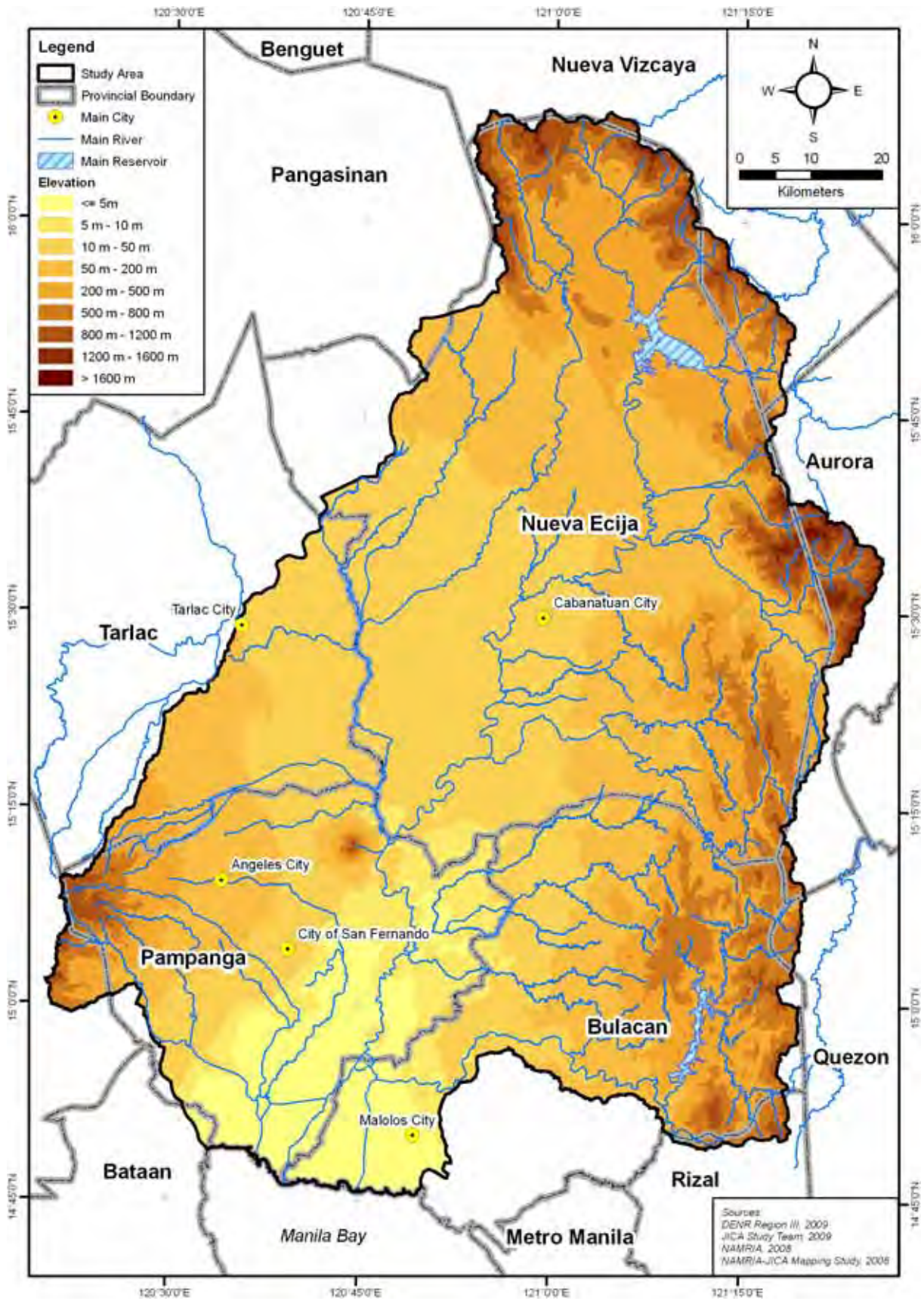
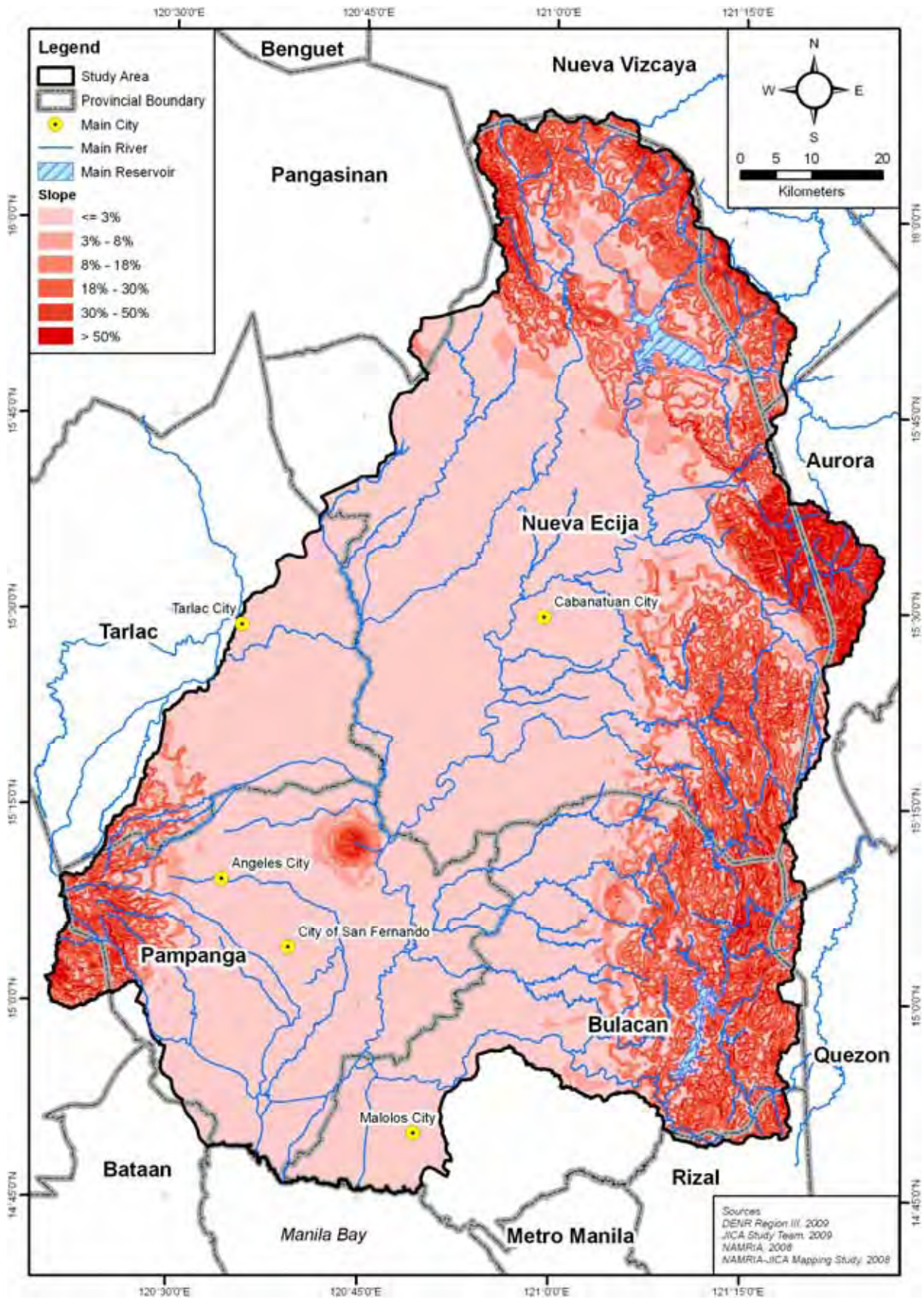


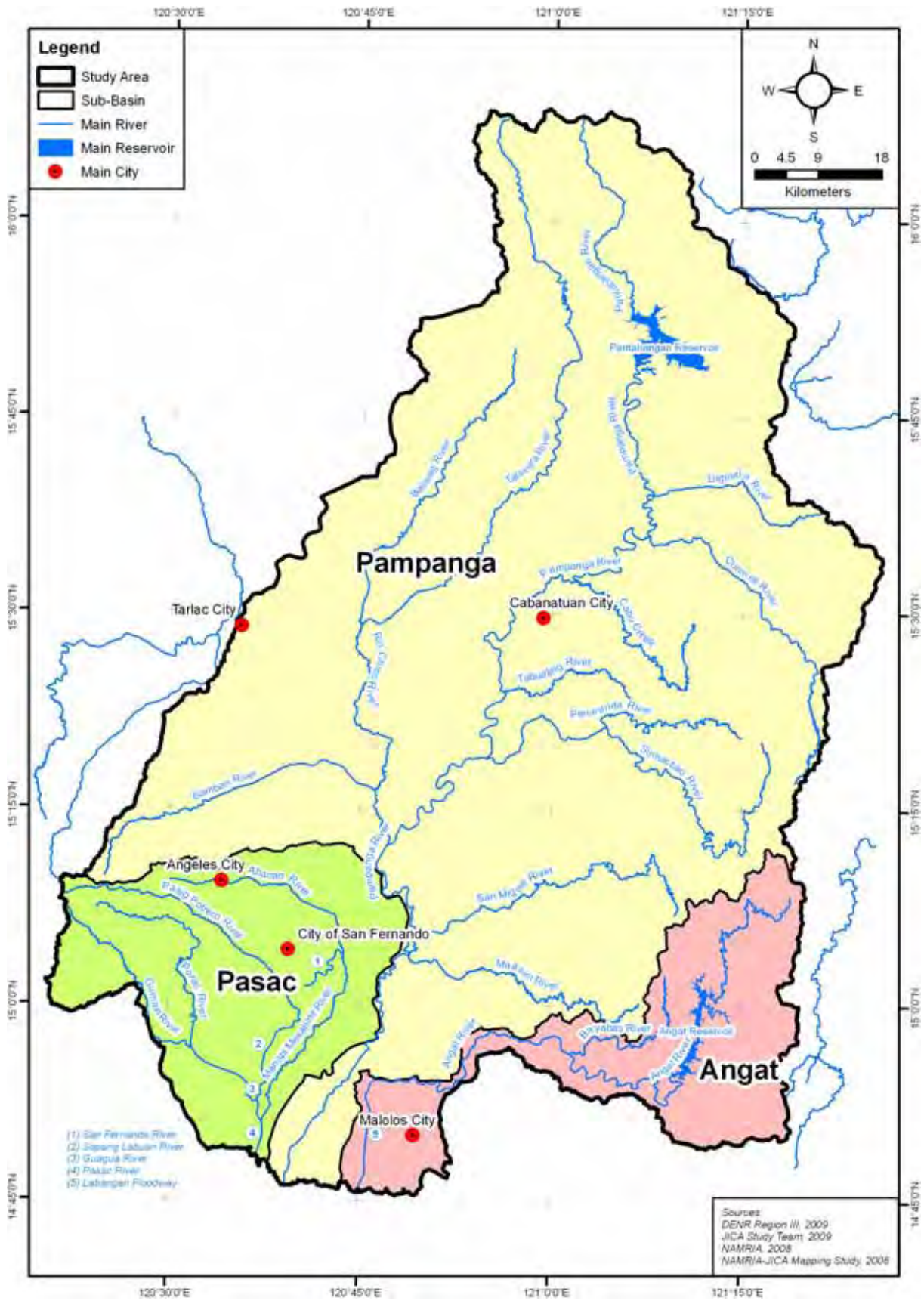
Annex-Figures



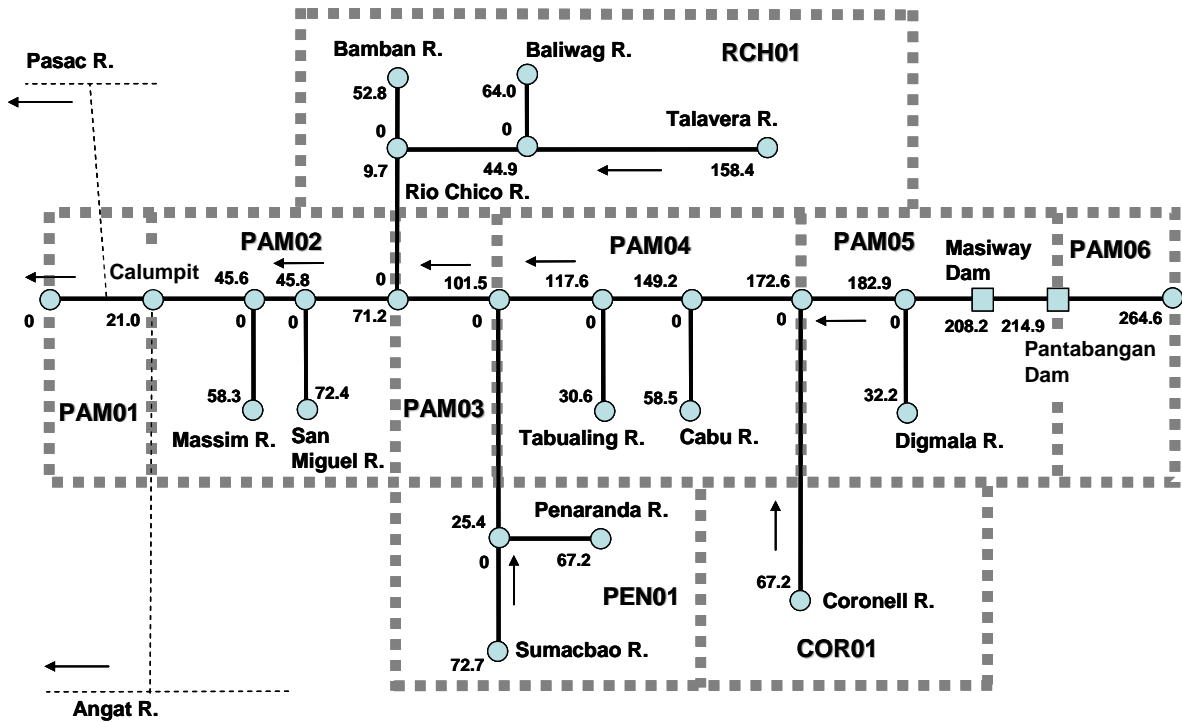
Annex-F 2.1.1 Distribution of Elevation Zones in the Study Area



Annex-F 2.1.2 Distribution of Slope Category in the Study Area



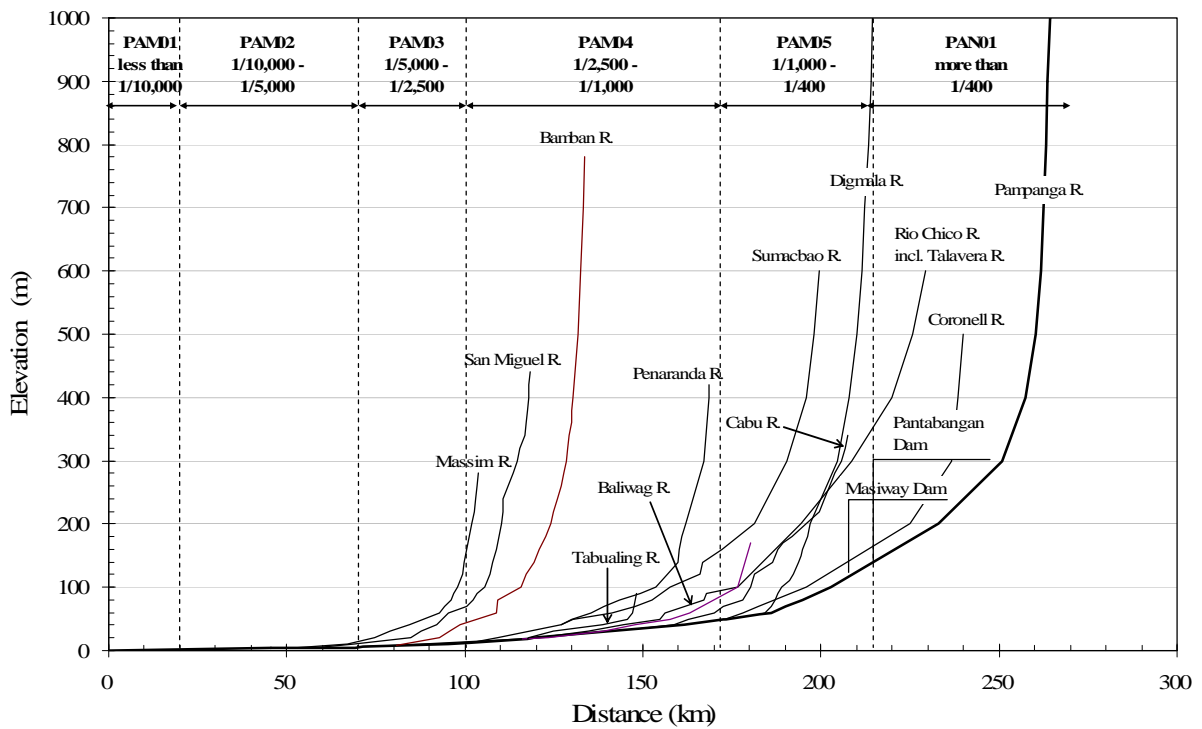
Annex-F 2.2.1 Principal Sub-basins in the Study Area



Note: Number shows distance in km from downstream end of a river.

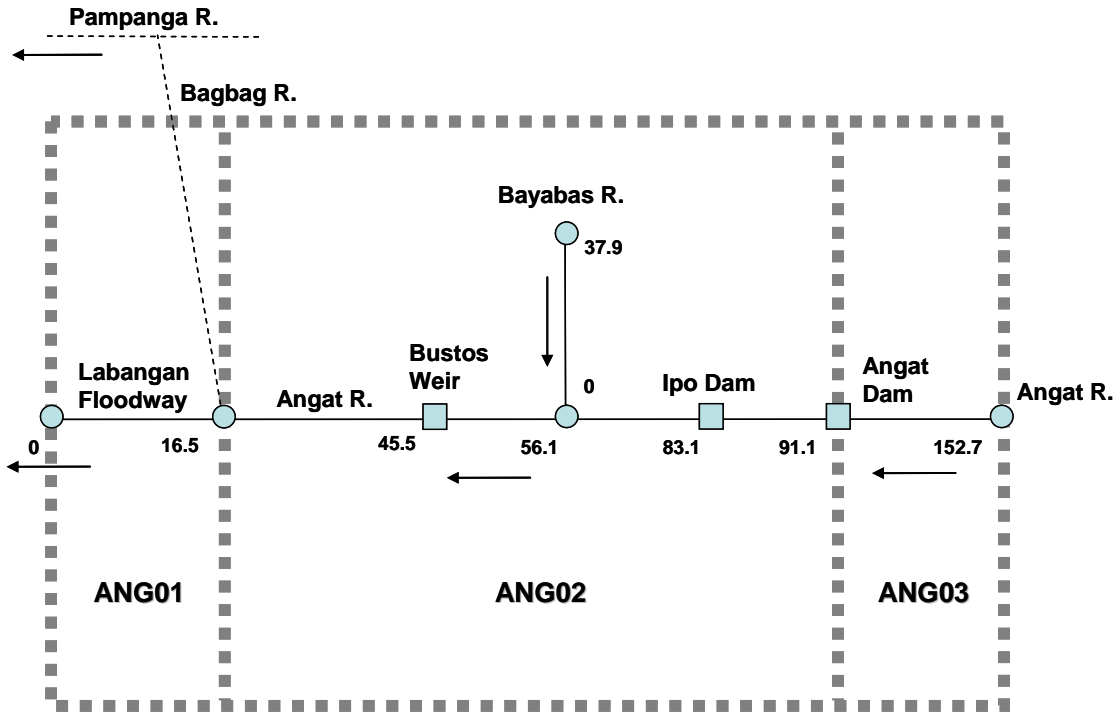
Source: JICA Study Team

Annex-F 2.2.2 Schematic River System in Pampanga Main River System



Source: JICA Study Team

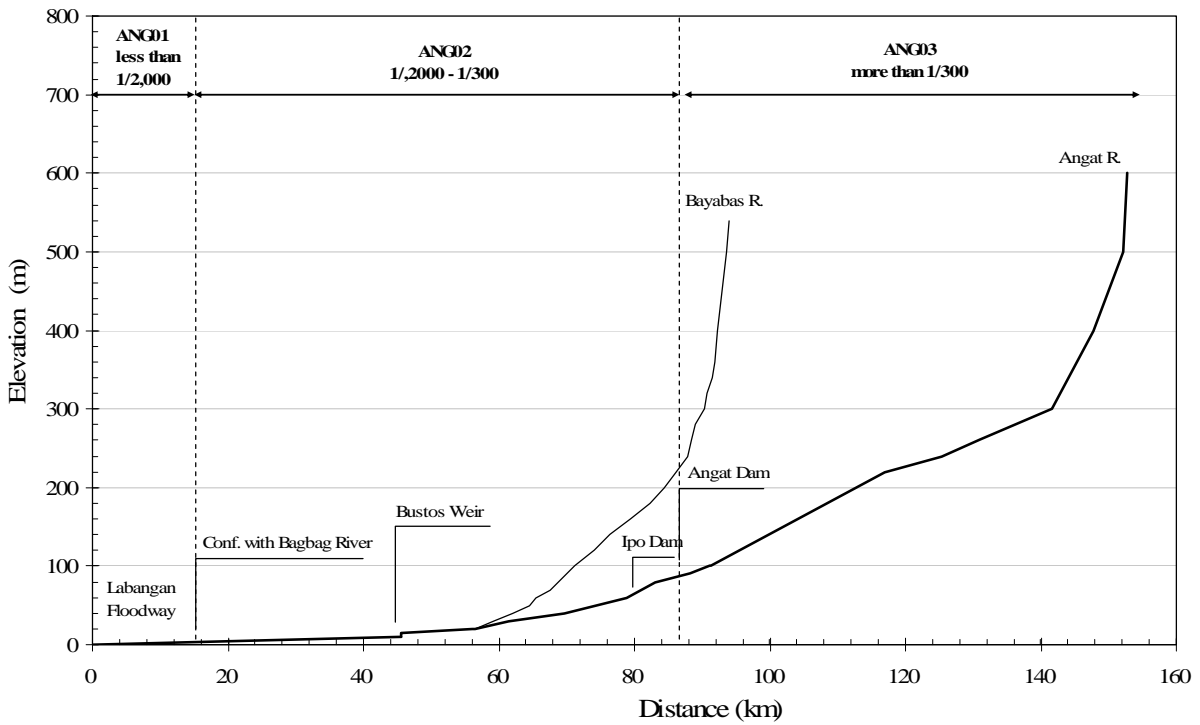
Annex-F 2.2.3 Longitudinal Profile of the Main Rivers in Pampanga Main River System



Note: Number shows distance in km from downstream end of a river.

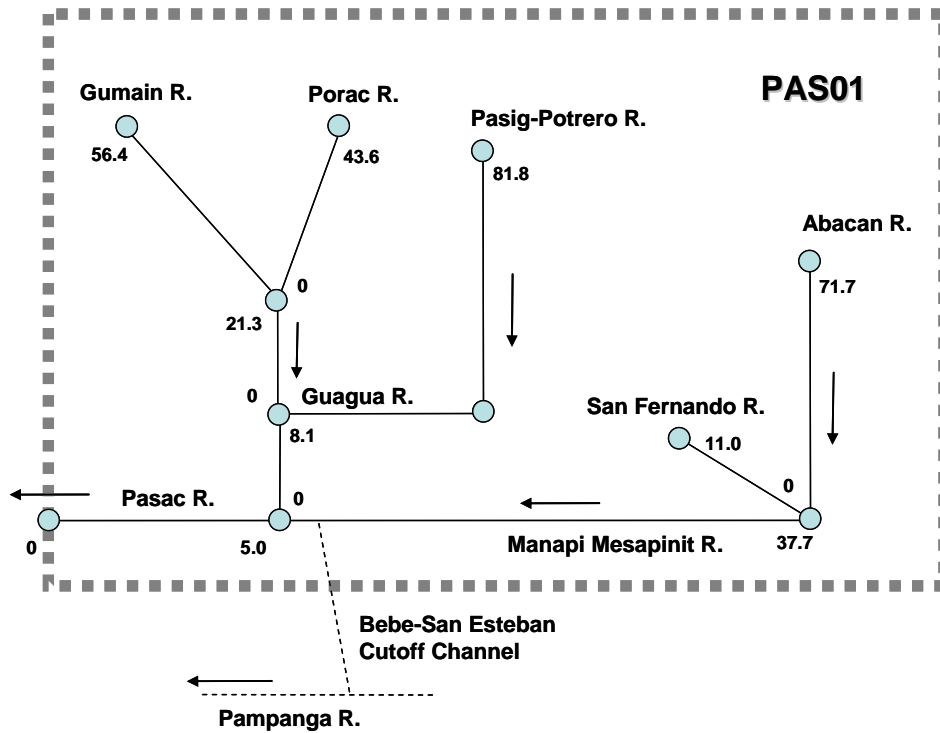
Source: JICA Study Team

Annex-F 2.2.4 Schematic River System in Angat River System



Source: JICA Study Team

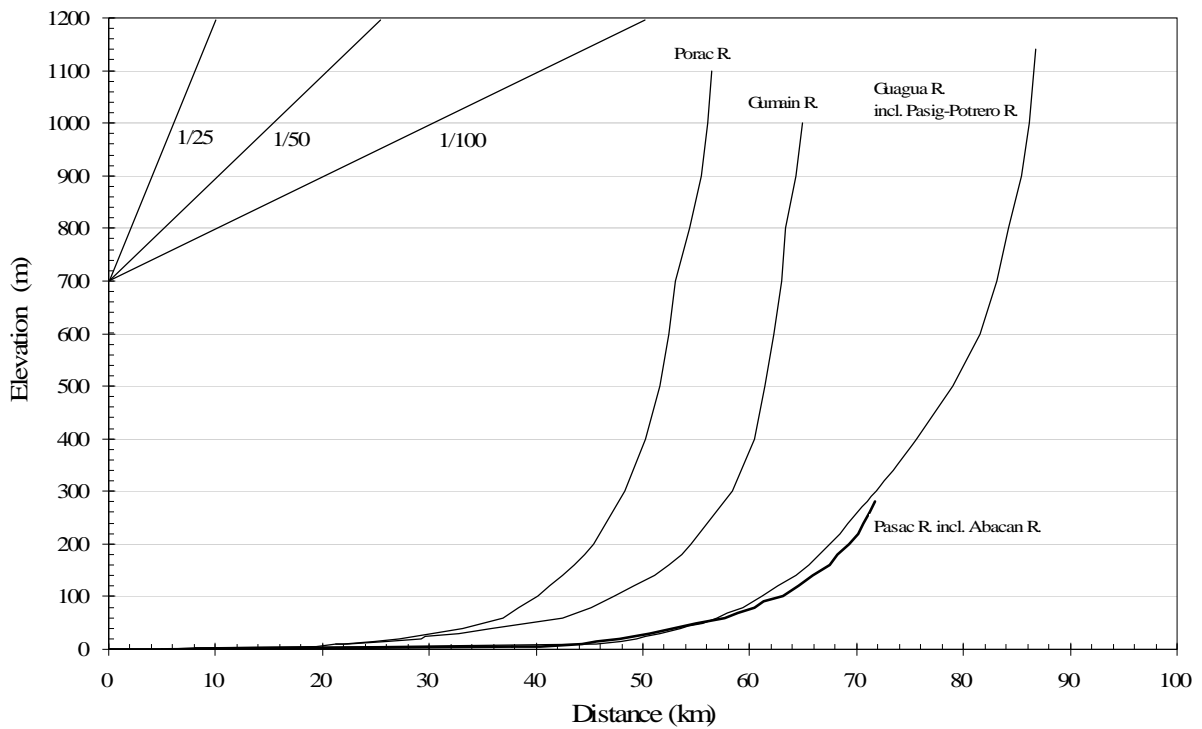
Annex-F 2.2.5 Longitudinal Profile of the Main Rivers in Angat River System



Note: Number shows distance in km from downstream end of a river.

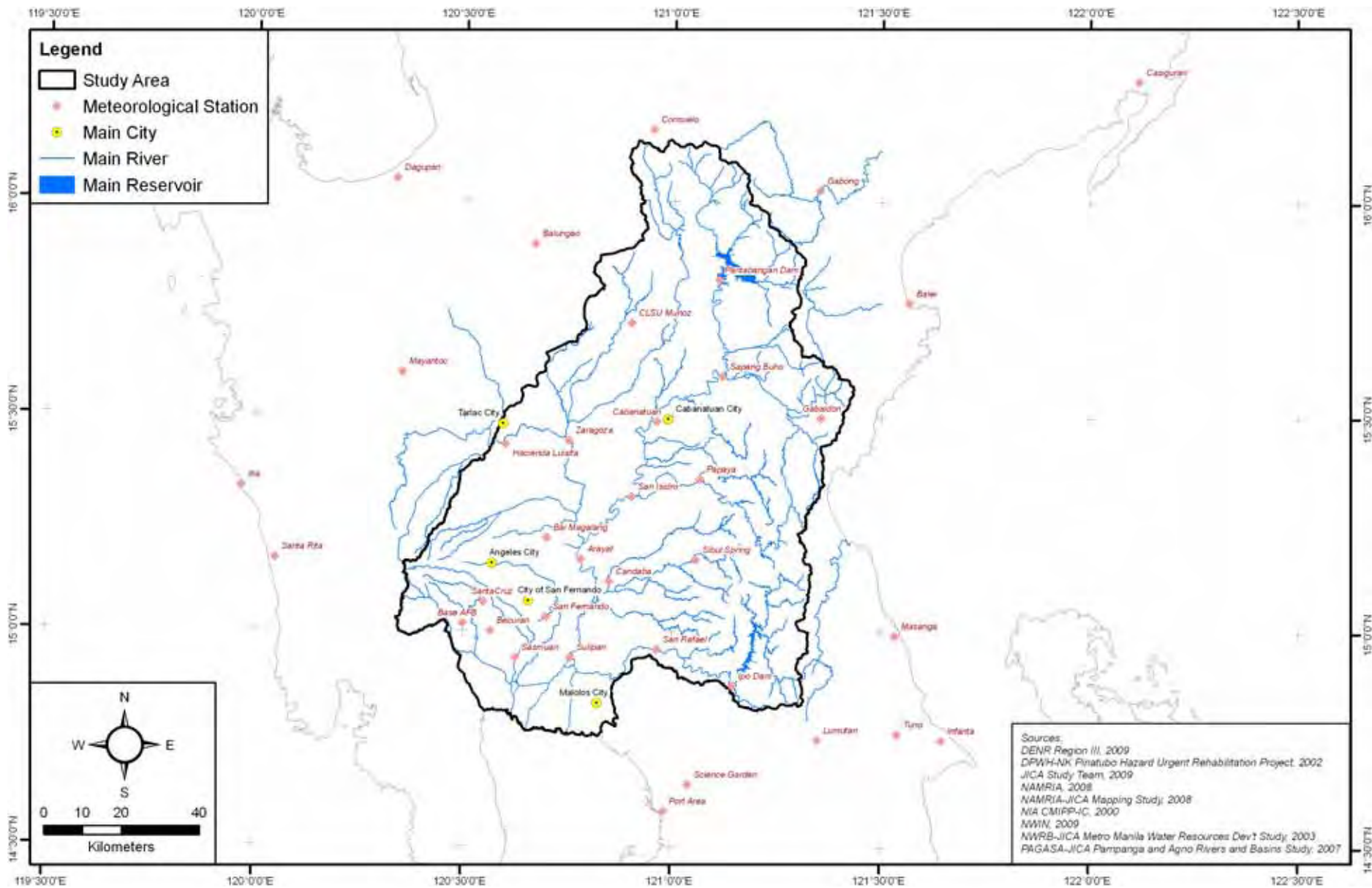
Source: JICA Study Team

Annex-F 2.2.6 Schematic River System in Pasac River System

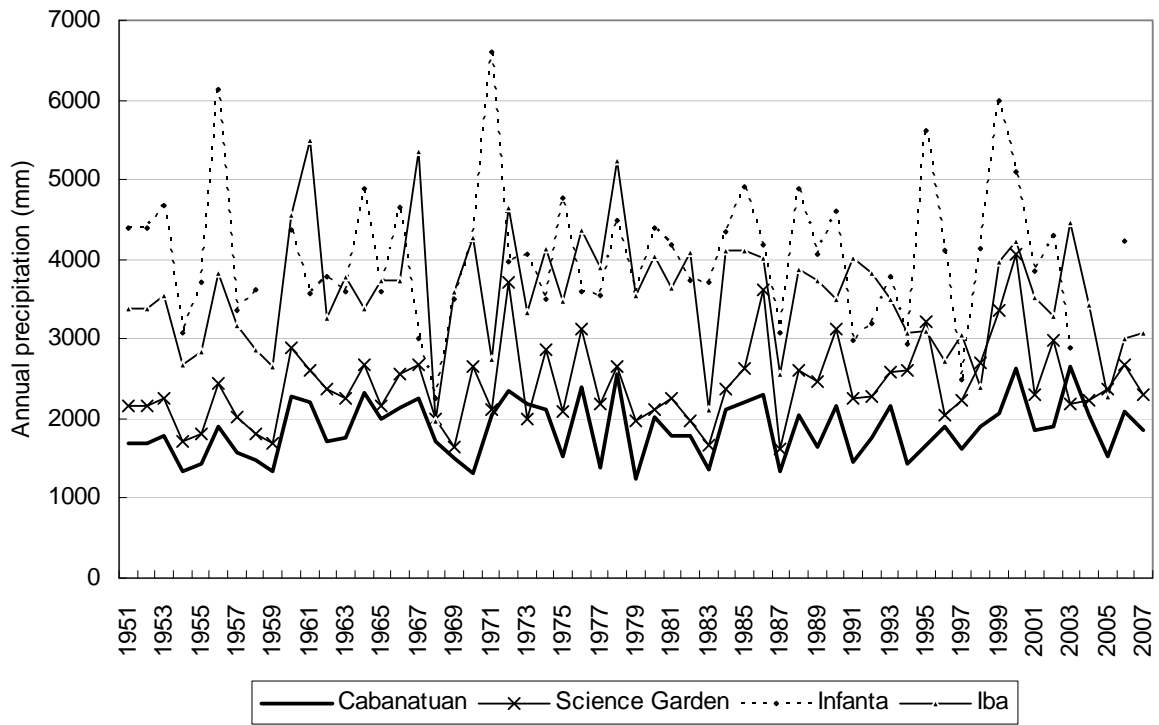


Source: JICA Study Team

Annex-F 2.2.7 Longitudinal Profile of the Main Rivers in Pasac River System

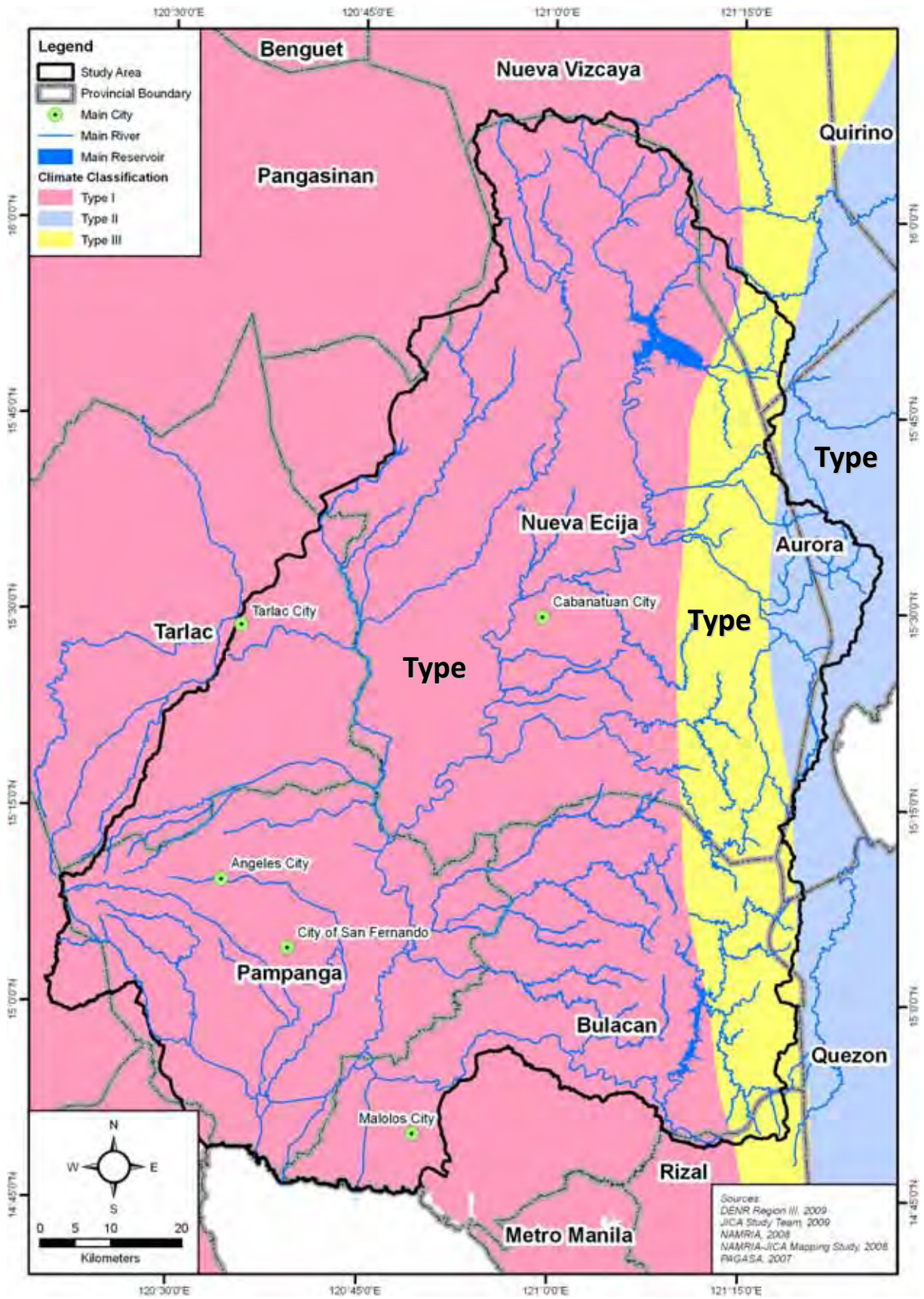


Annex-F 2.3.1 Location of Meteorological Stations

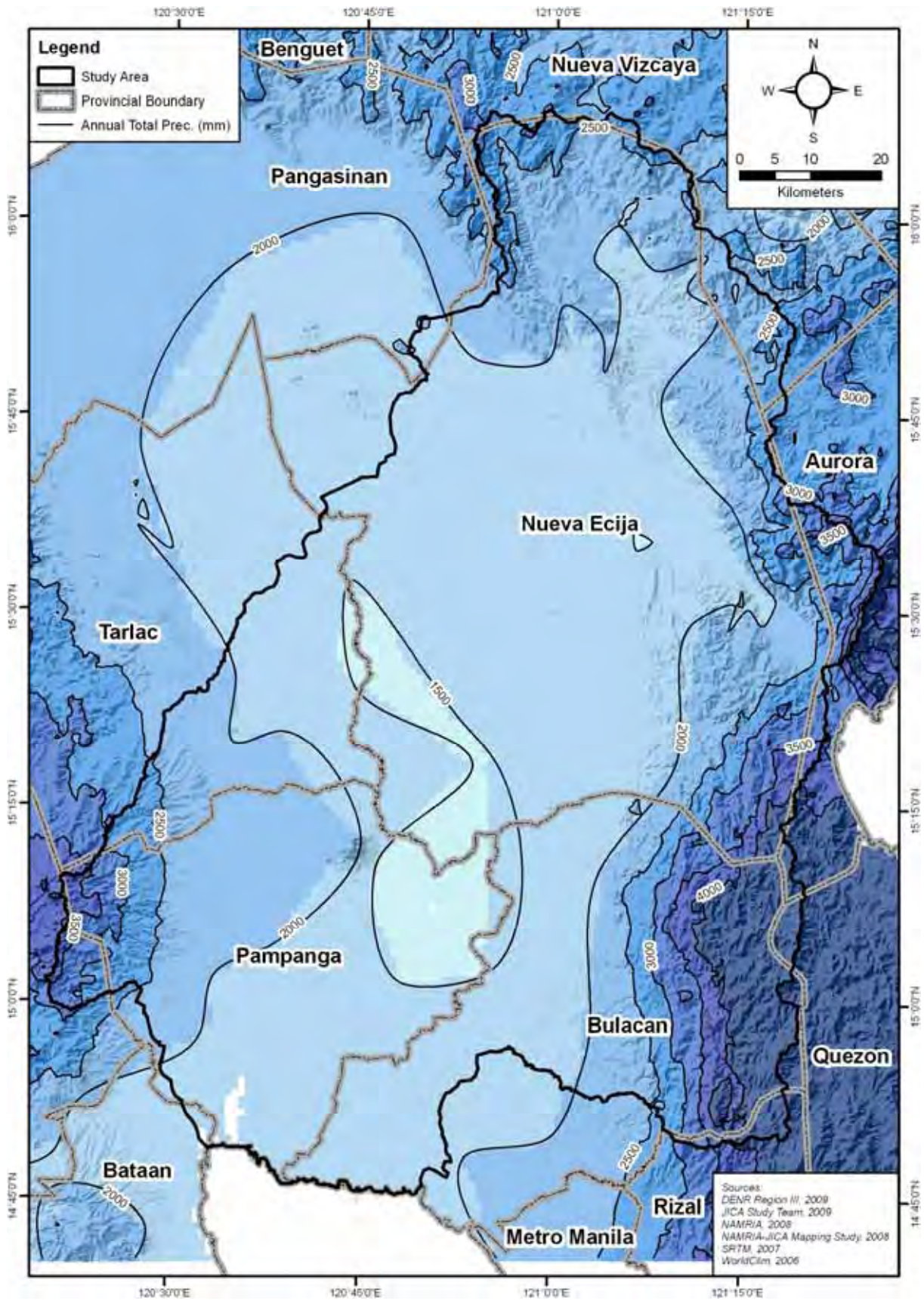


Source: JICA Study Team based on PAGASA data

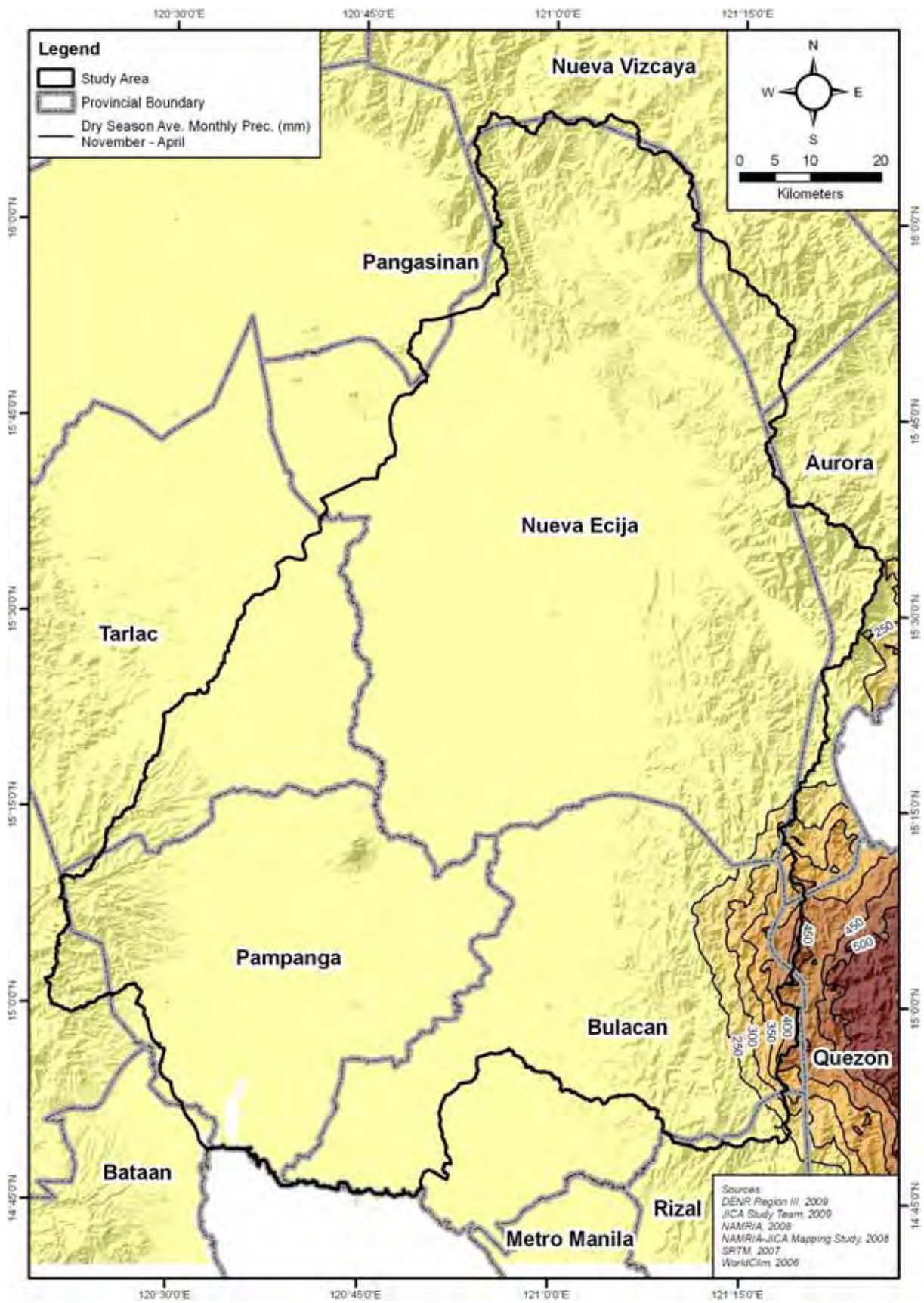
Annex-F 2.3.2 Change in Annual Total Precipitation at Key Stations



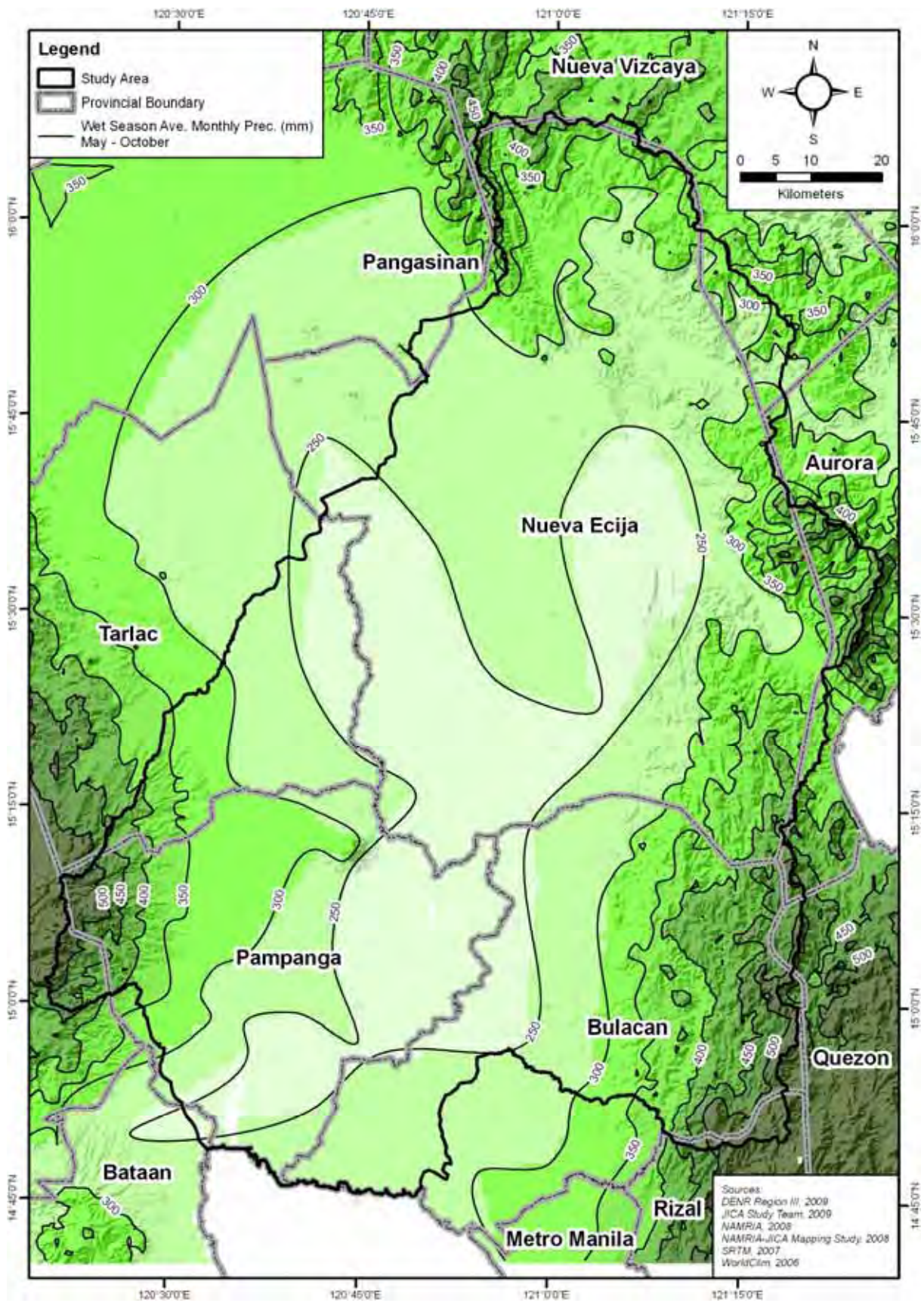
Annex-F 2.3.3 Climate Zones



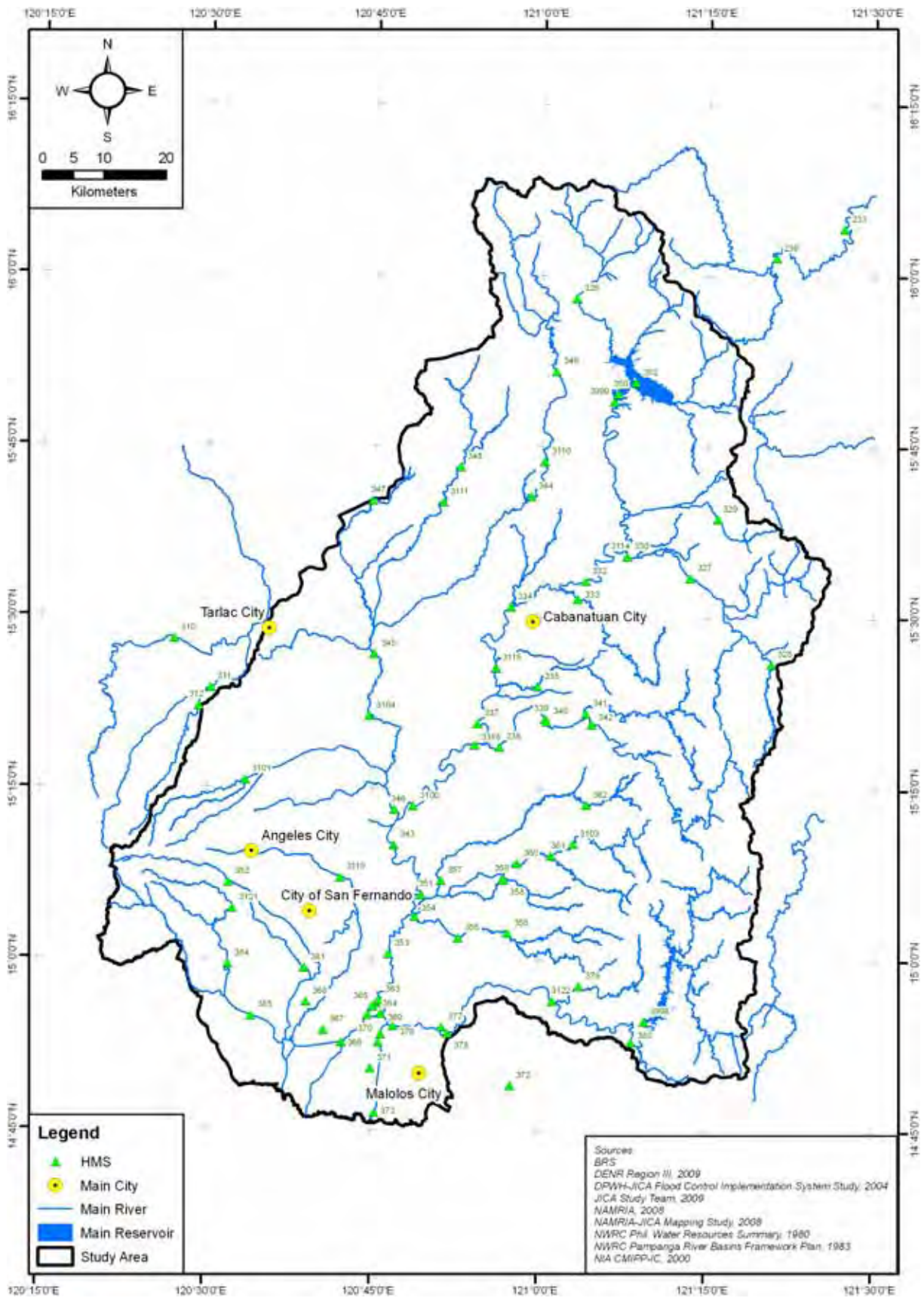
Annex-F 2.3.4 Spatial Distribution of Annual Total Precipitation



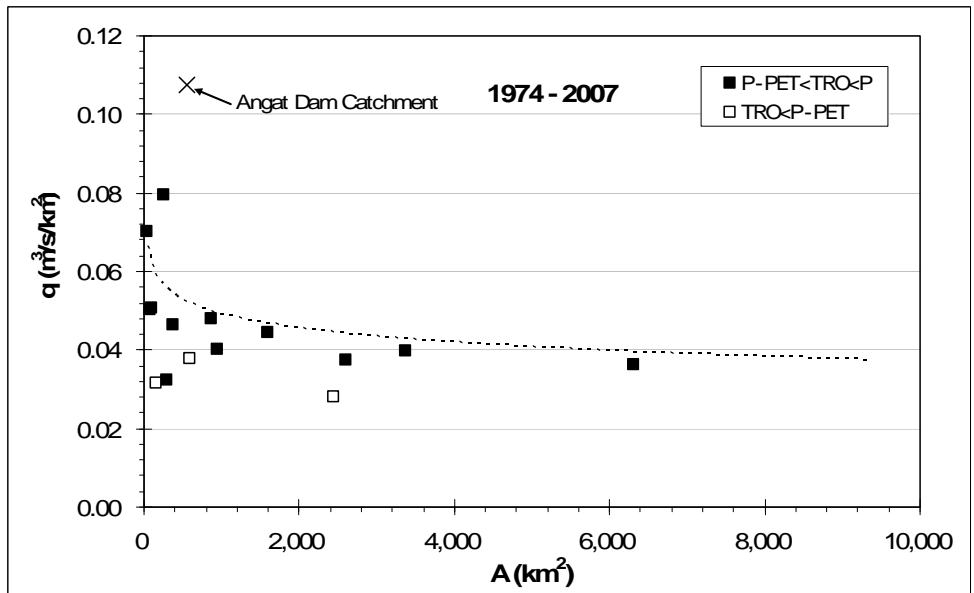
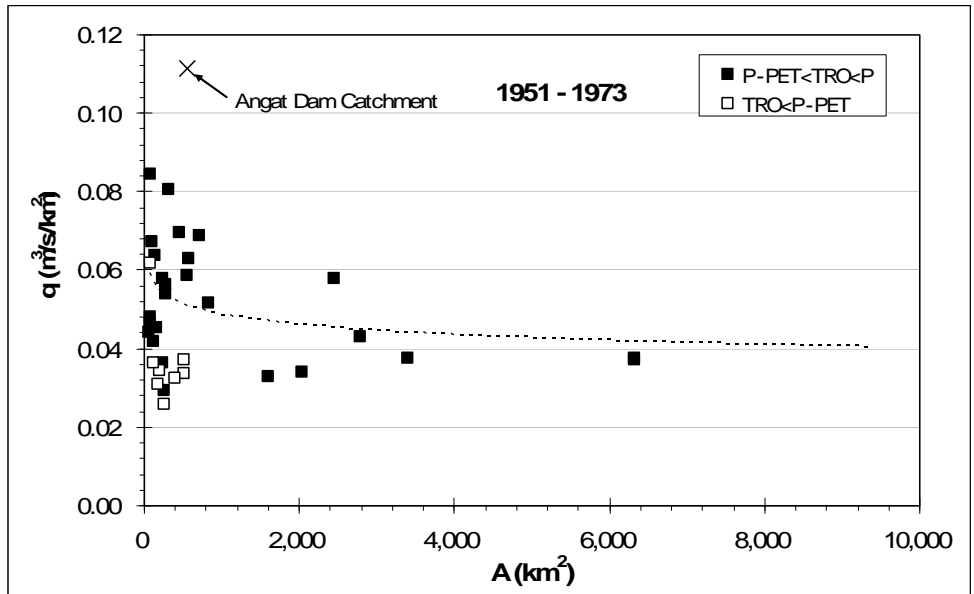
Annex-F 2.3.5 Spatial Distribution of Precipitation in Dry Season



Annex-F 2.3.6 Spatial Distribution of Precipitation in Wet Season

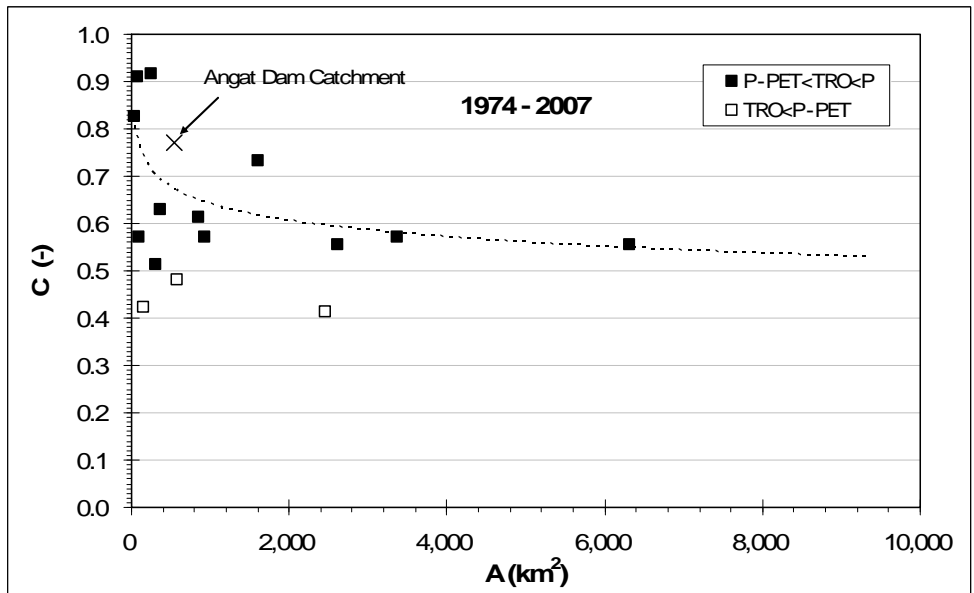
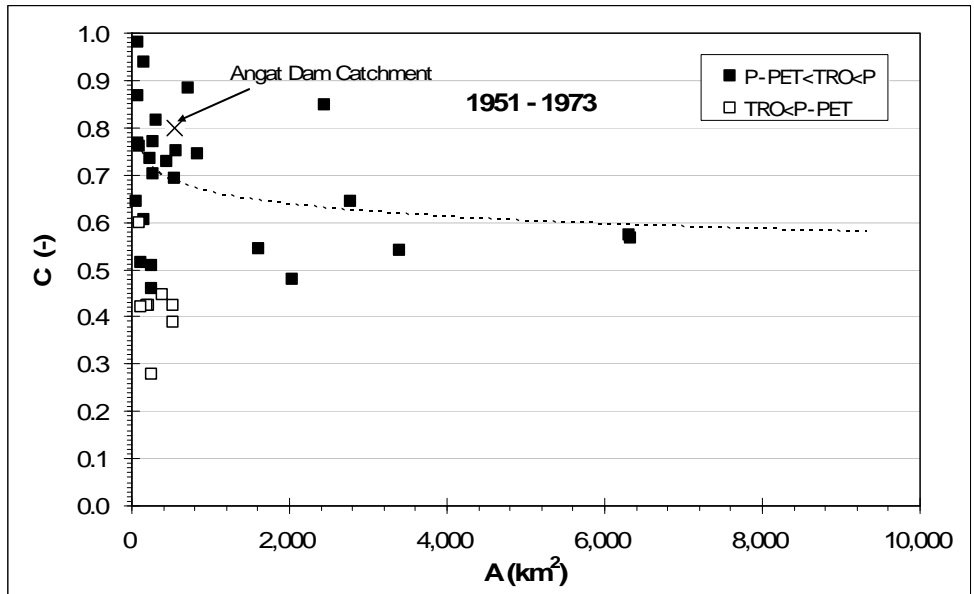


Annex-F 2.4.1 Location of Hydrometric Stations



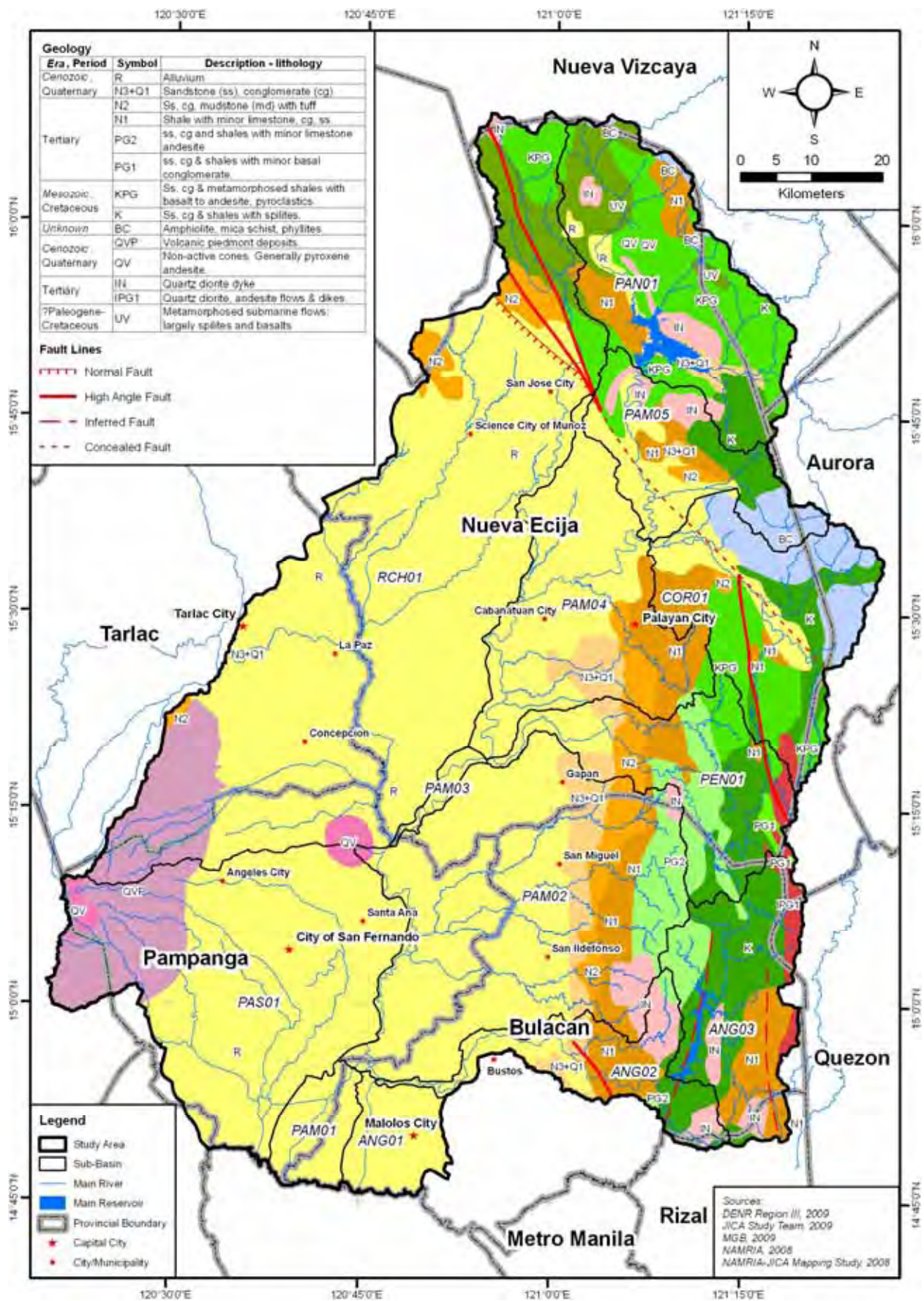
Source: JICA Study Team

Annex-F 2.4.2 Specific Discharge

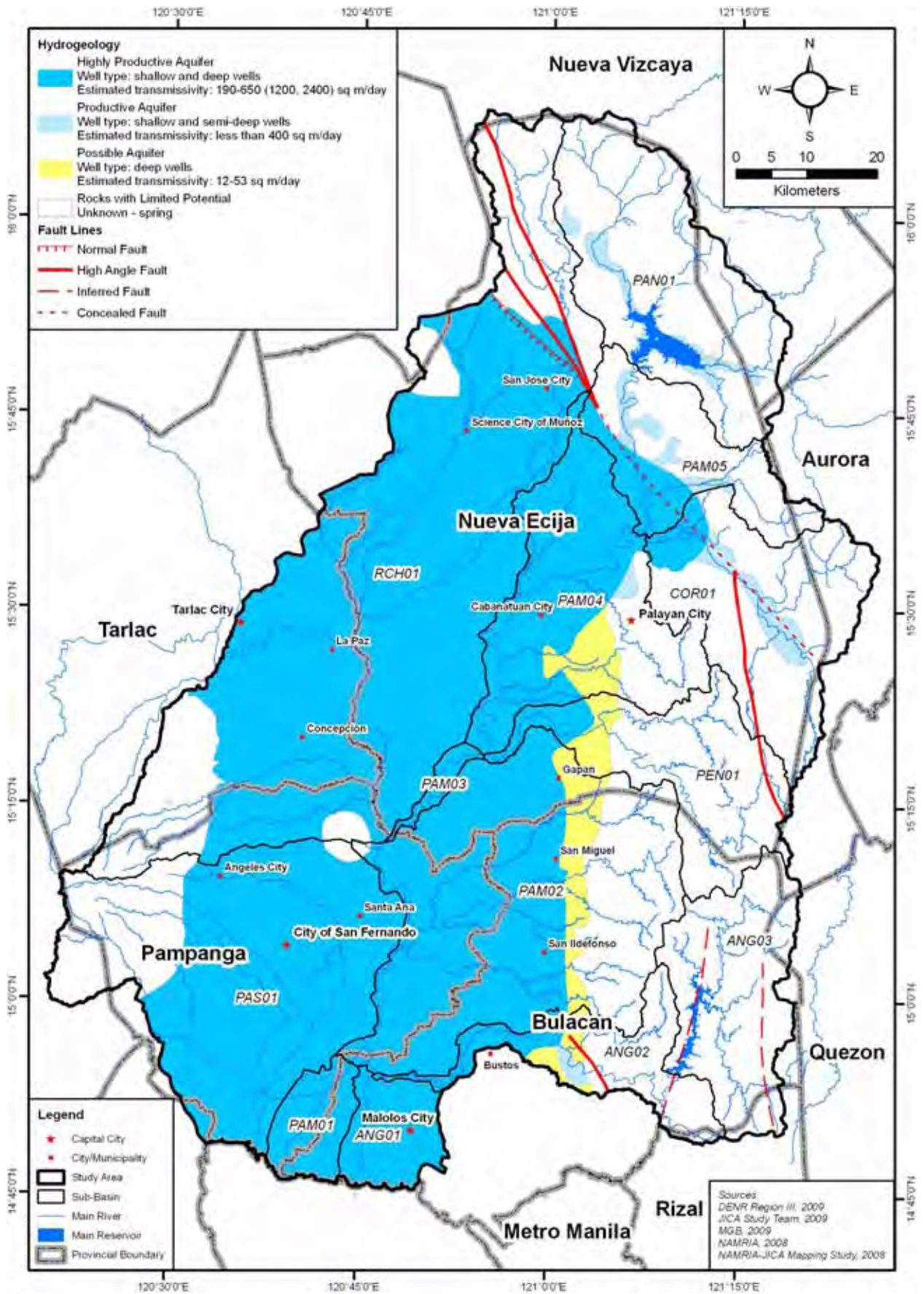


Source: JICA Study Team

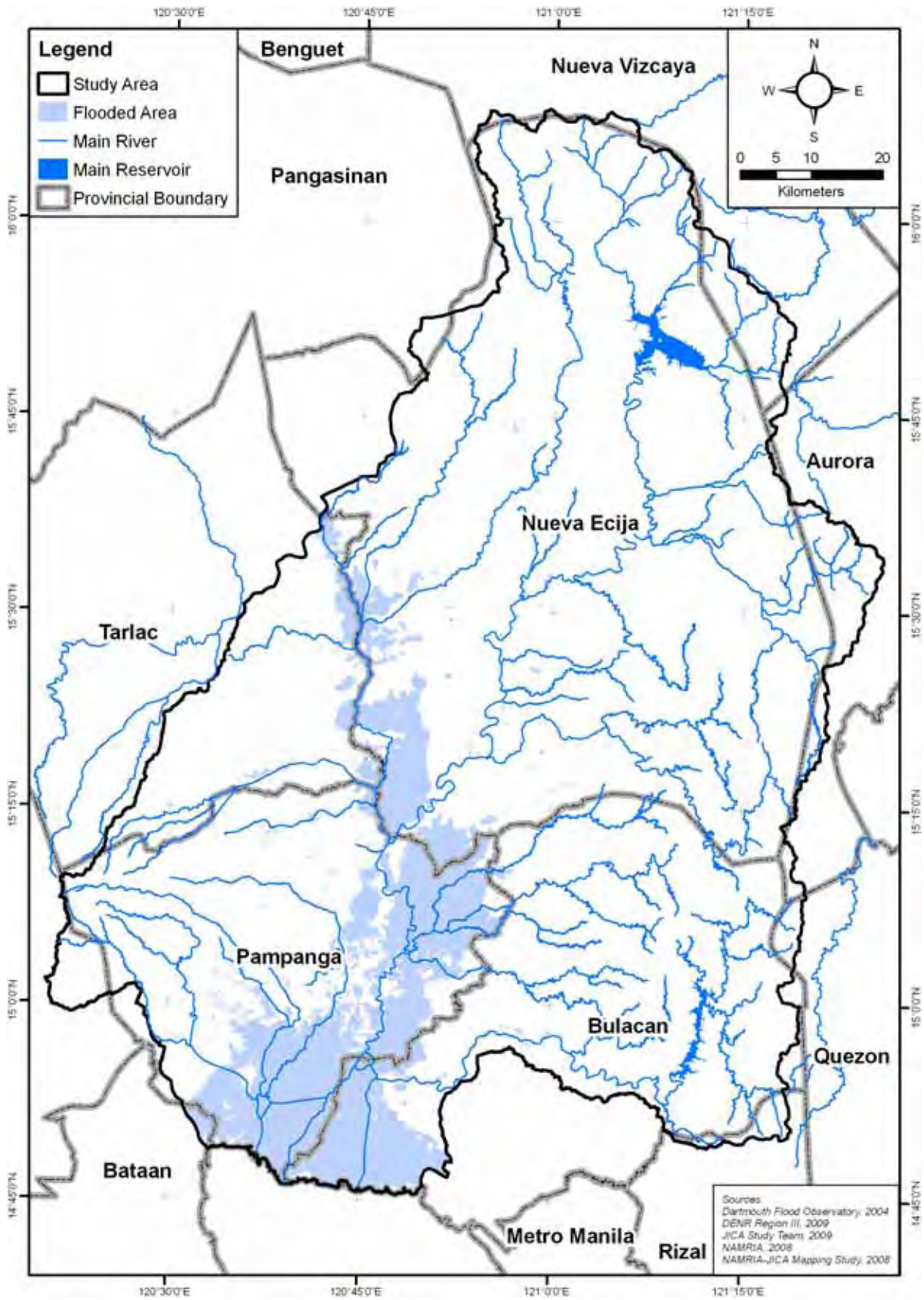
Annex-F 2.4.3 Runoff Rate



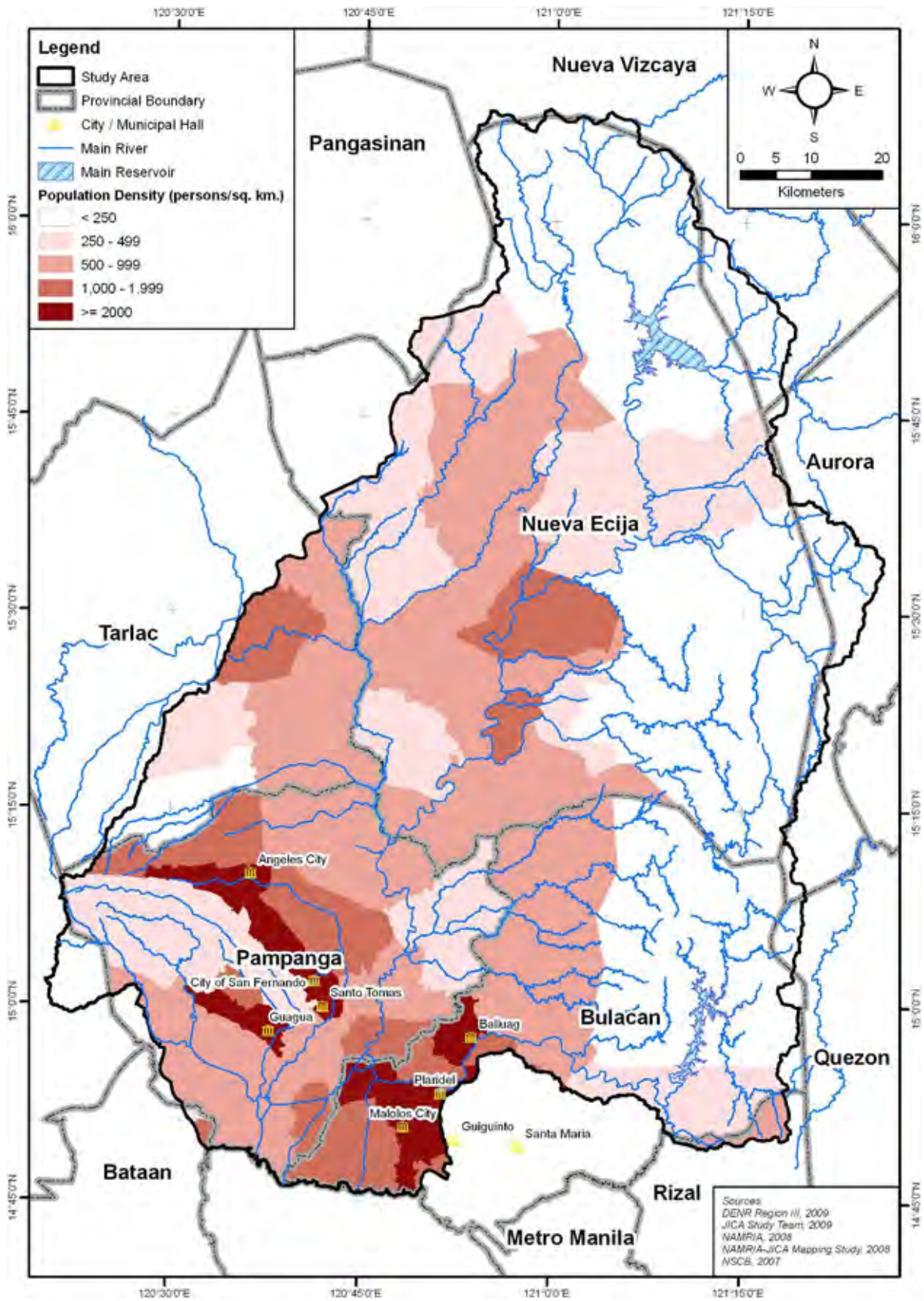
Annex-F 2.5.1 Geological Map



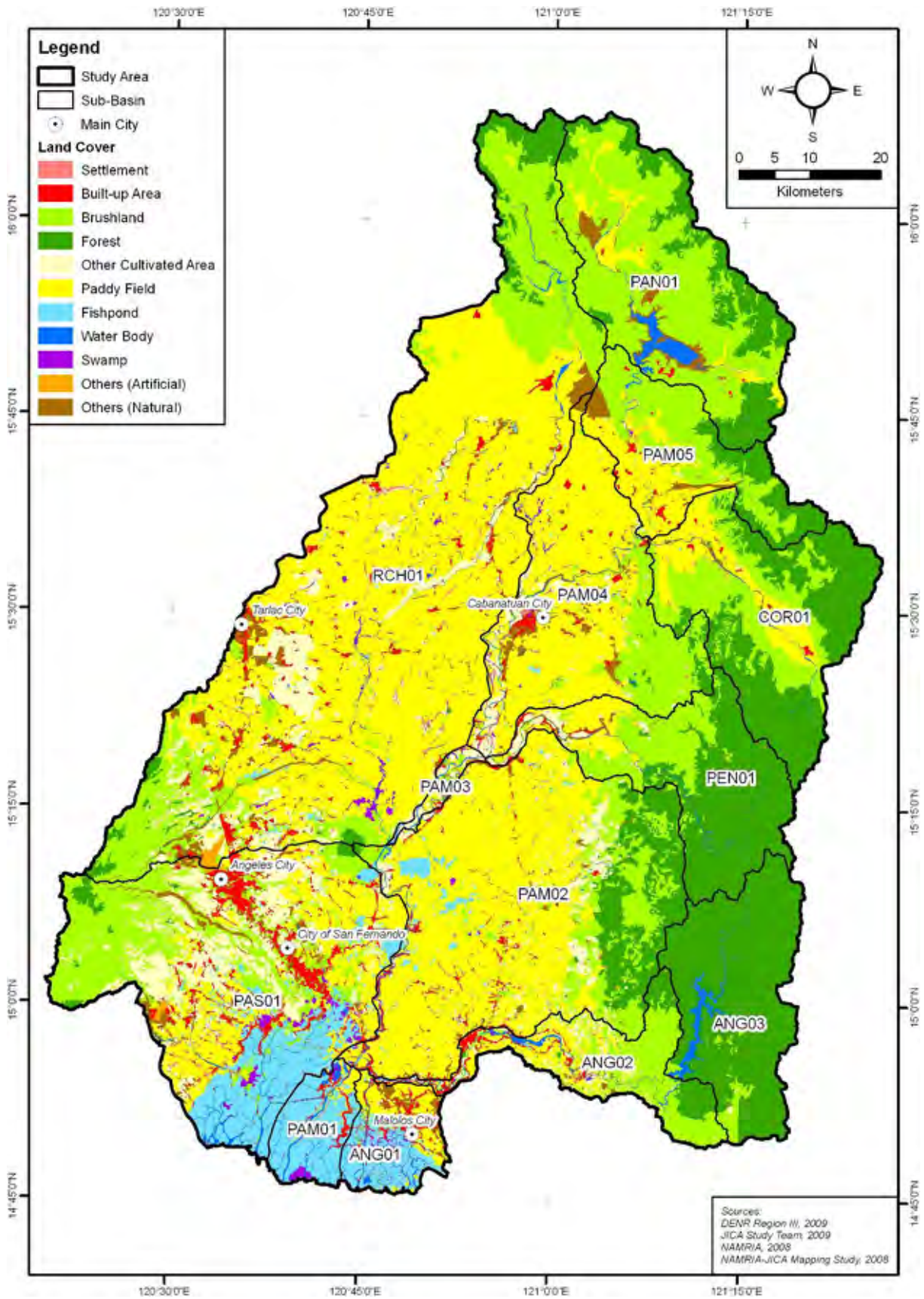
Annex-F 2.6.1 Hydrogeology Map



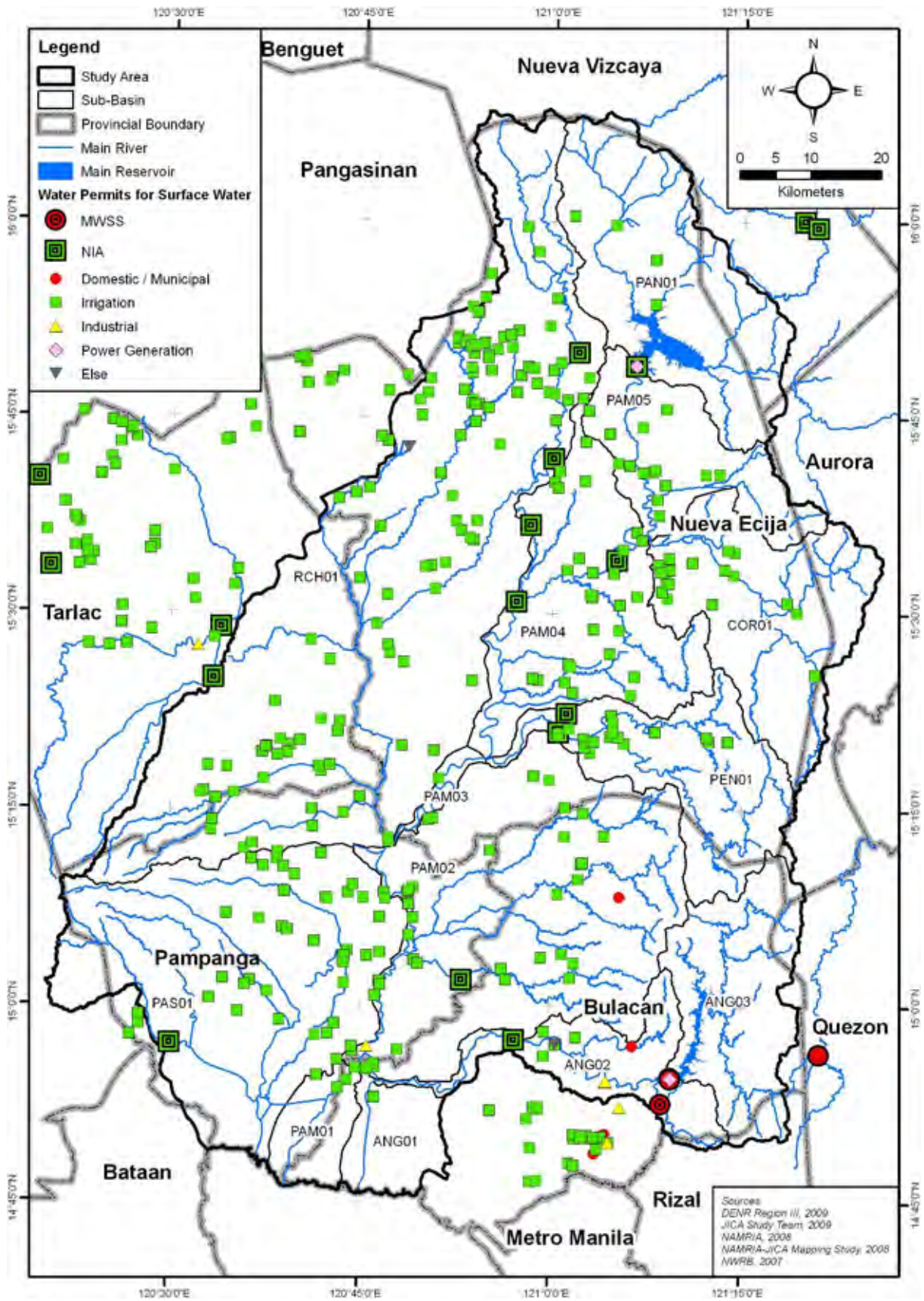
Annex-F 2.10.1 Flood Area in Typhoon Marce, August 2004



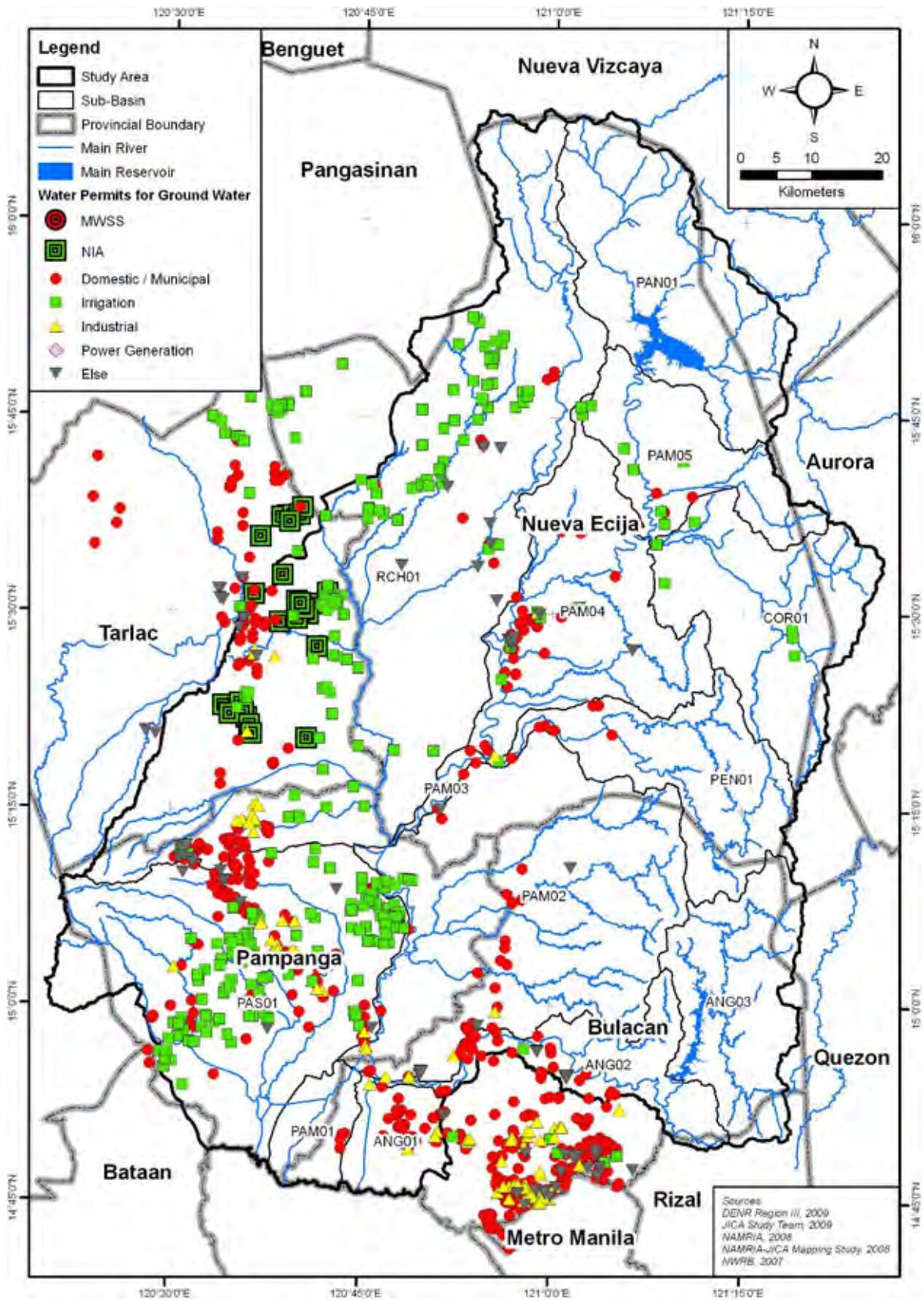
Annex-F 3.1.1 Population Density of Each of Municipalities in the Study Area



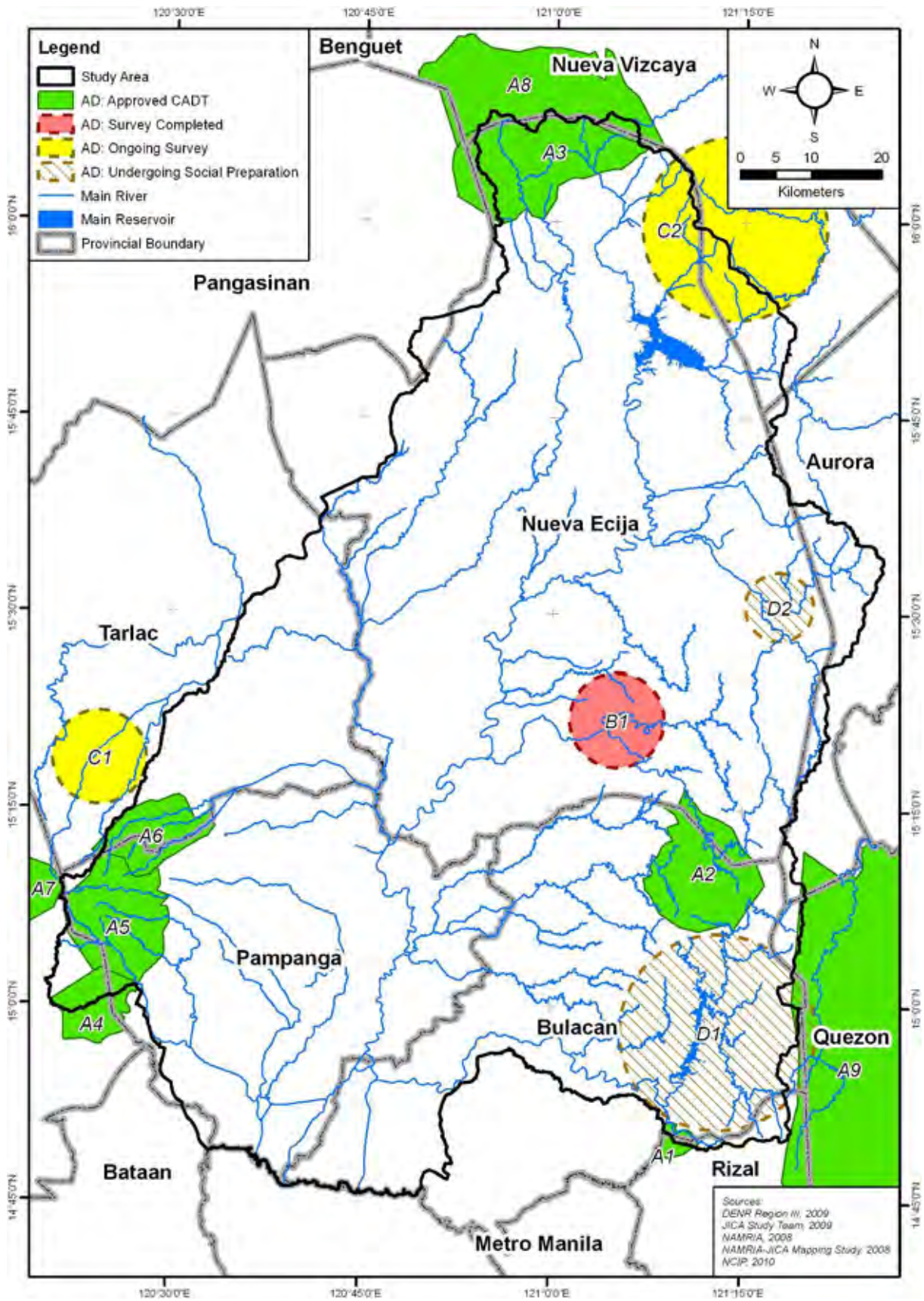
Annex-F 3.3.1 Land Cover in the Study Area



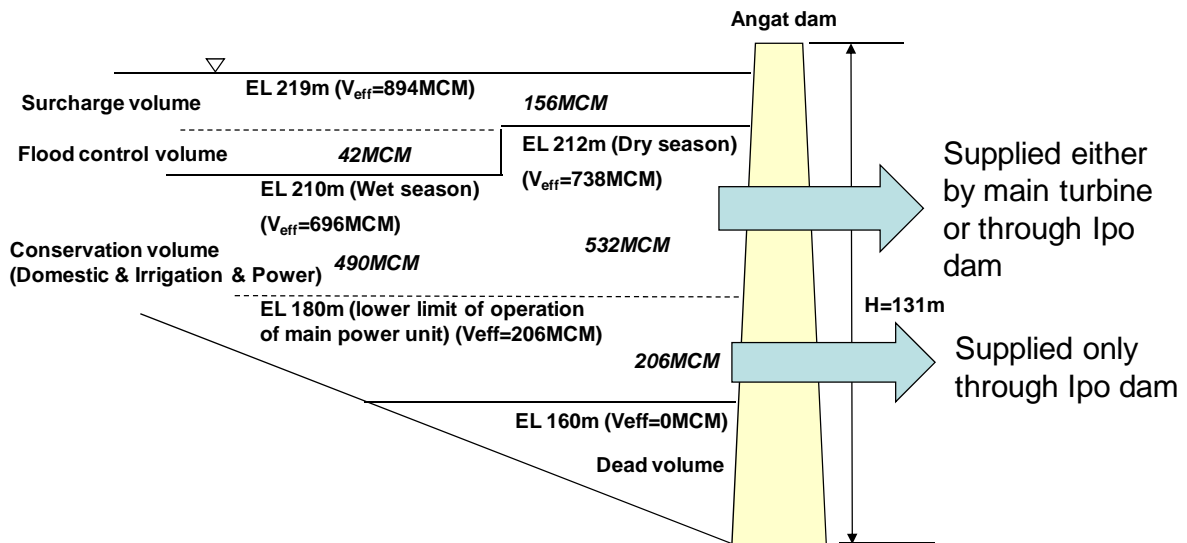
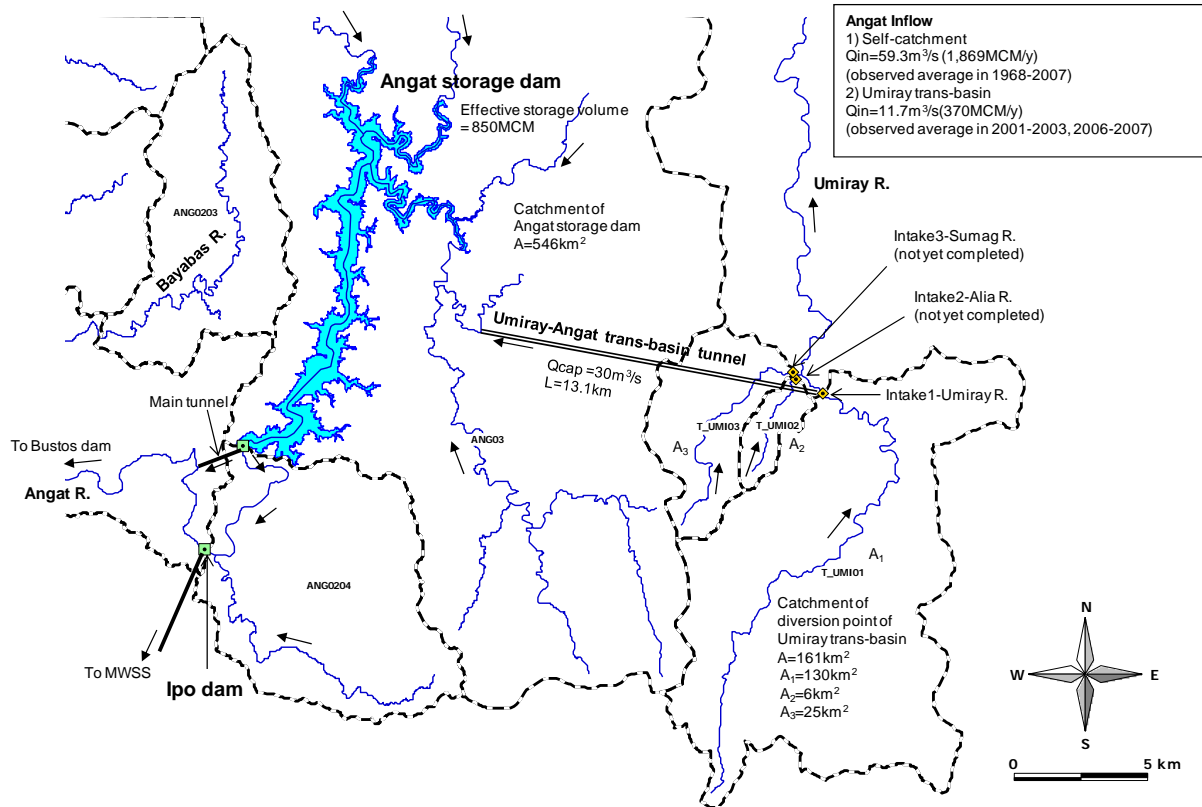
Annex-F 3.4.1 Location of Water Permits for Surface Water



Annex-F 3.4.2 Location of Water Permits for Groundwater

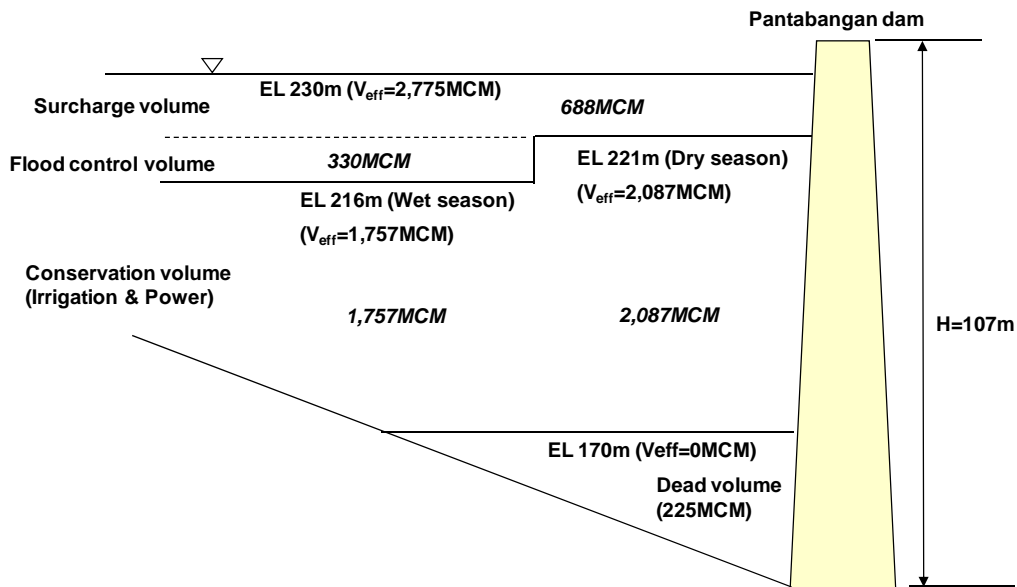
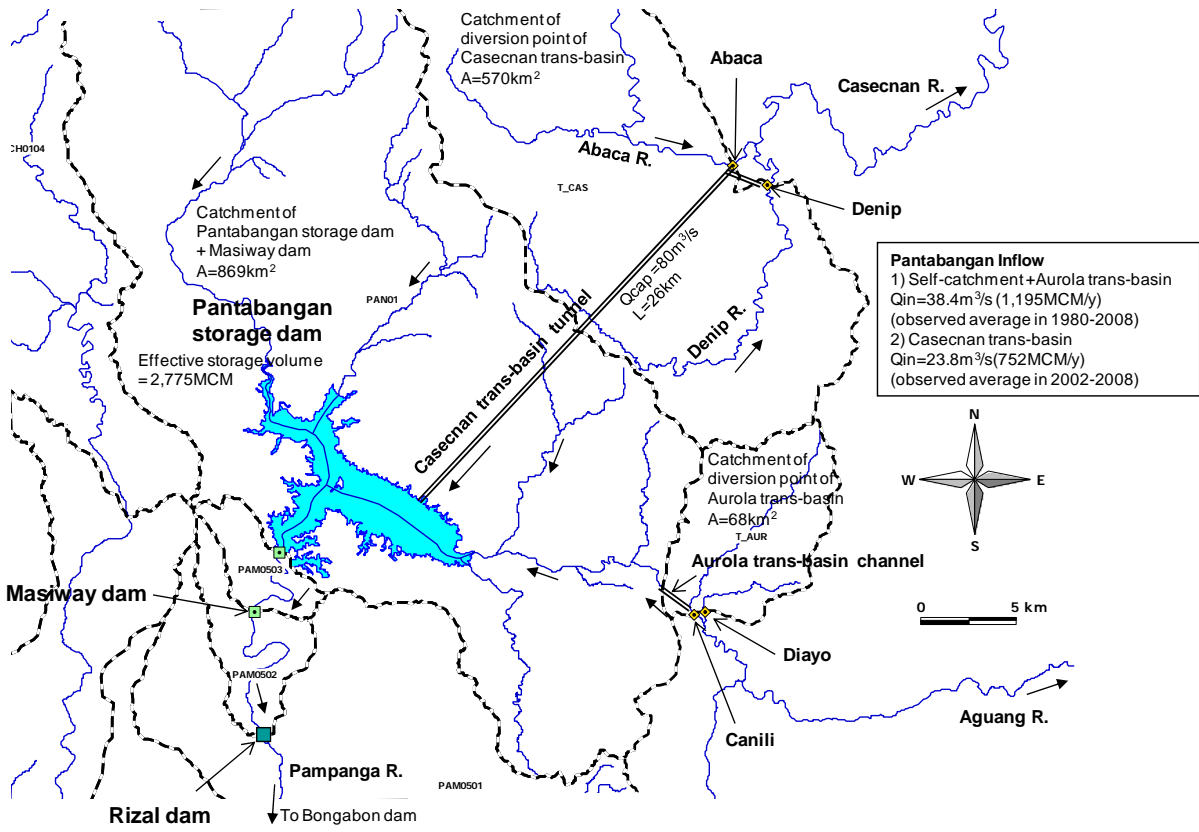


Annex-F 3.6.1 Status of AD/AL (Ancestral Land) Delineation and Titling in and around the Study Area as of March 9, 2010



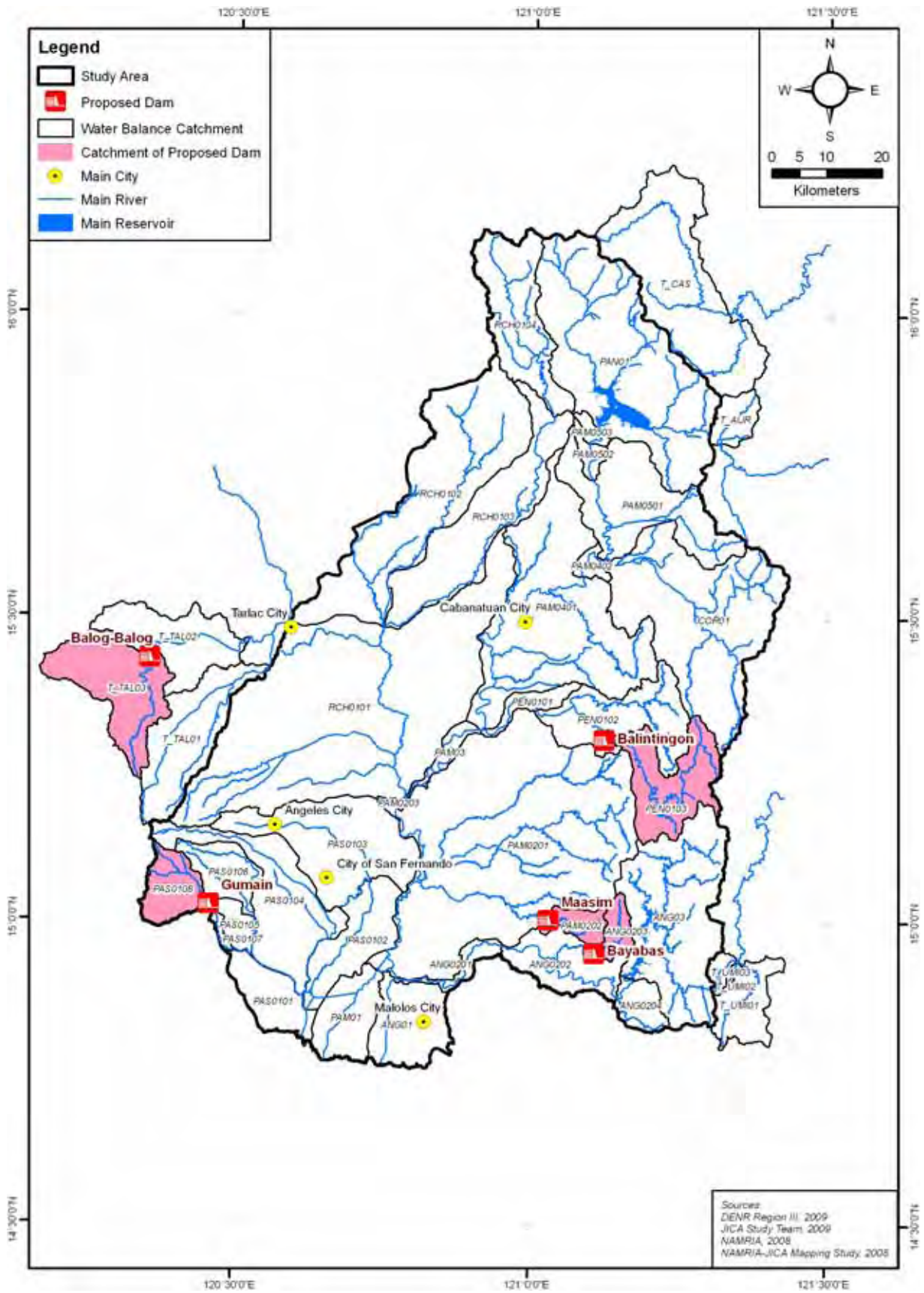
Source: JICA Study Team

Annex-F 4.1.1 Location and Dimension of Angat Storage Dam

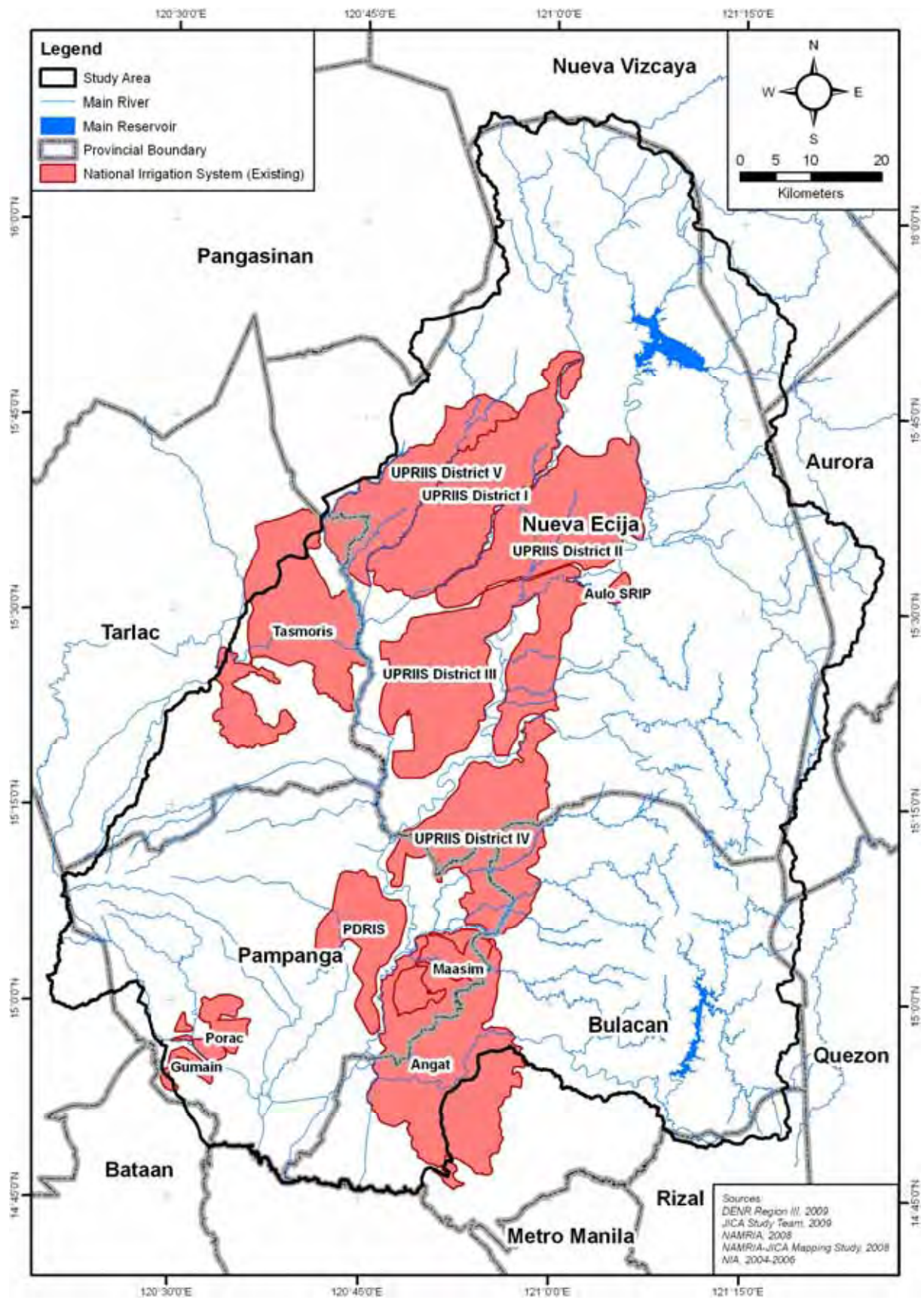


Source: JICA Study Team

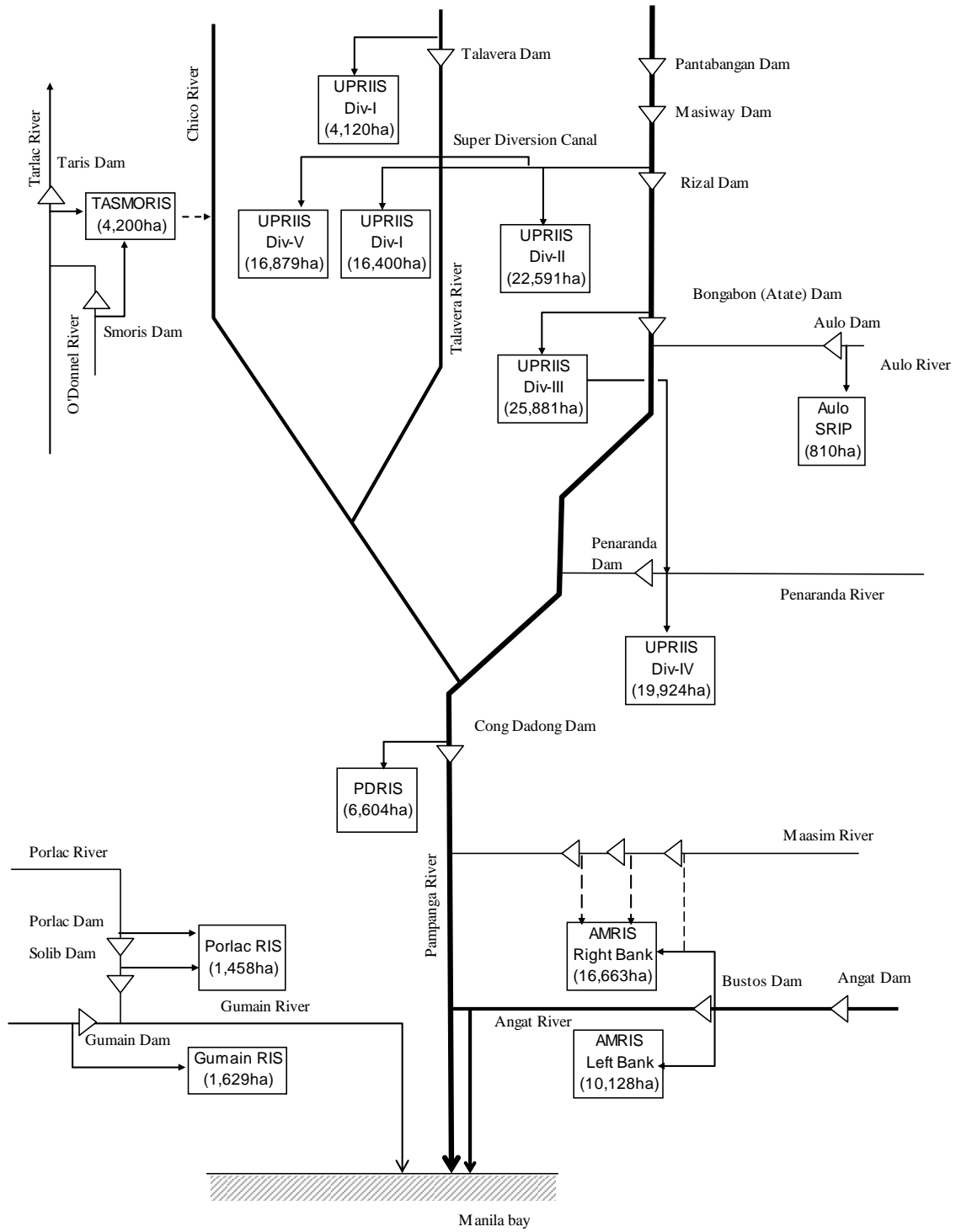
Annex-F 4.1.2 Location and Dimension of Pantabangan Storage Dam



Annex-F 4.1.3 Location of Proposed Large Storage Dam Sites

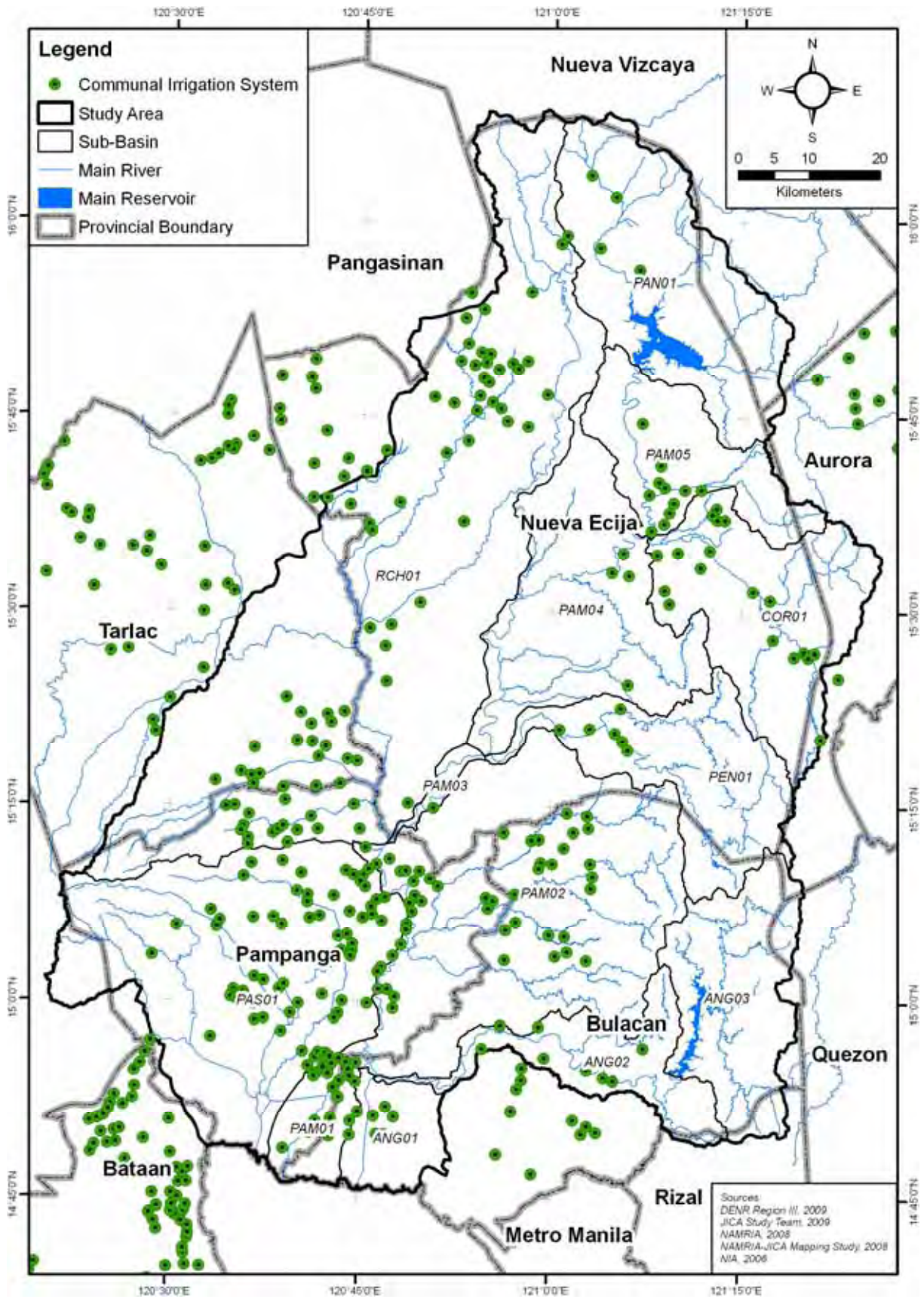


Annex-F 4.2.1 Location Map of Existing NIS

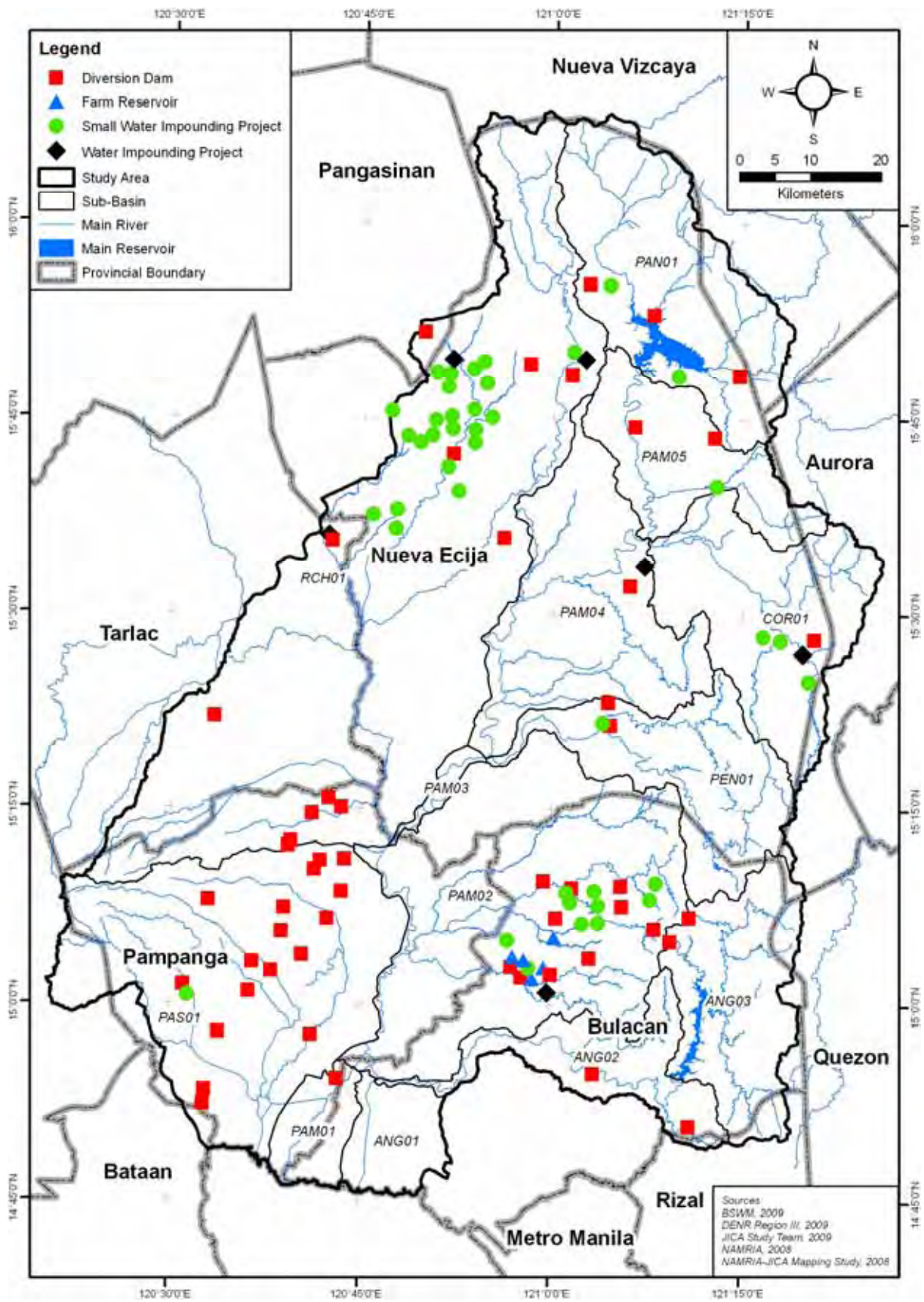


Source : JICA Study Team

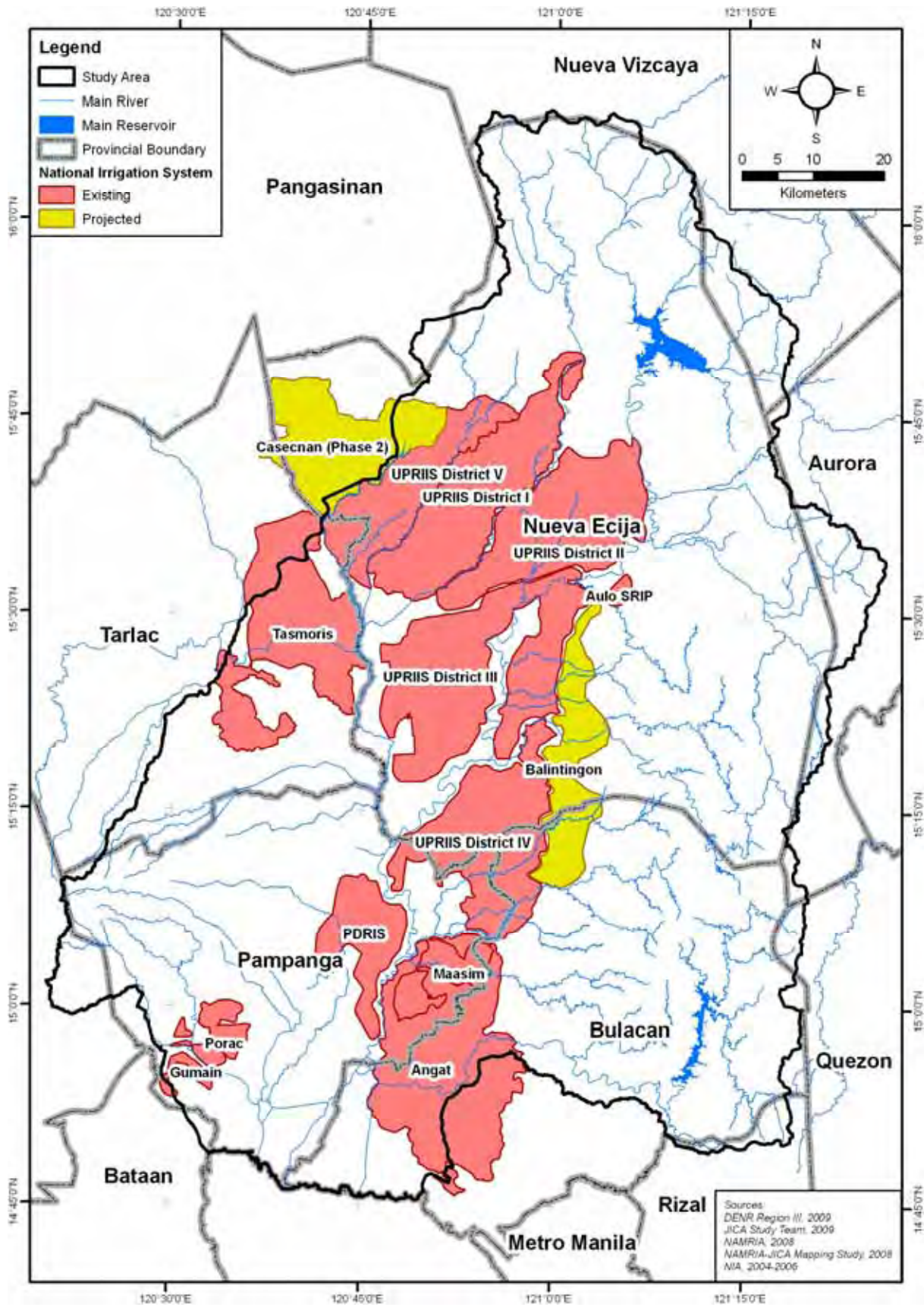
Annex-F 4.2.2 Schematic Flow Diagram of Existing NIS



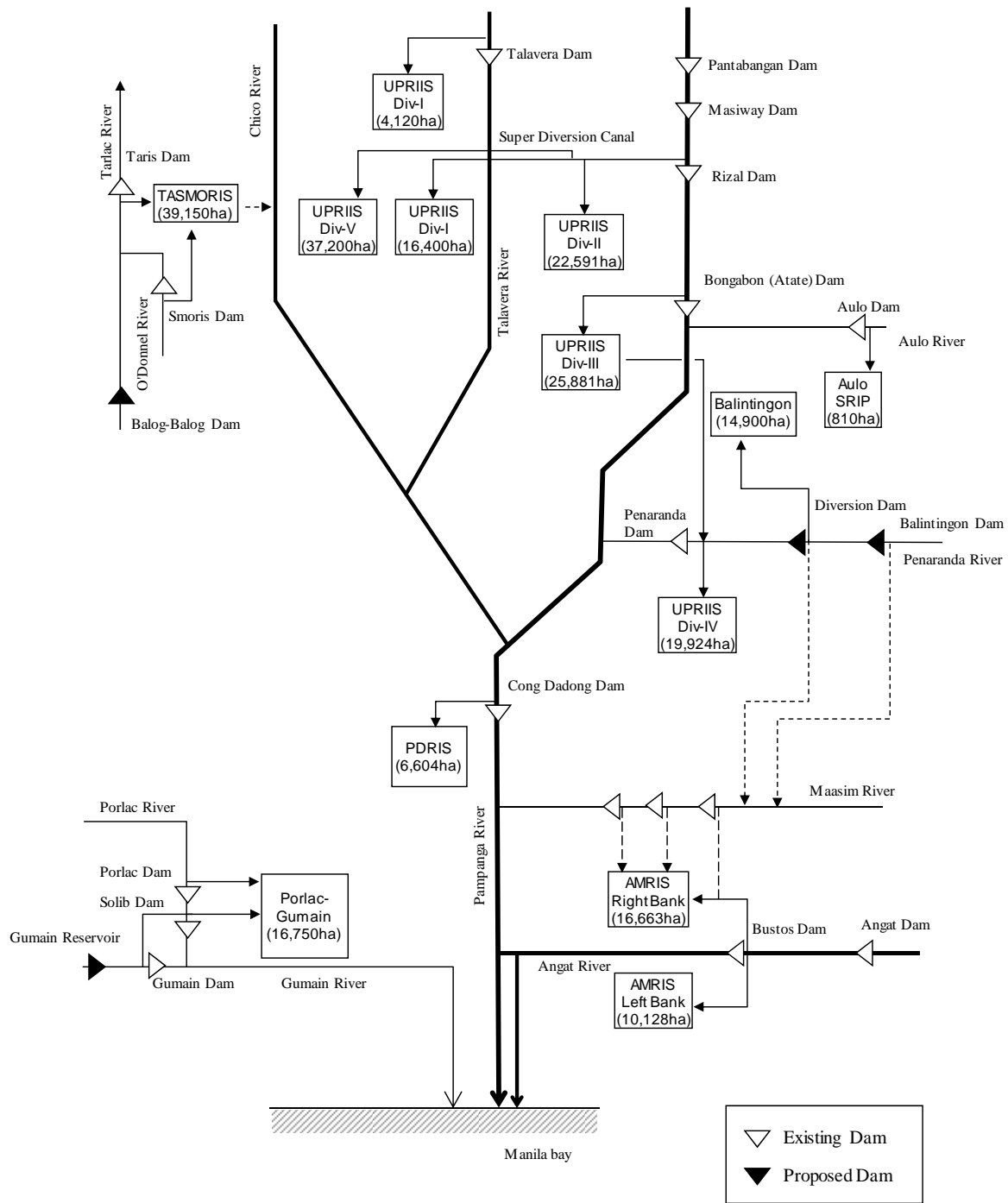
Annex-F 4.2.3 Location Map of CIS



Annex-F 4.2.4 Location Map of Small Scale Irrigations under BSWM

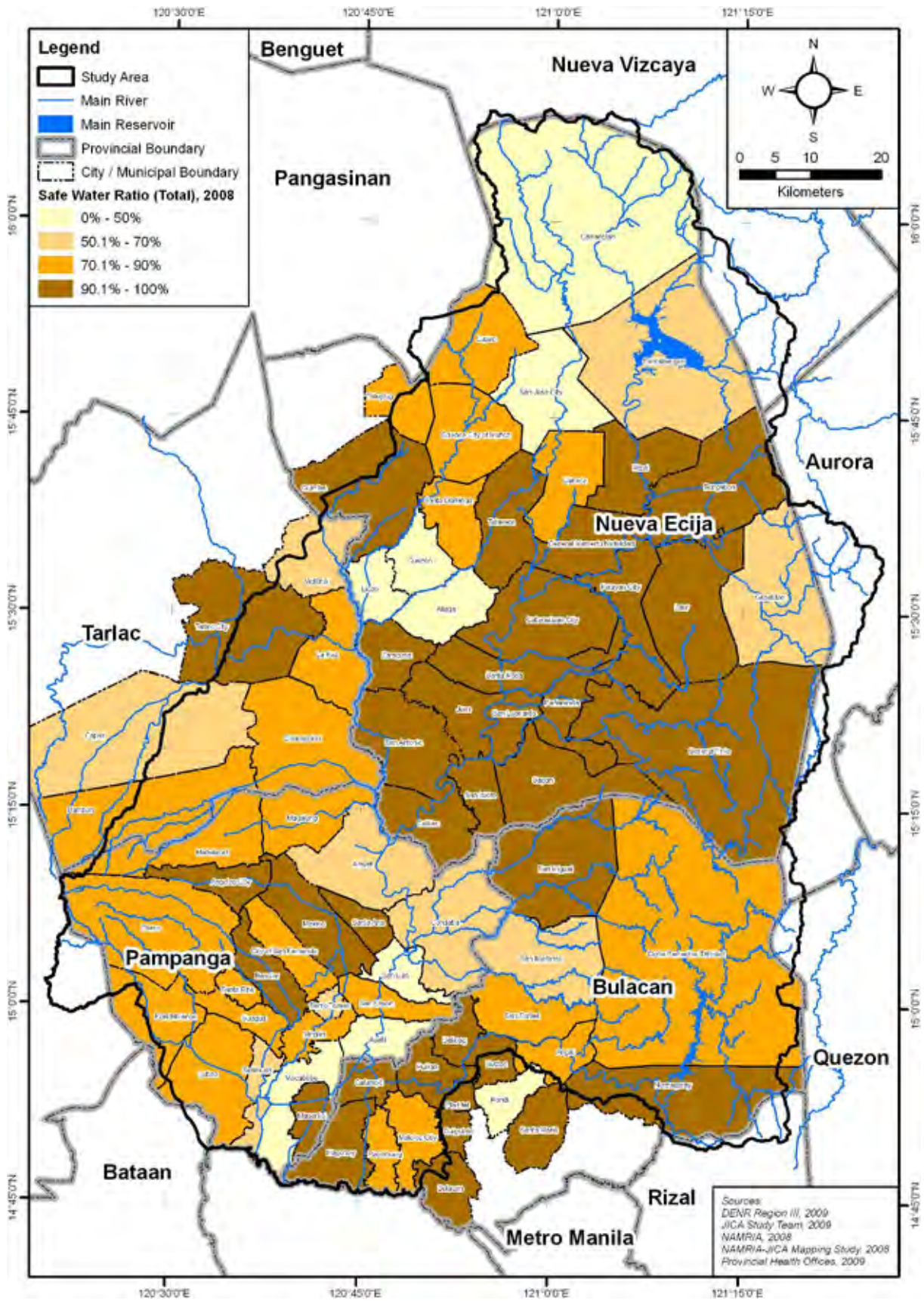


Annex-F 4.2.5 Location Map of Projected NIS

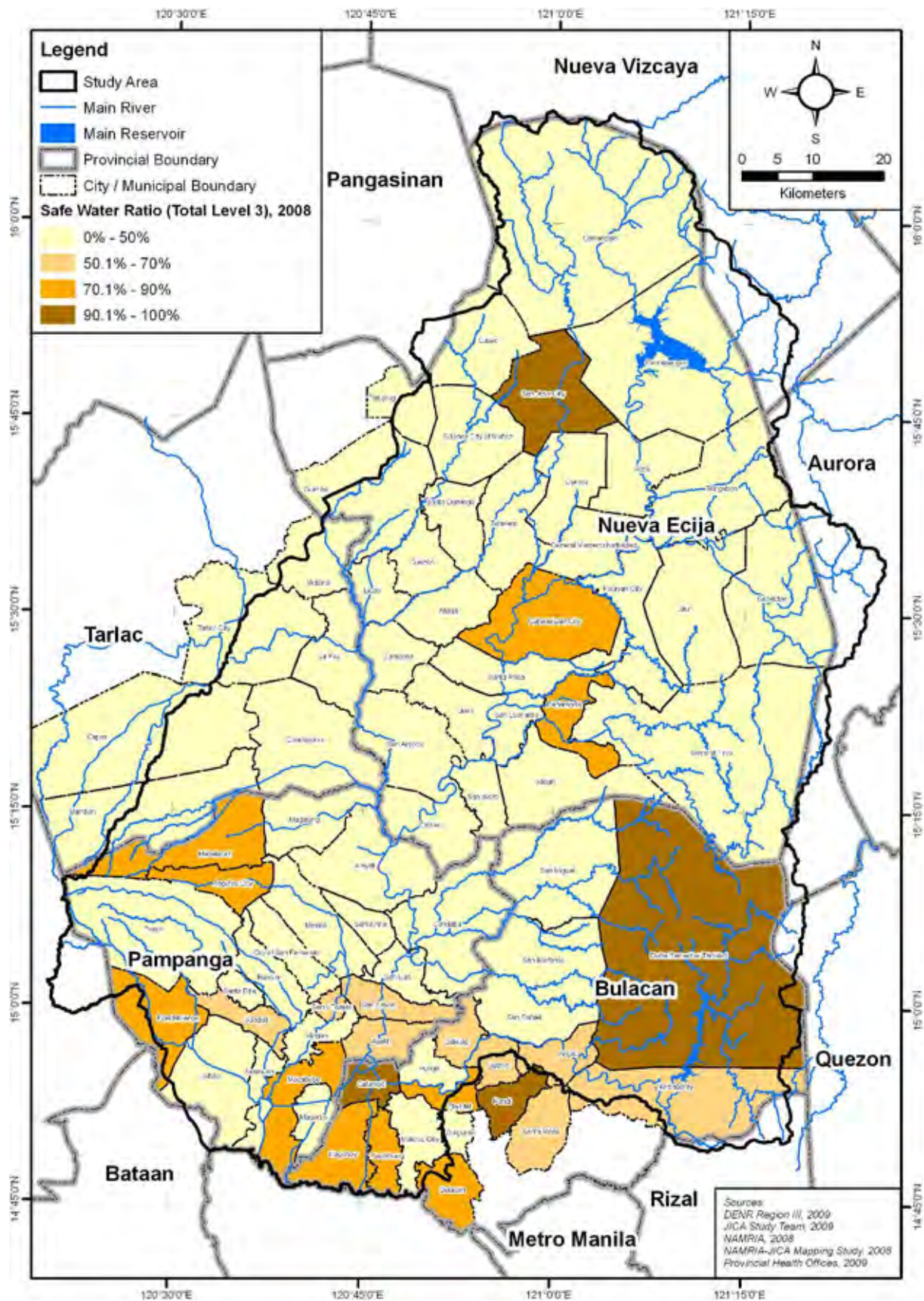


Source : JICA Study Team

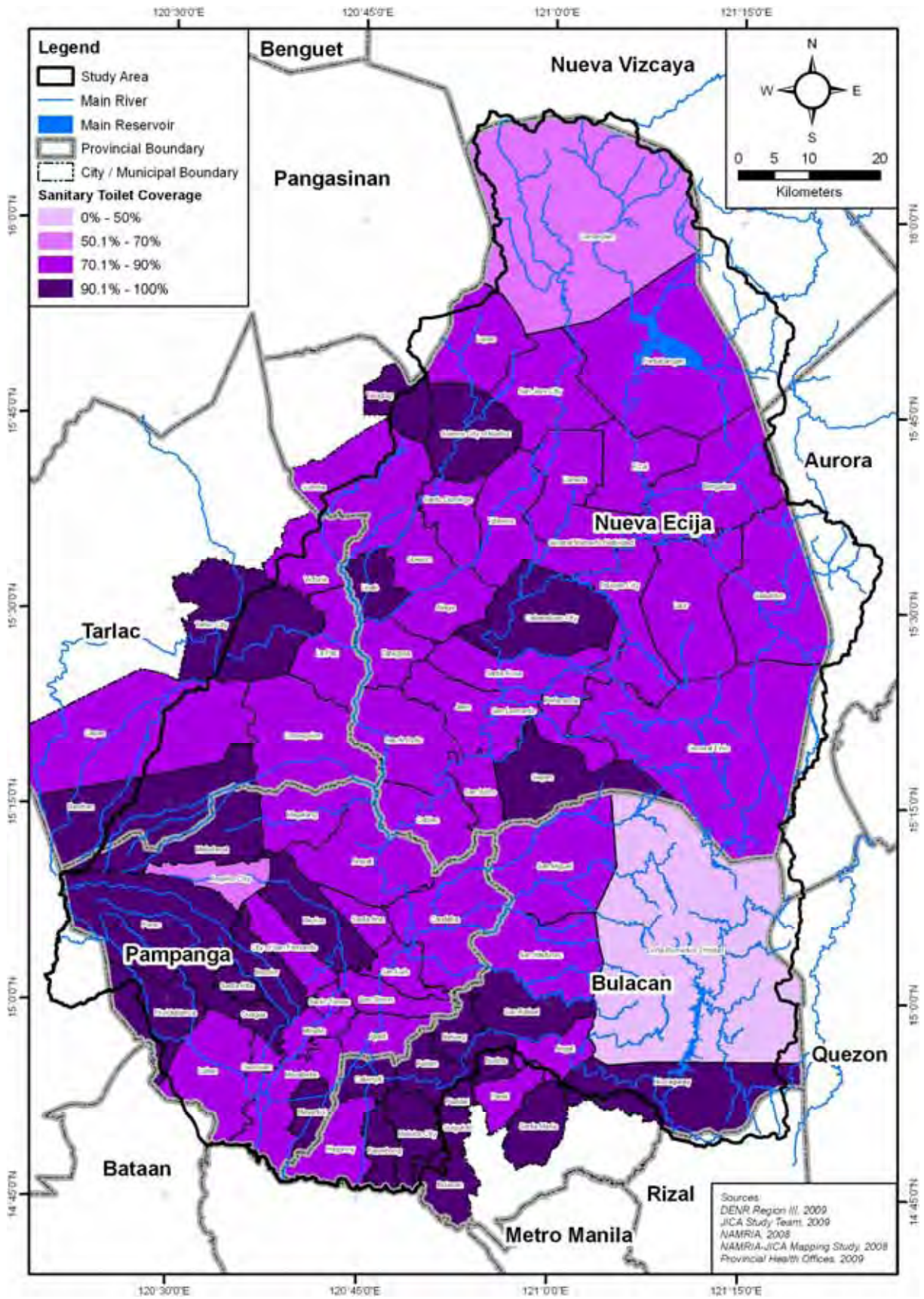
Annex-F 4.2.6 Schematic Flow Diagram of Projected NIS



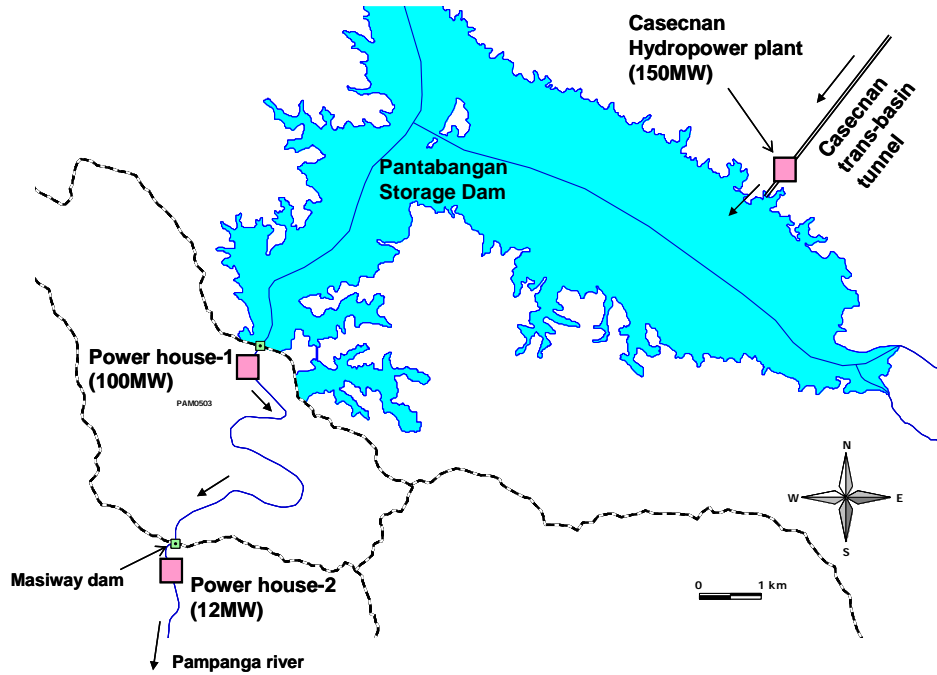
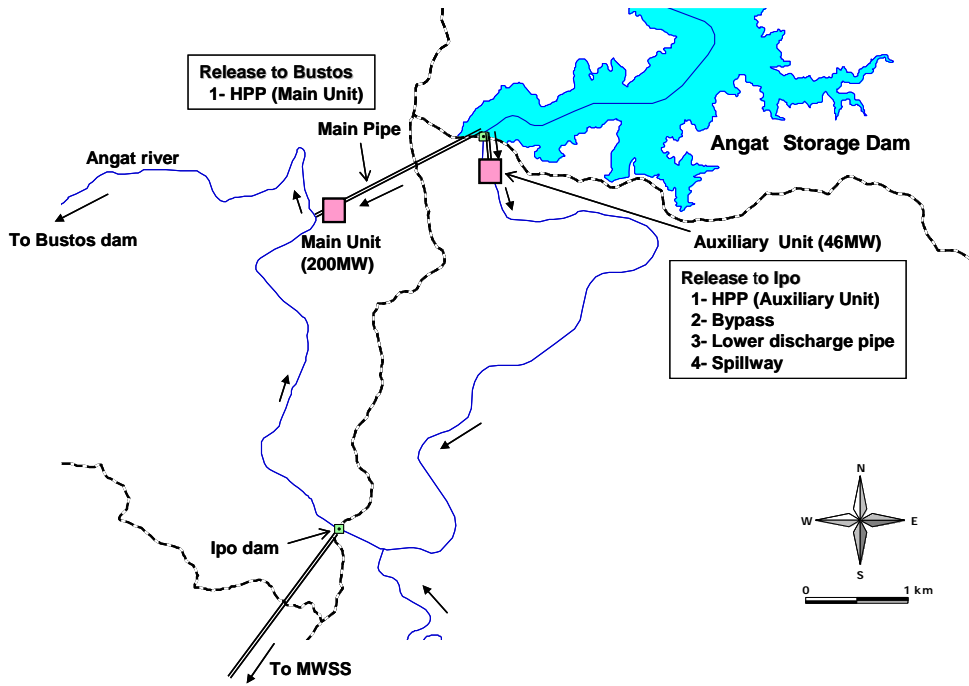
Annex-F 4.3.1 Present Coverage of Water Supply Facilities for Access to Safe Drinking Water



Annex-F 4.3.2 Present Coverage of Level 3 Water Supply Facilities with Safe Water Access

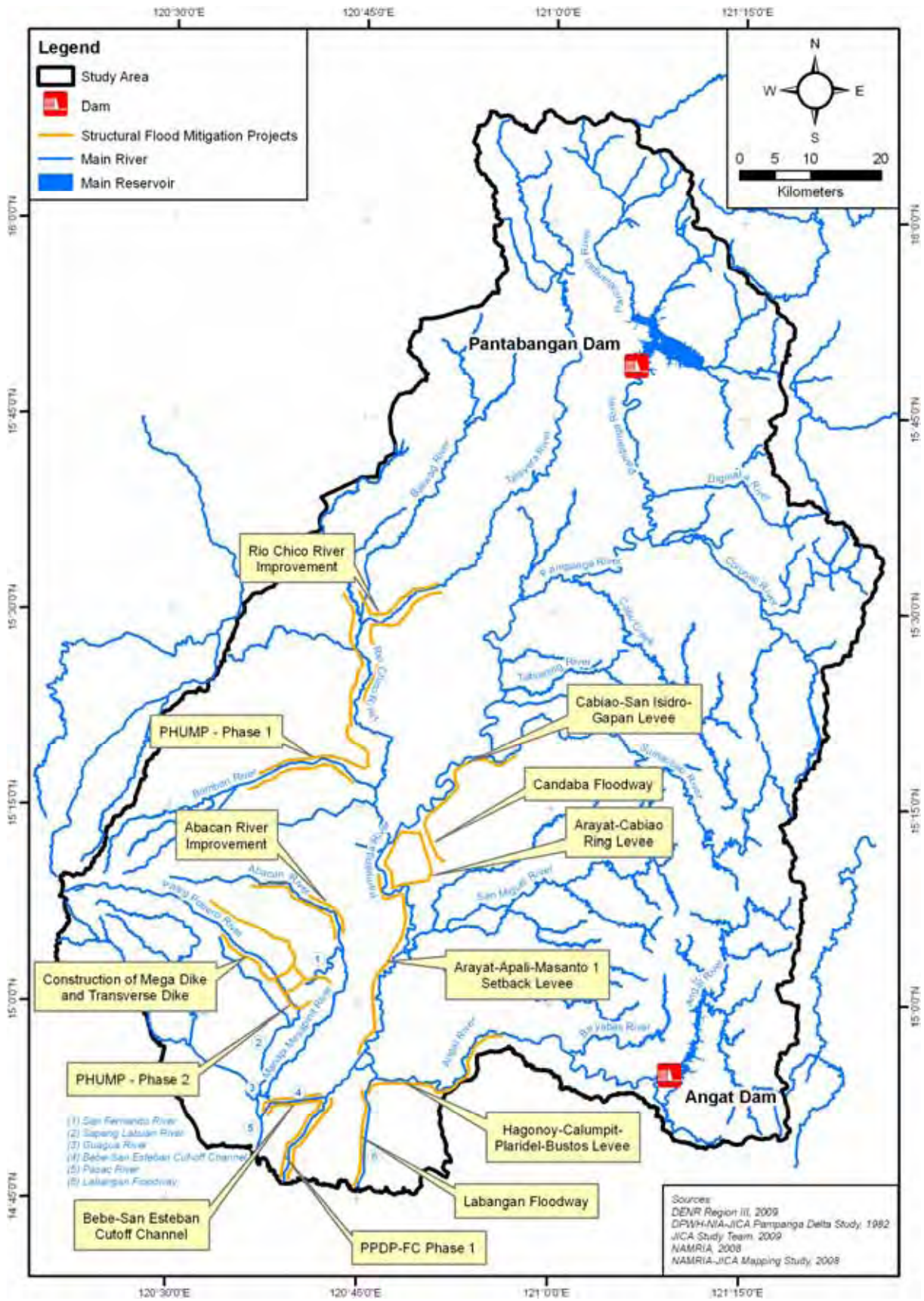


Annex-F 4.3.3 Present Coverage of Sanitary Toilet

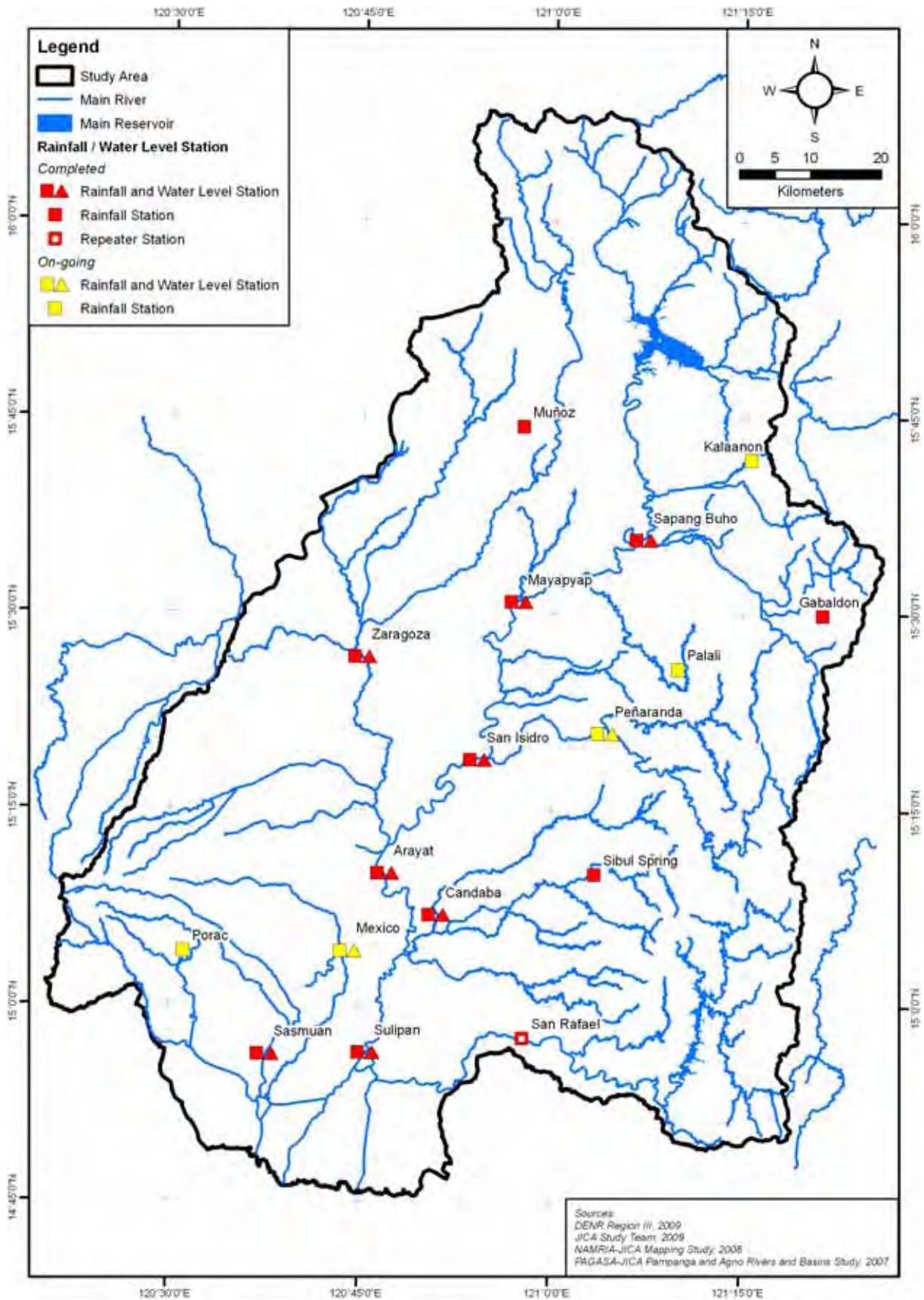


Source: JICA Study Team

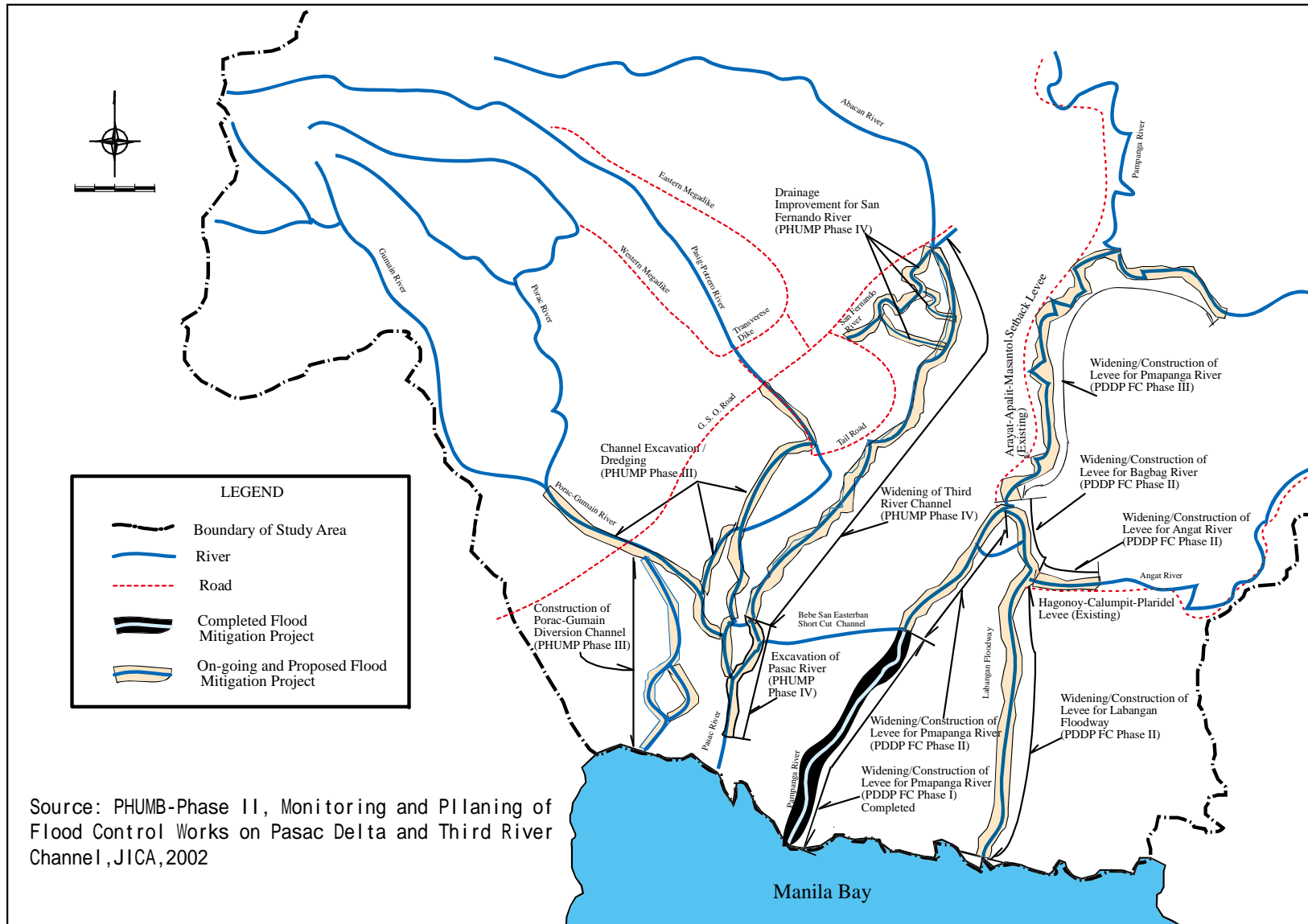
Annex-F 4.4.1 Existing Hydropower Plants in the Study Area



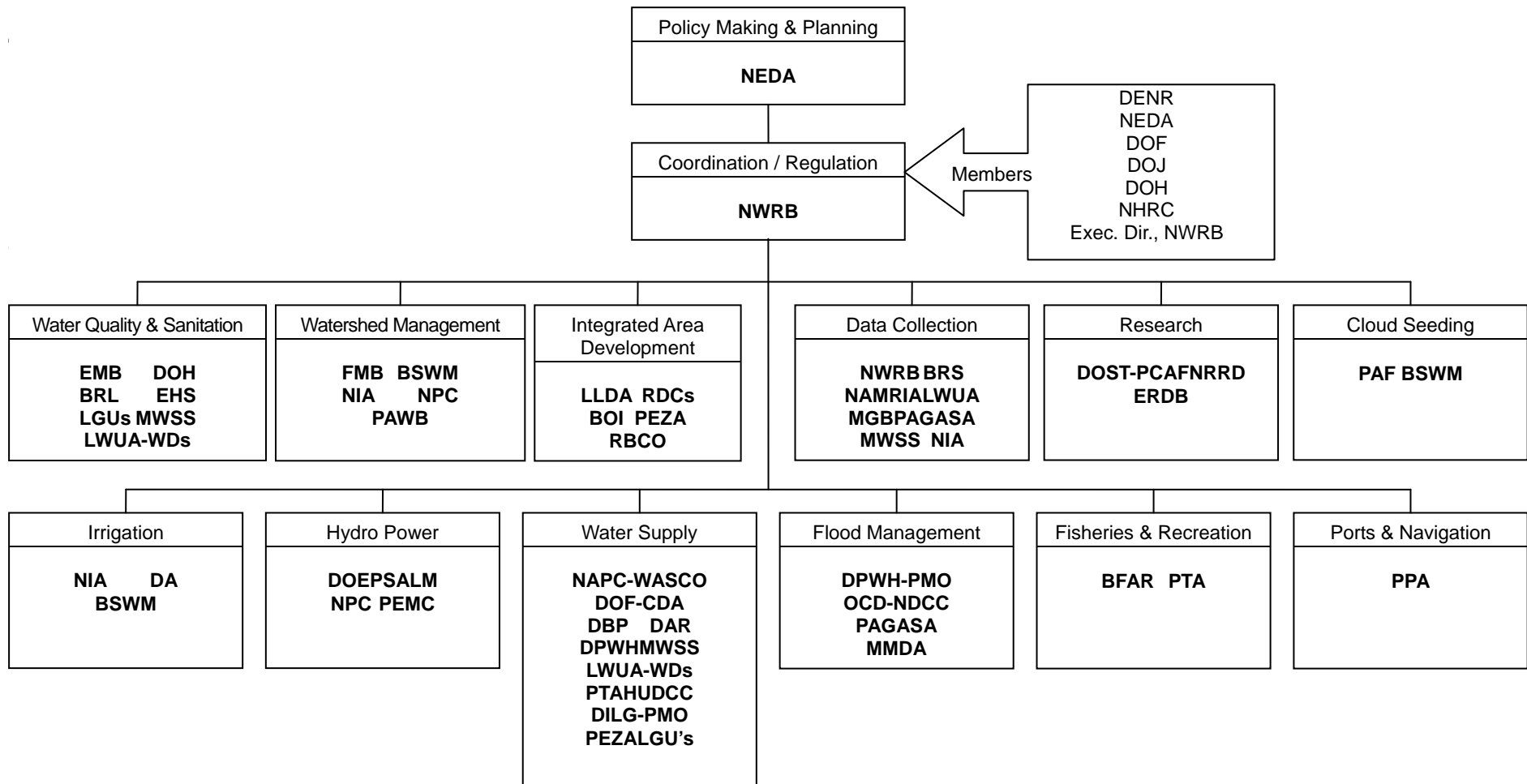
Annex-F 4.5.1 Completed Major Flood and Sediment Disaster Prevention Works



Annex-F 4.5.2 Hydrological Gauging and Repeater Stations for Completed and On-going Flood Forecasting and Warning System in Pampanga River Basin

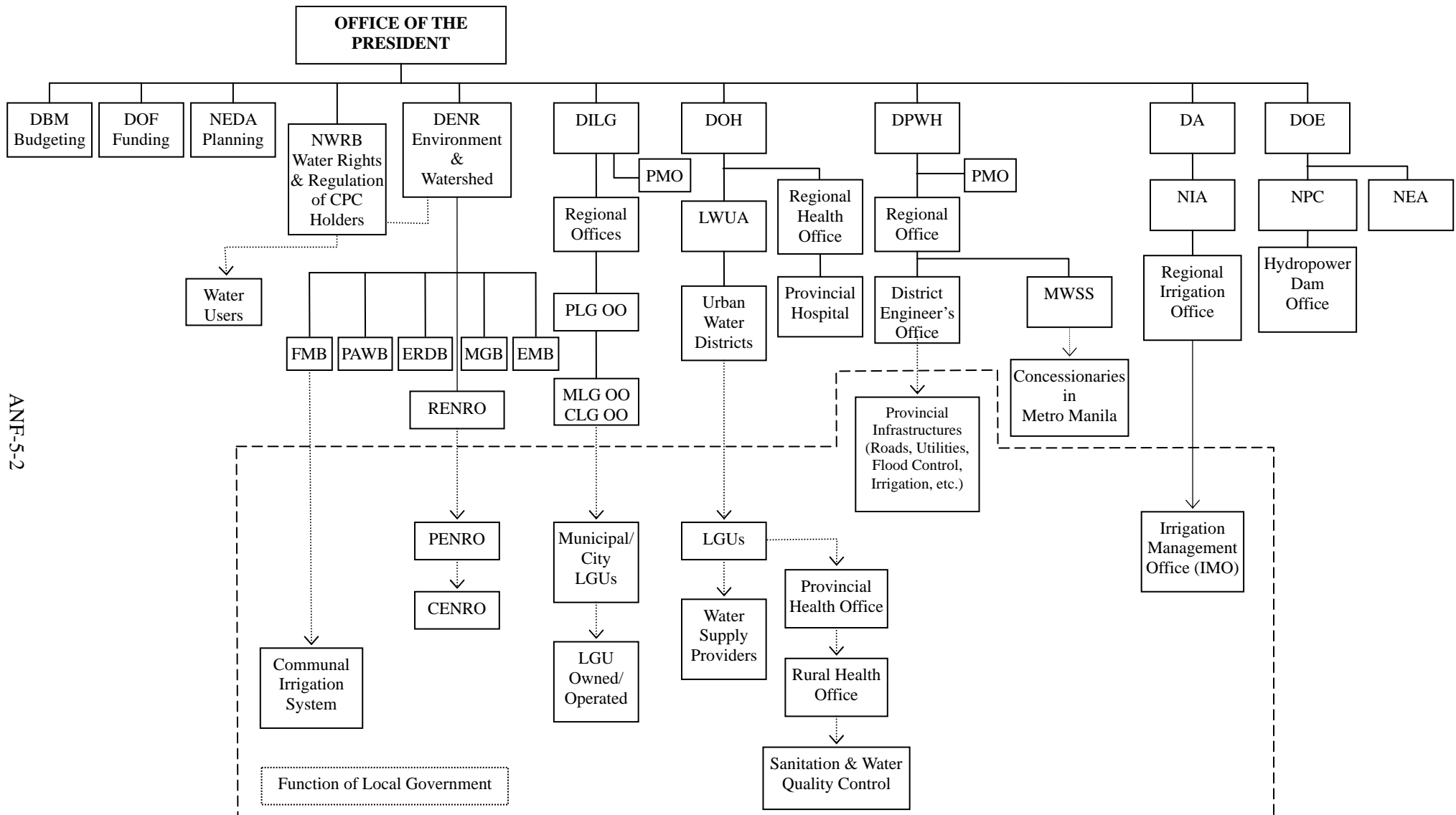


Annex-F 4.5.3 On-going and Proposed Structural Flood Mitigation Works in Pampanga River Basin



Source: Philippine Water Supply Sector Road Map, p.19, modified by JICA study

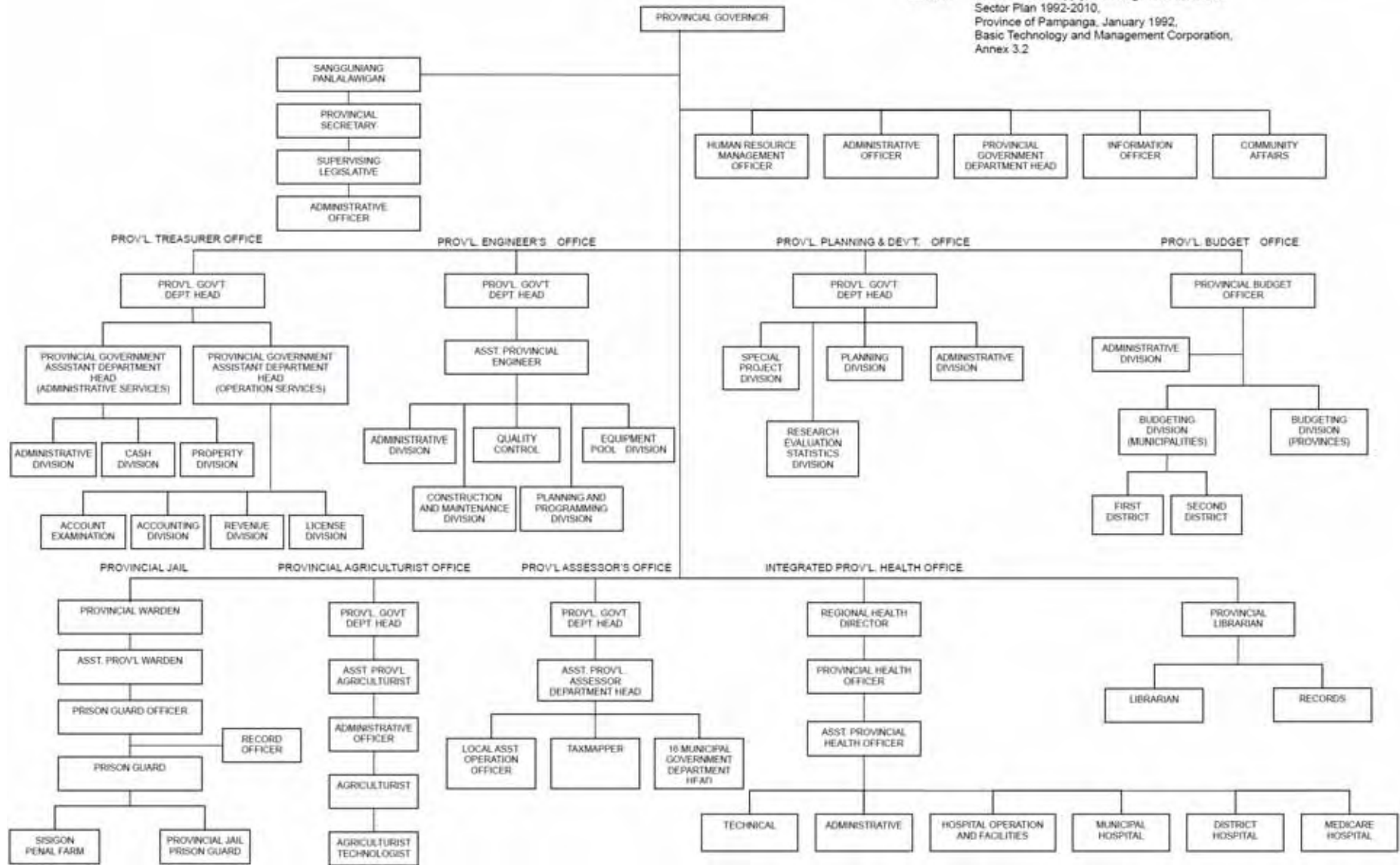
Annex-F 5.2.1 Functional Chart of Water Related Agencies in the Philippines



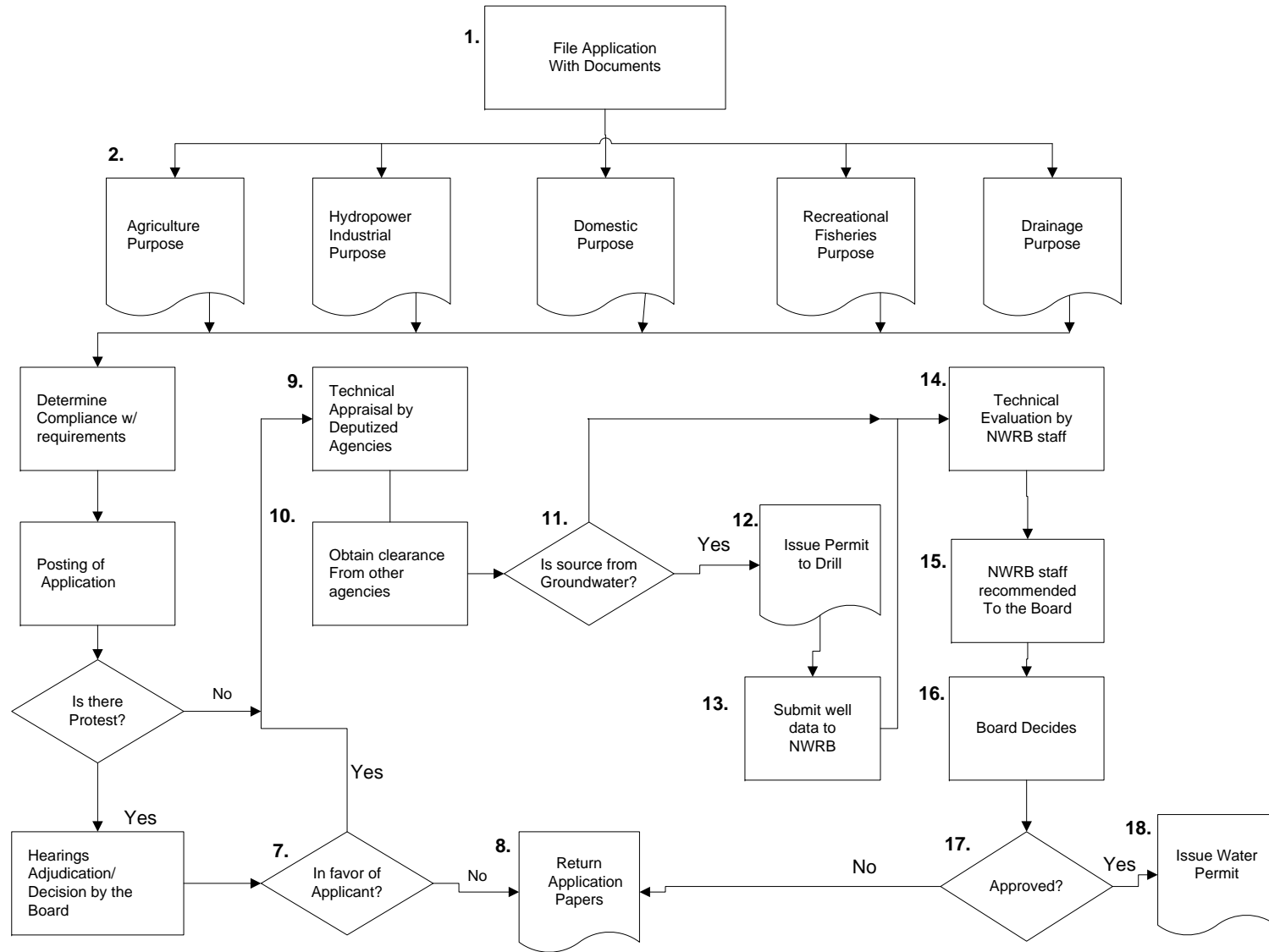
ANF-5-2

Annex-F 5.2.2 Functional Relationship among Central Government Agencies and Local Governments Source; JICA Study Team

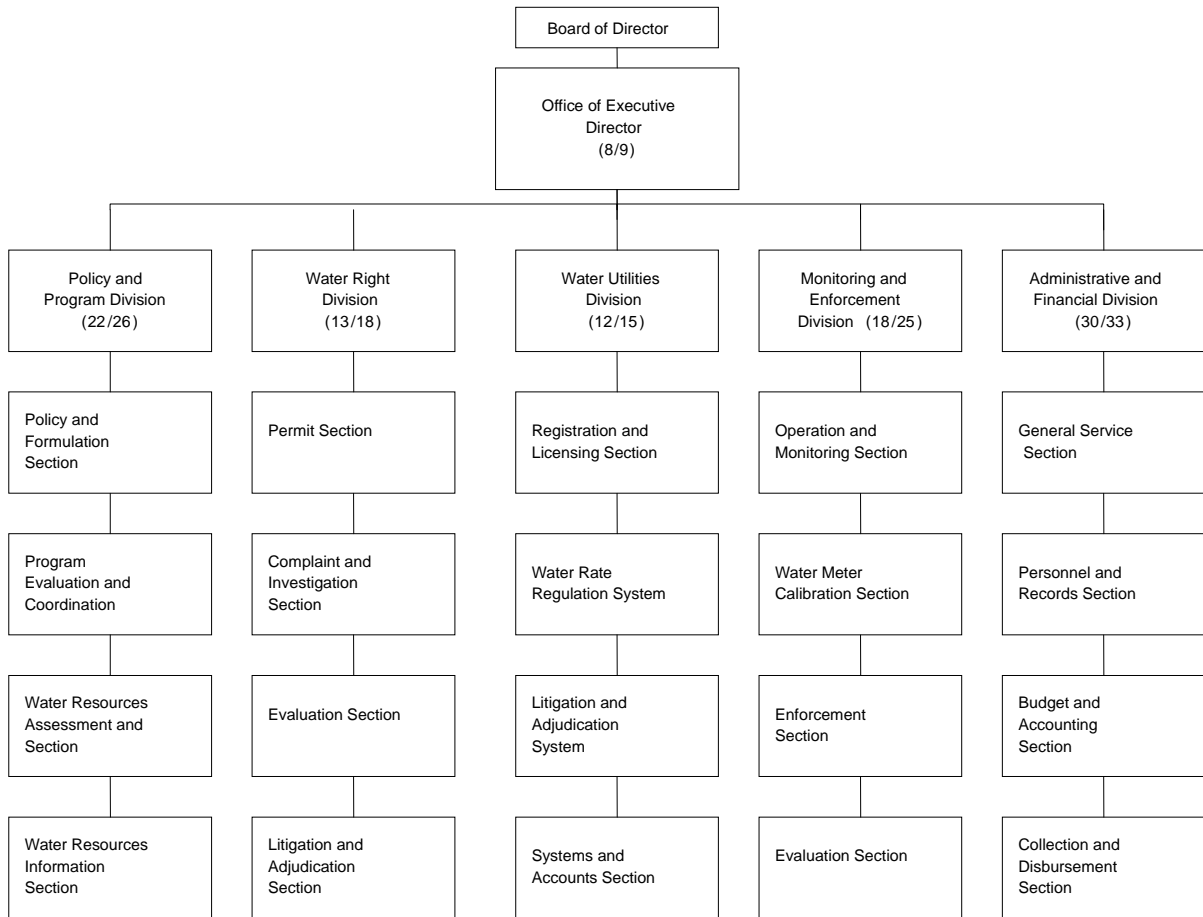
Source: DPWH Water Supply, Sewerage and Sanitation Sector Plan 1992-2010, Province of Pampanga, January 1992, Basic Technology and Management Corporation, Annex 3.2



Annex-F 5.2.3 Organizational Chart of Province of Pampanga



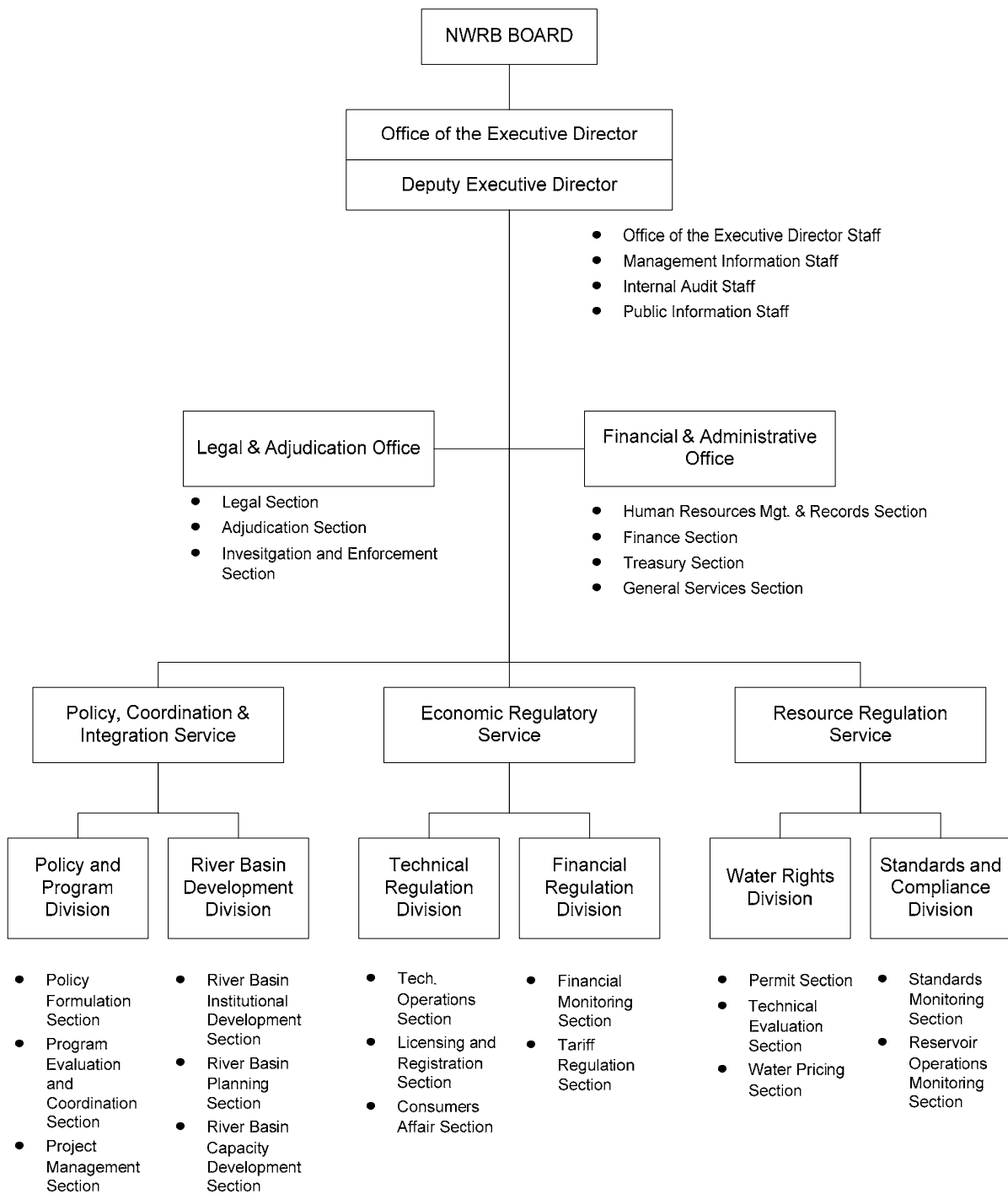
Annex-F 5.3.1 Flowchart for Processing of Water Permit Application Source: NWRB



Note: Values in () indicate staff number/position.

	Policy and Program	WaterRight	Water Utilities	Monitoring and Enforcement	Administrative and Financial
Engineer	10	4	-	11	-
Special investigator	-	5	-	-	-
Planning officer	1	-	-	-	-
Development management officer	-	-	-	2	-
Instrument technician	-	-	-	4	-
Information analyst	3	-	-	-	-
Statistician	1	-	-	-	-
Economist	3	-	-	-	-
Financial analyst	-	-	3	-	-
Regulation officer	-	-	7	-	-
Attorney	-	1	-	-	-
Administrative	4	3	2	1	30
Total (95+8=103)	22	13	12	18	30

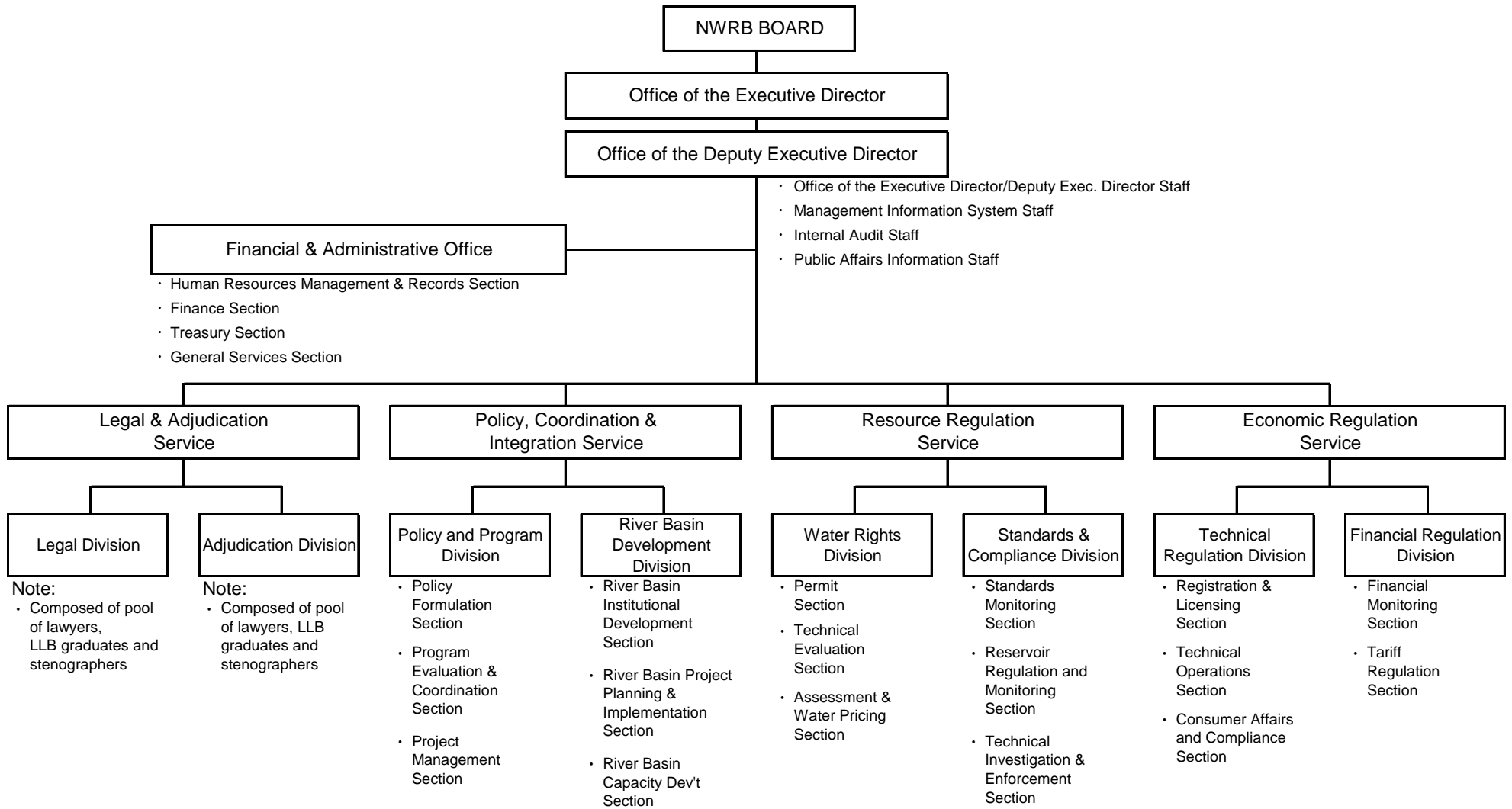
Annex-F 5.3.2 Organization Chart of Present NWRB as of March 2009 Source: NWRB



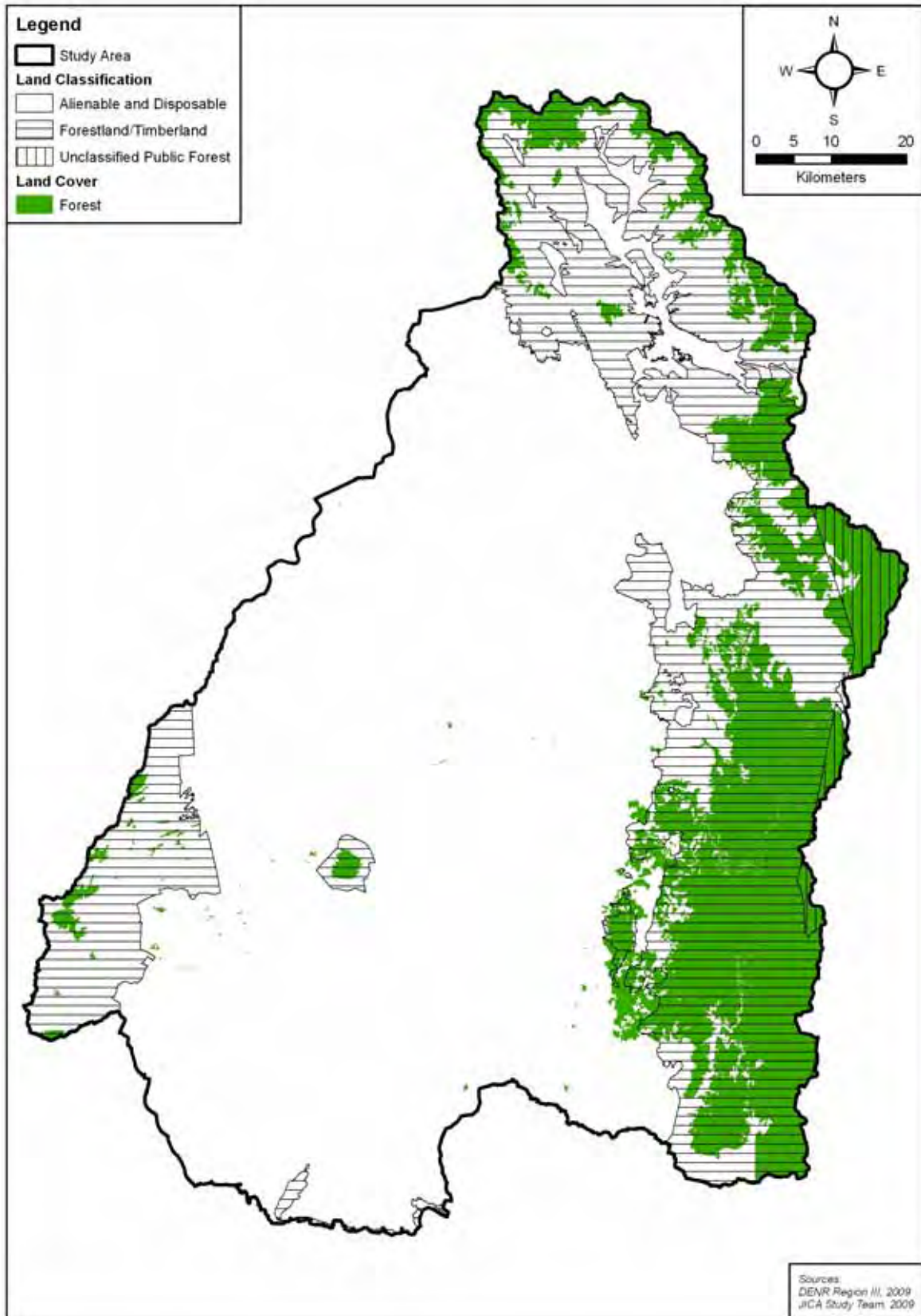
Source: Proposal to DBM, NWRB

Annex-F 5.3.3 NWRB's Proposed Organizational Structure as of March 2009

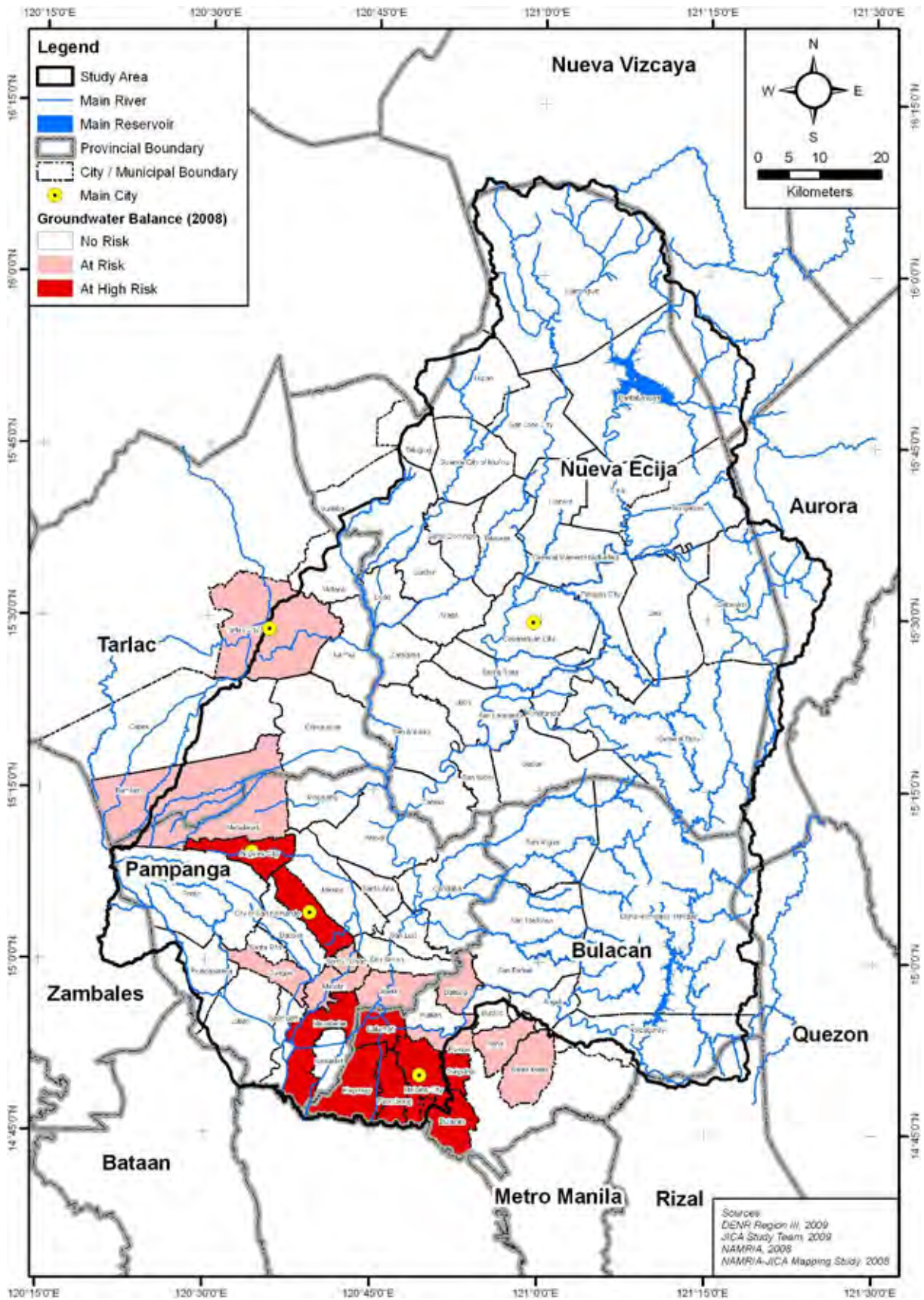
ANF-5-7



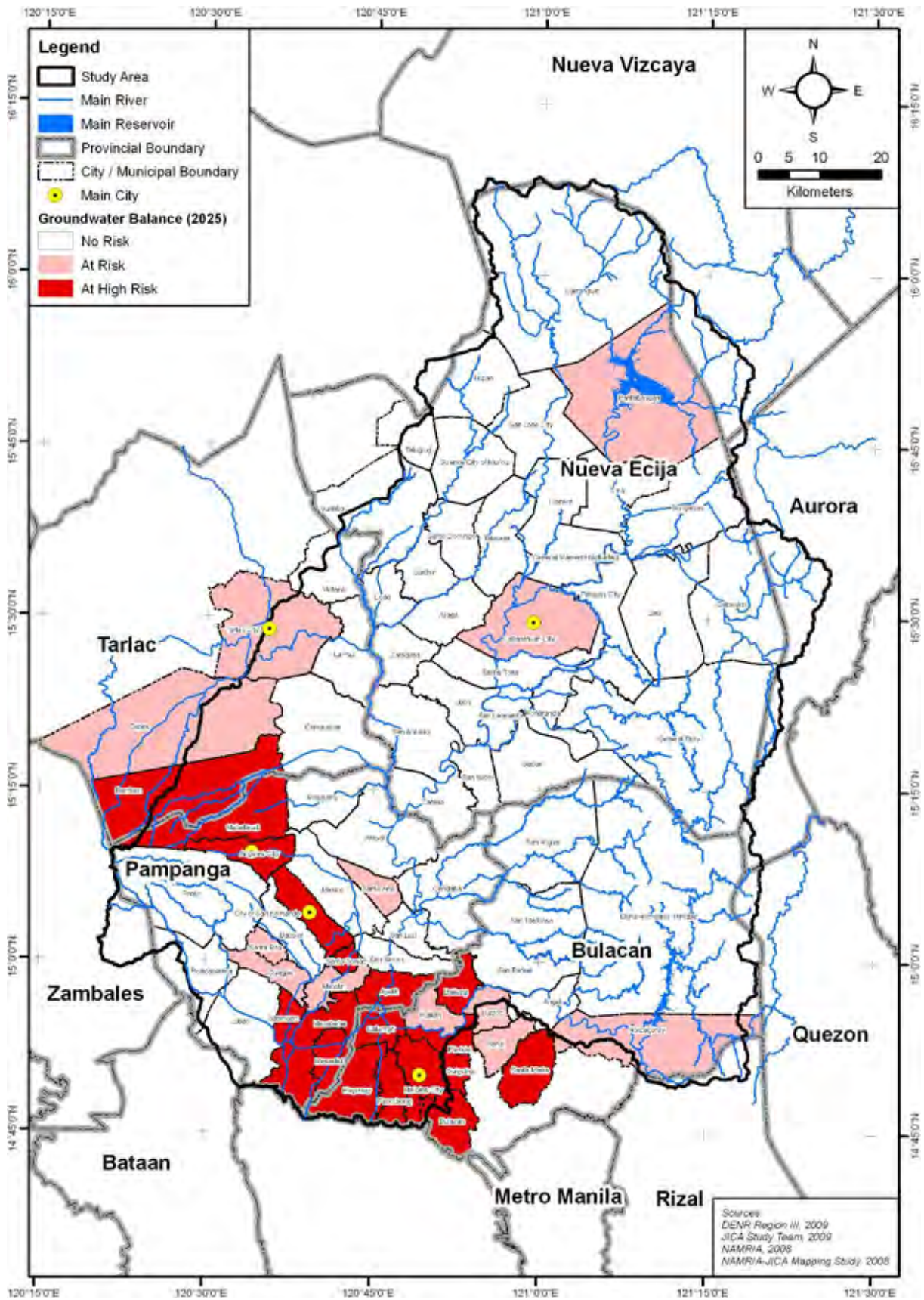
Annex-F 5.3.4 NWRB's Proposed Organizational Structure, September 2010



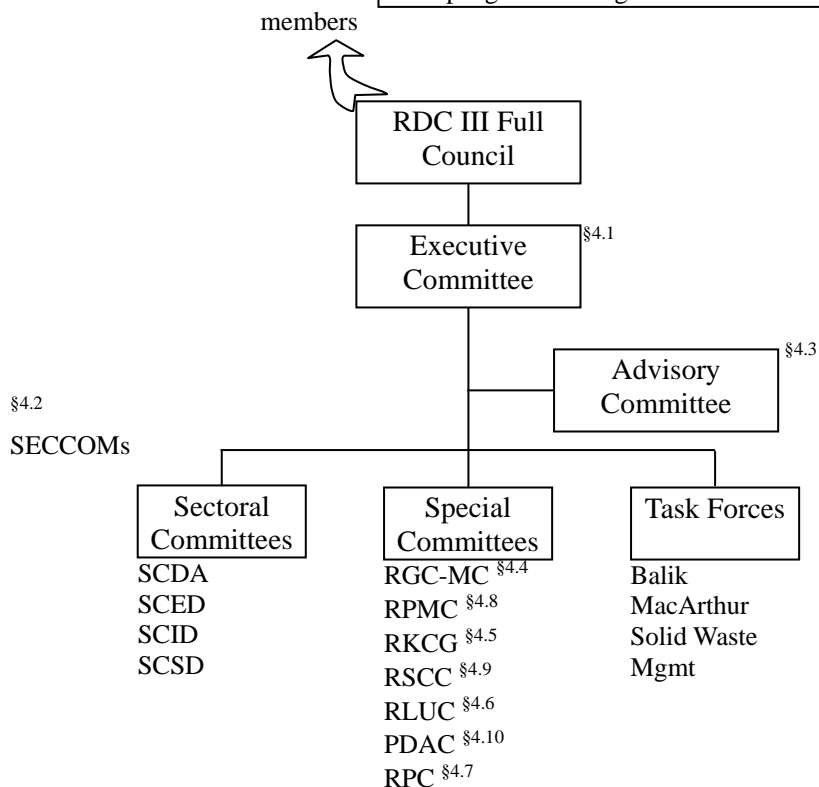
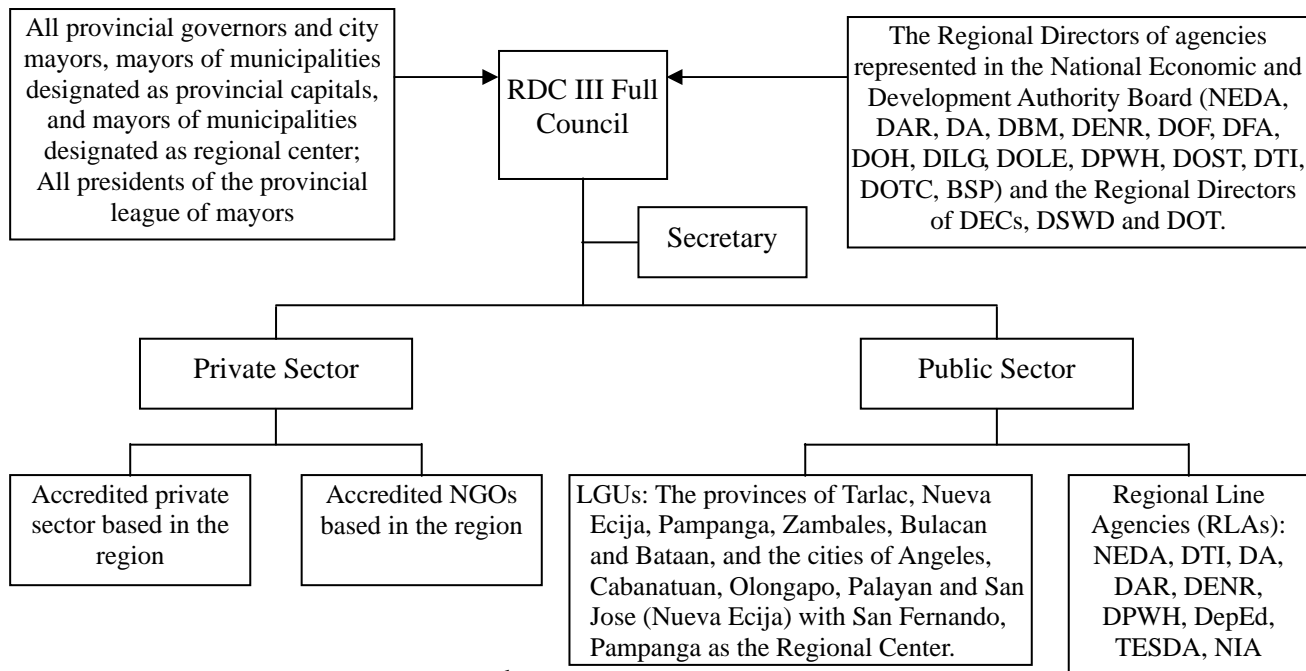
Annex-F 6.5.1 Land Classification vs. Land Cover Over Forest Lands in the Study Area 2005



Annex-F 6.7.1 Evaluation of Groundwater Usage Condition in Present Condition (2008)



Annex-F 6.7.2 Evaluation of Groundwater Usage Condition in Future Condition (2025)

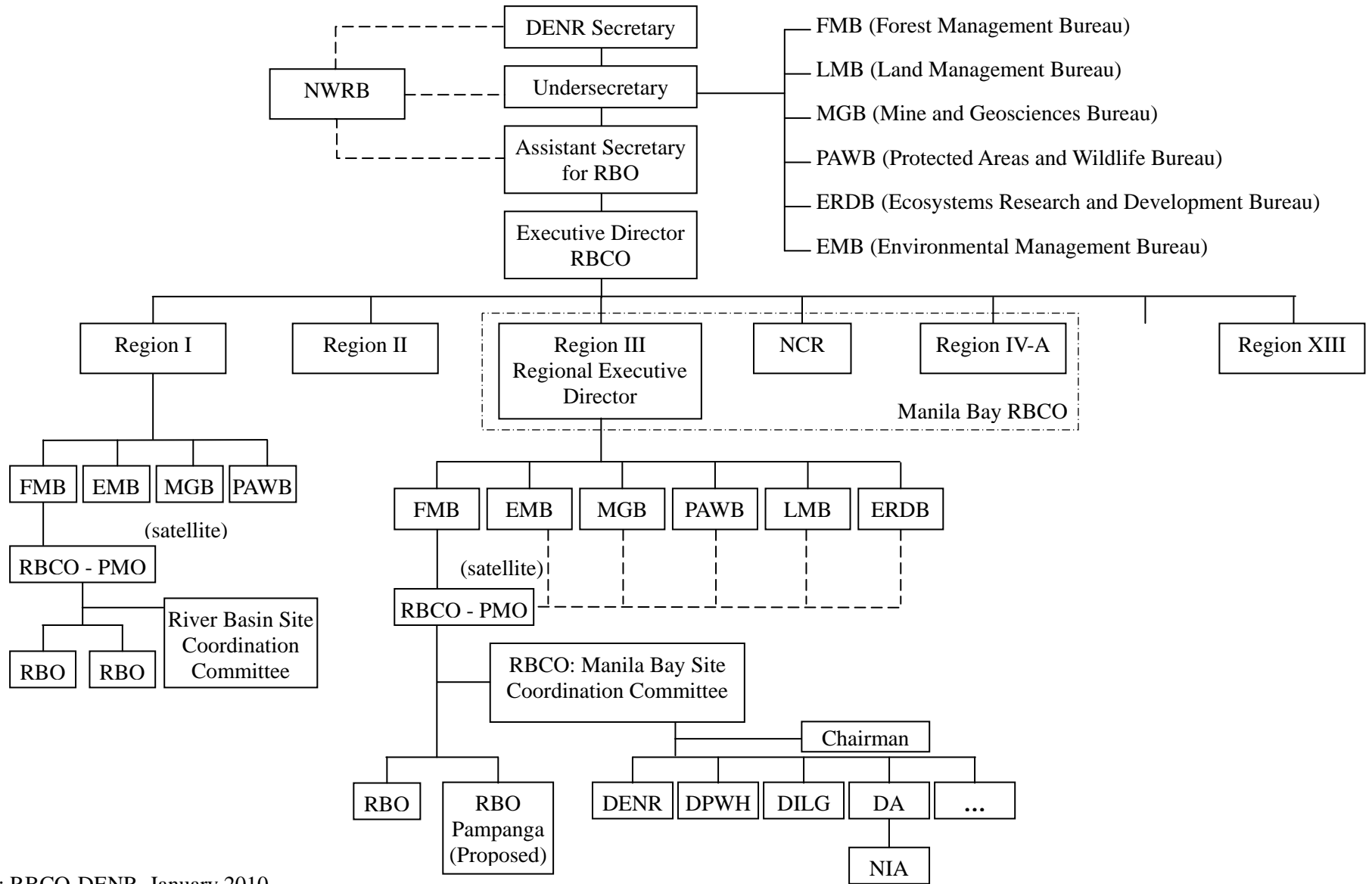


SC: Sectoral Committee
DA: Development Administration
ED: Economic Development
ID: Infrastructure Development
SD: Social Development

RGC-MC: Regional Government Center Management Committee
 RKCG: Regional KALAH I Convergence Group
 RLUC: Regional Land Use Committee
 RPC: Regional Productivity Committee
 RPMC: Regional Project Monitoring Committee
 RSCC: Regional Statistical Coordination Committee
 PDAC: Project Development Assistance Committee

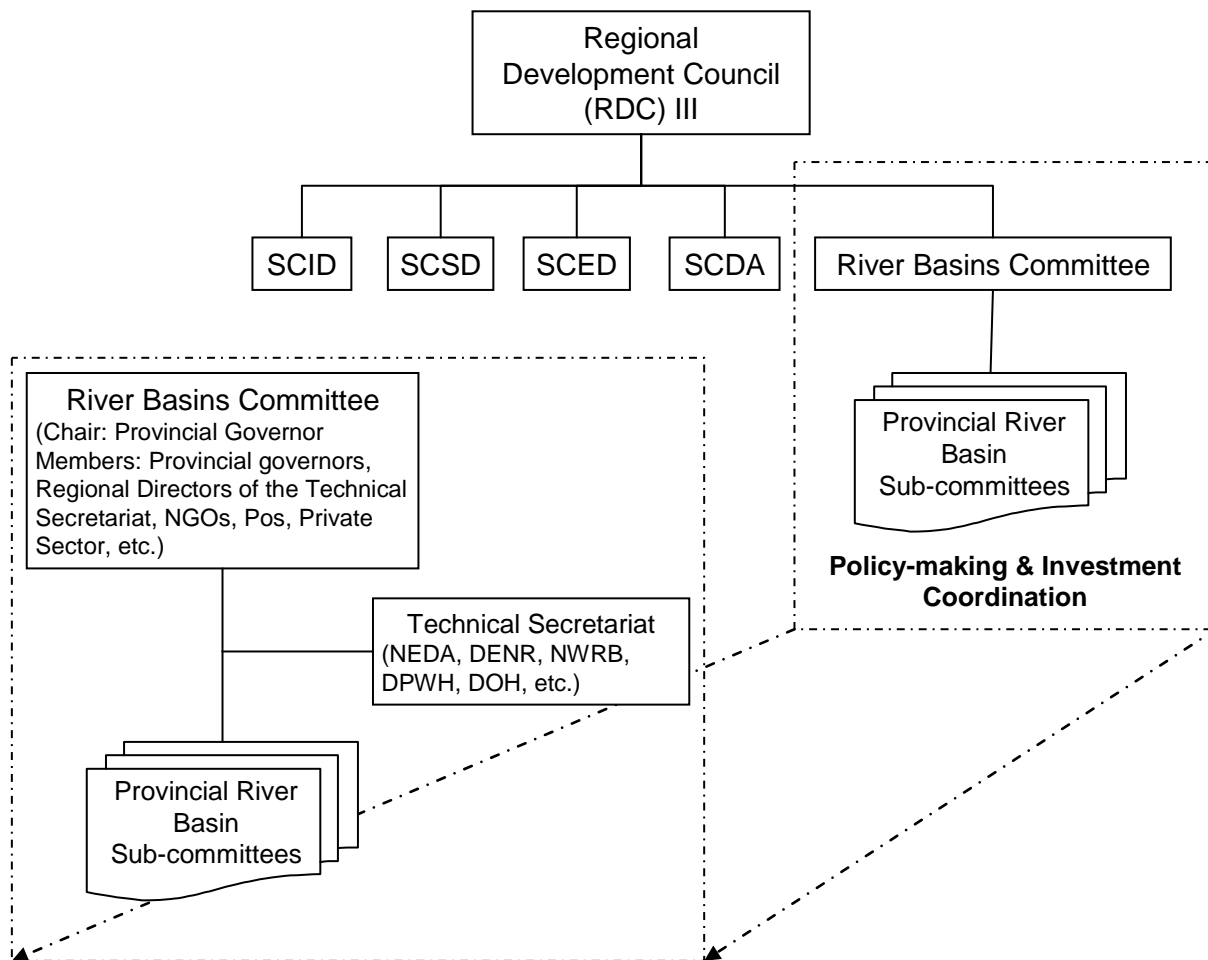
Source: Handbook of the Regional Development Council III (RDC III)
 Central Luzon Region, Revised August 2006, p26 & pp. 1-25

Annex-F 12.4.1 Organization Structure of Regional Development Council of Region III



Source: RBCO-DENR, January 2010

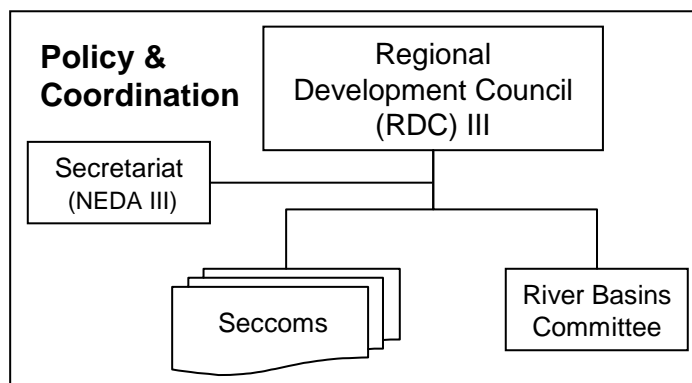
Annex-F 12.4.2 RBO under of RBCO and Satellite RBCO, Manila Bay Site Coordination Committee



The relationship of the RDC III – RBC vis-à-vis the regular frontline agencies

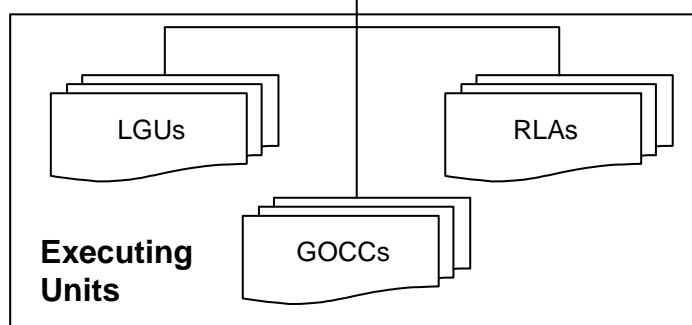
Roles & Functions:

Policy coordination & Decision-making body in the region;
Formulation of development plans & Investment Programs; Project monitoring;
Budgeting & investment programming

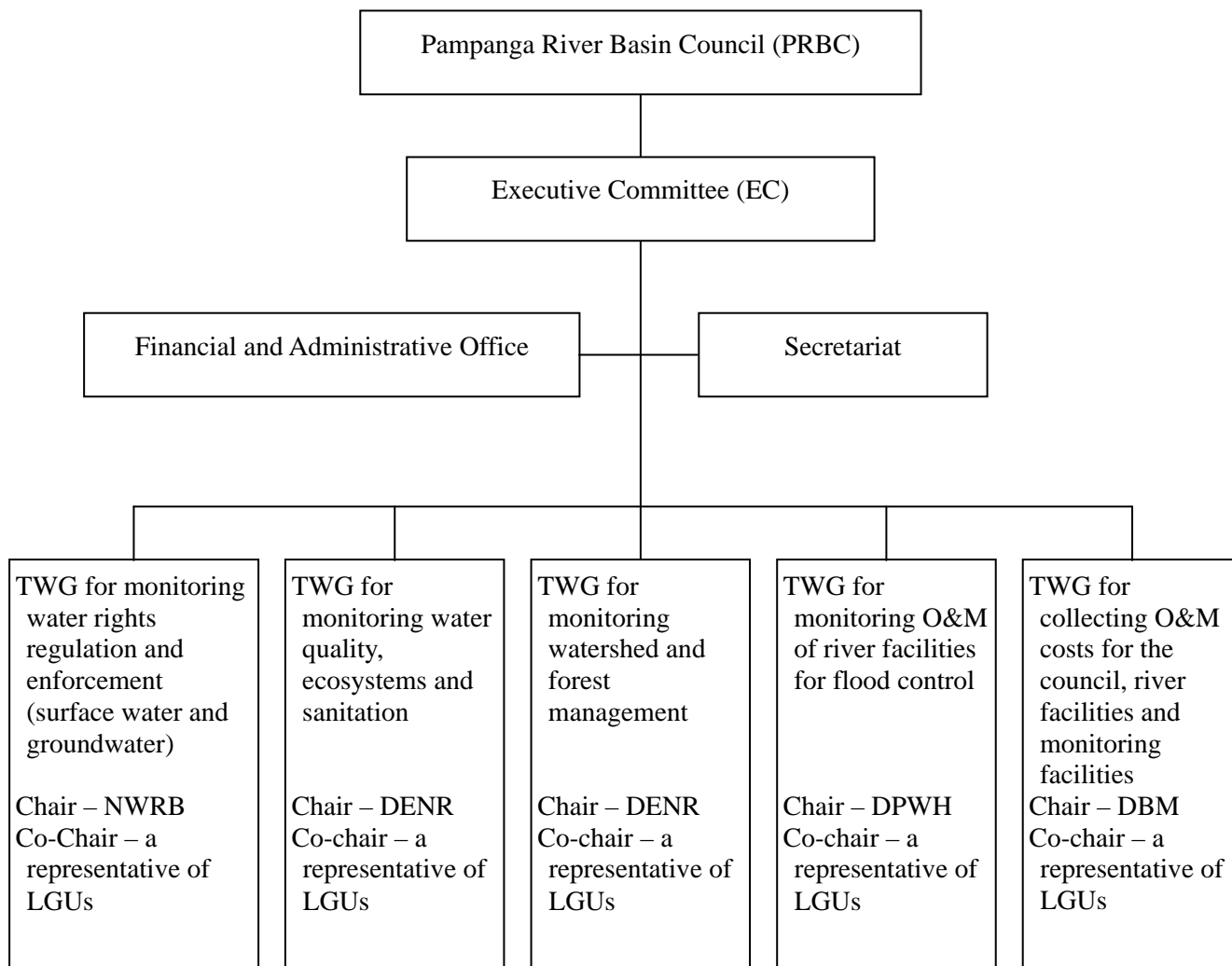


Roles & Functions:

Formulation of agency plans and programs;
Implementation of plans and programs



Annex-F 12.4.3 Proposed creation of a Committee on River Basins under the Regional Development Council (RDC) III

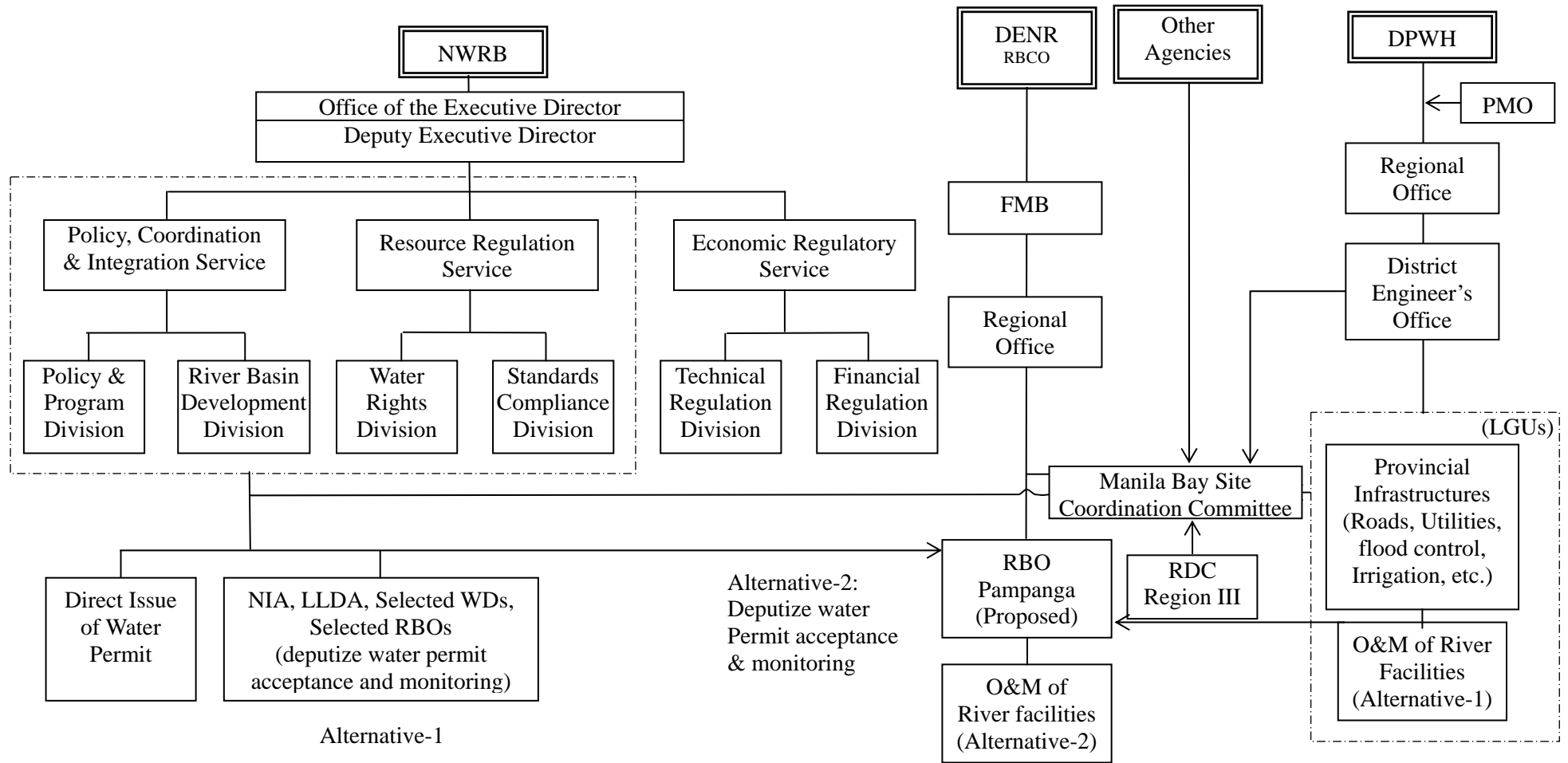


Note: PRBC and EC are multi-sectoral, led by the Chair, a representative of LGUs in Region III.

A representative of PRBC or EC is elected by the member of PRBC and EC respectively

Source: JICA Study Team

Annex-F 12.4.4 Independent Pampanga River Basin Council



Source: JICA Study Team

Annex-F 12.4.5 Position of NWRB for Water Rights Regulation among RBCO and RBO

