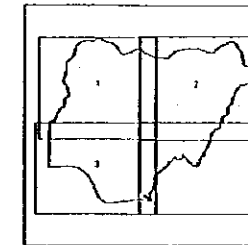
N14 00'

N3 00'
E8 00'

E14 45'30"



- International Boundary and Outline
- Major Waterbody
- Minor Waterbody
- Existing Dam
- Proposed Dam
- Mangroves
- Tropical Rain Forest
- Grassland Savanna
- Woodland
- Wetland
- Breeland
- Agriculture
- Water
- Urban District



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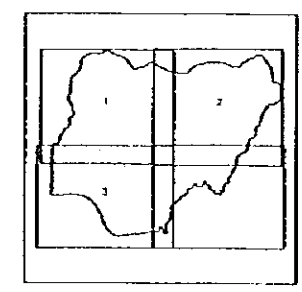
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LAND COVER

Sheet 3



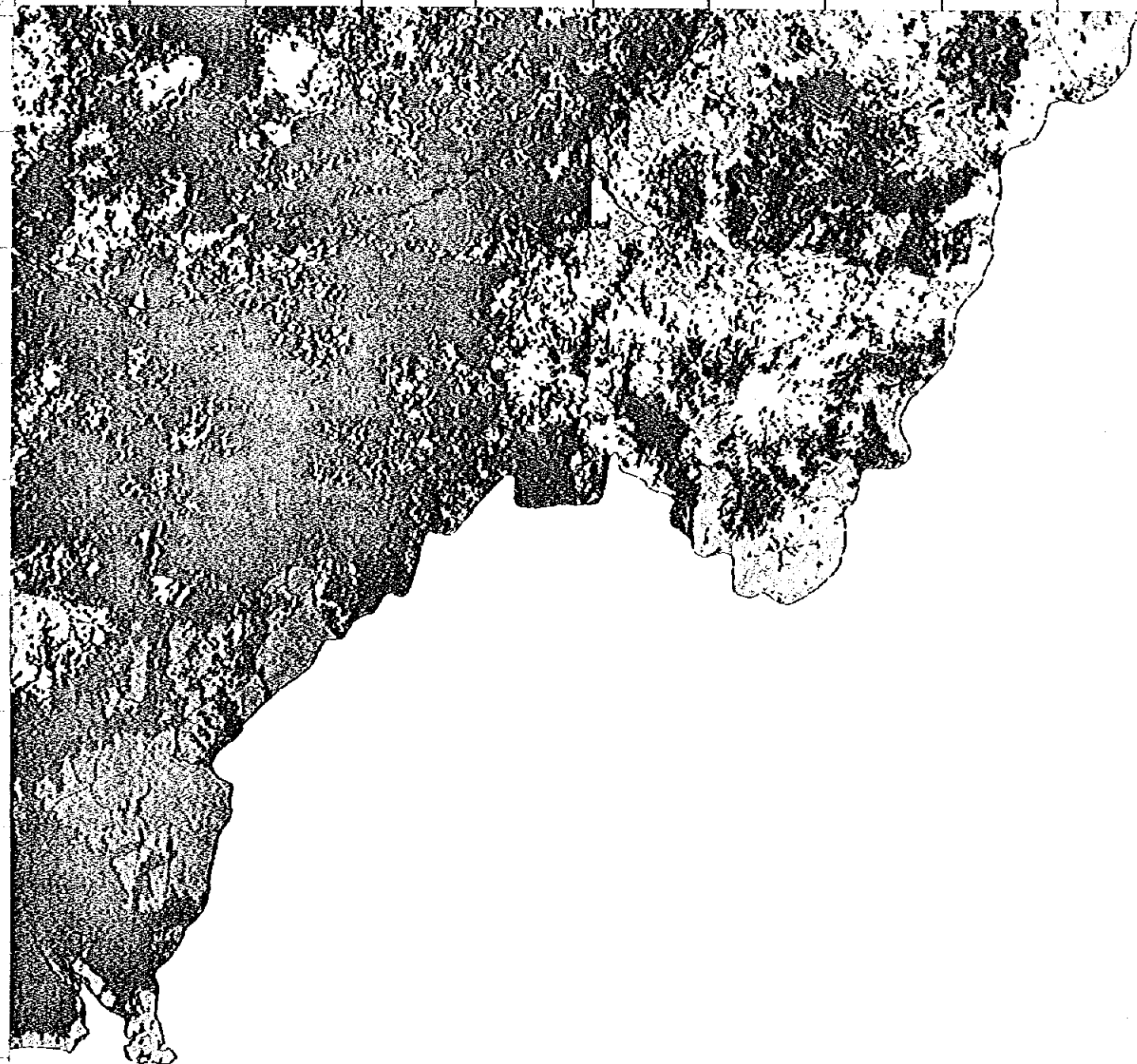
- International Boundary and Crustine
- Major Watershed
- Minor Watershed
- Existing Dams
- Proposed Dams
- Mangrove
- Tropical Rain Forest
- Grassland/Savanna
- Woodland
- Wetlands
- Barland
- Agriculture
- Water
- Urban Disturbed



LAND COVER

Sheet 4

N9 00'



N8 30'

E3 40'

E14 45.30'

- Interlocking Building and Concrete
- Mangrove
- Mixed Woodland
- Existing Dams
- Proposed Dams
- Mangrove
- Tropical Rain Forest
- Ground Surface
- Woodland
- Wetland
- Beach
- Agriculture
- Bare
- Urban District

