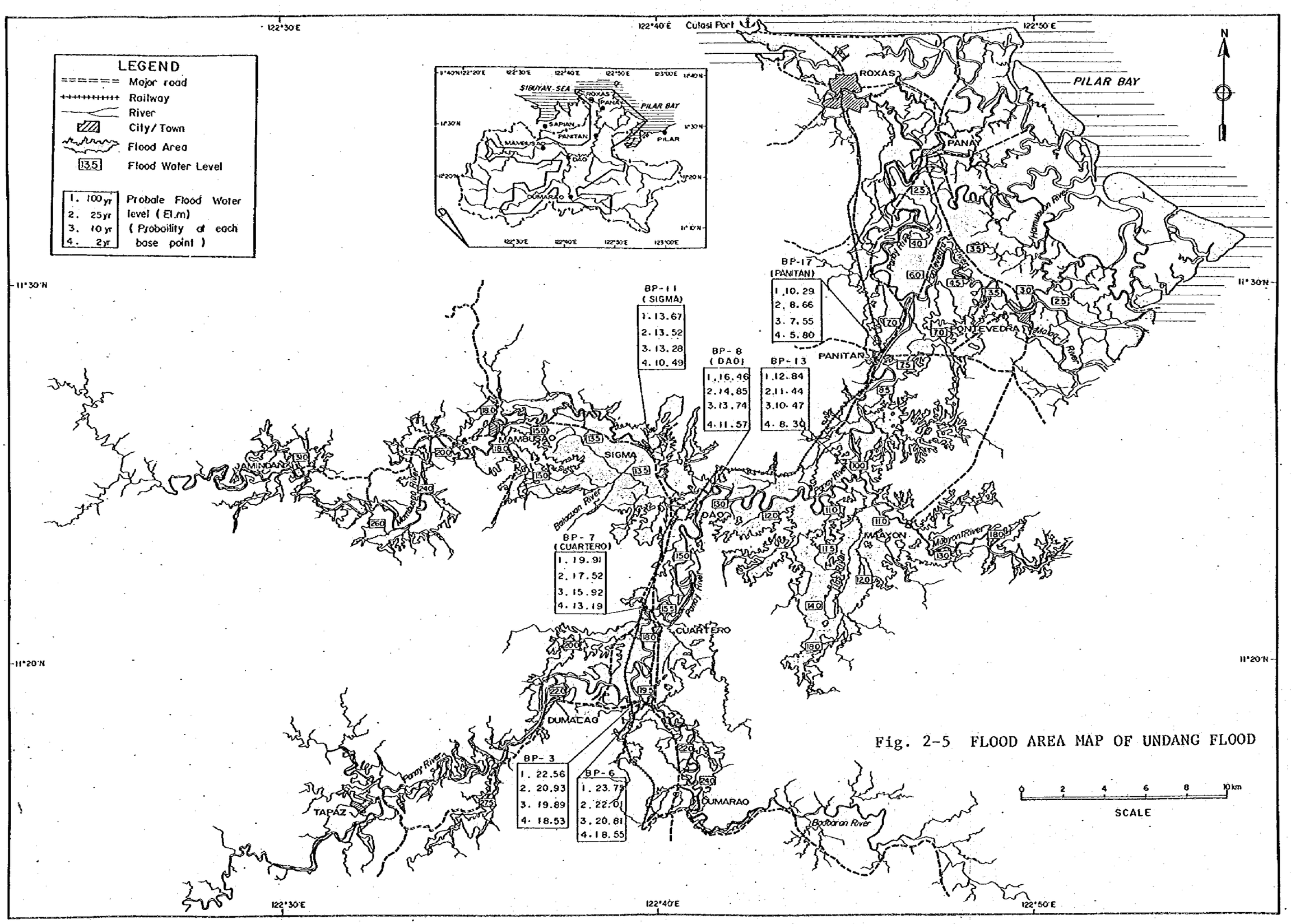
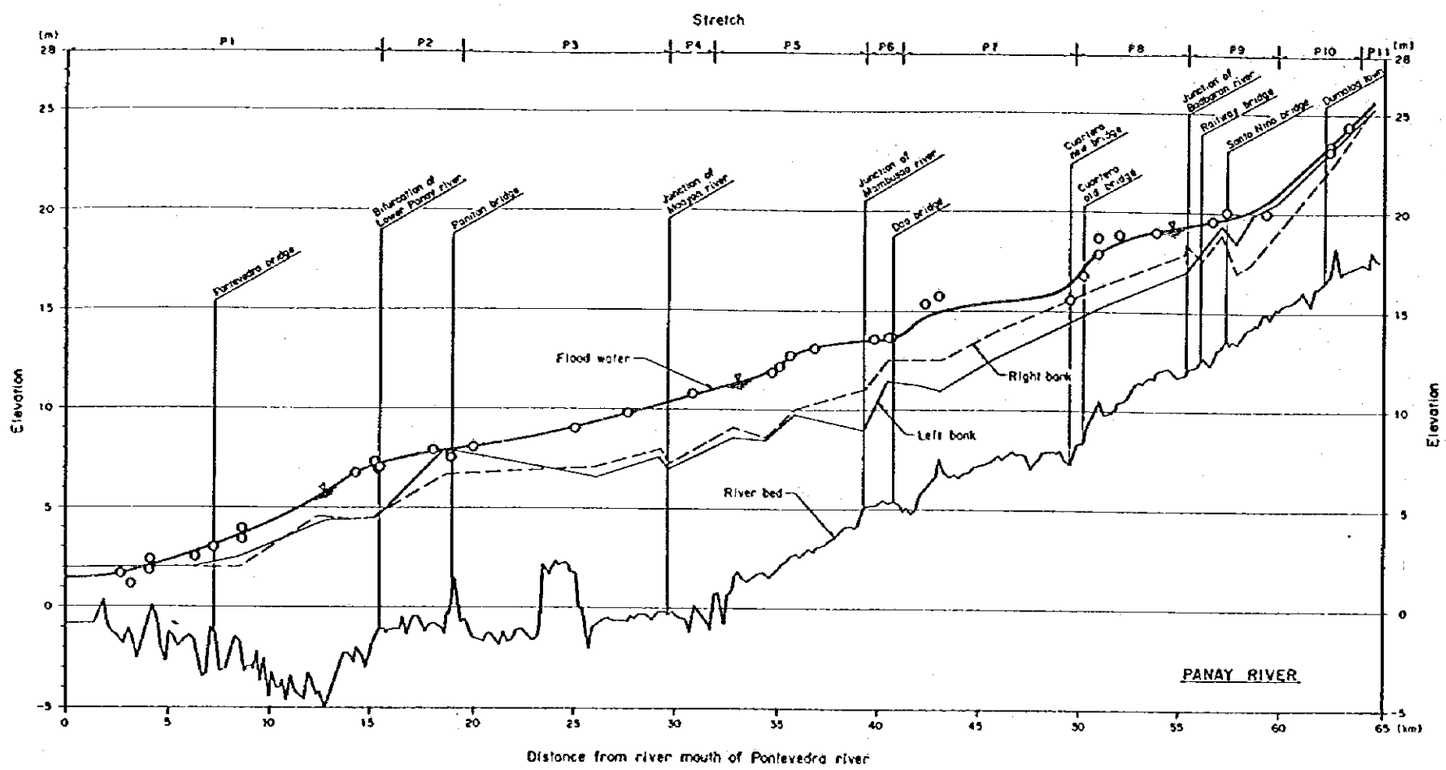
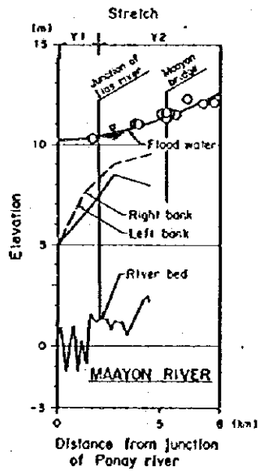
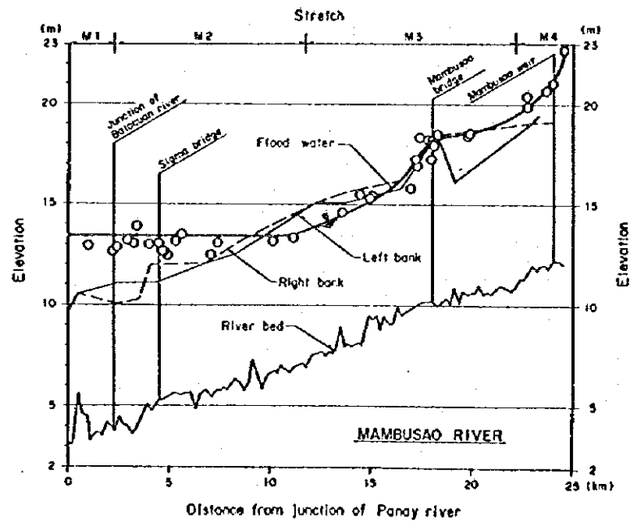
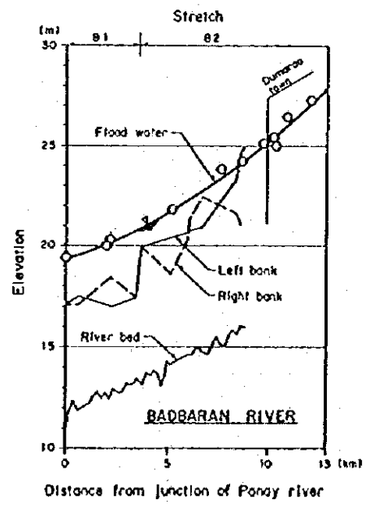


Fig. 2-5 FLOOD AREA MAP OF UNDANG FLOOD









Remarks : O shows surveyed water level

Fig. 2-6 LONGITUDINAL WATER PROFILE OF UNDANG FLOOD

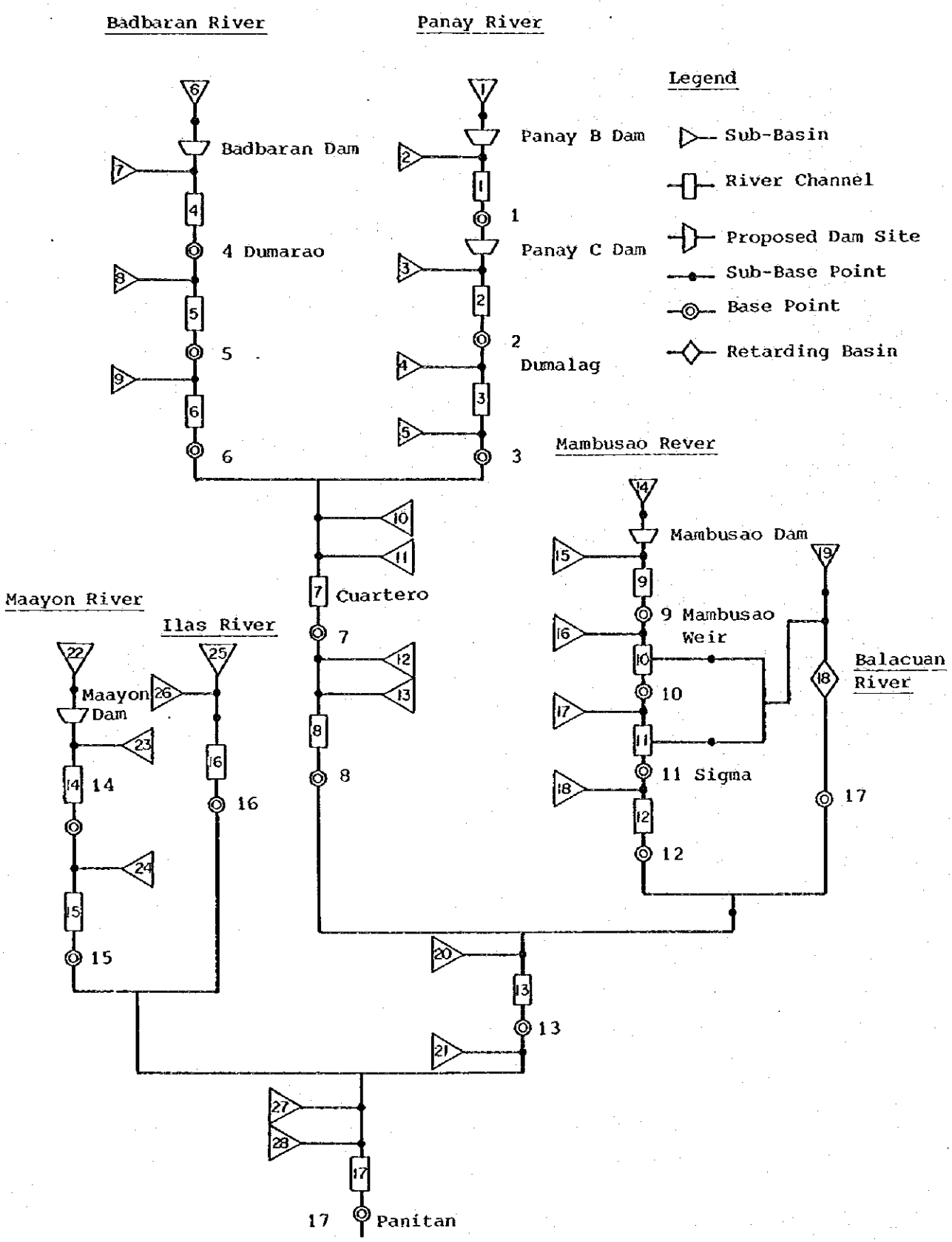


Fig. 2-7 RIVER SYSTEM MODEL

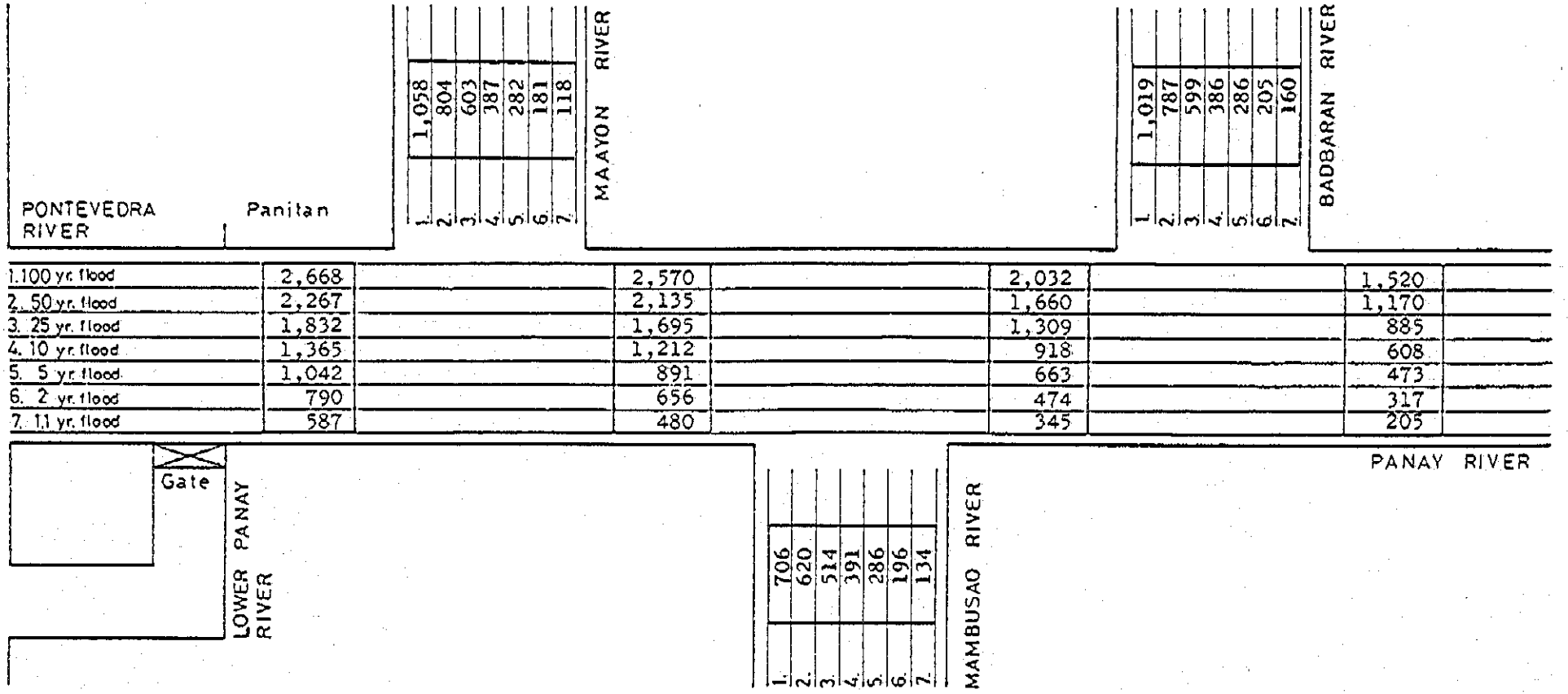


Fig. 2-8 FLOOD FLOW DISTRIBUTION FOR PRESENT RIVER CONDITION (PROBABILITY OF BASIN RAINFALL AT PANITAN)

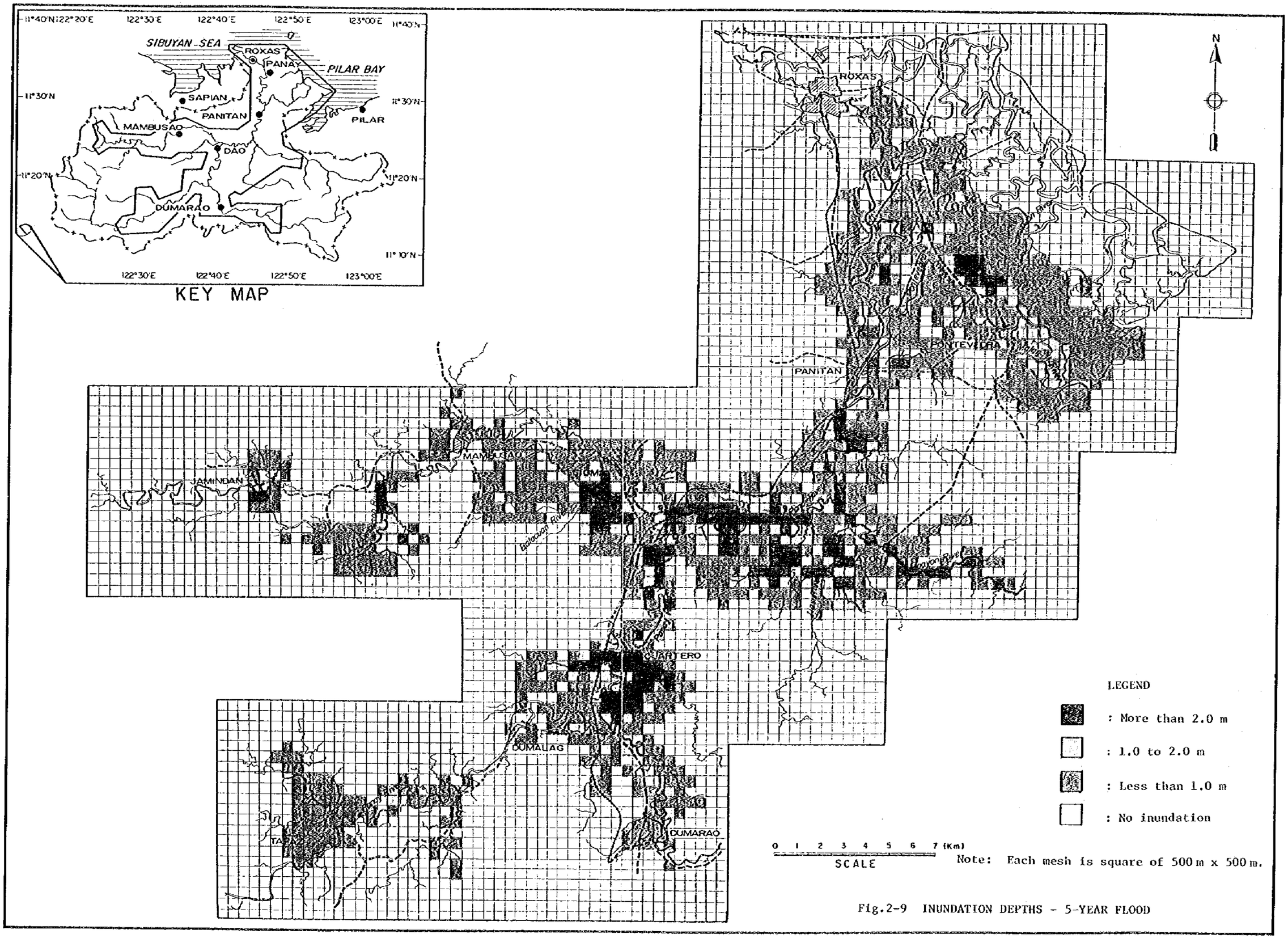


Fig.2-9 INUNDATION DEPTHS - 5-YEAR FLOOD

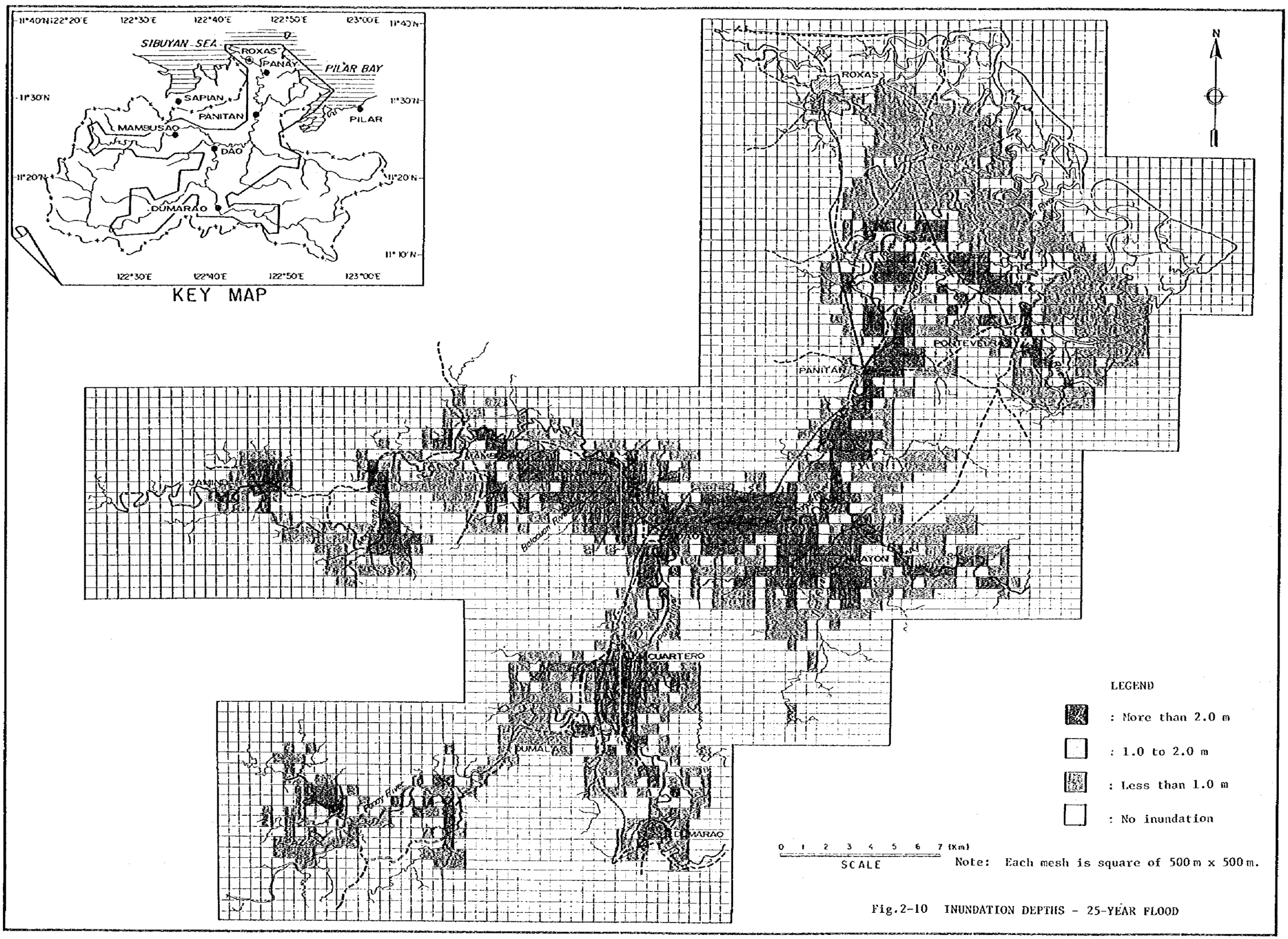
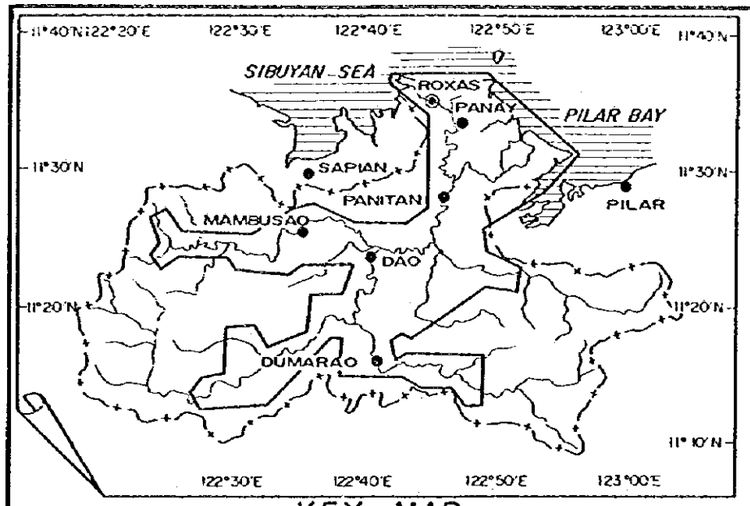


Fig.2-10 INUNDATION DEPTHS - 25-YEAR FLOOD



KEY MAP

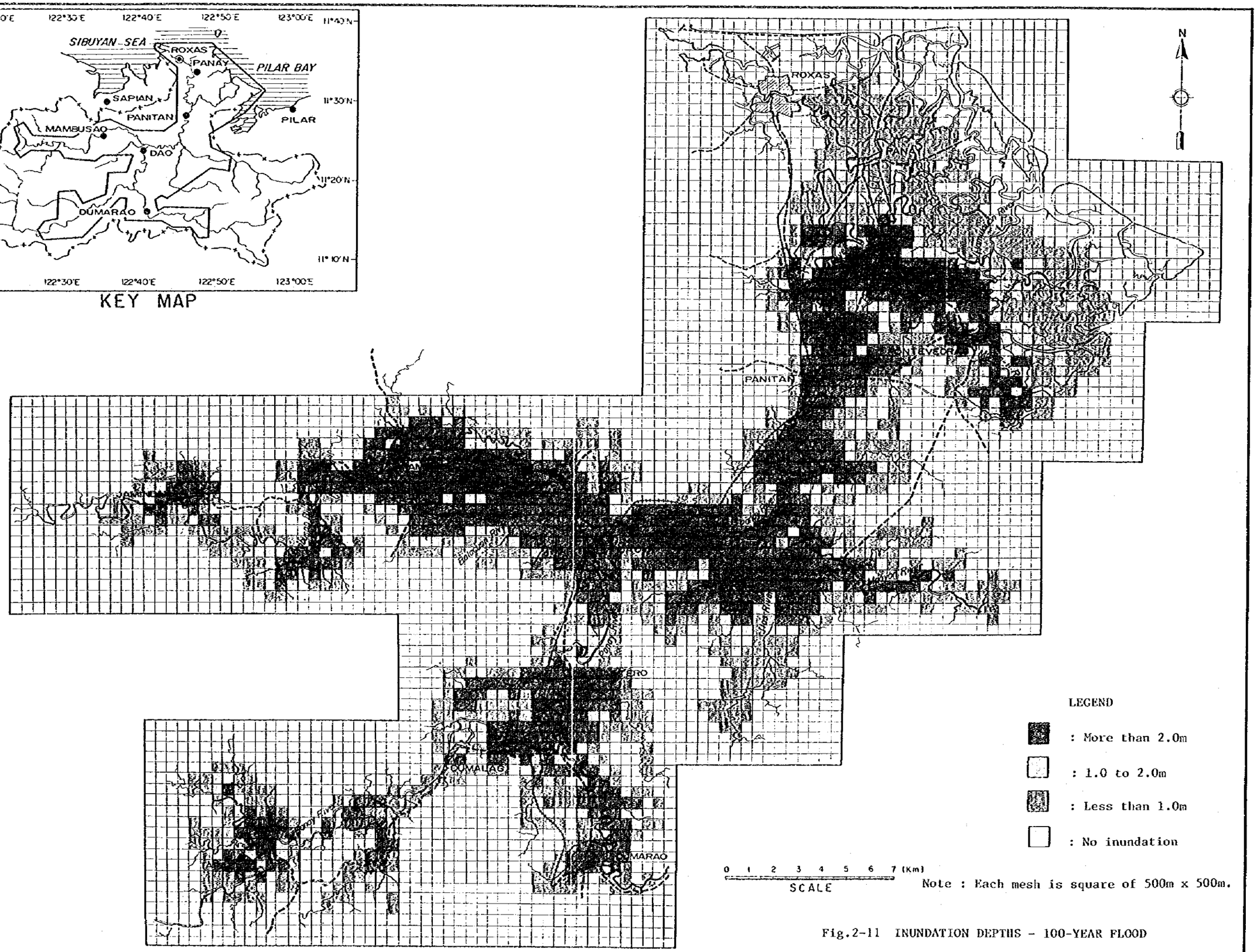


Fig.2-11 INUNDATION DEPTHS - 100-YEAR FLOOD

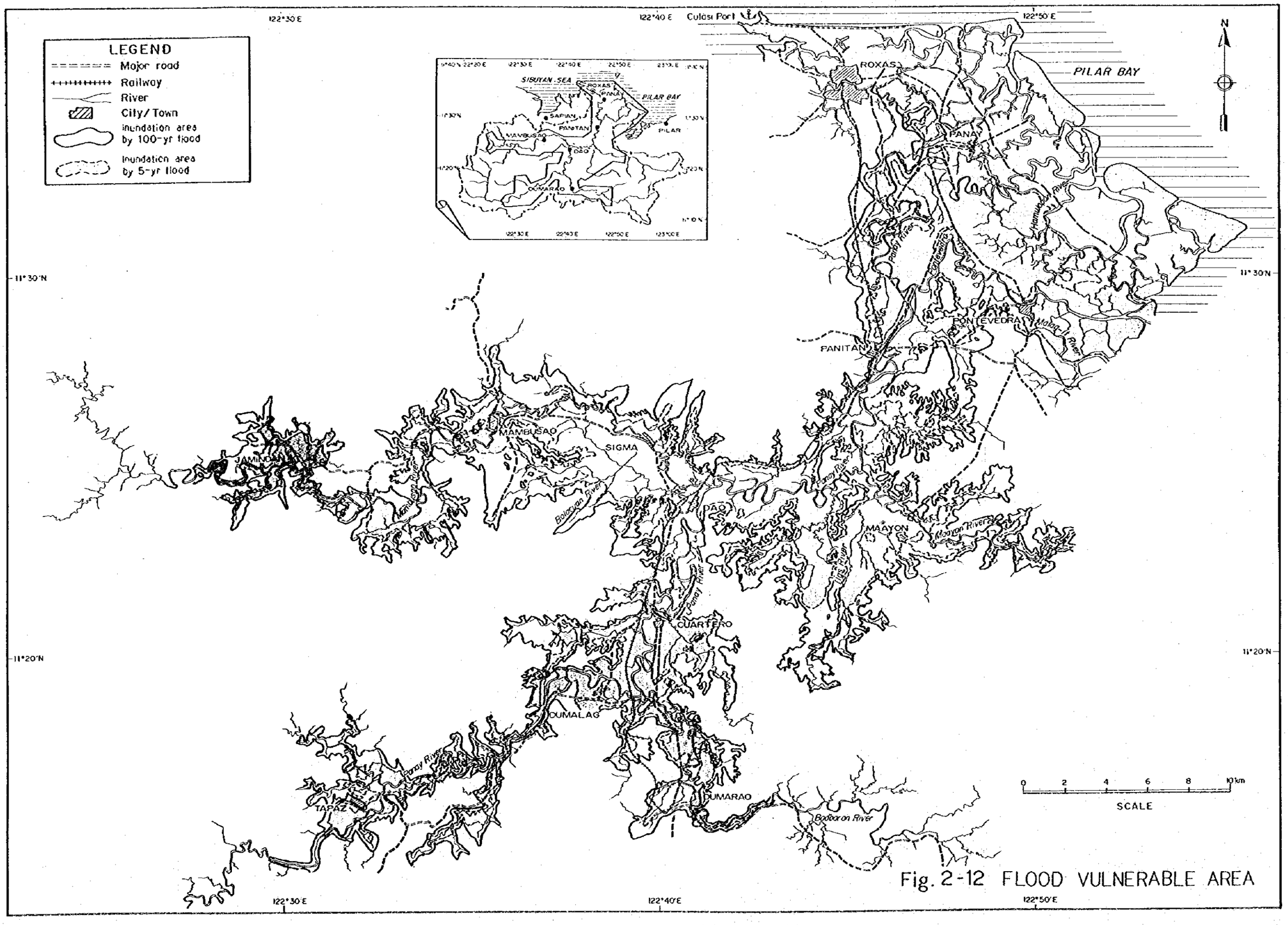


Fig. 2-12 FLOOD VULNERABLE AREA

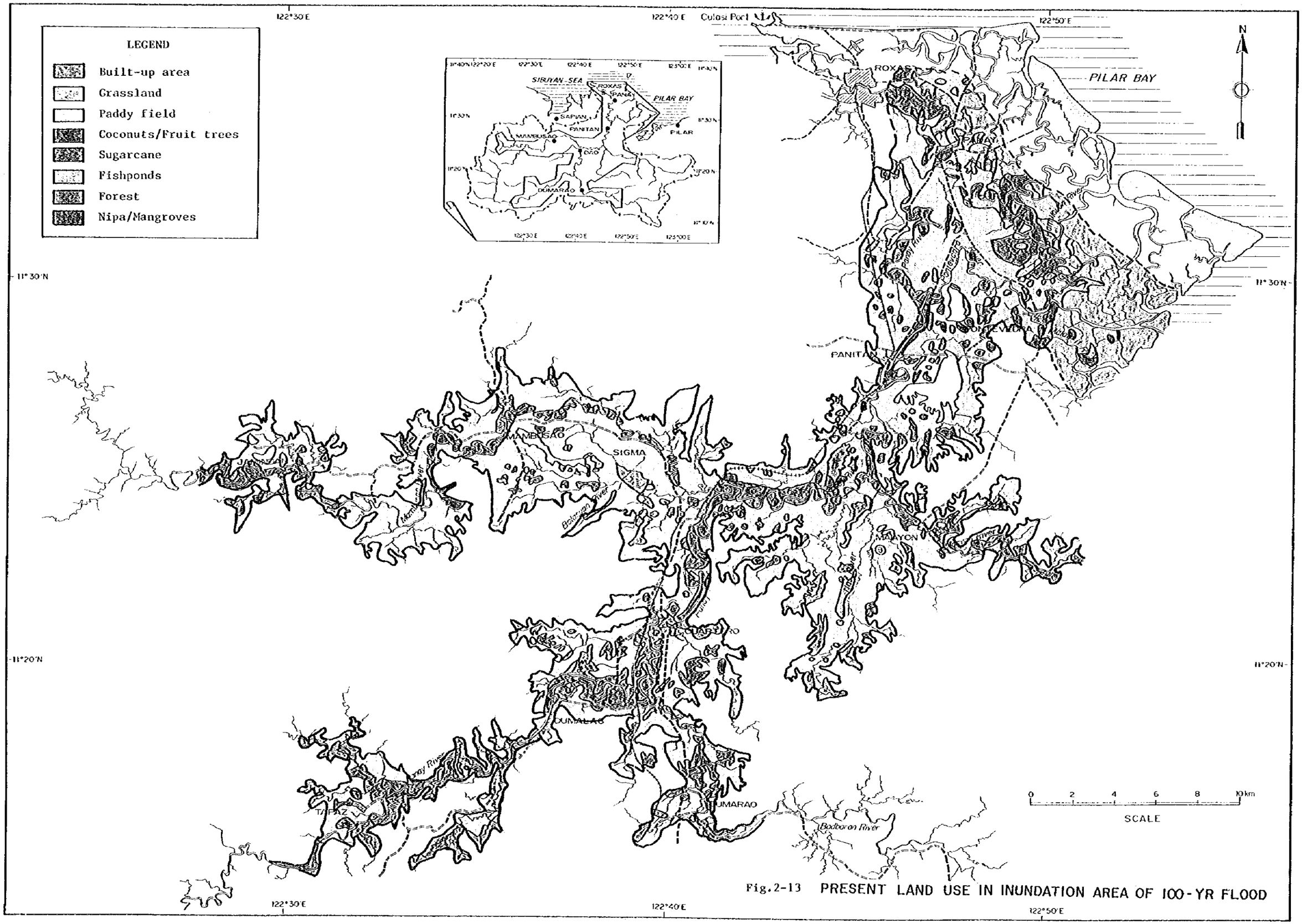


Fig.2-13 PRESENT LAND USE IN INUNDATION AREA OF 100-YR FLOOD

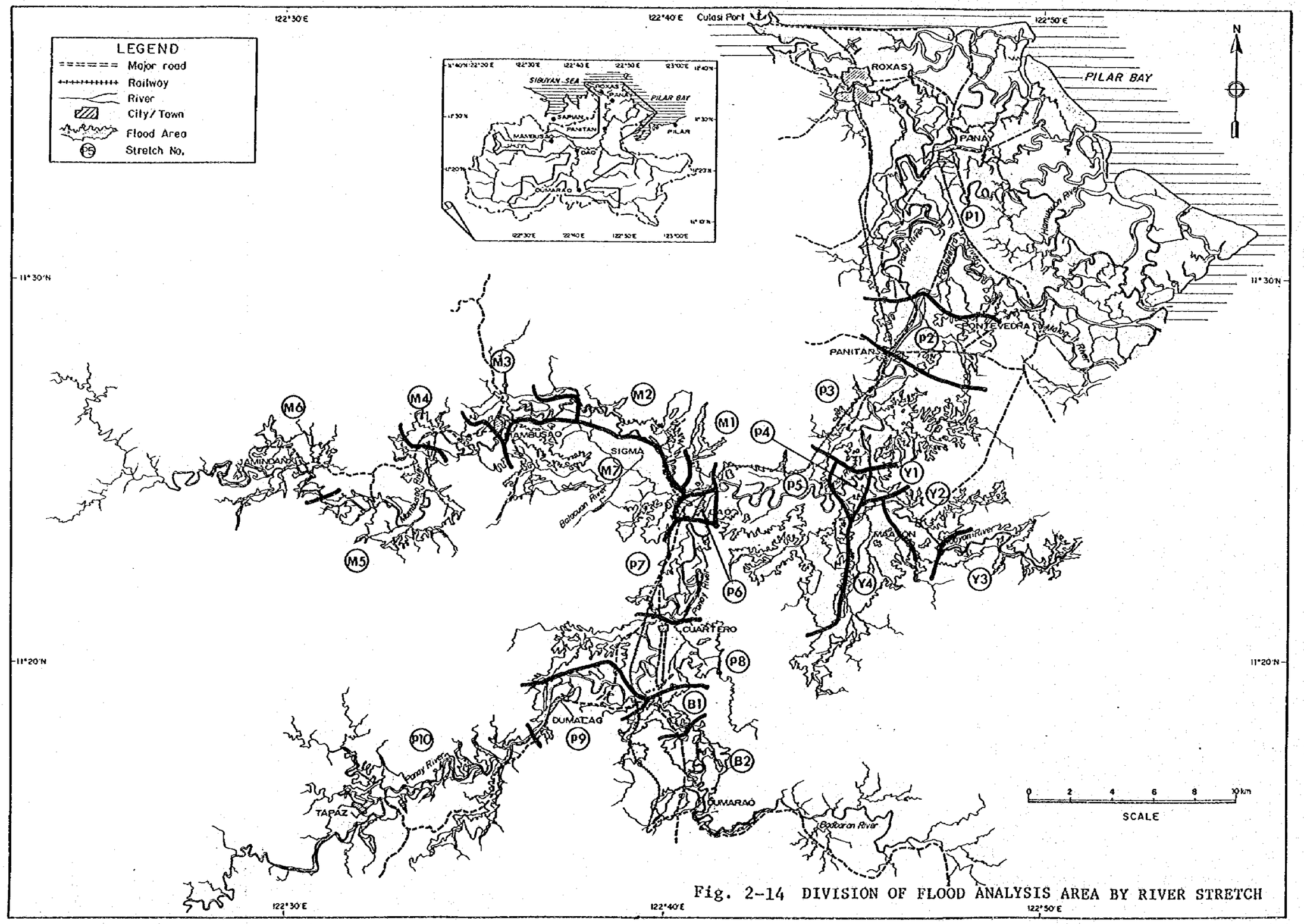


Fig. 2-14 DIVISION OF FLOOD ANALYSIS AREA BY RIVER STRETCH

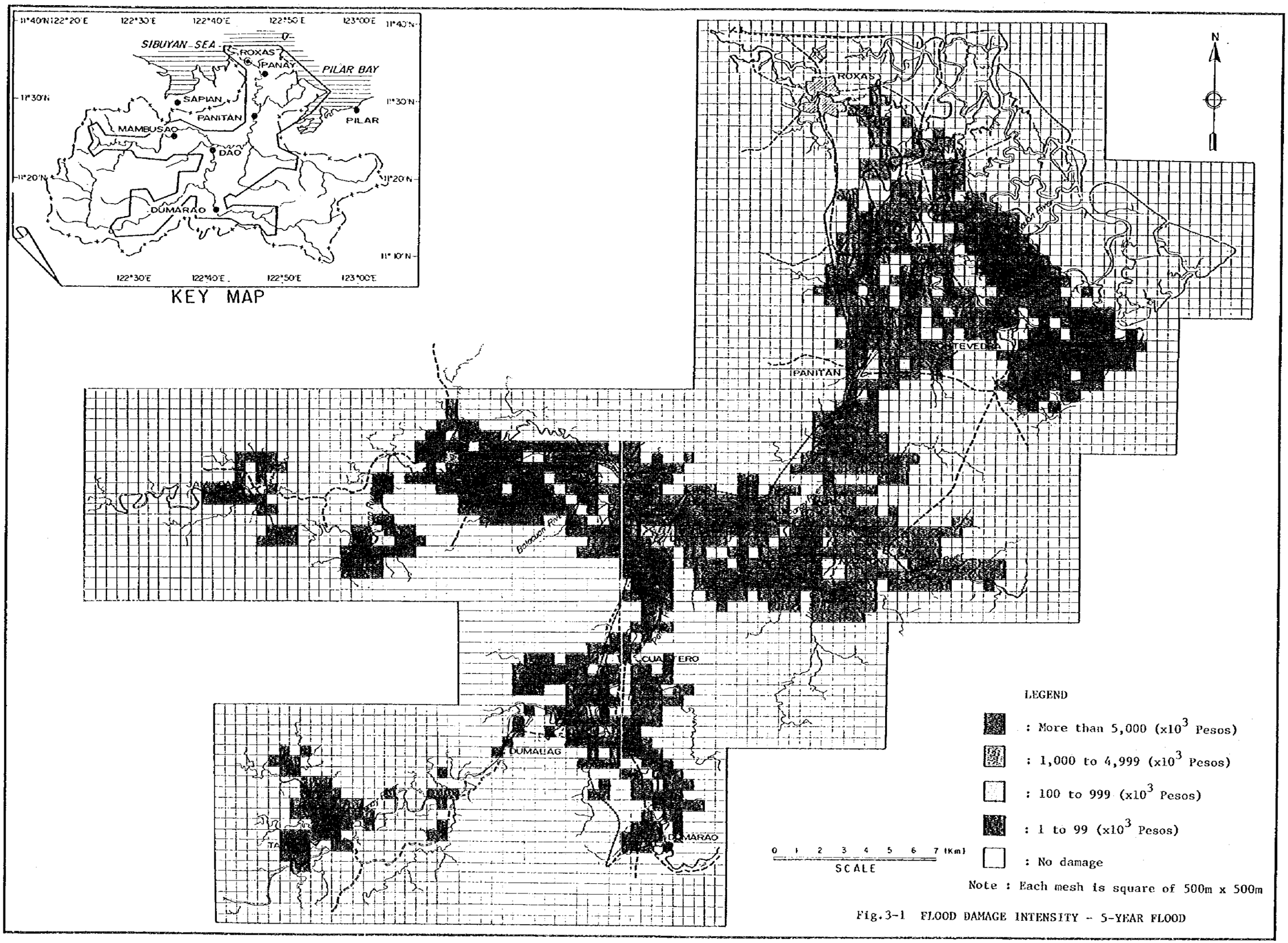


Fig.3-1 FLOOD DAMAGE INTENSITY - 5-YEAR FLOOD

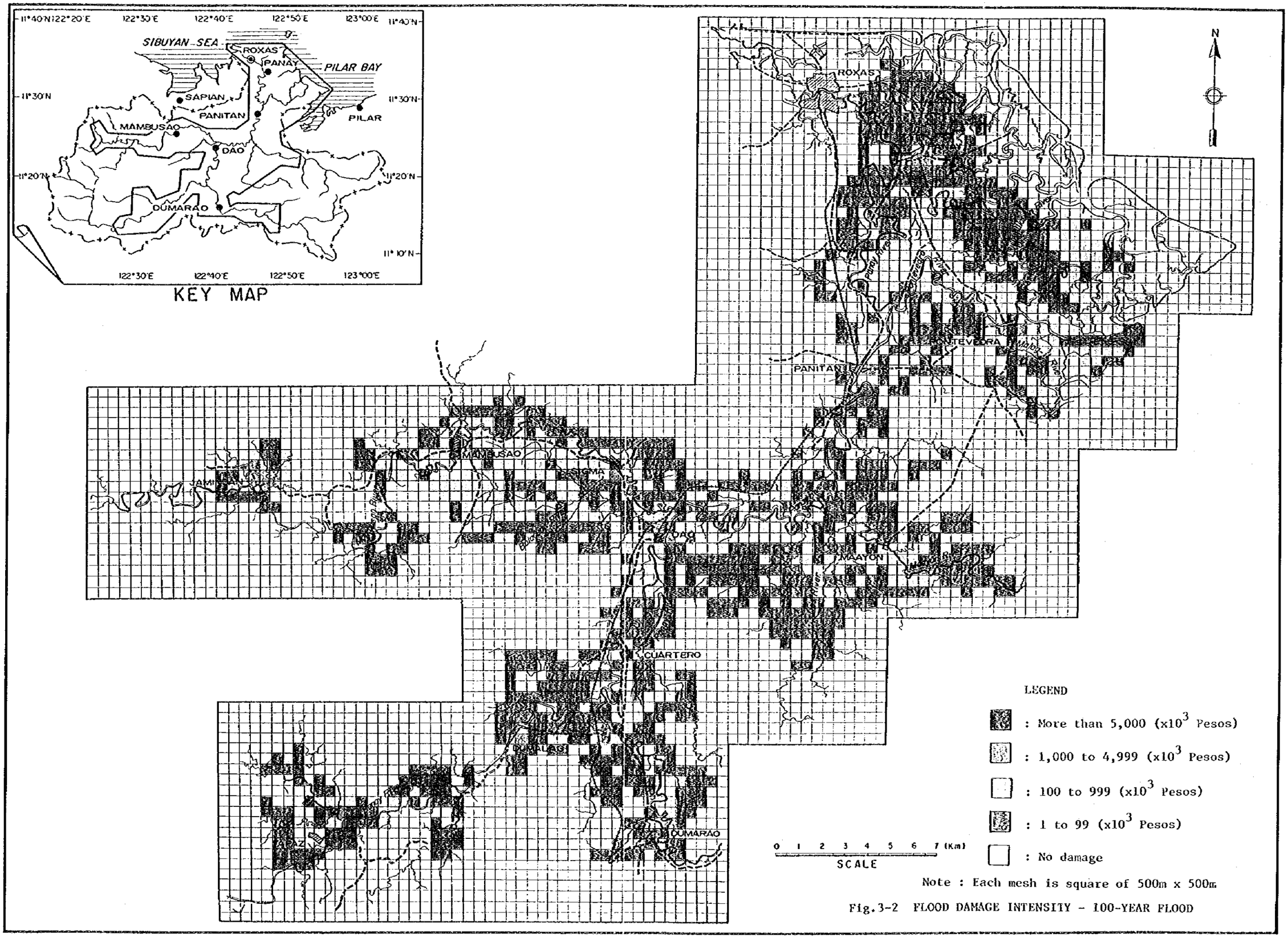


Fig.3-2 FLOOD DAMAGE INTENSITY - 100-YEAR FLOOD

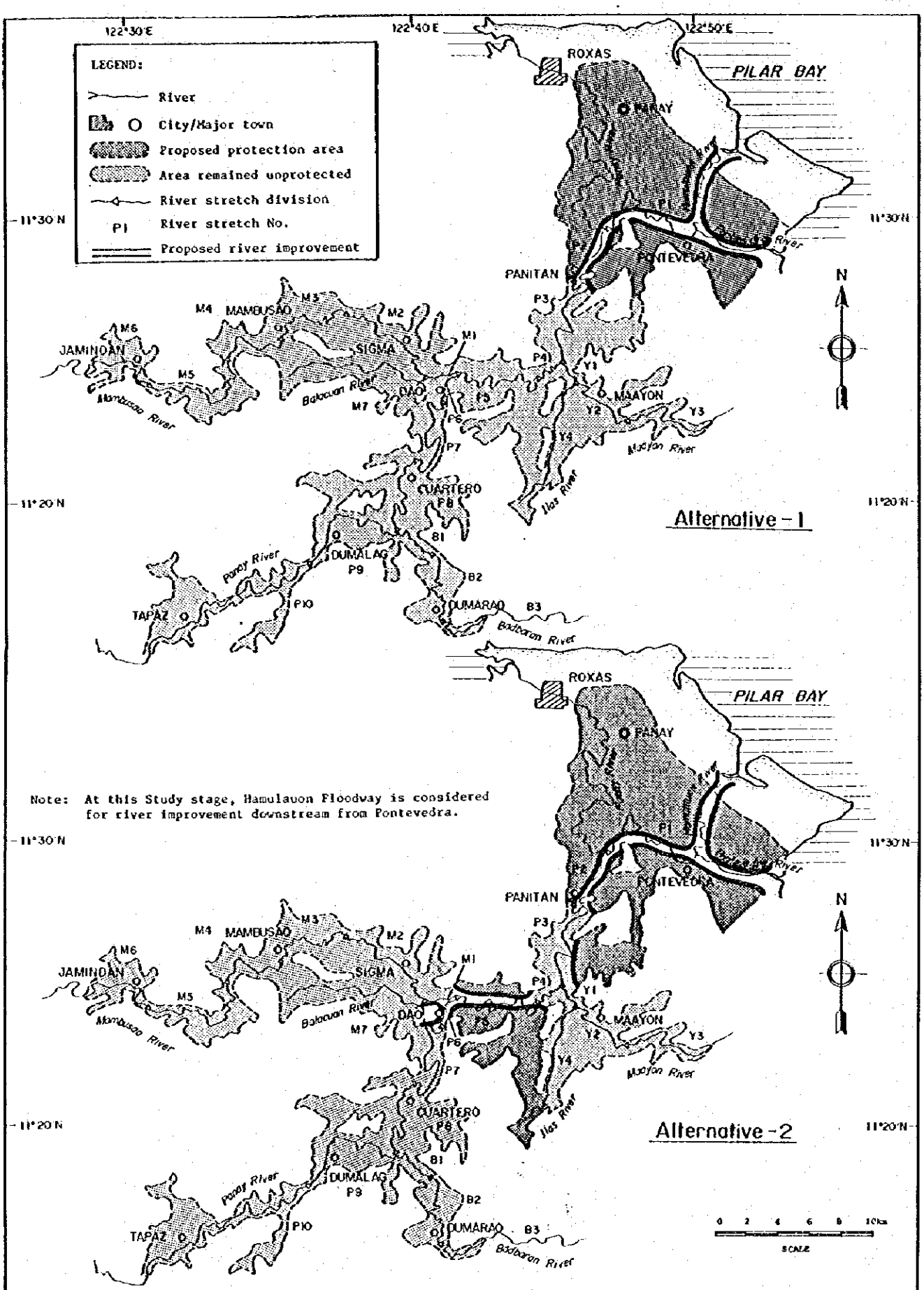


Fig. 3-3 FLOOD PROTECTION AREA OF ALTERNATIVE-1 AND ALTERNATIVE-2

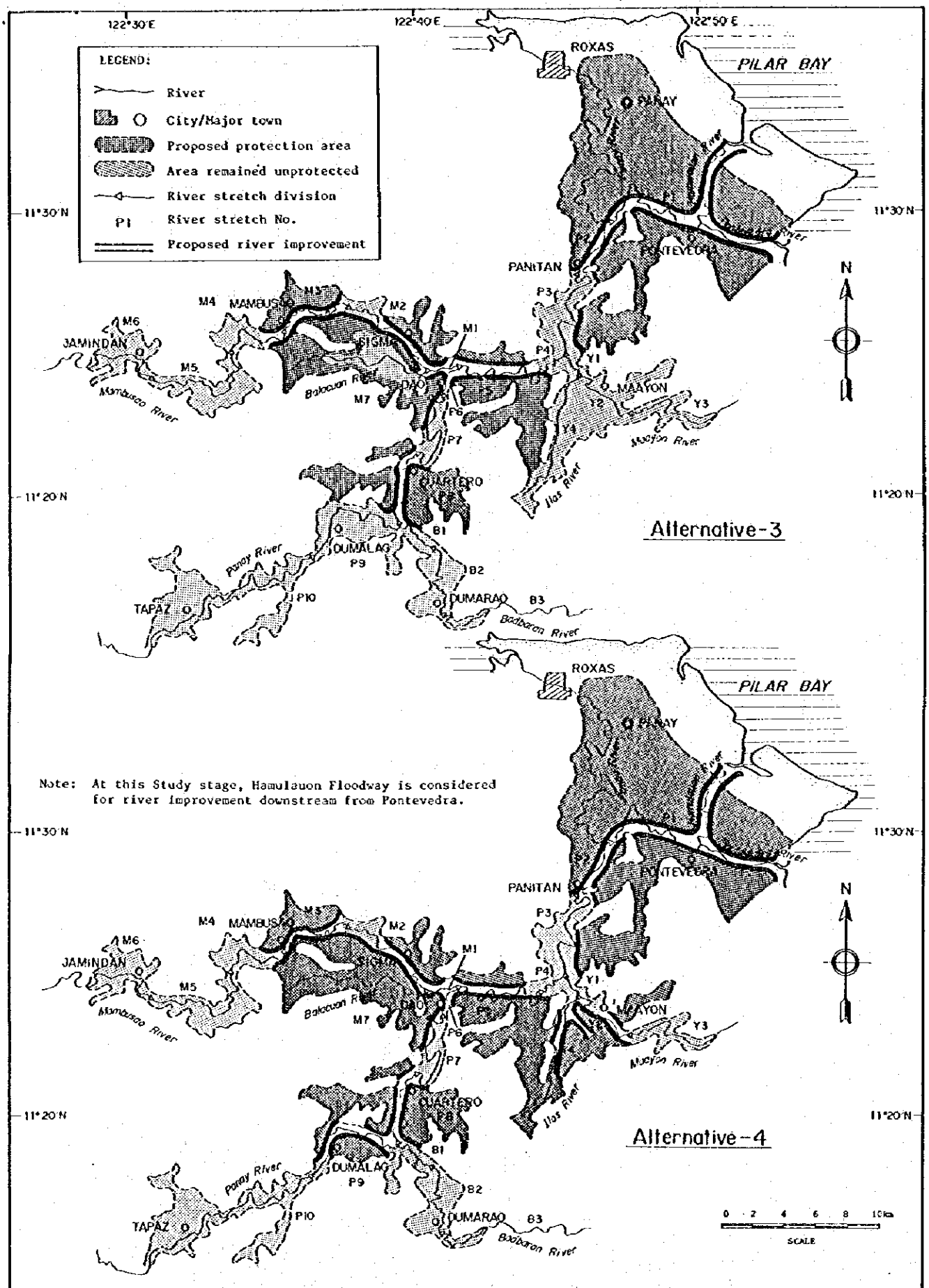


Fig. 3-4 FLOOD PROTECTION AREA OF ALTERNATIVE-3 AND ALTERNATIVE-4

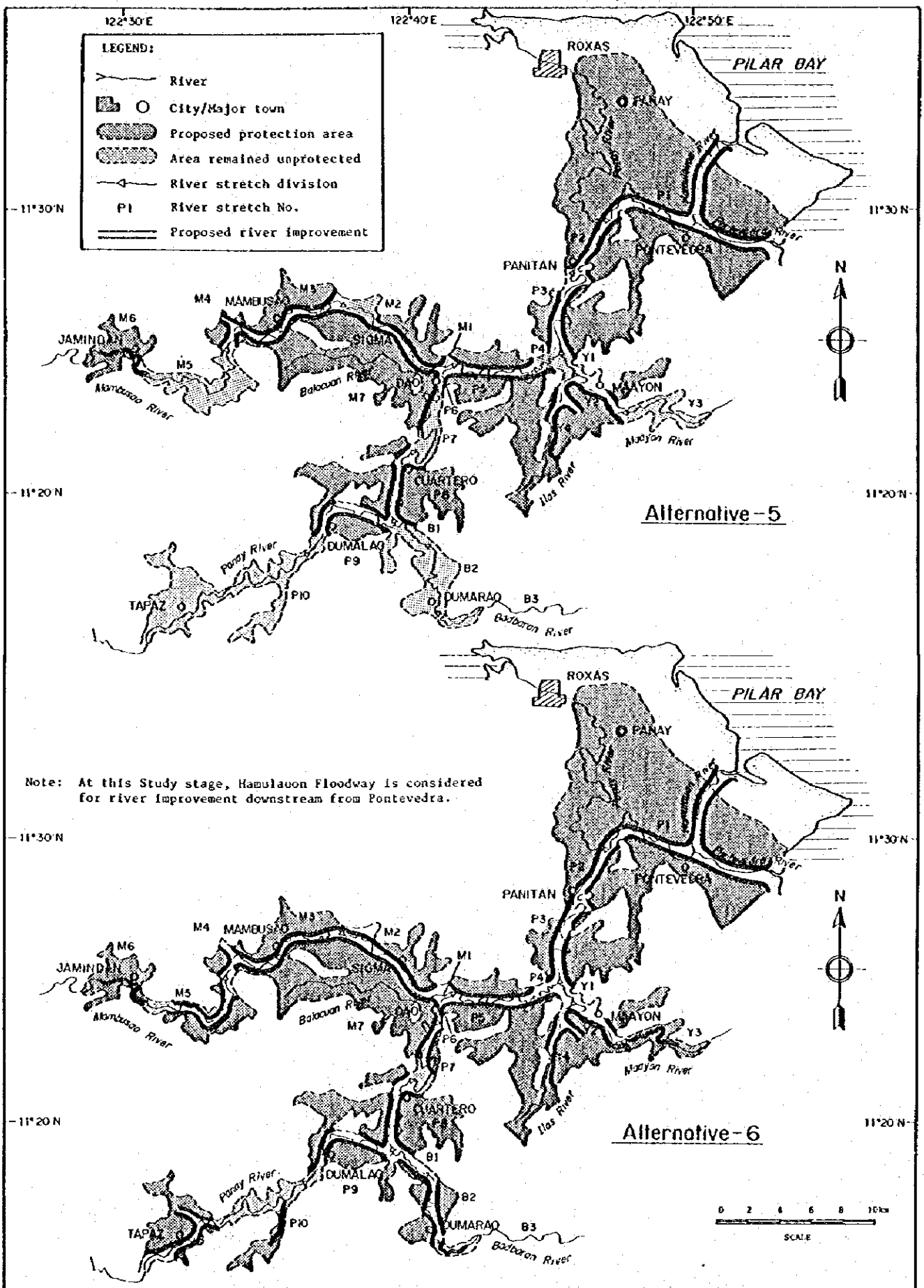
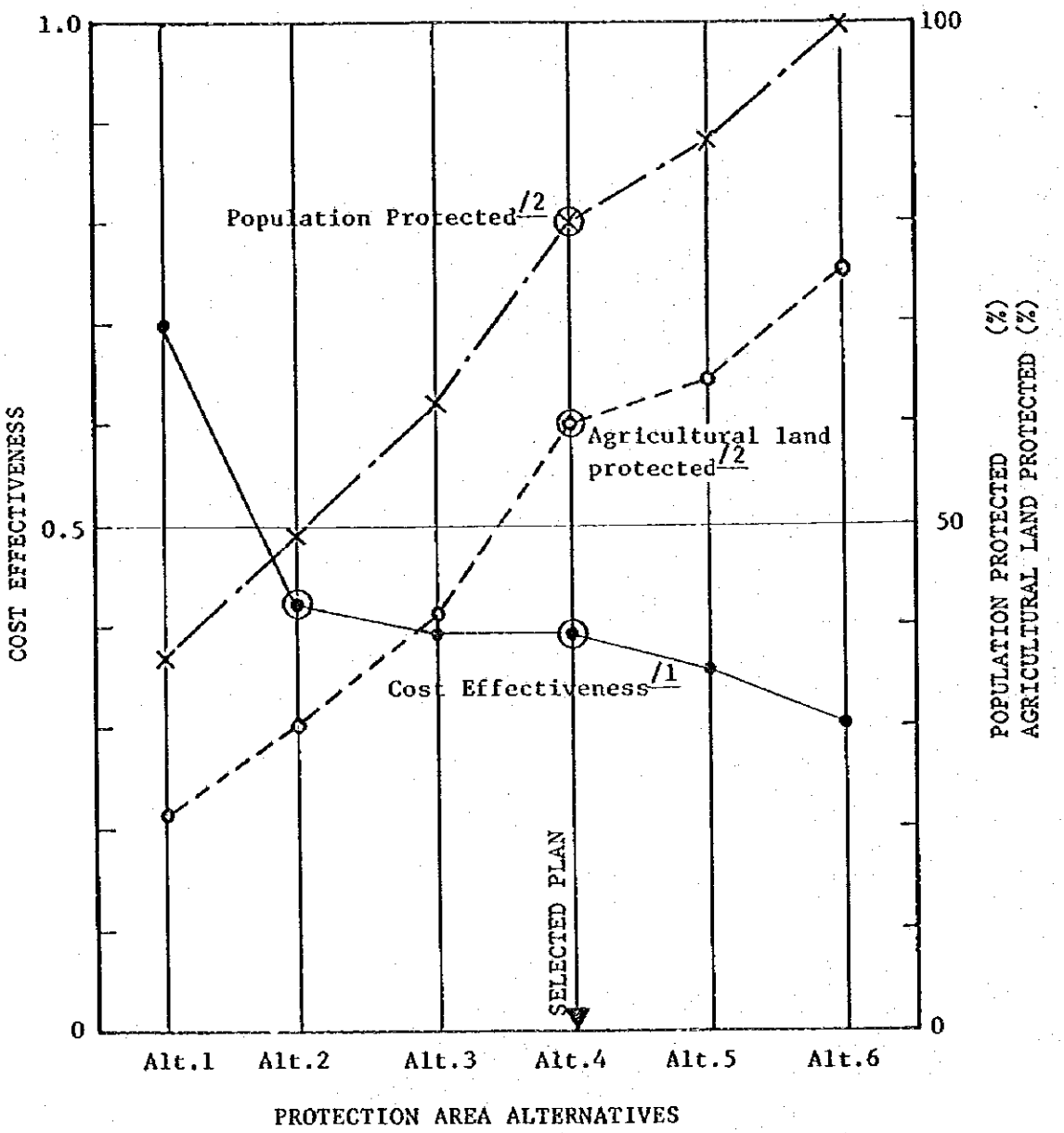


Fig. 3-5 FLOOD PROTECTION AREA OF ALTERNATIVE-5 AND ALTERNATIVE-6



Notes: /1 Expressed in terms of benefit-cost ratio (present worth of damage reduction/present worth of cost)

/2 % to total population and agricultural land area in flood prone area

○ Points where a notable change in index value is seen.

Fig. 3-6 COMPARISON OF FLOOD PROTECTION AREA ALTERNATIVES

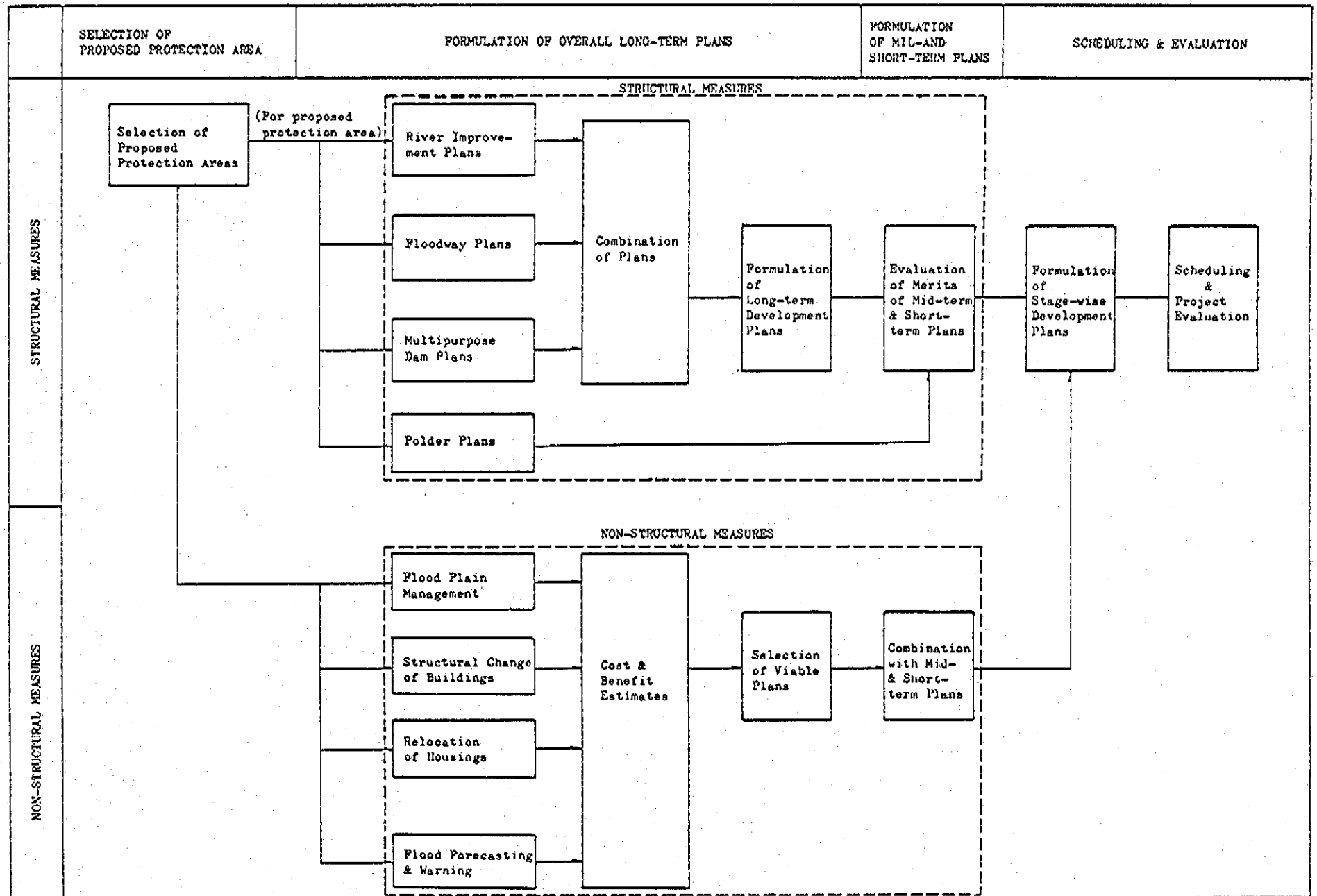


Fig. 4-1 FLOOD CONTROL PLAN - PLAN FORMULATION LOGIC DIAGRAM

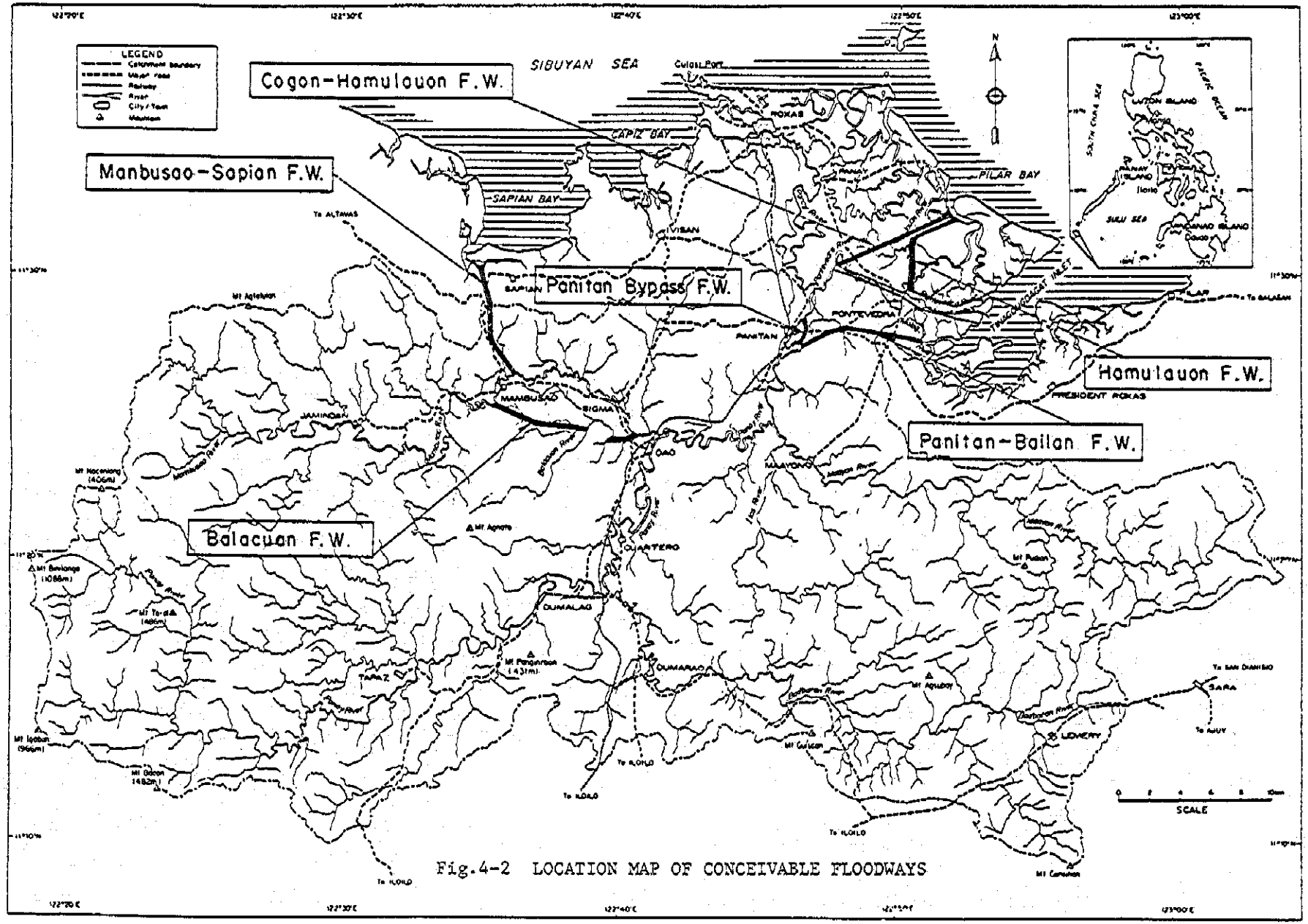


Fig.4-2 LOCATION MAP OF CONCEIVABLE FLOODWAYS

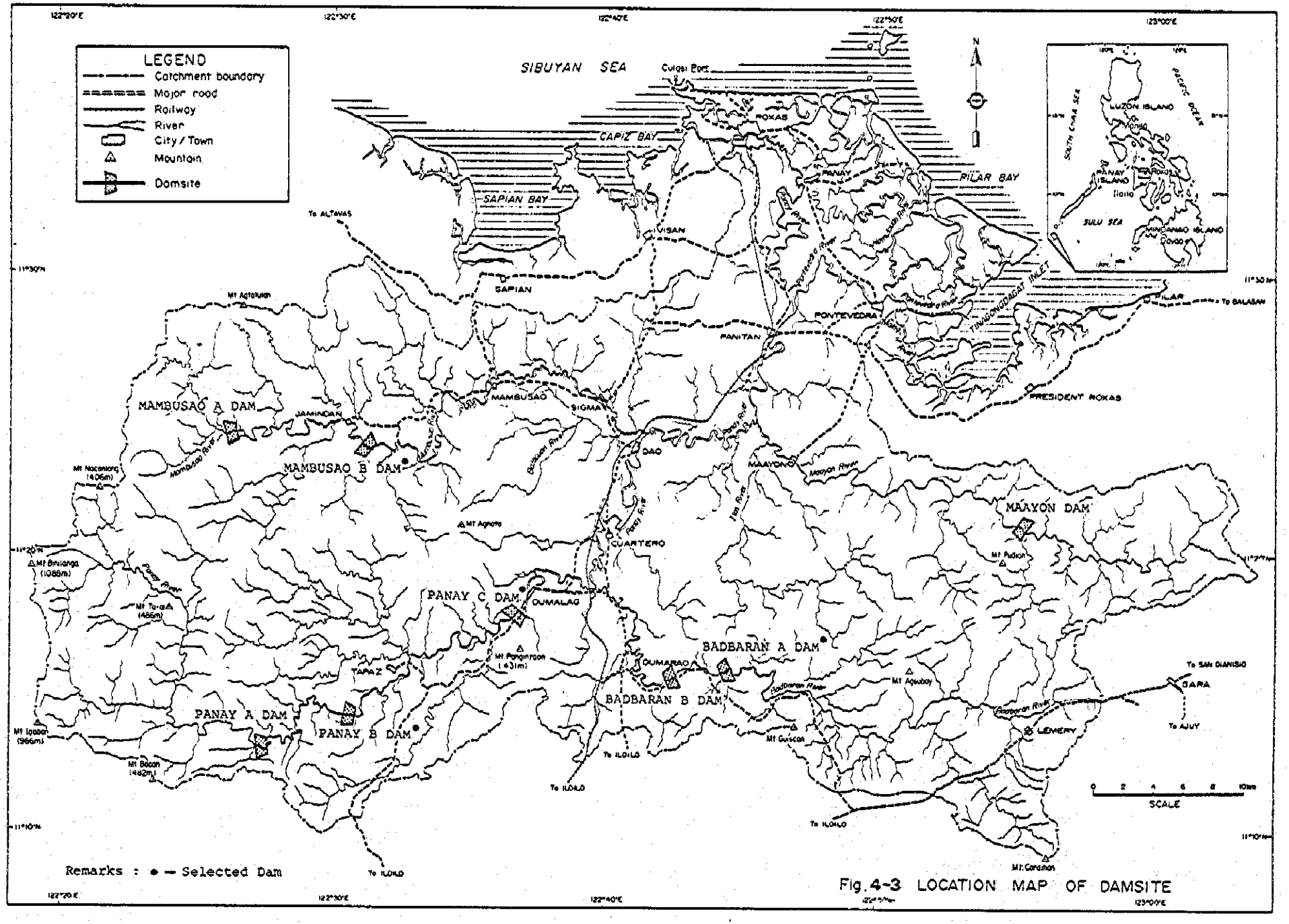


Fig. 4-3 LOCATION MAP OF DAMSITE

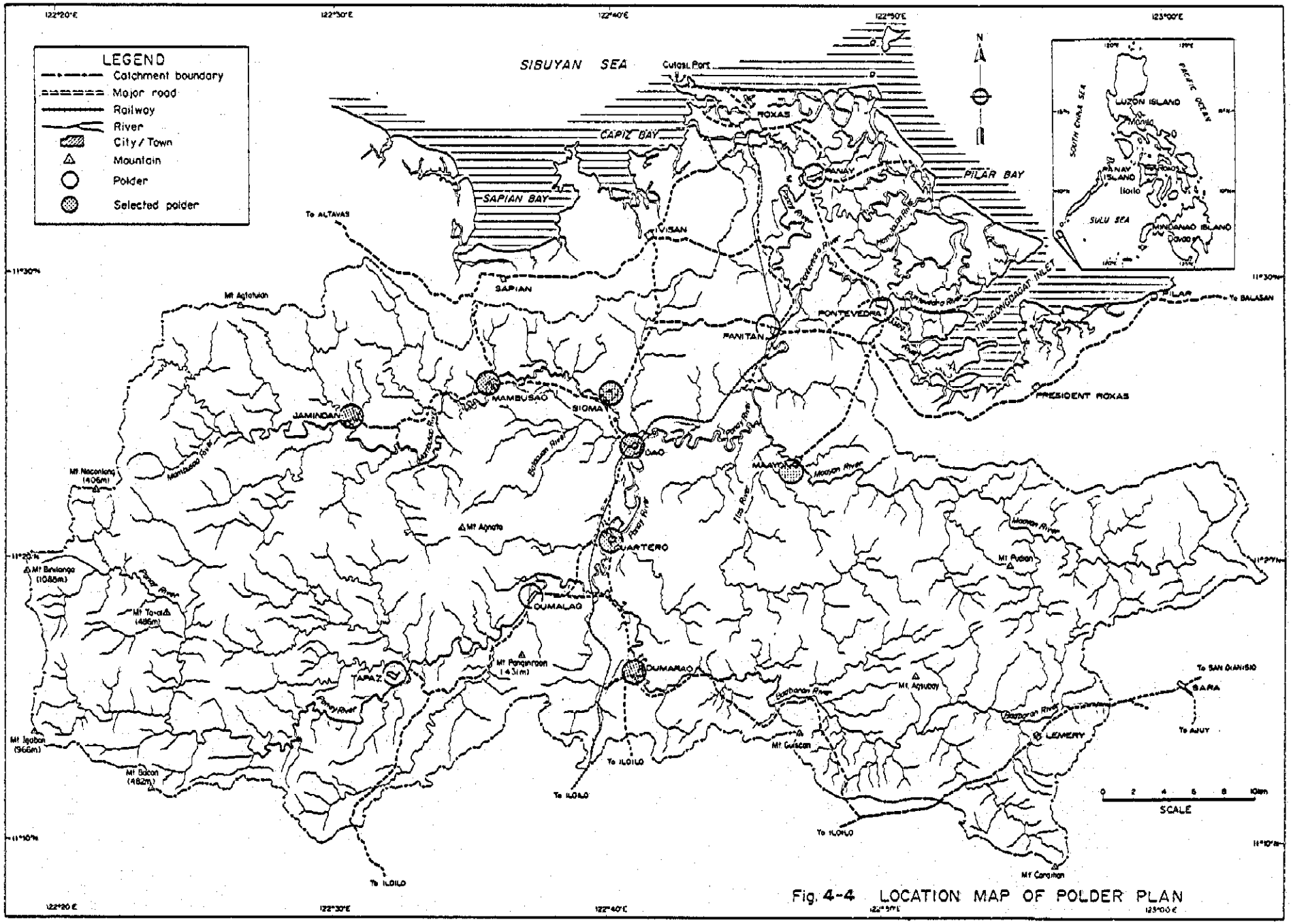


Fig. 4-4 LOCATION MAP OF POLDER PLAN

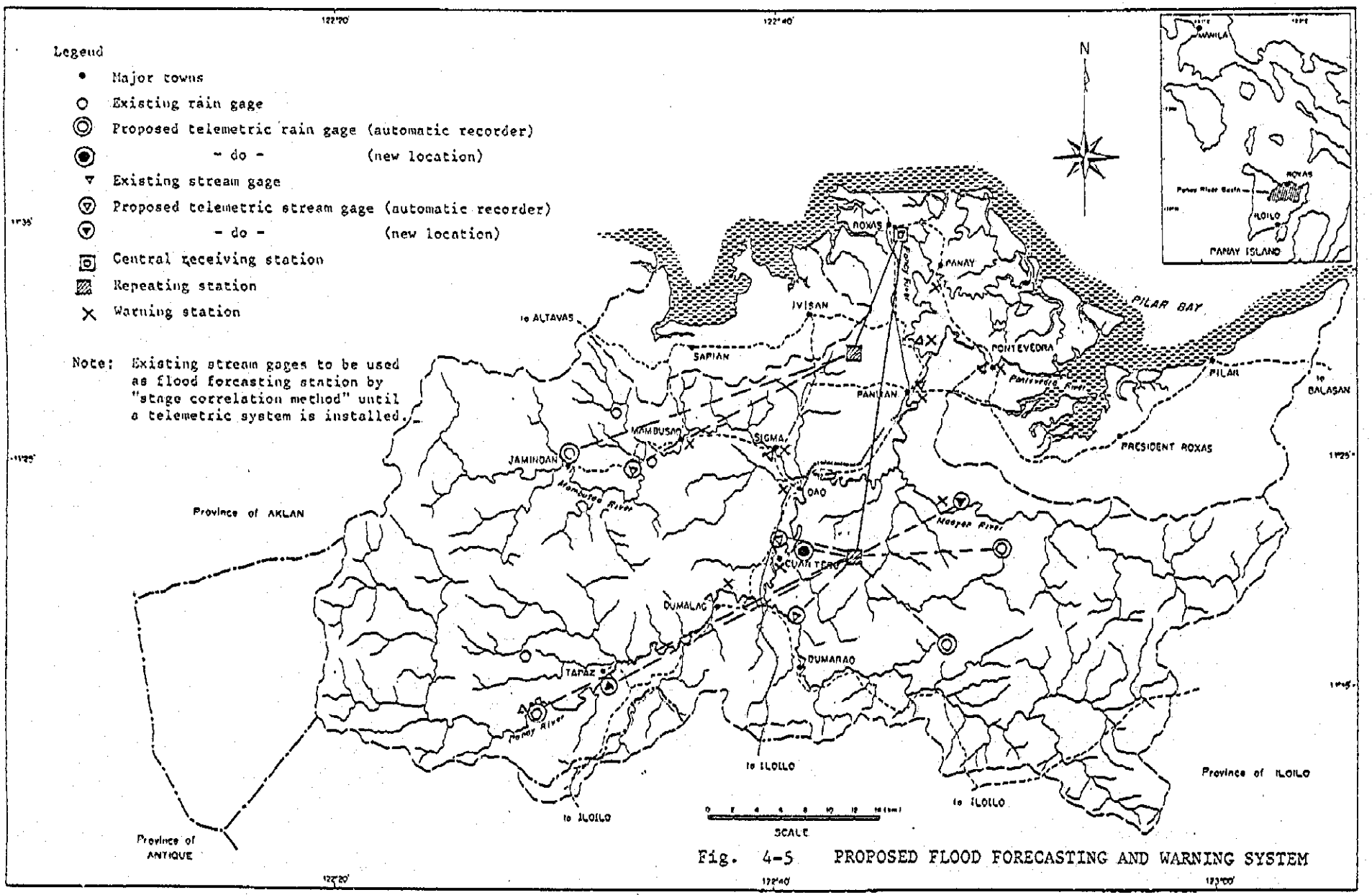


Fig. 4-5 PROPOSED FLOOD FORECASTING AND WARNING SYSTEM

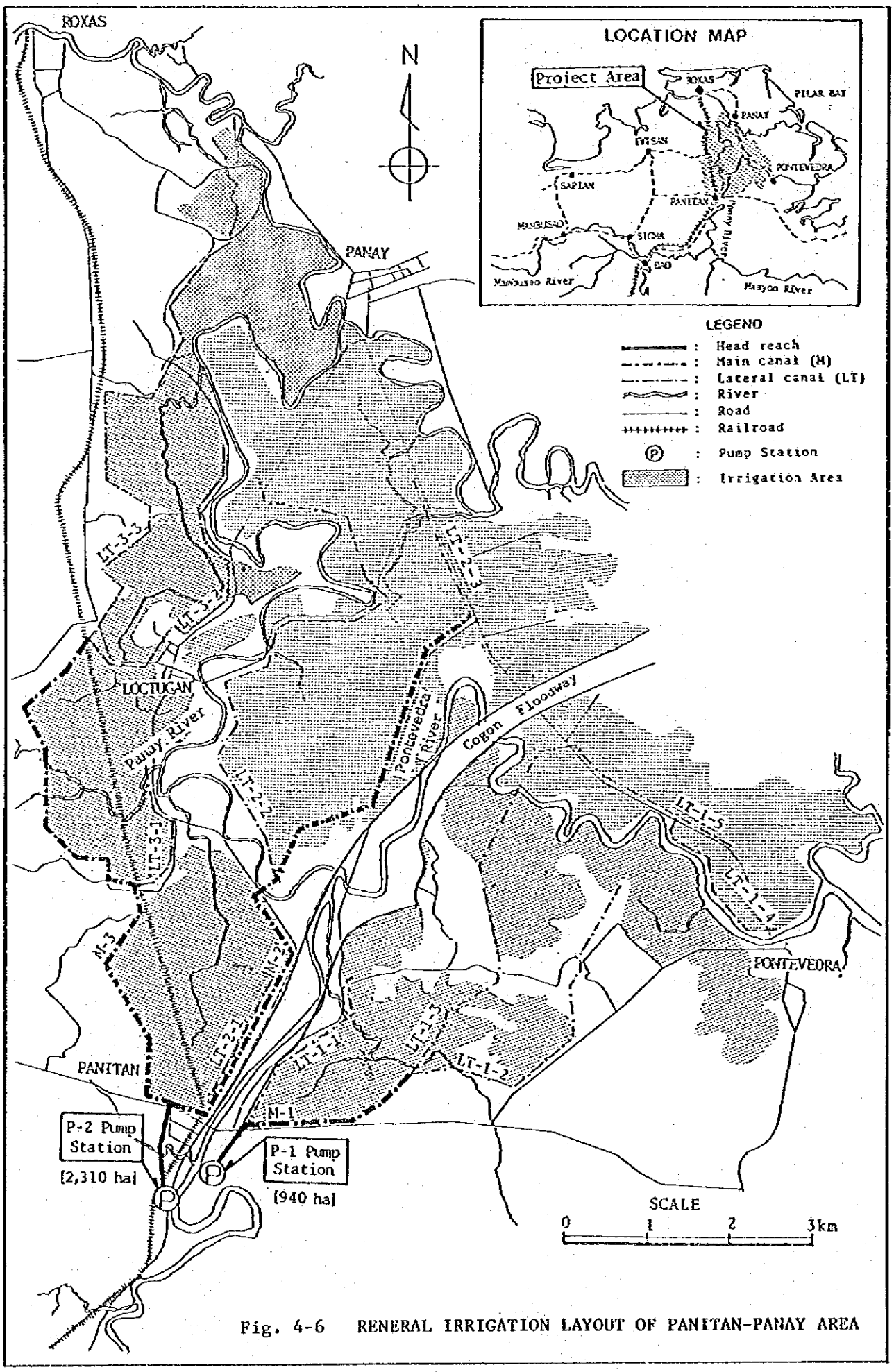


Fig. 4-6 RENERAL IRRIGATION LAYOUT OF PANITAN-PANAY AREA

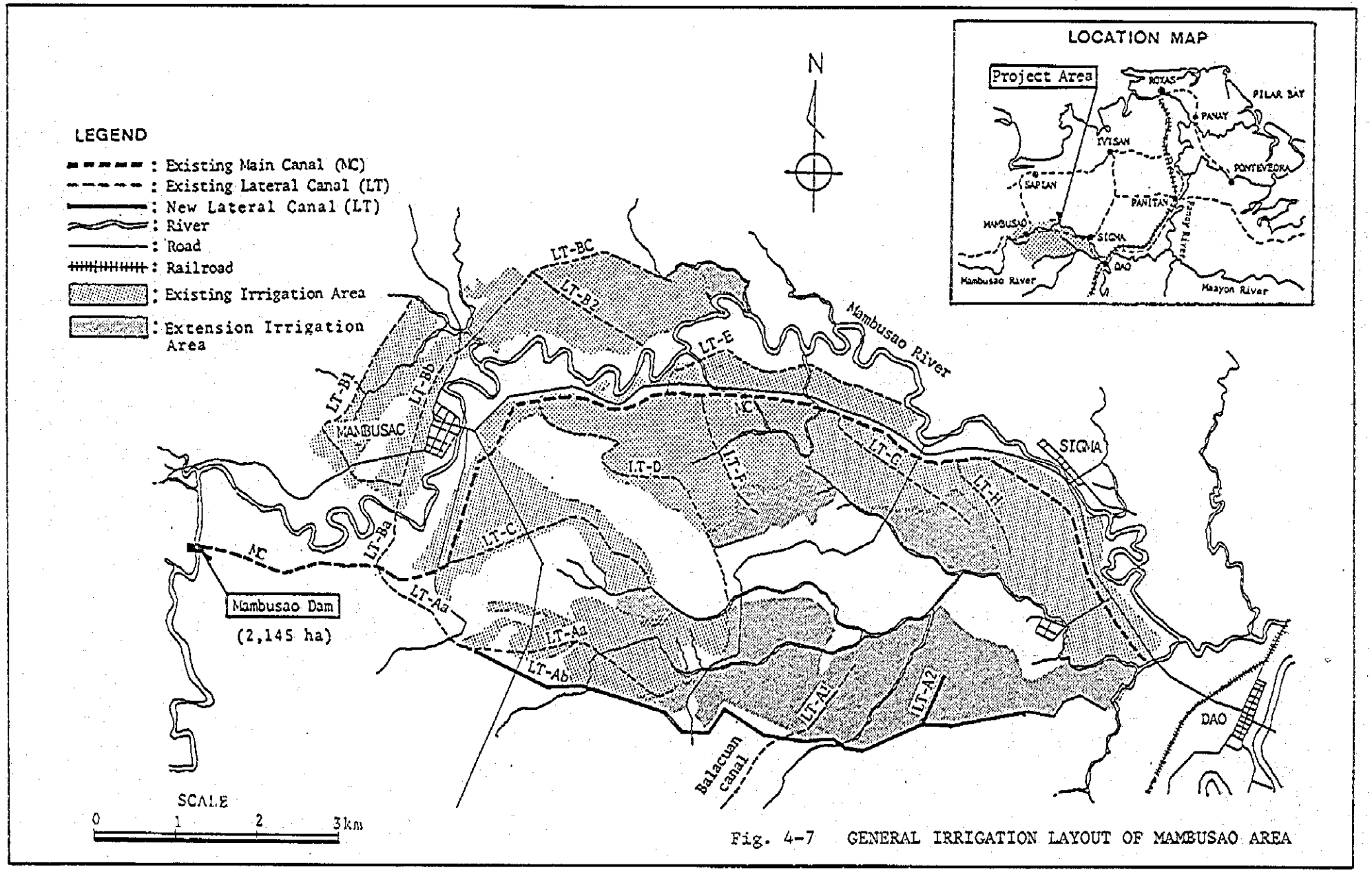
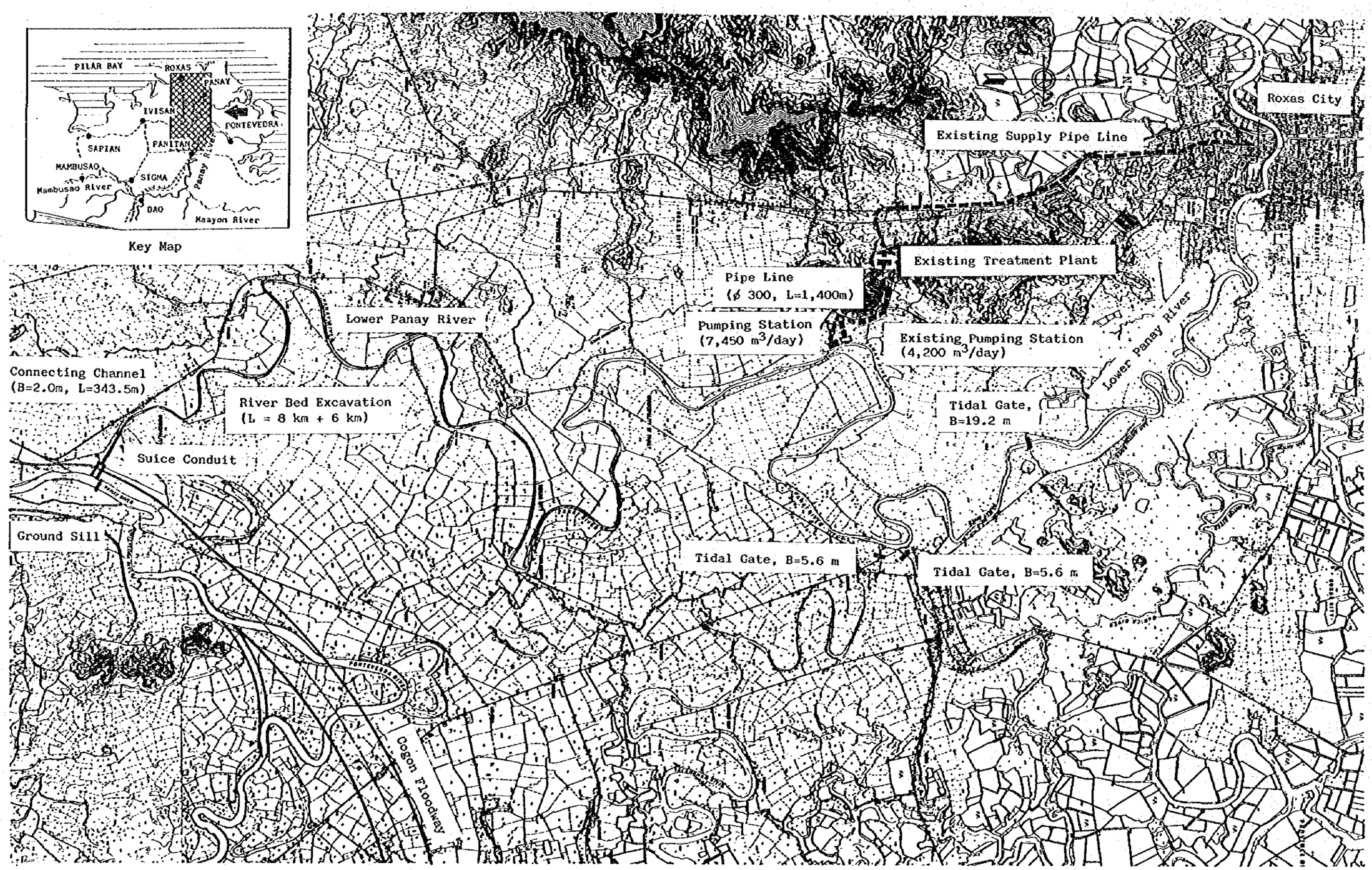


Fig. 4-7 GENERAL IRRIGATION LAYOUT OF MAMBUSAO AREA



Scale 0 1 2 km

Fig. 4-8 GENERAL PLAN OF ROX-WD WATER SUPPLY PROJECT

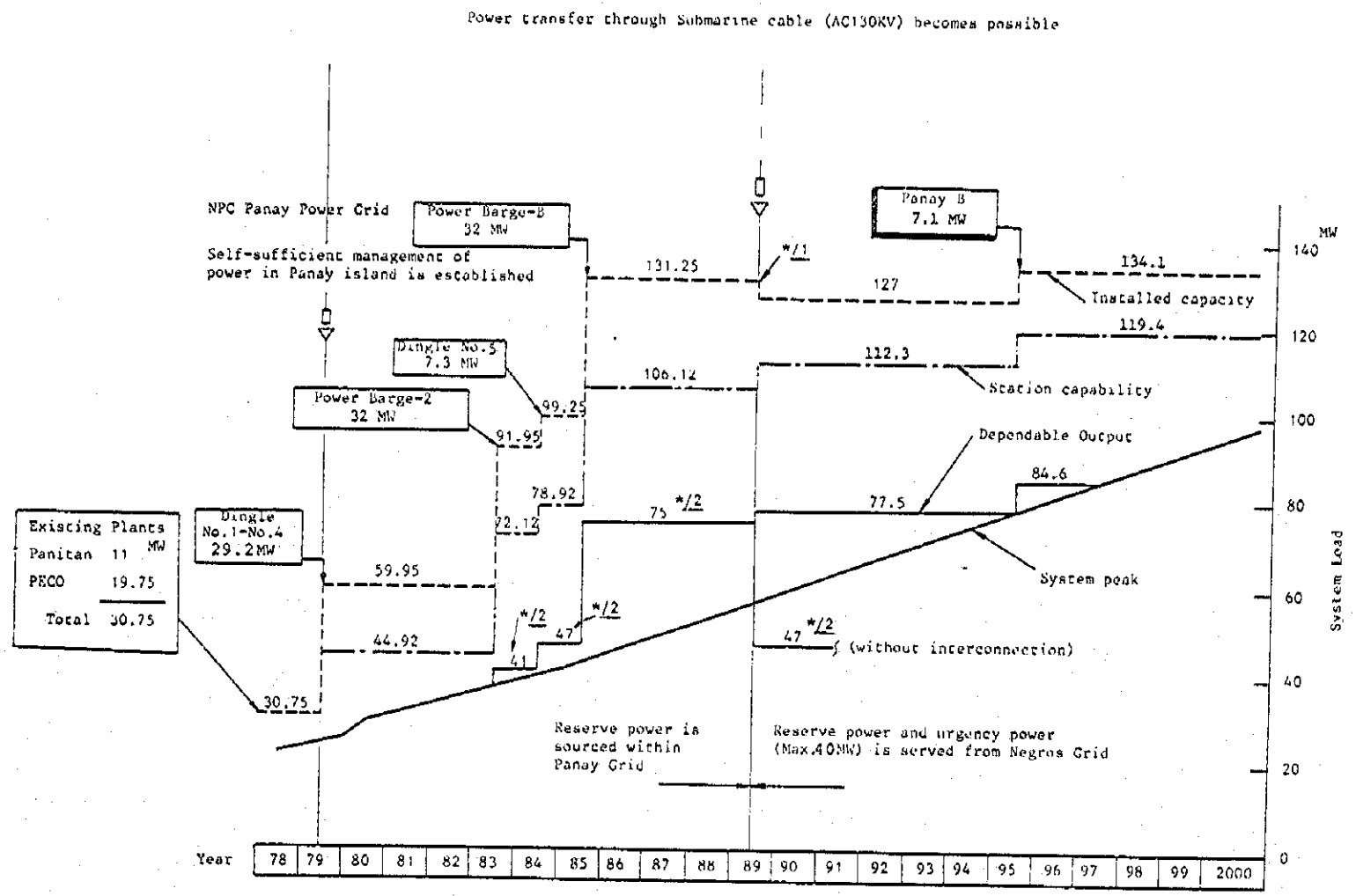
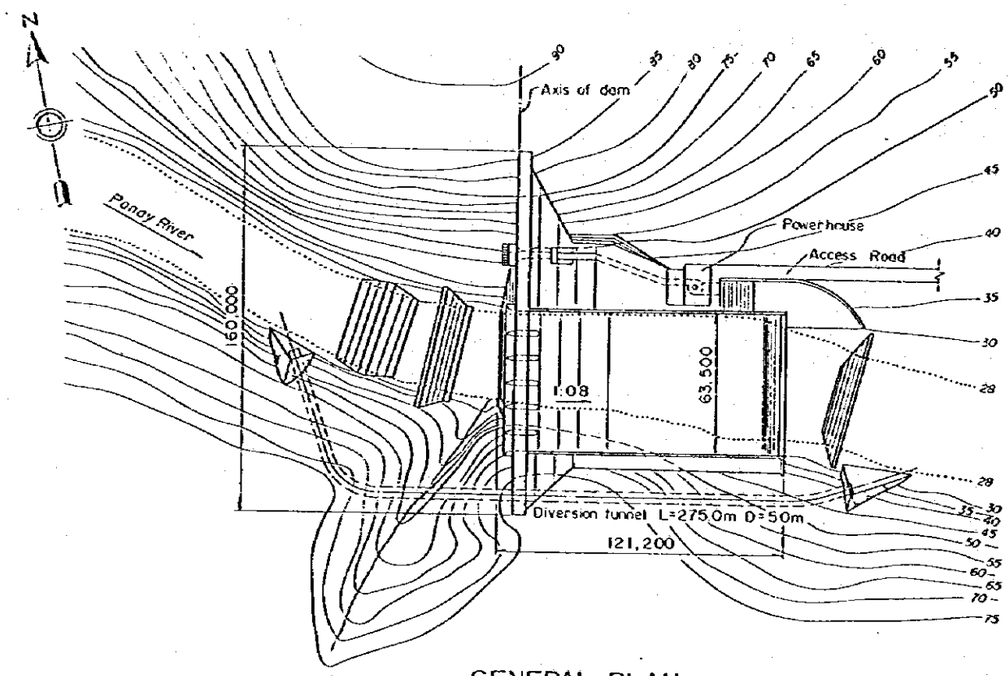


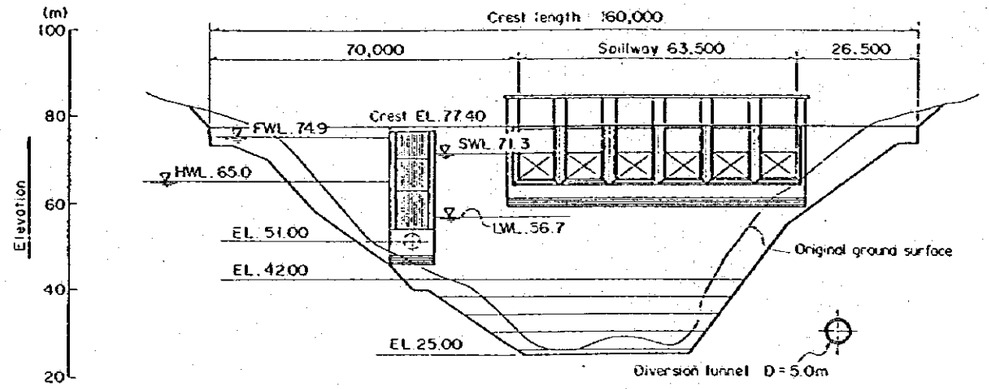
Fig. 4-9 PROPOSED INSTALLATION PROGRAM OF POWER PLANTS IN PANAY ISLAND

(Note) */1 : Pullout Power Barge-B -32MW
Retire PECO Diesel -19.75MW
Interconnection +47.5MW

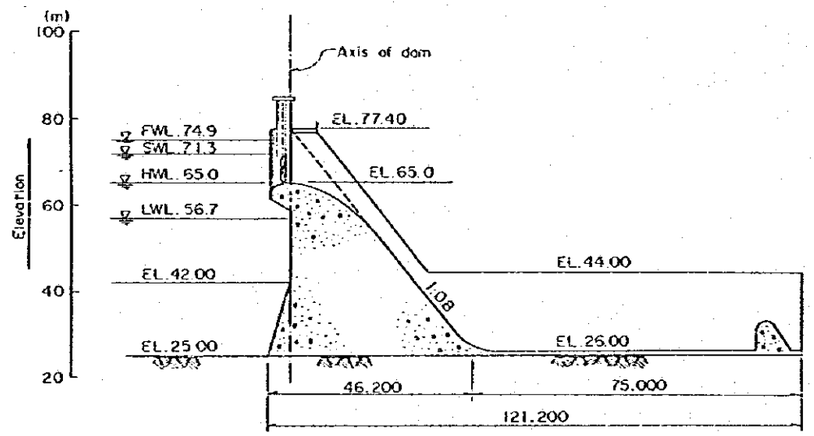
*/2 : Figure of present dependable output is based on the information from NPC



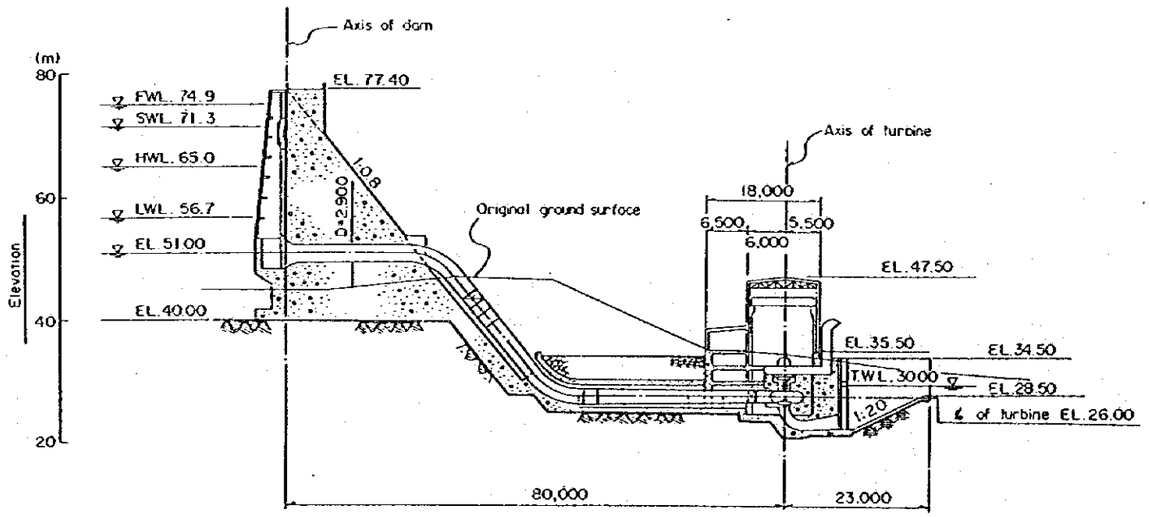
GENERAL PLAN SCALE A



VIEW FROM UPSTREAM SCALE B



TYPICAL SECTION OF DAM SCALE B



WATERWAY AND POWERHOUSE SCALE C

SCALE A 0 50 100m

SCALE B 0 50m

SCALE C 0 20 40m

Fig. 4-10 PANAY B DAM SCHEME

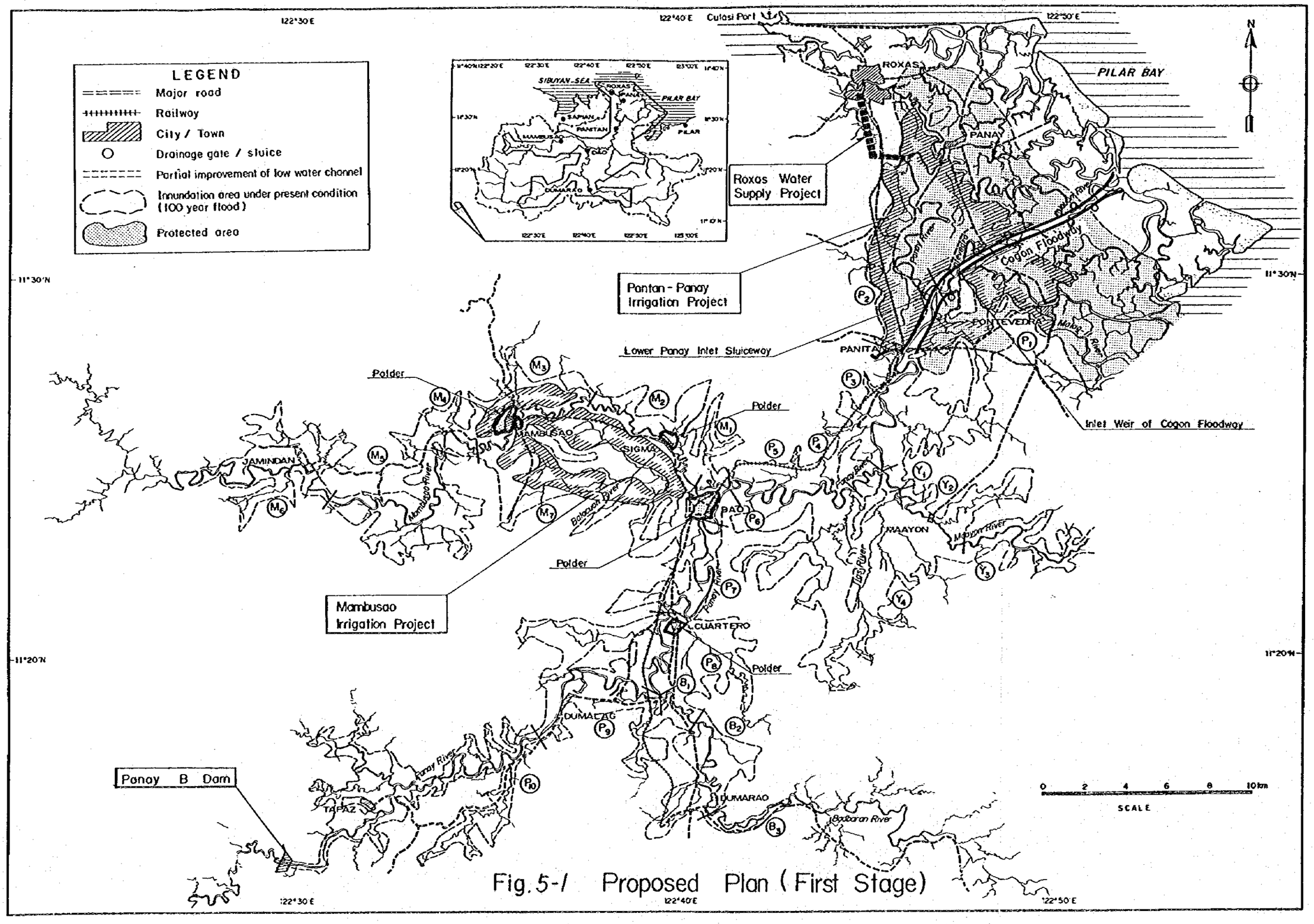


Fig. 5-1 Proposed Plan (First Stage)

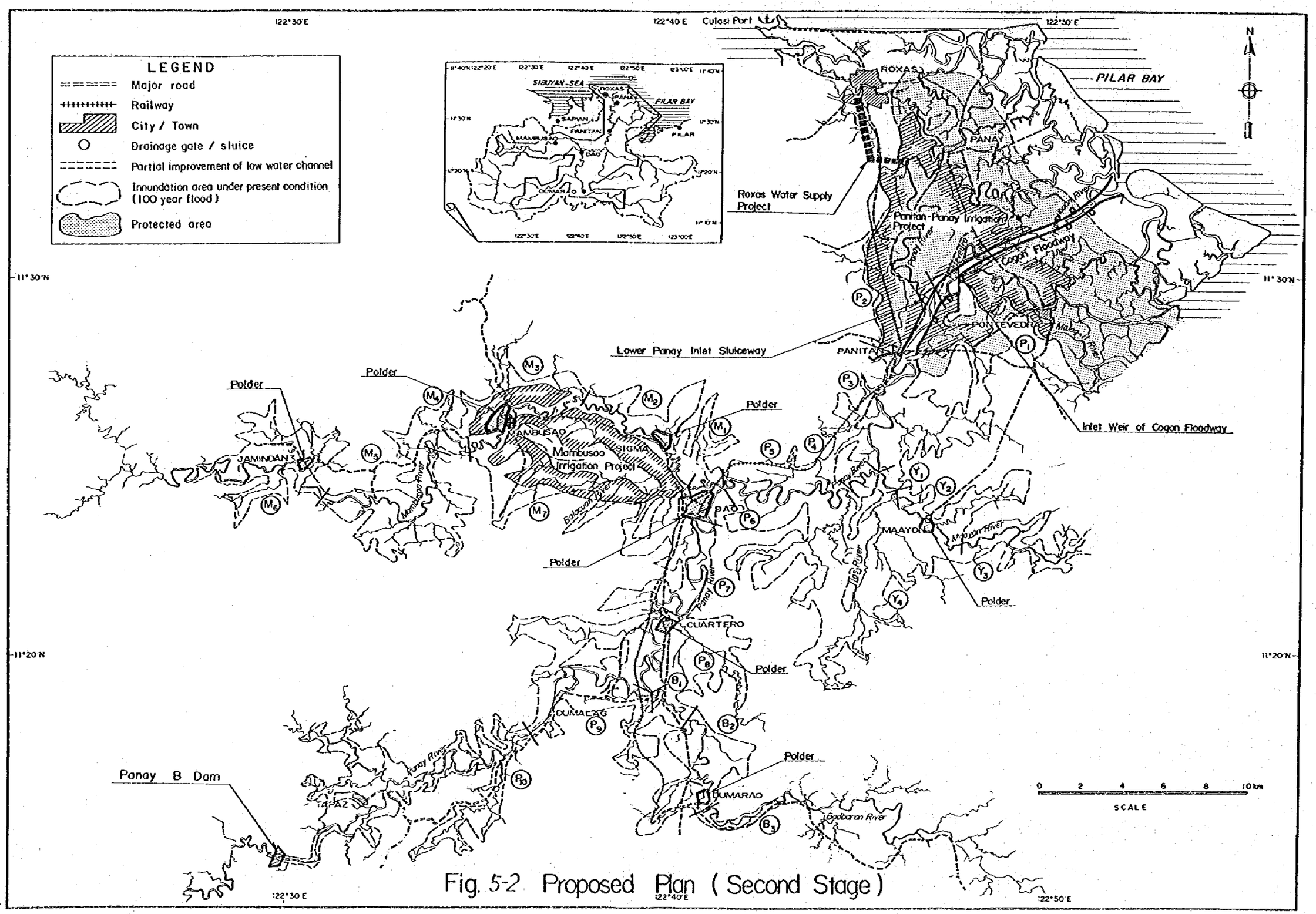


Fig. 5-2 Proposed Plan (Second Stage)

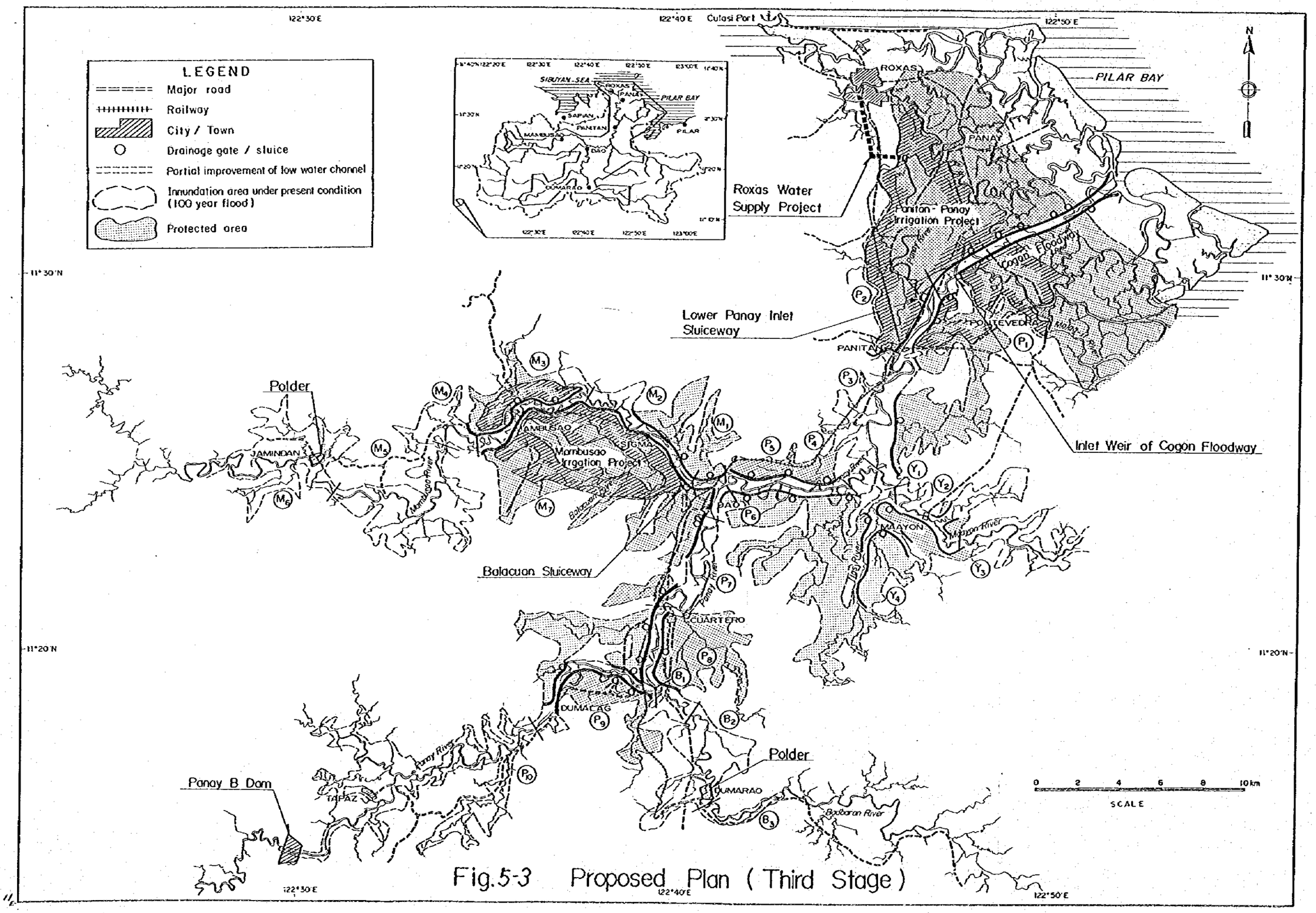


Fig.5-3 Proposed Plan (Third Stage)

Fig. 5-4 IMPLEMENTATION OF PROPOSED PROJECTS MASTER SCHEDULE

PROJECT	CONST. COST (₱ x 10^6) ⚠1	Short-term Program													Long-term Program			
		84	85	86	87	88	89	90	91	92	93	94	95	96	97 00	2001 2010	2011 2020	2021 2030
BASIN-WIDE FLOOD CONTROL STUDY																		
FLOOD CONTROL PROJECT																		
First Stage Project																		
- River improvement work (I)	589			FN		FN			TC		(Prep.)							
- Polder - Dao	55					FN		TC										
- Polder - Cuartero	59						FN		TC									
- Polder - Sigma	42						FN		TC									
- Polder - Mambusao	78					FN		TC										
Second Stage Project																		
- River improvement work (II)	440															FN TC		
- Polder - Maayon	49												FN	TC				
- Polder - Jamindan	39												FN	TC				
- Polder - Dumarao	58																FN TC	
Third Stage Project																		
- River improvement work (III)	3,486																FN	TC
Non-structural Measures	51						FN	Mapping/Zoning								(Operation)		
Flood Forecasting and Warning System	84					FN		TC								(Operation)		
MULTIPURPOSE DAM PROJECT																		
Panay B Dam	471					FN		TC & Prep.										
IRRIGATION PROJECT																		
Panitan - Panay Scheme	183						FN			TC								
Mambusao Scheme	79					FN		TC										
WATER SUPPLY PROJECT																		
Roxas-WD Water Supply Project	56		FN	TC														

Notes; Feasibility study — Detailed design — Construction

FN: Financing TC: Tender and Contract Prep.: Preparatory works incl. land acquisition

⚠1 1984 base price

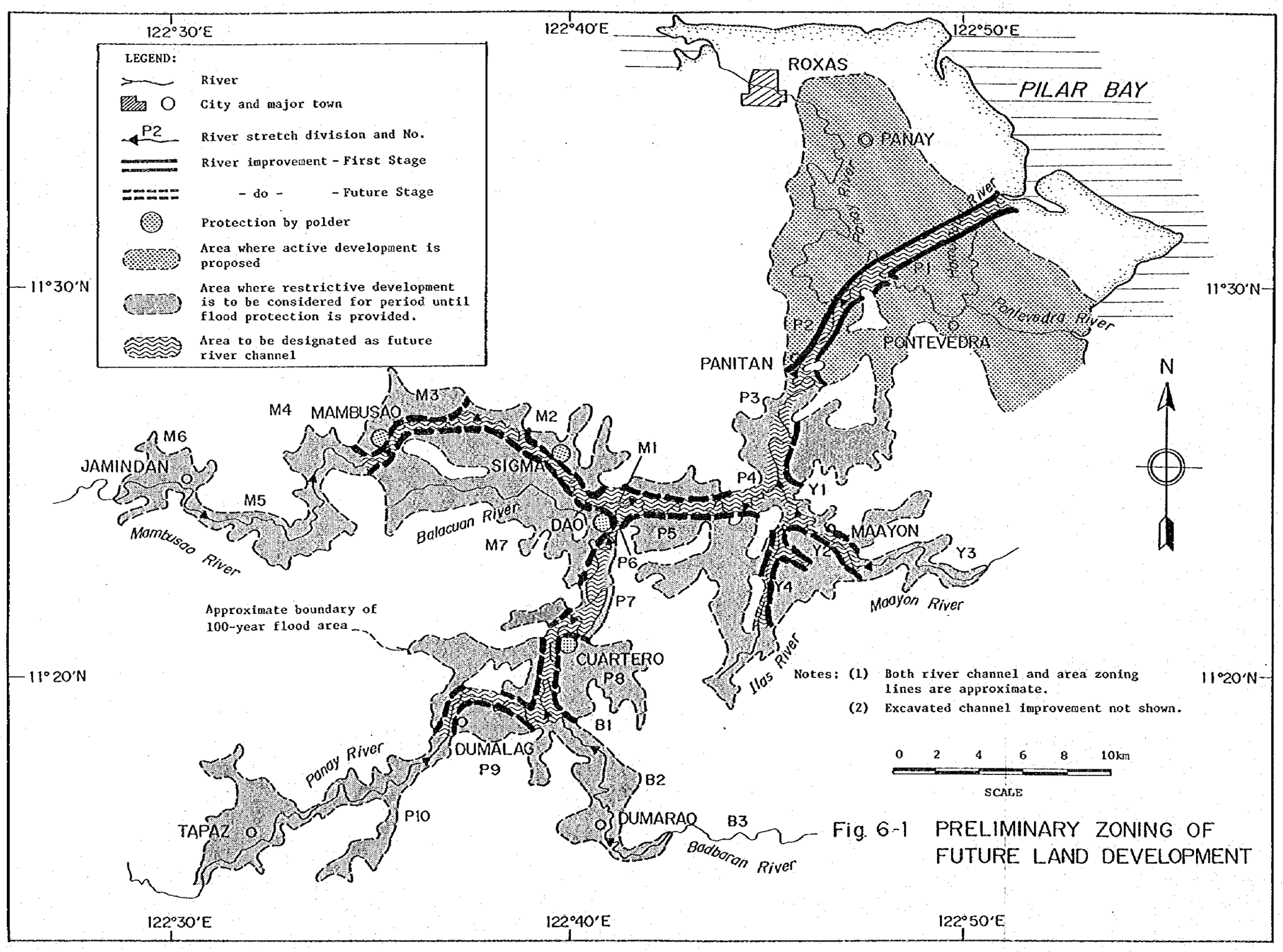


Fig. 6-1 PRELIMINARY ZONING OF FUTURE LAND DEVELOPMENT