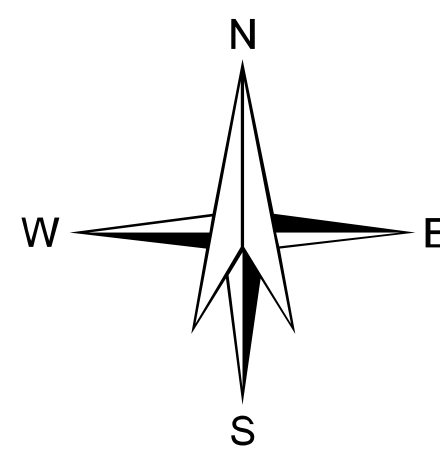
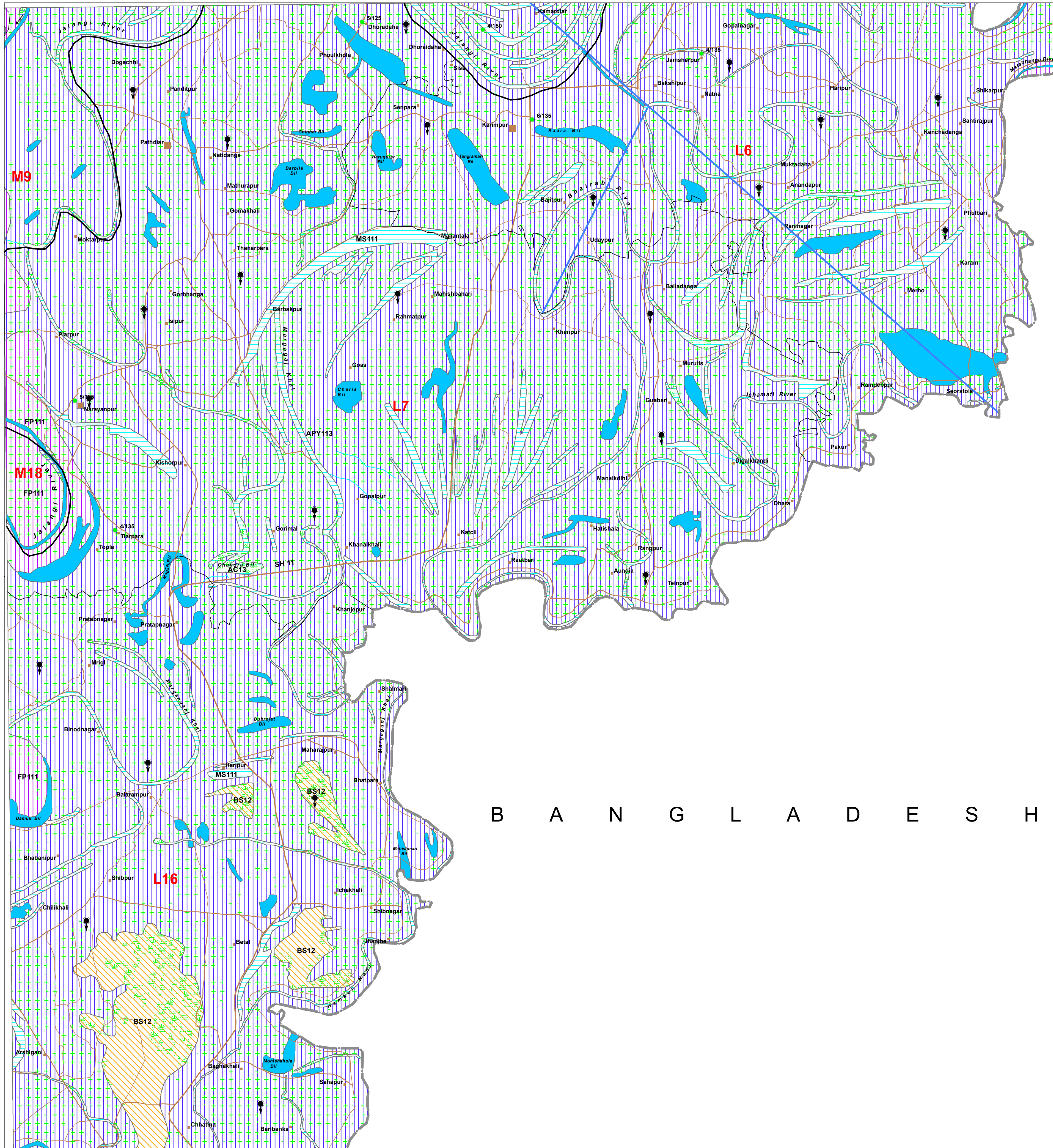


0 1 2 3 4 5 Kilometers

**SCALE - 1 : 50,000**



MURSHIDABAD &amp; NADIA DISTRICTS, WEST BENGAL



MAP UNIT (HYDROGEO MORPHIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE  (COLOUR INDICATES YIELD RANGE AND MATCHING INDICATE DEPTH RANGE)		GEOLOGICAL SEQUENCE / ROCK TYPE  ( REPRESENTED IN THE MAP WITH NUMERIC CODE )		GEOMORPHIC UNIT / LANDFORM  ( REPRESENTED IN THE MAP WITH ALPHABETIC CODE )		DEPTH TO WATER LEVEL  PRE / POST- MONSOON (AVERAGE IN METERS)  NO. OF WELLS OBSERVED		RECHARGE CONDITIONS  BASED ON AVAILABILITY OF WATER  ( RAINFALL & OTHER SOURCES )		GROUND WATER PROSPECTS							RECHARGE STRUCTURES: SUITABLE & PRIORITY		REMARKS  ( PROBLEMS / LIMITATIONS )																		
										AQUIFER MATERIAL	TYPE OF WELLS SUITABLE	DEPTH RANGE OF WELLS (SUGGESTED)	YIELD RANGE OF WELLS ( EXPECTED )	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS ( PROBABILITY )	QUALITY OF WATER  ( POTABLE (P), NON- POTABLE (NP) )	GROUND WATER IRRIGATED AREA  ( APPROX. RANGE IN PERCENTAGE )																					
LEGEND											EXPLANATION																										
MAP UNIT											AQUIFER MATERIAL																										
GEOLOGICAL SEQUENCE / ROCK TYPE											TYPE OF WELLS SUITABLE																										
GEOMORPHIC UNIT / LANDFORM											DEPTH RANGE OF WELLS (SUGGESTED)																										
DEPTH TO WATER LEVEL											YIELD RANGE OF WELLS ( EXPECTED )																										
RECHARGE CONDITIONS											HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS ( PROBABILITY )																										
BASED ON AVAILABILITY OF WATER											QUALITY OF WATER																										
( RAINFALL & OTHER SOURCES )											( POTABLE (P), NON- POTABLE (NP) )																										
NO. OF WELLS OBSERVED											( APPROX. RANGE IN PERCENTAGE )																										
L1 = L100% BEDROCK P1 = FORMABLE ROCK R1 = TIGHTENED ROCK R2 = UNALTERED ROCK R3 = WEATHERED ROCK R4 = UNALTERED NATURAL R5 = IMPERVIOUS ROCK											D1 = D100% WELL D2 = D100% WELL D3 = D100% WELL D4 = D100% WELL D5 = D100% WELL D6 = D100% WELL D7 = D100% WELL D8 = D100% WELL D9 = D100% WELL D10 = D100% WELL																										
MIN. MAX.											MIN. MAX.																										
( IN METERS )											( IN METERS )																										
10 LPM or 2 / day											10 LPM or 2 / day																										
VERY POOR											VERY POOR																										
HIGH											HIGH																										
MODERATE											MODERATE																										
LOW											LOW																										
PT = PRECIPITATION TANK CD = CHECK DAM NE = NALLA/NEED DT = DISTRICT OF TANK SP = SURFACE POND SD = SURFACE DYKE BS = BEDROCK SHIELD ST = STONE TANK SCM = SOIL CONSERVATION MEASURES																																					
Channel Bar (CB)											No Well Observed							Excellent		LS		RW		5-10 m		400-500 LPM		Very High		P		Nil		Not Required		Groundwater prospects very high with high recharge potential. Recharge structures not required.	
Meander Scar (MS)											No Well Observed							Good		LS		RW		10-15 m		200-250 LPM		High		P		Nil		Not Required		Groundwater prospects very high with high recharge potential. Recharge structures not required.	
Flood Plain (FP)											No Well Observed							Very Good		LS		TW		>150 m		>800 LPM		Very High		NP (As&Fe) [At shallow depth]		71		RW Low		Areas with high Arsenic and Iron concentration.Potable water available at depth range above 150m.	
Backswamp (BS)											No Well Observed							Poor		LS		TW		60-70 m		40-50 LPM		Low		P		Nil		Not Required		Areas of low groundwater potential. Better potential at greater depths.	
Abandoned Channel (AC)											No Well Observed							Very Good		LS		RW		10-15 m		250-300 LPM		Very High		P		Nil		Not Required		Areas of very high groundwater potential at shallow depth.Most suitable for extraction of groundwater.	
Alluvial Plain Younger (APY)											6 / 3 6							Good		LS		TW		>150 m		500-600 LPM		High		NP (As&Fe) [At shallow depth]		63		RW Low		Areas with high Arsenic and Iron concentration.Potable water available at depth range above 150m.	
F = Fault / Fracture zones, which generally act as conduits for movement of ground water in hard rocks. Along these zones, the yields are significantly higher and wells are likely to be sustainable for longer duration. However, the inferred fractures need to be confirmed by detailed ground surveys.																																					
D = Dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.																																					
N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/Lines which are clearly observed / inferred from the satellite image are indicated on the map. There could be some obscured fractures which also influence the ground water prospects. Locations of the recharge structures shown in the map are tentative. This map is useful for narrowing down the target zones, and exact location on the ground for wells and recharge structures should be identified based on follow-up ground hydrogeological/geophysical surveys.																																					

B A N G L A D E S H

[illegible]