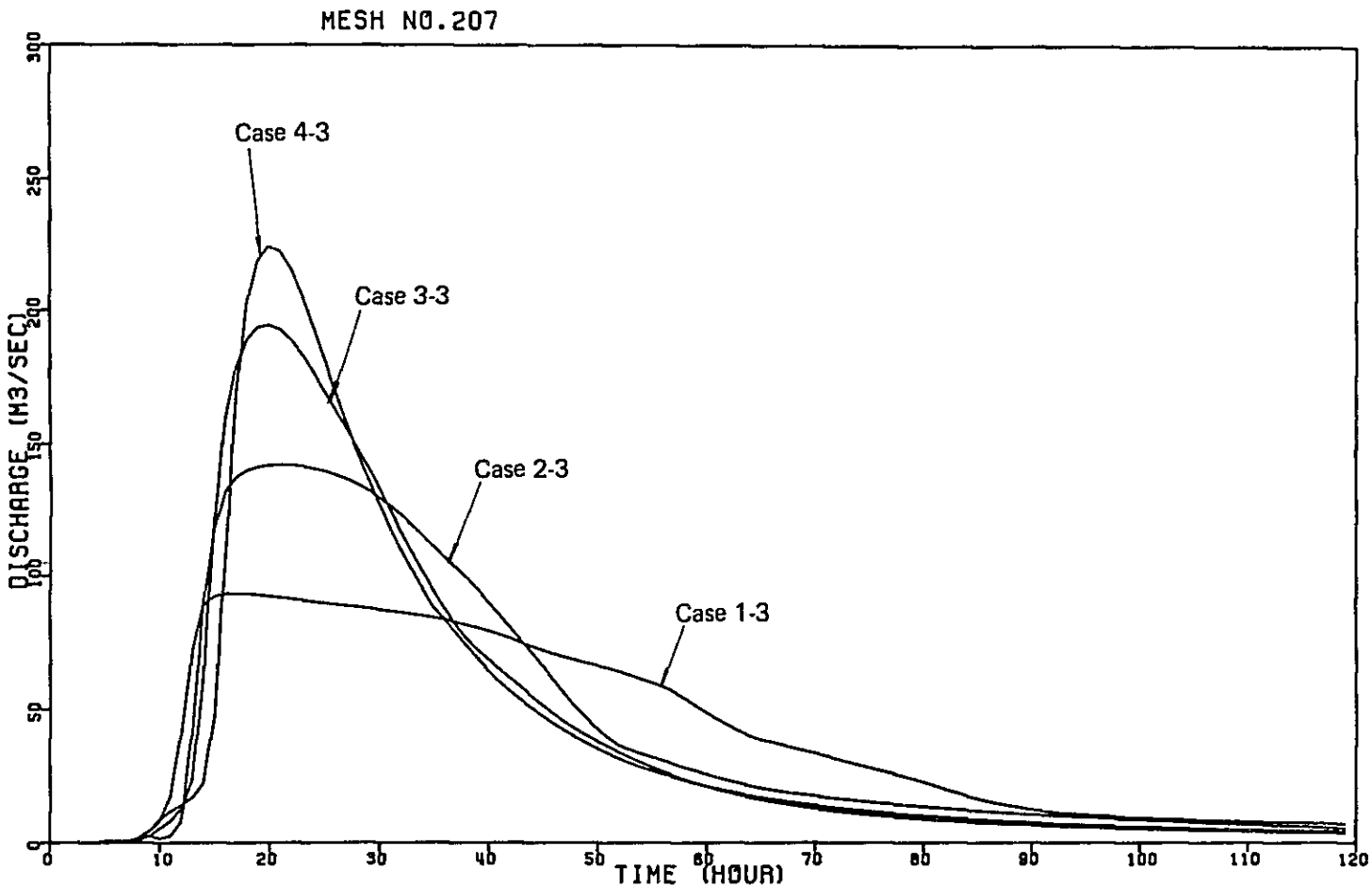

Fig. 5-108 Curves of the Water Level

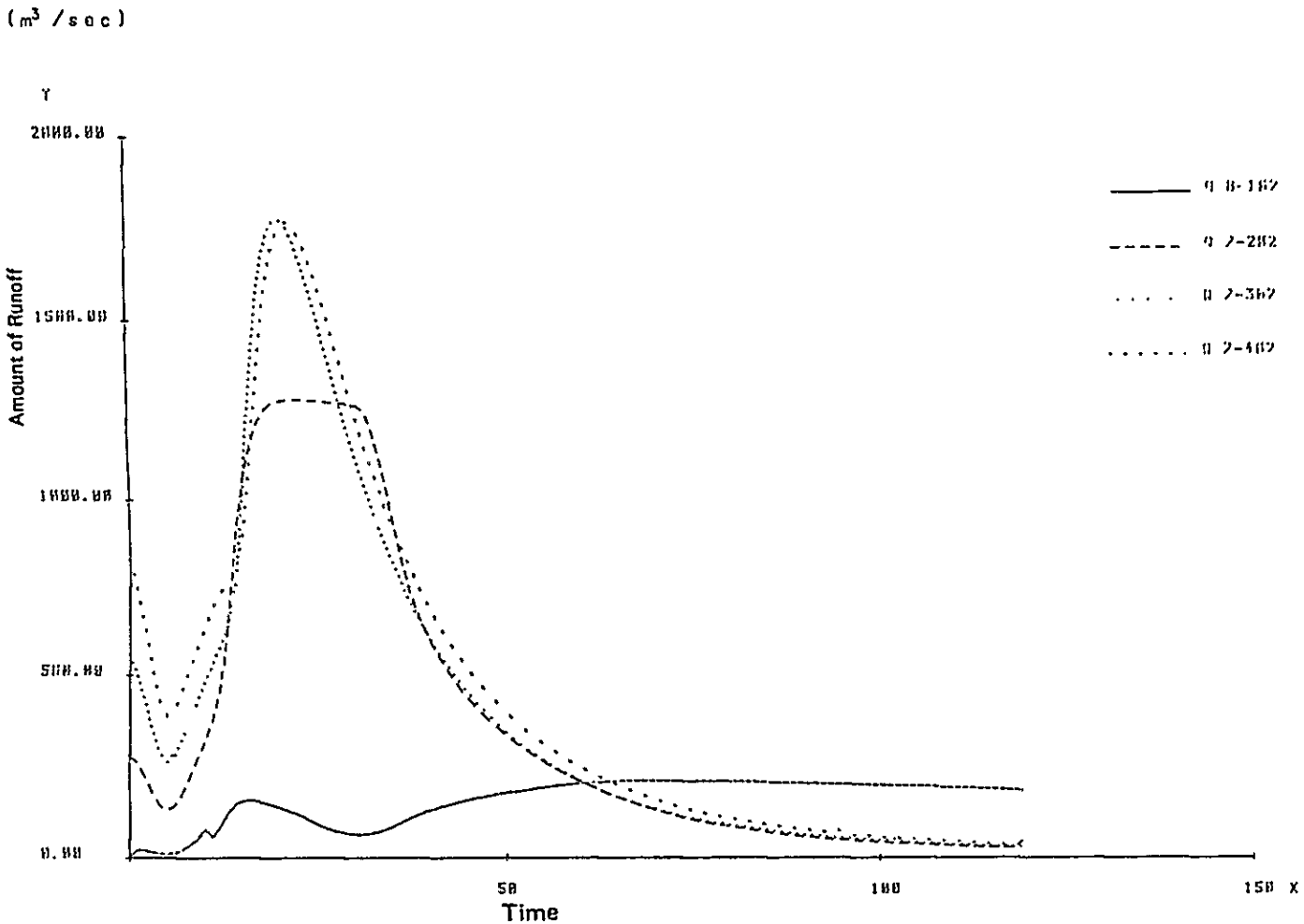

Fig. 5-109 Curves of the Change in Discharge

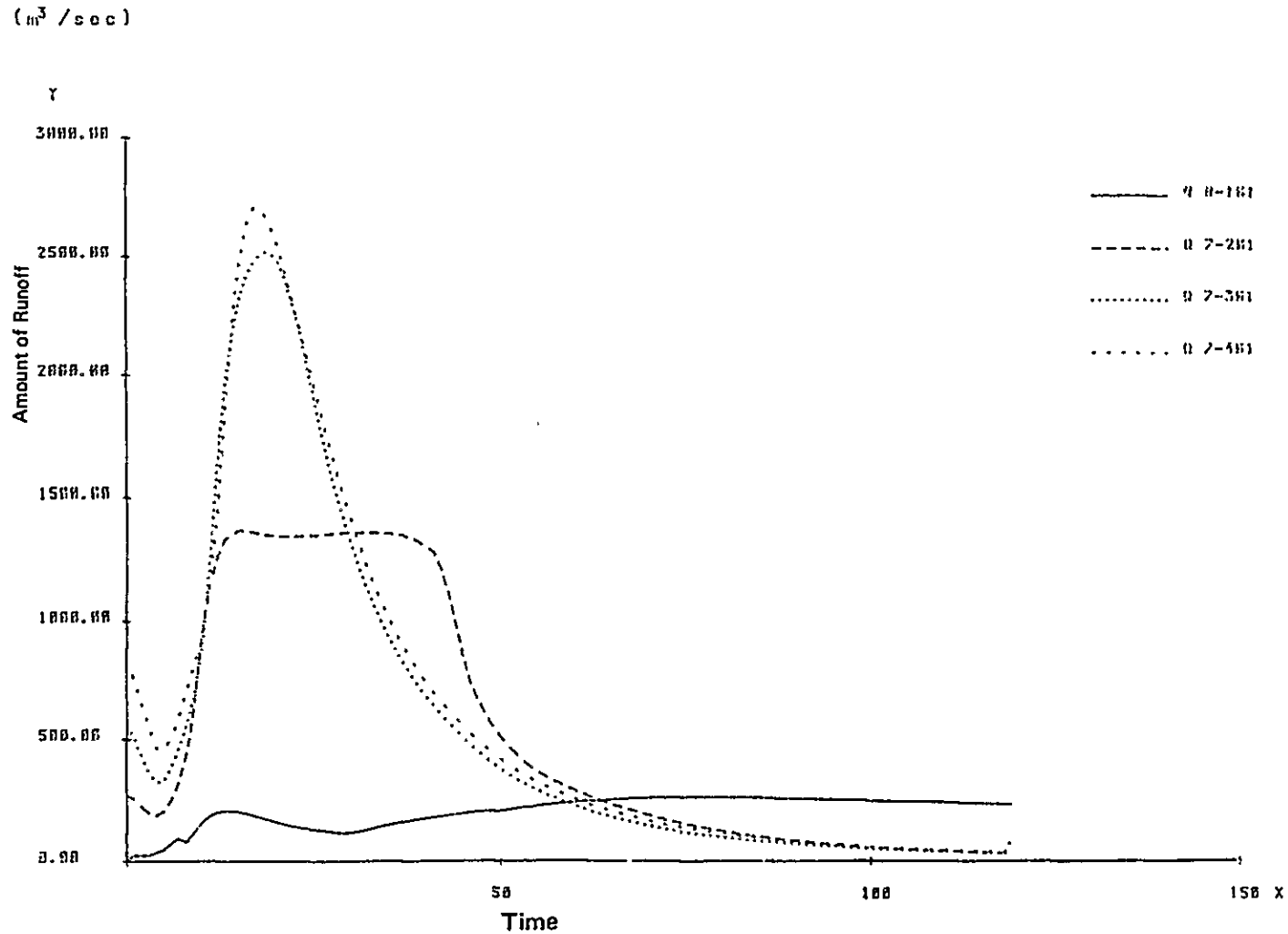

Fig. 5-110 Curves of the Change in Discharge

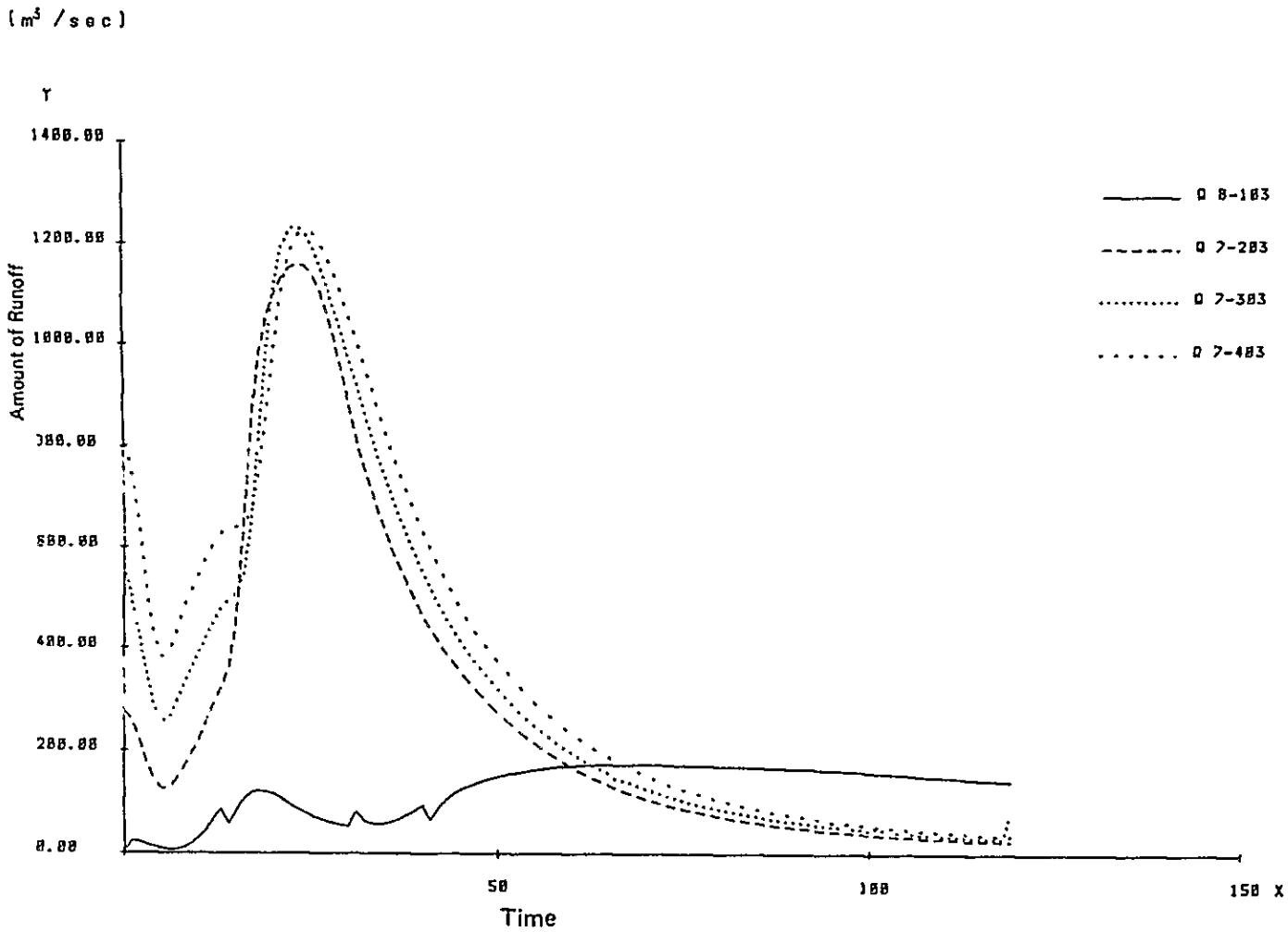

Fig. 5-111 Curves of the Change in Discharge

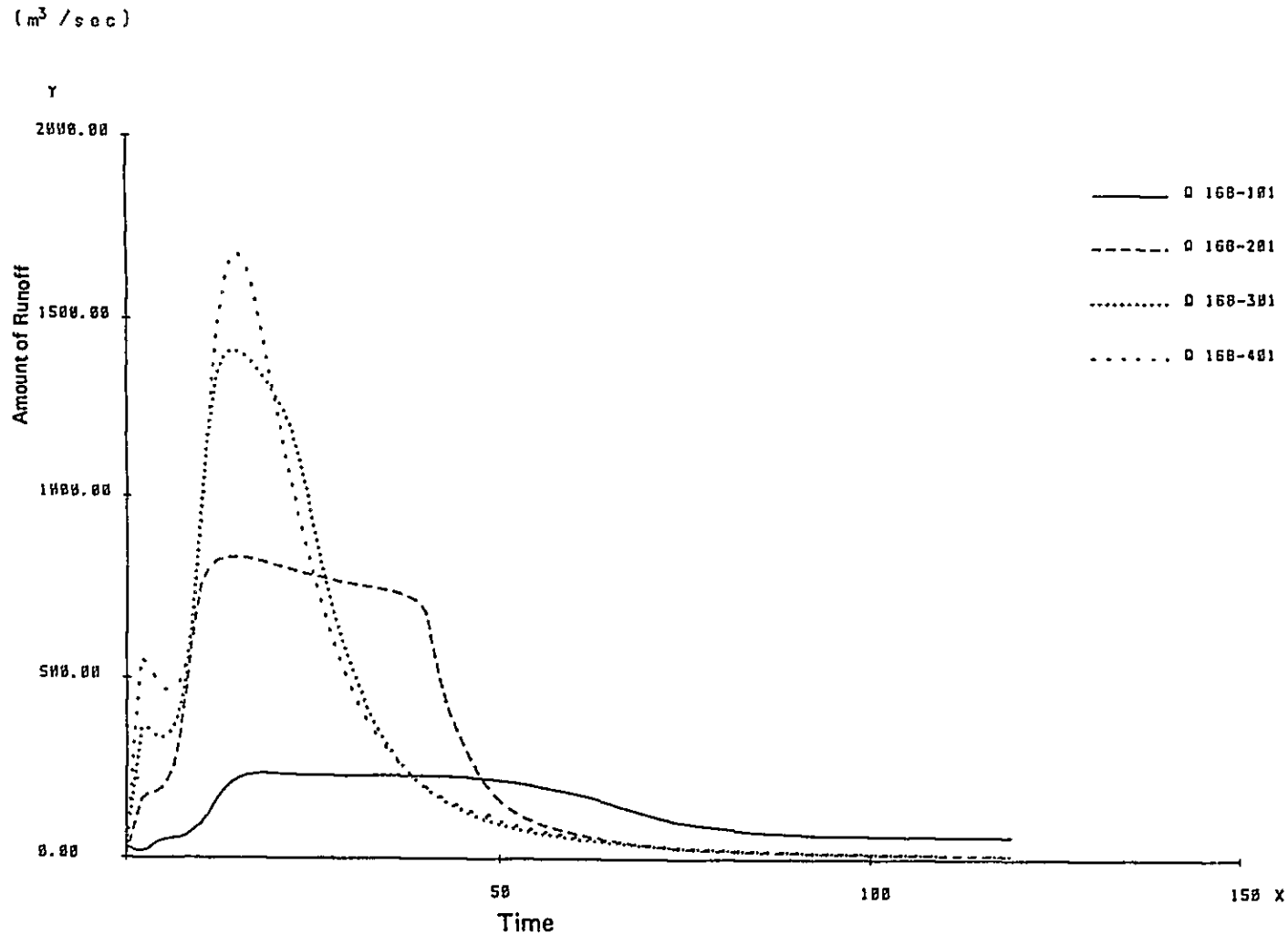

Fig. 5-112 Curves of the Change in Discharge

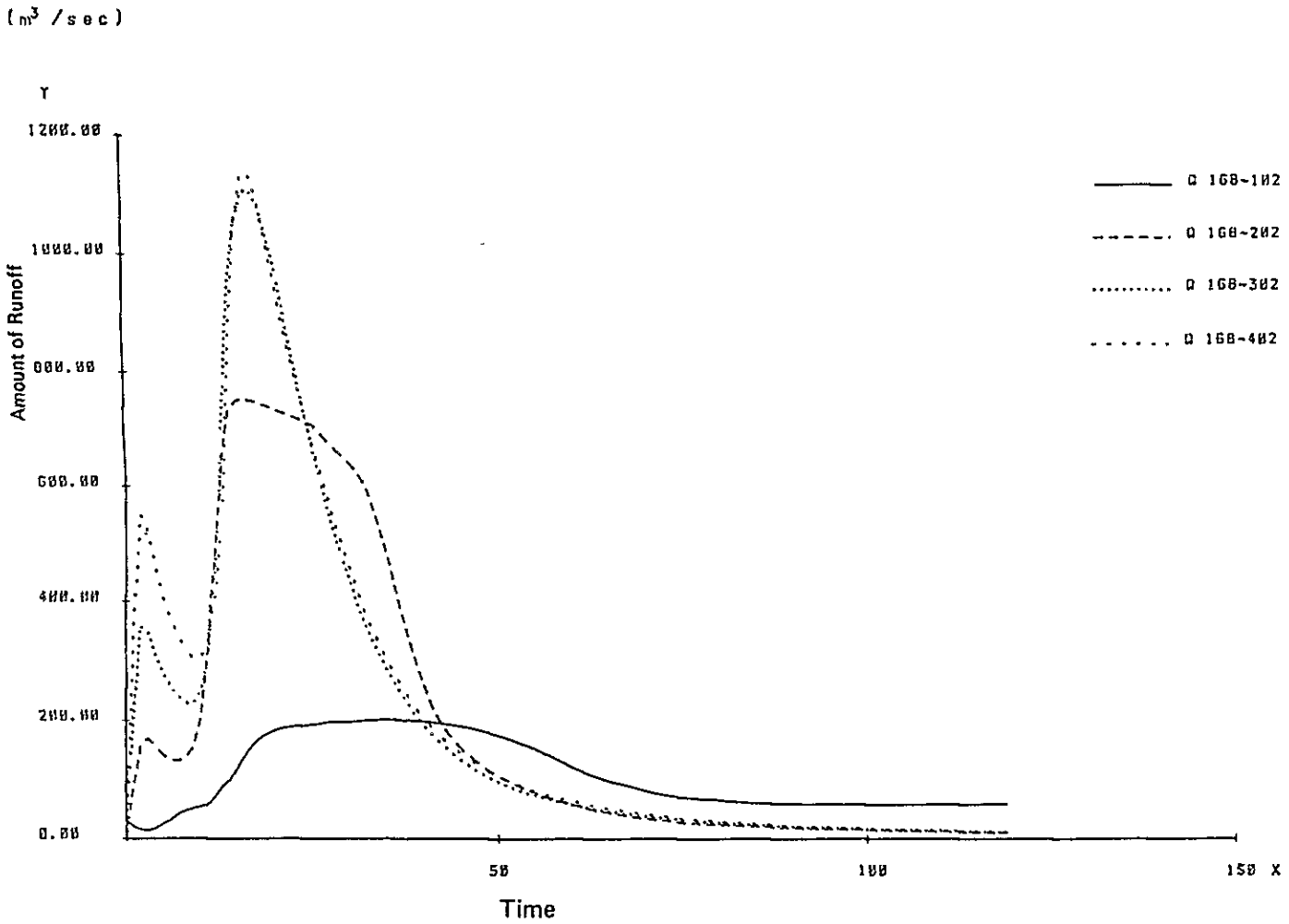

Fig. 5-113 Curves of the Change in Discharge

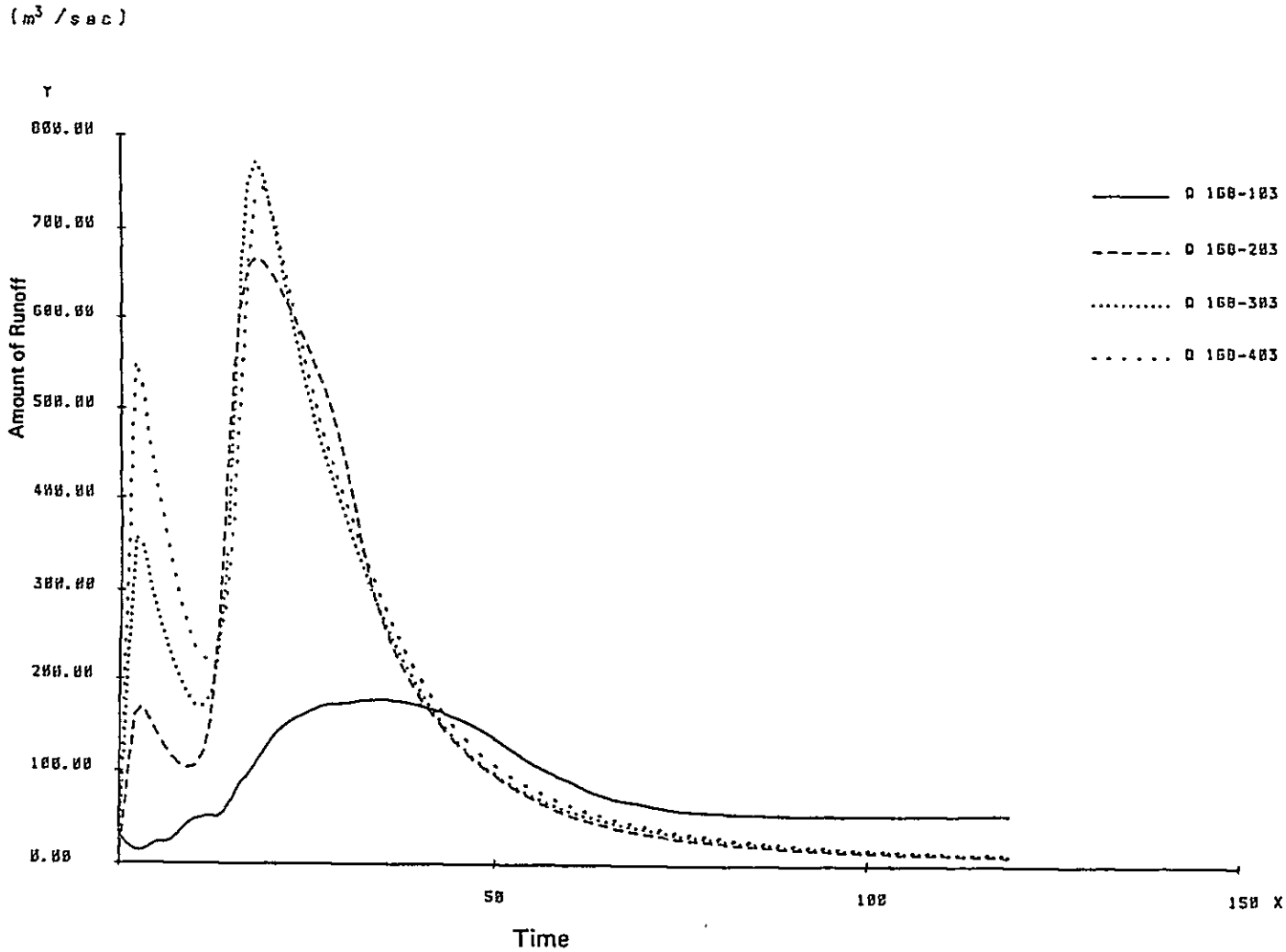

Fig. 5-114 Curves of the Change in Discharge

Table 5-5 List of Peak Discharge (I)

System I

Mesh No.	Amount of rainfall loss	Area of runoff region	Case 1			Case 2			Case 3			Case 4			Notes
			Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	
	(m/m)	(km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	
	0.0		257.0	15	0.324	527.2	17	0.665	963.9	18	1.216	1,659.9	16	2.095	
(No. 7)	50.0	792.4	186.0	20	0.235	468.3	18	0.591	861.6	19	1.087	1,318.0	18	1.663	
	80.0		165.7	77	0.209	414.2	19	0.523	776.9	21	0.980	876.3	20	1.106	
	0.0		203.8	33	0.297	449.2	52	0.654	866.9	16	1.262	1,507.4	15	2.194	
(No. 19)	50.0	687.1	173.7	80	0.253	404.5	43	0.589	772.2	18	1.124	1,248.4	16	1.817	
	80.0		158.9	68	0.231	376.3	37	0.548	708.2	19	1.031	835.8	17	1.216	
	0.0		175.3	12	0.329	405.1	54	0.761	722.9	31	1.358	1,222.3	17	2.296	
(No. 25)	50.0	532.3	160.0	90	0.301	359.3	46	0.675	638.8	25	1.200	1,012.3	14	1.902	
	80.0		138.1	14	0.259	328.5	38	0.617	579.1	20	1.088	671.0	16	1.261	
	0.0		80.1	13	0.742	125.9	13	1.166	182.7	12	1.692	260.5	12	2.412	
(No. 61)	50.0	108.0	67.8	15	0.628	109.1	14	1.010	158.3	13	1.466	224.0	13	2.074	
	80.0		58.9	16	0.545	94.5	15	0.875	135.4	14	1.254	176.8	15	1.637	
	0.0		275.3	52	0.404	442.8	34	0.650	540.0	29	0.793	717.6	23	1.054	
(No. 71)	50.0	681.1	227.2	44	0.334	358.5	32	0.526	336.2	32	0.494	435.1	28	0.639	
	80.0		190.5	41	0.280	292.8	32	0.430	227.8	36	0.334	289.4	33	0.425	
	0.0		134.4	14	0.562	206.0	20	0.862	325.7	14	1.363	367.5	13	1.538	
(No. 81)	50.0	239.0	119.2	19	0.499	182.2	20	0.762	245.7	15	1.028	237.8	16	0.995	
	80.0		108.3	21	0.453	159.3	20	0.667	164.9	17	0.690	154.7	18	0.647	
	0.0		236.6	20	0.682	330.9	20	0.954	576.4	20	1.663	519.6	18	1.499	
(No. 99)	50.0	346.7	204.9	22	0.591	290.8	29	0.839	391.2	22	1.128	328.0	22	0.946	
	80.0		182.5	24	0.526	254.0	25	0.733	264.5	23	0.763	227.8	26	0.657	
	0.0		115.4	20	1.143	178.0	15	1.762	359.5	11	3.559	451.8	11	4.473	
(No.107)	50.0	101.0	91.7	12	0.908	159.1	13	1.575	300.2	13	2.972	333.1	14	3.298	
	80.0		89.9	11	0.890	144.7	13	1.433	220.2	15	2.180	218.9	16	2.167	

Table 5-5 List of Peak Discharge (I)

(cont')

System I

Mesh No.	Amount of rainfall loss	Area of runoff region	Case 1			Case 2			Case 3			Case 4			Notes
			Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	
	(m/m)	(km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	
	0.0		53.4	14	0.822	73.3	15	1.128	115.8	13	1.782	184.9	10	2.845	
(No.112)	50.0	65.0	47.1	15	0.725	66.9	15	1.029	107.2	14	1.649	161.8	12	2.489	
	80.0		32.5	12	0.500	53.7	23	0.826	92.5	14	1.423	113.3	14	1.743	
	0.0		320.3	15	0.497	520.5	41	0.807	798.9	25	1.239	1,266.8	17	1.964	
(No.139)	50.0	645.0	275.0	17	0.426	460.9	33	0.715	700.9	21	1.087	945.0	18	1.465	
	80.0		244.7	20	0.379	410.6	26	0.637	603.7	20	0.936	632.7	20	0.981	
	0.0		243.1	55	0.495	456.5	30	0.930	658.6	26	1.341	1,030.4	16	2.098	
(No.148)	50.0	491.1	214.4	44	0.437	398.4	26	0.811	557.4	25	1.135	771.3	17	1.571	
	80.0		190.5	40	0.388	339.5	23	0.691	452.7	22	0.922	523.4	18	1.066	
	0.0		294.1	15	0.661	501.1	13	1.126	724.1	14	1.627	1,008.5	12	2.266	
(No.156)	50.0	445.1	249.3	15	0.560	420.5	14	0.945	563.0	16	1.265	732.6	15	1.646	
	80.0		205.4	21	0.461	328.8	17	0.739	429.2	17	0.964	505.0	16	1.135	
	0.0		36.8	18	0.518	60.4	18	0.851	98.3	14	1.385	149.3	13	2.103	
(No.193)	50.0	71.0	32.3	18	0.455	55.1	18	0.776	86.8	15	1.223	116.7	15	1.644	
	80.0		23.2	12	0.327	50.3	18	0.708	74.4	16	1.048	81.2	17	1.144	
	0.0		121.3	12	0.534	180.6	18	0.796	266.4	18	1.174	416.8	16	1.836	
(No.207)	50.0	227.0	105.6	14	0.465	158.9	20	0.700	230.4	19	1.015	310.9	18	1.370	
	80.0		93.6	17	0.412	142.2	21	0.626	194.6	20	0.857	224.3	20	0.988	

Table 5-6 List of Peak Discharge (II)

System II

River name	Mesh No.	Amount of rainfall loss	Area of runoff region	Case 1			Case 2			Case 3			Case 4			Notes
				Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	Amount of peak runoff	Run-off time	Amount of run-off ratio	
		(m/m)	(km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	(m^3/sec)	(hour)	(m^3/sec/km^2)	
Atinguy River	168	0.0	664	238.0	19	0.358	835.0	15	1.257	1,413.0	14	2.128	1,675.0	15	2.522	
		50.0		201.0	35	0.302	750.0	16	1.129	1,105.0	17	1.664	1,132.0	17	1.704	
		80.0		177.0	34	0.266	667.0	18	1.004	771.0	18	1.161	743.0	19	1.118	
Atinguy River	177 (174)	0.0	451	83.0	60	0.184	508.0	16	1.126	865.0	15	1.918	1,069.0	14	2.370	
		50.0		74.0	53	0.164	471.0	23	1.044	697.0	16	1.545	705.0	16	1.563	
		80.0		67.0	46	0.148	416.0	17	0.922	459.0	17	1.017	450.0	18	0.997	
Yabebyry River	8 (7)	0.0	1,327	265.0	75	0.199	1,372.0	15	1.033	2,518.0	19	1.841	2,709.0	17	2.041	
		50.0		209.0	69	0.157	1,282.0	22	0.966	1,787.0	20	1.346	1,778.0	21	1.339	
		80.0		175.0	67	0.131	1,156.0	23	0.871	1,233.0	23	0.929	1,226.0	24	0.923	
Yabebyry River	26 (19)	0.0	1,167	465.0	40	0.398	1,401.0	25	1.200	2,520.0	15	2.159	2,801.0	14	2.400	
		50.0		396.0	38	0.339	1,307.0	15	1.119	1,853.0	16	1.587	1,868.0	16	1.600	
		80.0		345.0	38	0.295	1,157.0	19	0.991	1,285.0	18	1.101	1,284.0	19	1.100	
Dam secondary channels	227	0.0	280	279.0	20	0.996	331.0	16	1.182	391.0	16	1.396	406.0	15	1.450	
		50.0		226.0	20	0.807	248.0	19	0.885	282.0	18	1.007	281.0	18	1.003	
		80.0		175.0	24	0.625	190.0	21	0.678	201.0	20	0.717	201.0	20	0.717	
Dam secondary channels	233	0.0	248	261.0	21	1.052	295.0	16	1.189	354.0	15	1.427	366.0	14	1.475	
		50.0		215.0	23	0.866	225.0	17	0.907	258.0	16	1.040	256.0		1.032	
		80.0		175.0	21	0.705	177.0	18	0.713	187.0	17	0.754	185.0	17	0.745	

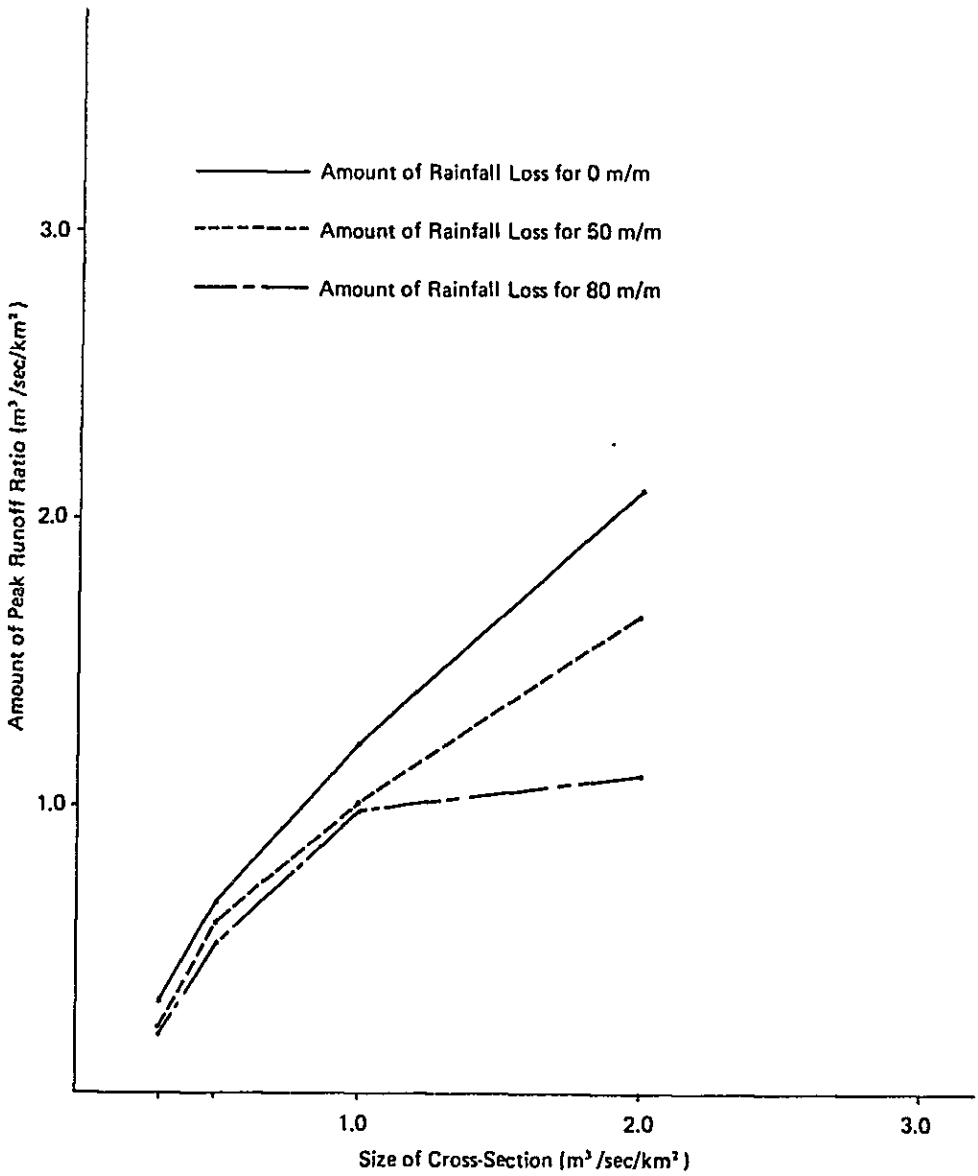

Fig. 5-115 Relationship between the Size of the Cross-Section and the Specific Peak Discharge (Yabebyry River No. 7 System I)

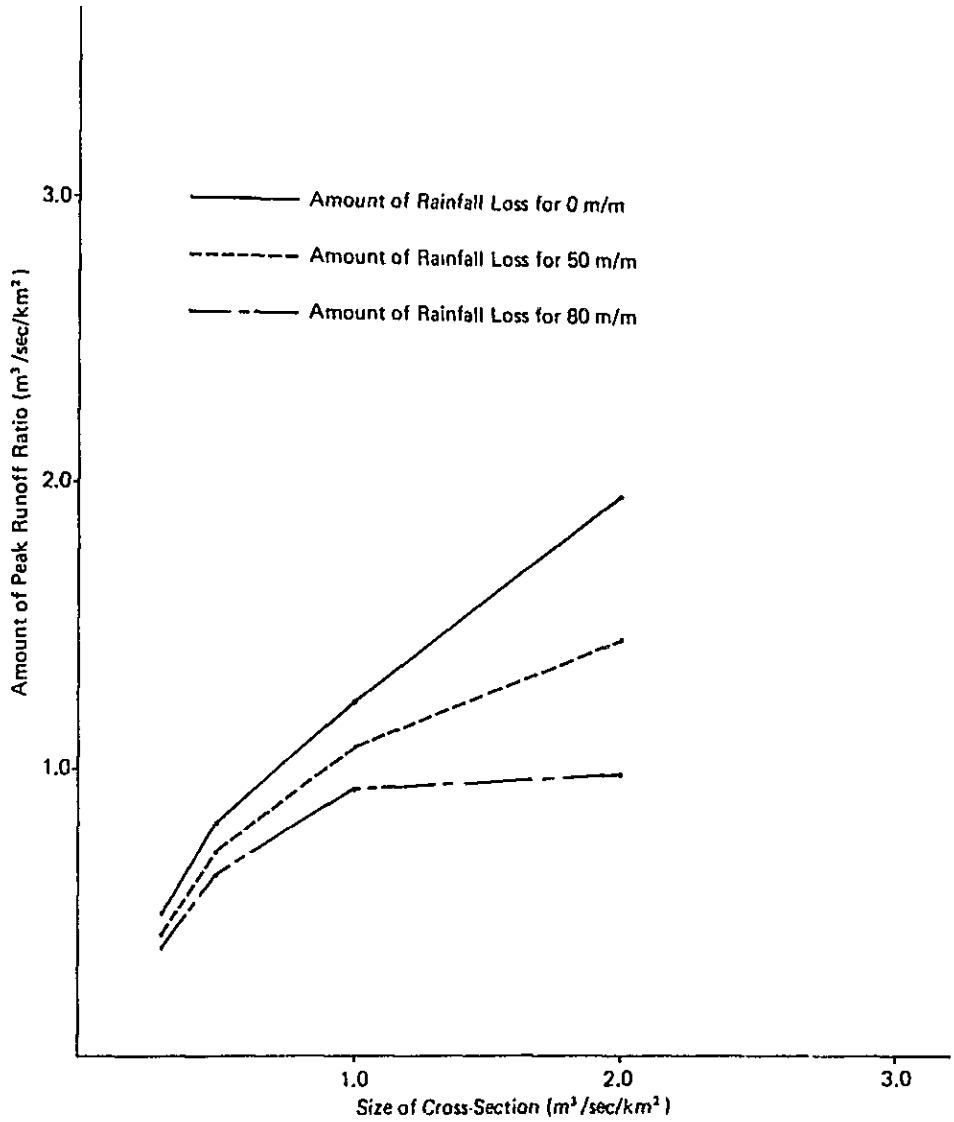

Fig. 5-116 Relationship between the Size of the Cross-Section and the Specific Peak Discharge (Atinguy River No. 139 System I)

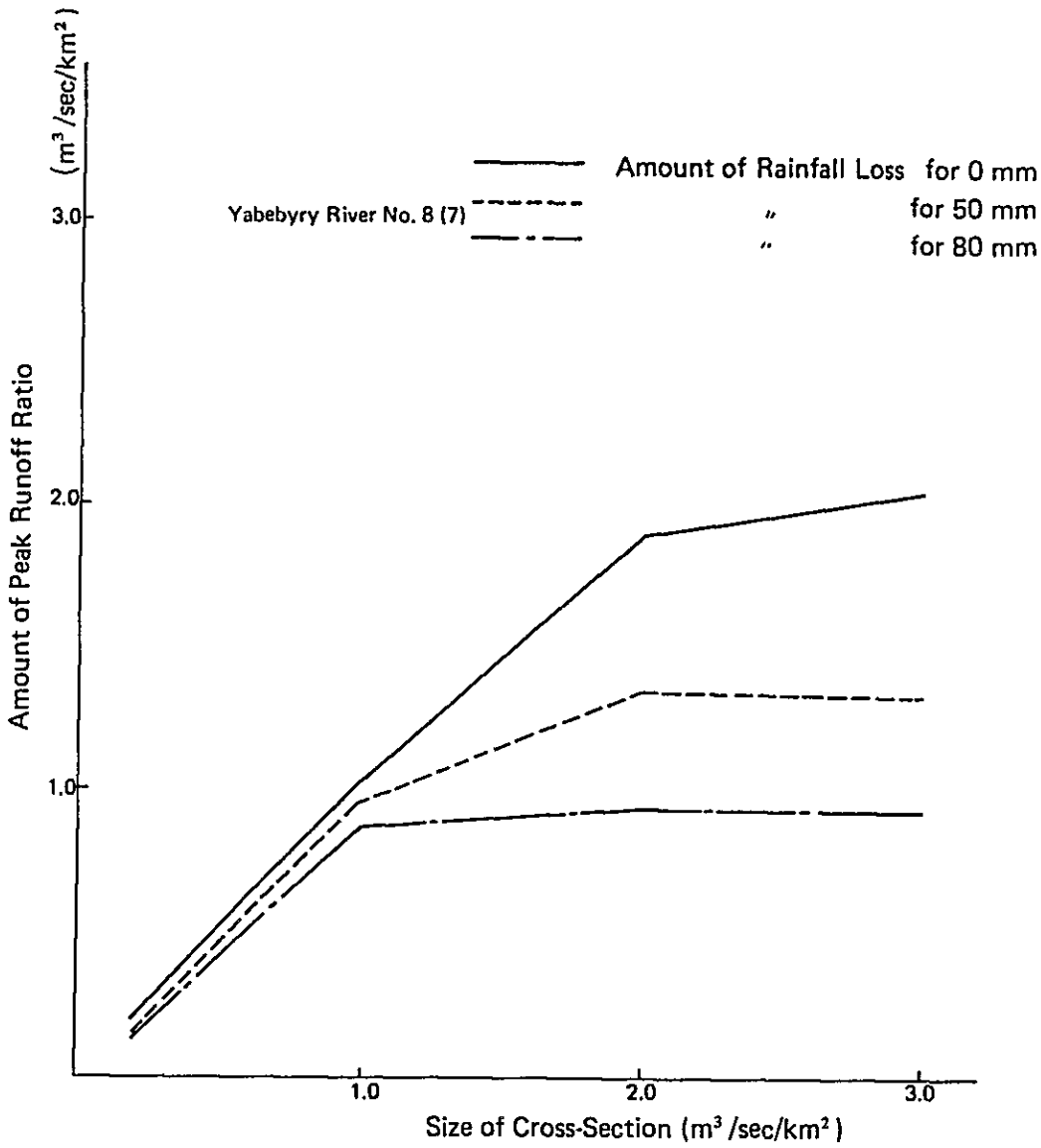

Fig. 5-117 Relationship between the Size of the Cross-Section and the Specific Peak Discharge (Yabebyry River No. 7 (8) System II)

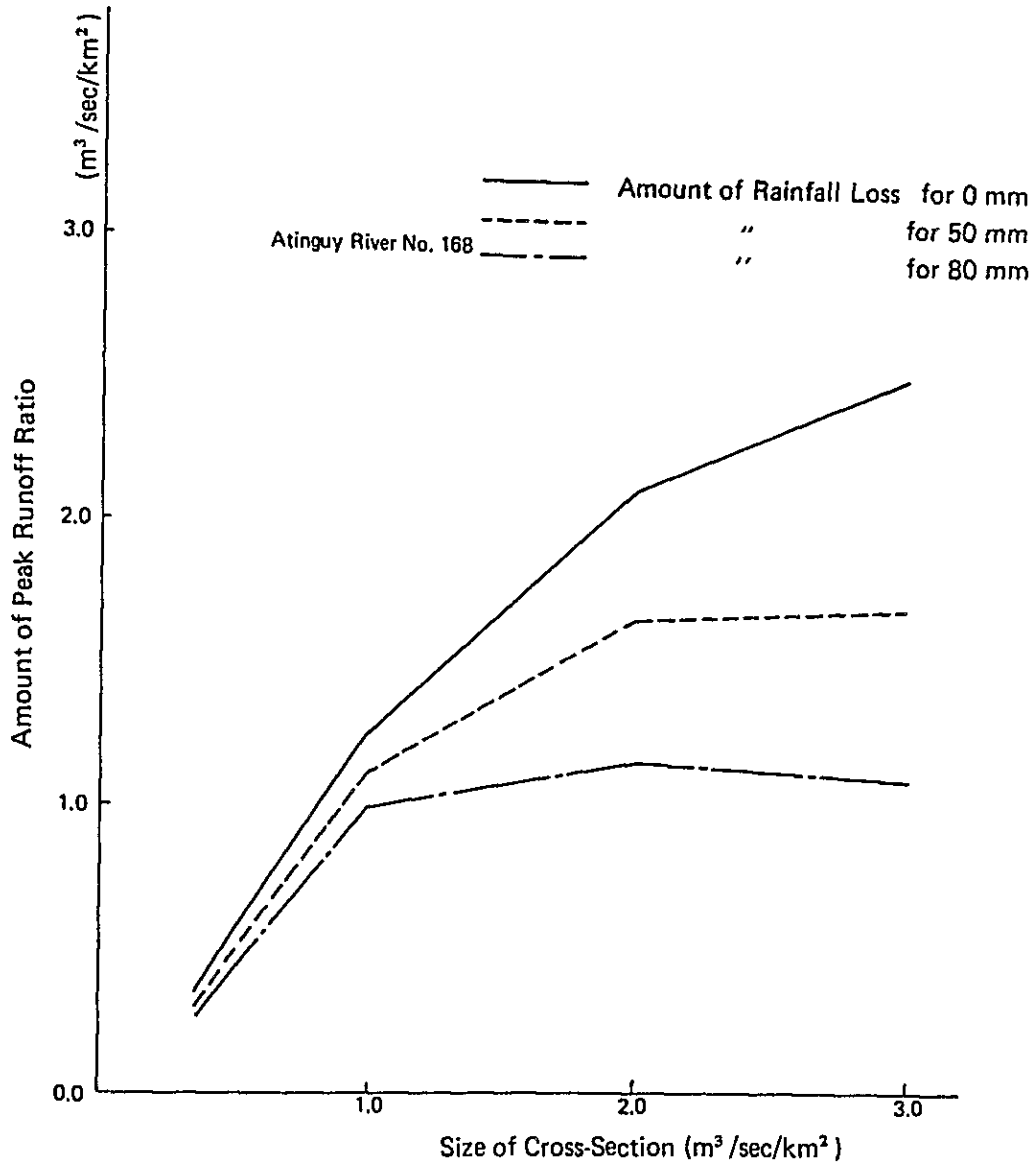

Fig. 5-118 Relationship between the Size of the Cross-Section and the Specific Peak Discharge (Atinguy River No. 168 System II)

Table 5-7 Distribution of the Maximum Depth of Inundation

Fig. No.	Symbol	Content	Fig. No.	Symbol	Content
Fig. 5-119	I-1-1-MAX.	Case I-1-1 Maximum depth inundation	Fig. 5-152	II-1-1-MAX.	Case II-1-1 Maximum depth inundation
" 120	I-2-1-MAX.	" I-2-1 "	" 153	II-2-1-MAX.	" II-2-1 "
" 121	I-3-1-MAX.	" I-3-1 "	" 154	II-3-1-MAX.	" II-3-1 "
" 122	I-4-1-MAX.	" I-4-1 "	" 155	II-4-1-MAX.	" II-4-1 "
" 123	I-1-2-MAX.	" I-1-2 "	" 156	II-1-2-MAX.	" II-1-2 "
" 124	I-2-2-MAX.	" I-2-2 "	" 157	II-2-2-MAX.	" II-2-2 "
" 125	I-3-2-MAX.	" I-3-2 "	" 158	II-3-2-MAX.	" II-3-2 "
" 126	I-4-2-MAX.	" I-4-2 "	" 159	II-4-2-MAX.	" II-4-2 "
" 127	I-1-3-MAX.	" I-1-3 "	" 160	II-1-3-MAX.	" II-1-3 "
" 129	I-2-3-MAX.	" I-2-3 "	" 161	II-1-3-MAX.	" II-2-3 "
" 129	I-3-3-MAX.	" I-3-3 "	" 162	II-3-3-MAX.	" II-3-3 "
" 130	I-4-3-MAX.	" I-4-3 "	" 163	II-4-3-MAX.	" II-4-3 "
" 131	I-1-2-10H	Case I-1-2 10 Hours after	" 164	II-1-2-10H	Case II-1-2 10 Hours after
" 132	I-1-2-20H	" 20 "	" 165	II-1-2-20H	" 20 "
" 133	I-1-2-30H	" 30 "	" 166	II-1-2-30H	" 30 "
" 134	I-1-2-40H	" 40 "	" 167	II-1-2-40H	" 40 "
" 135	I-1-2-60H	"" 60 "	" 168	II-1-2-60H	" 60 "
" 136	I-1-2-80H	" 80 "	" 169	II-1-2-80H	" 80 "
" 137	I-1-2-100H	" 100 "	" 170	II-1-2-100H	" 100 "
" 138	I-2-2-10H	Case I-2-2 10 "	" 171	II-2-2-10H	Case II-2-2 10 "
" 139	I-2-2-20H	" 20 "	" 172	II-2-2-20H	" 20 "
" 140	I-2-2-30H	" 30 "	" 173	II-2-2-30H	" 30 "
" 141	I-2-2-40H	" 40 "	" 174	II-2-2-40H	" 40 "
" 142	I-2-2-50H	" 50	" 175	II-3-2-10H	Case II-3-2 10 "
" 143	I-2-2-60H	" 60 "	" 176	II-3-2-20H	" 20 "
" 144	I-2-2-70H	" 70 "	" 177	II-3-2-30H	" 30 "
" 145	I-3-2-10H	Case I-3-2 10 "			
" 146	I-3-2-20H	" 20 "			
" 147	I-3-2-30H	" 30 "			
" 148	I-3-2-40H	" 40 "			
" 149	I-4-2-10H	Case I-4-2 10 "			
" 150	I-4-2-20H	" 20 "			
" 151	I-4-2-30H	" 30 "			

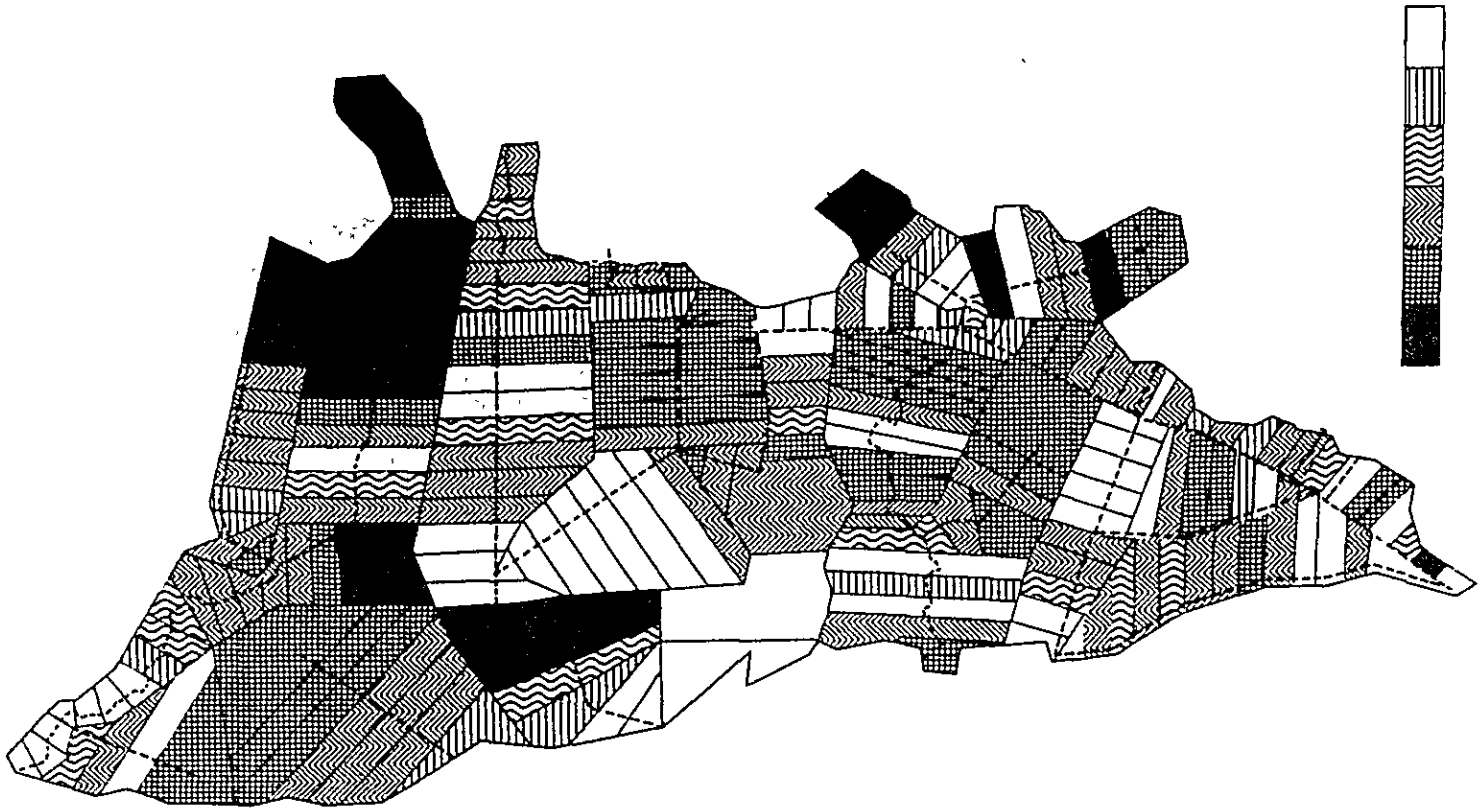

Fig. 5-119 Inundation Condition Case I-1-1-MAX.

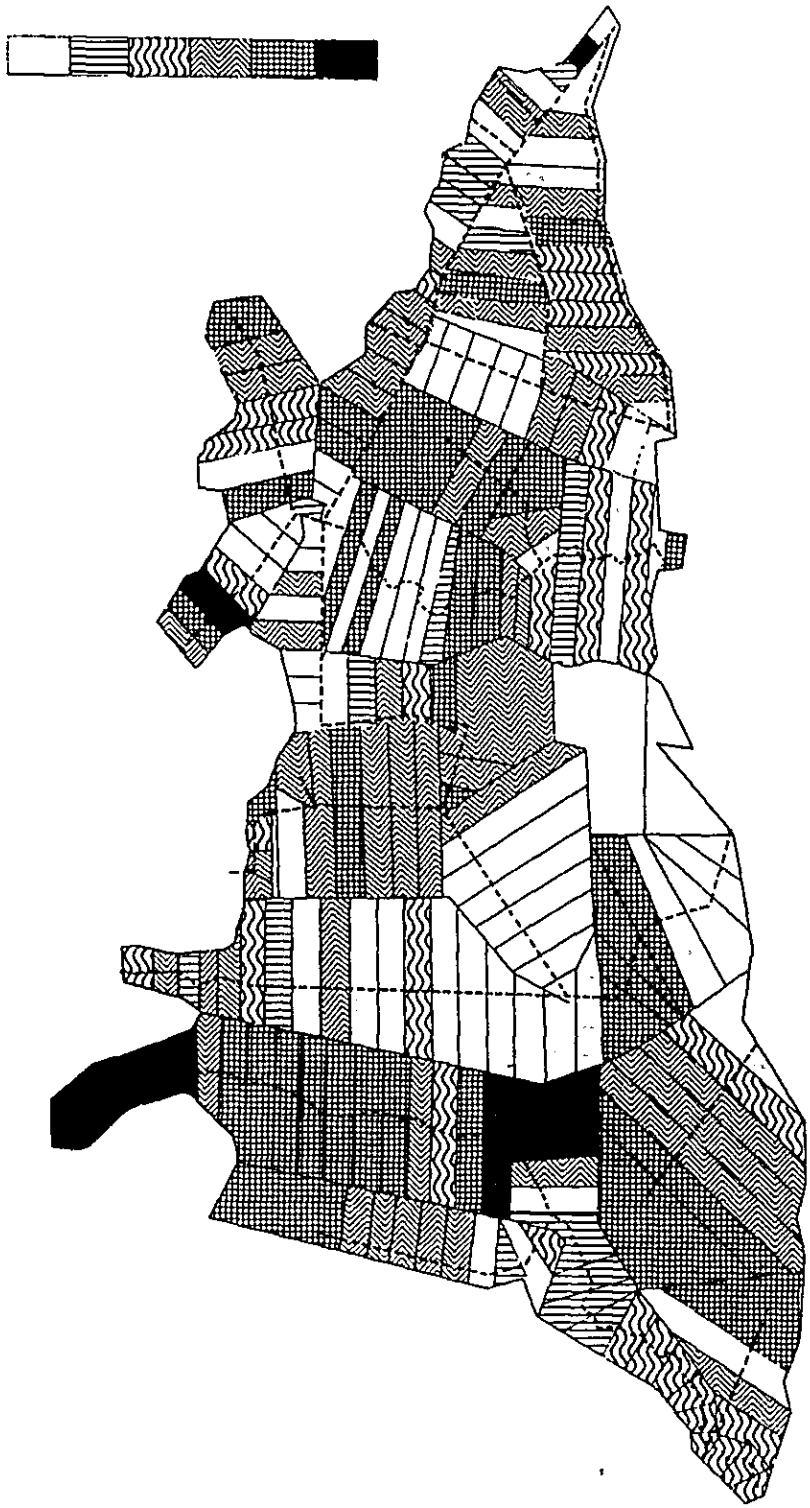

Fig. 5-120 Inundation Condition Case I-2-1-MAX.

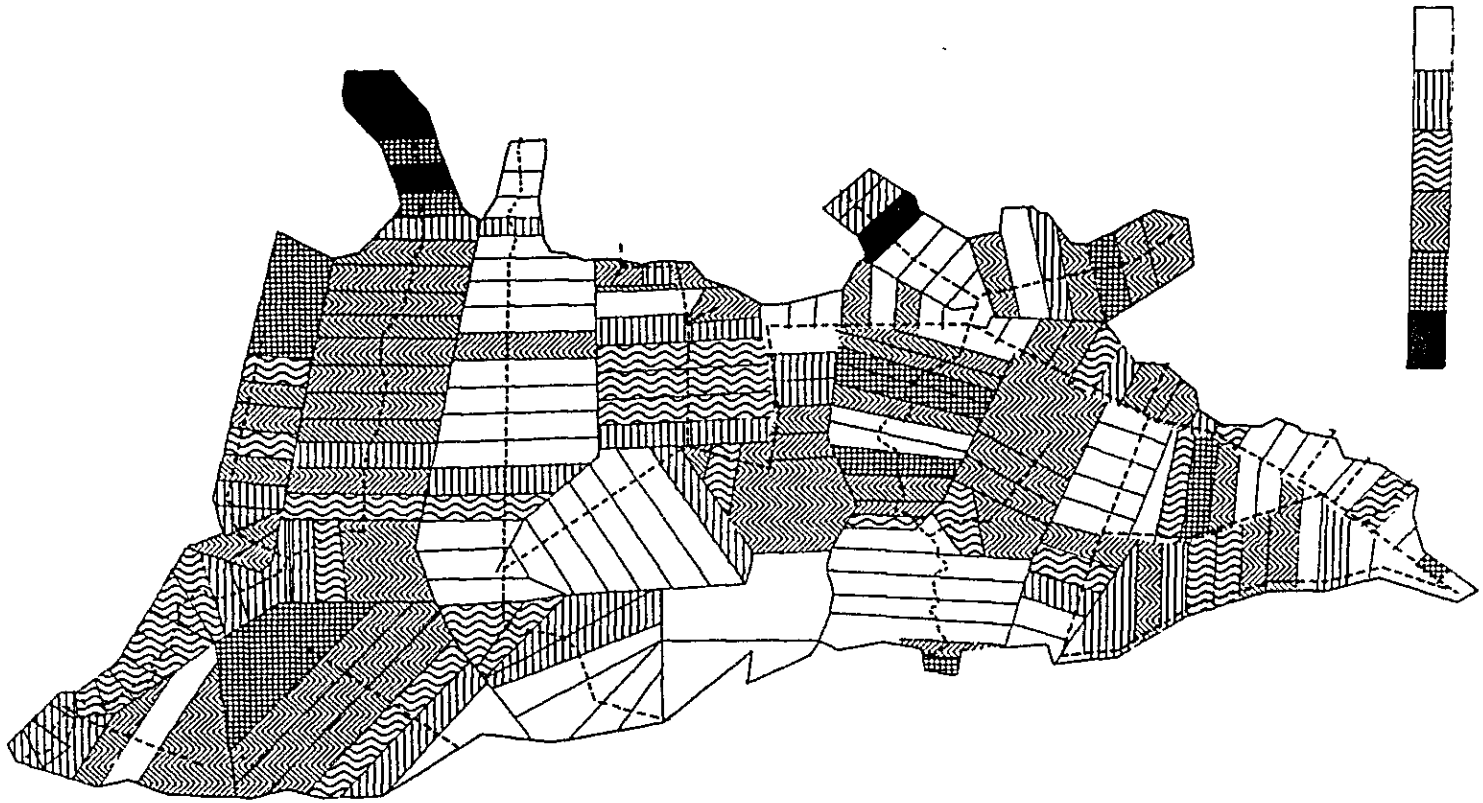

Fig. 5-121 Inundation Condition Case I-3-1-MAX.

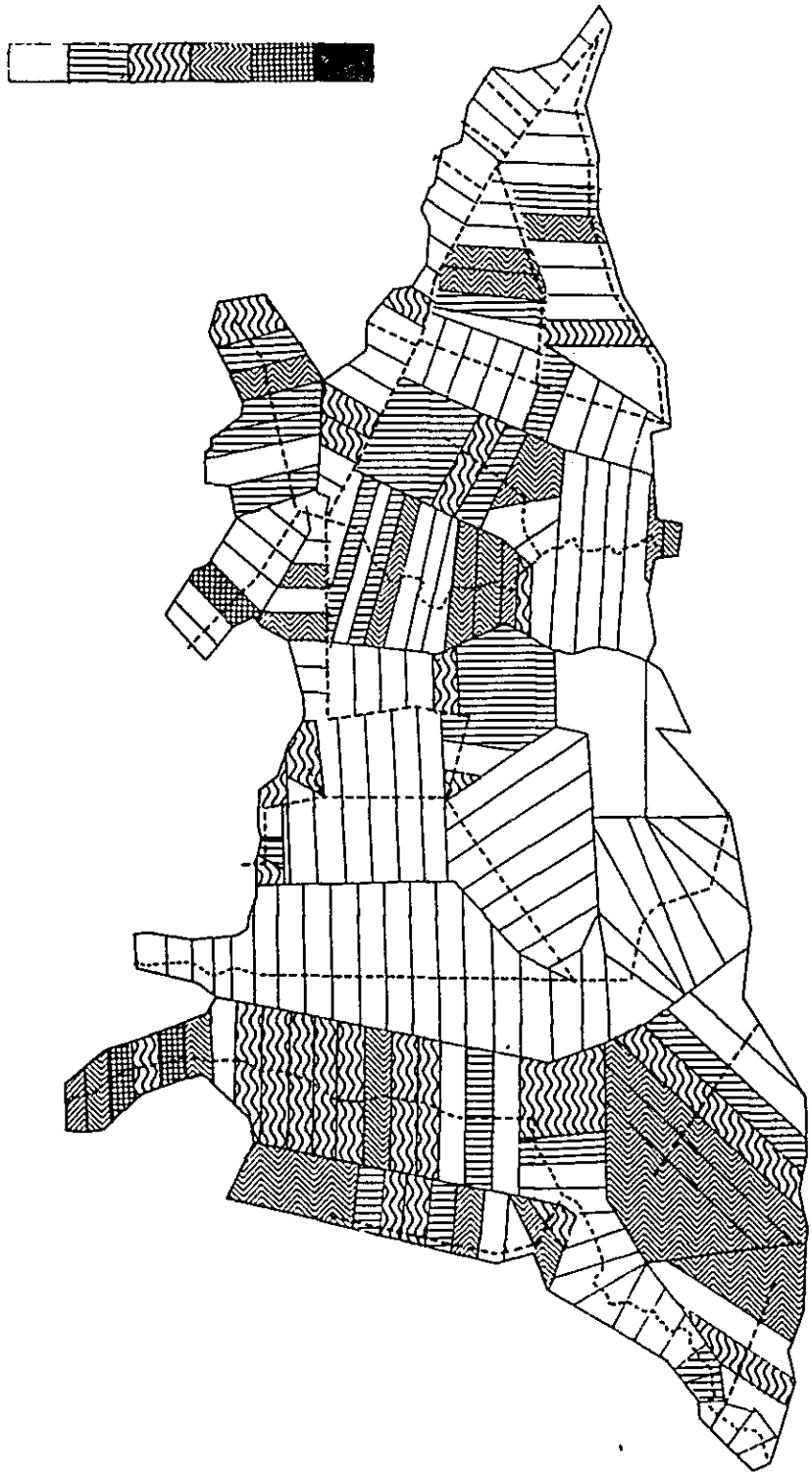

Fig. 5-122 Inundation Condition Case I-4-1-MAX.

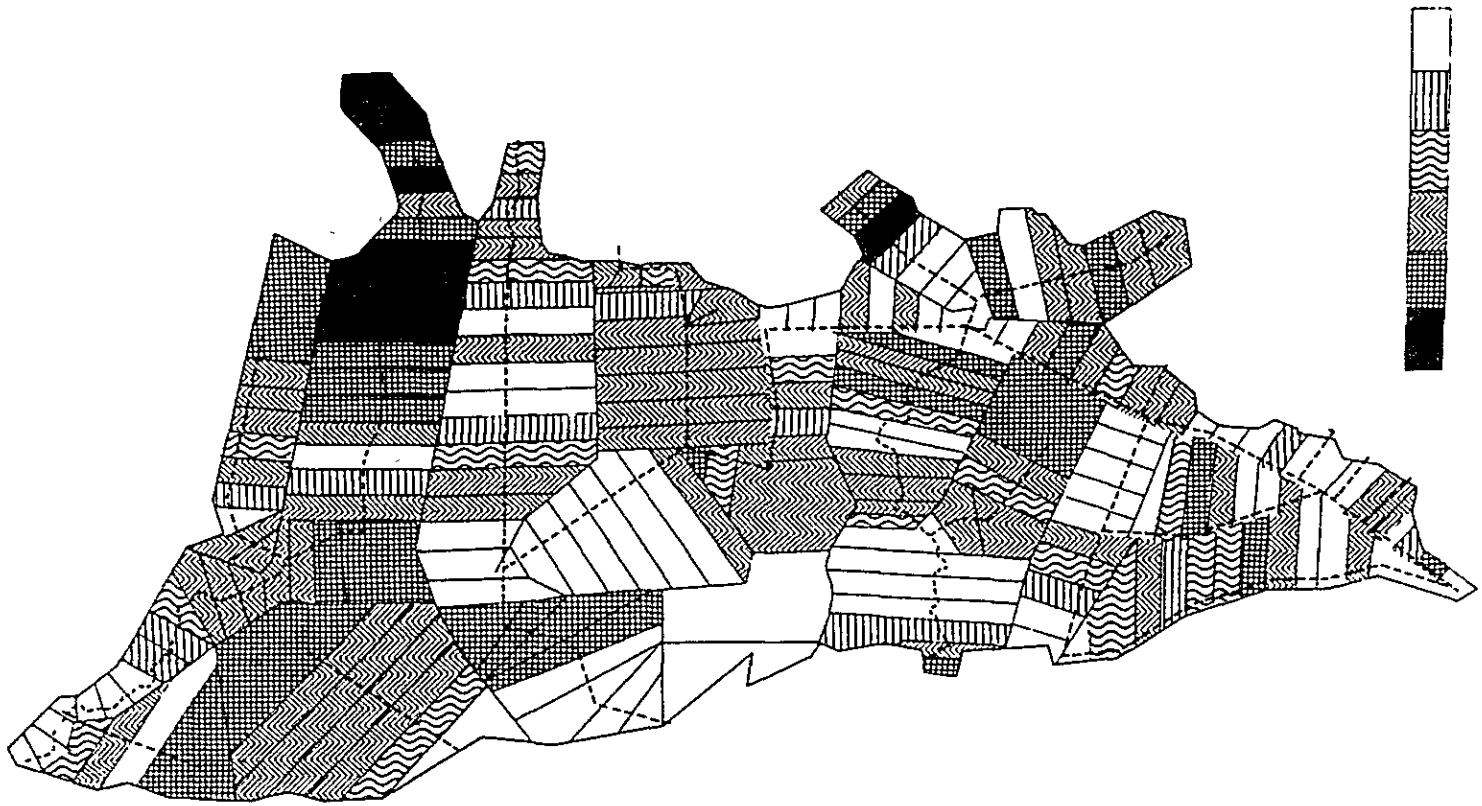

Fig. 5-123 Inundation Condition Case I-1-2-MAX.

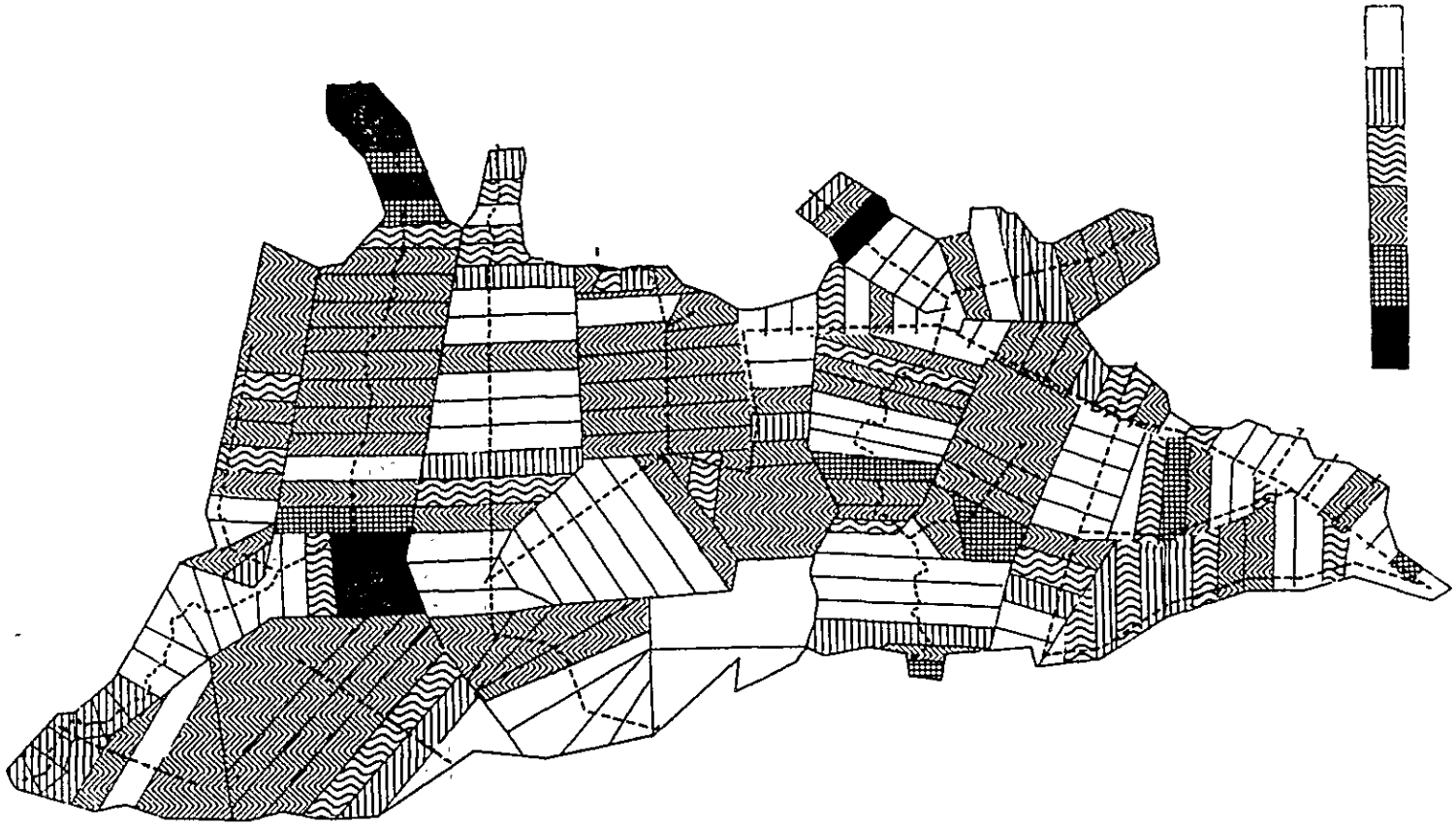

Fig. 5-124 Inundation Condition Case I-2-2-MAX.

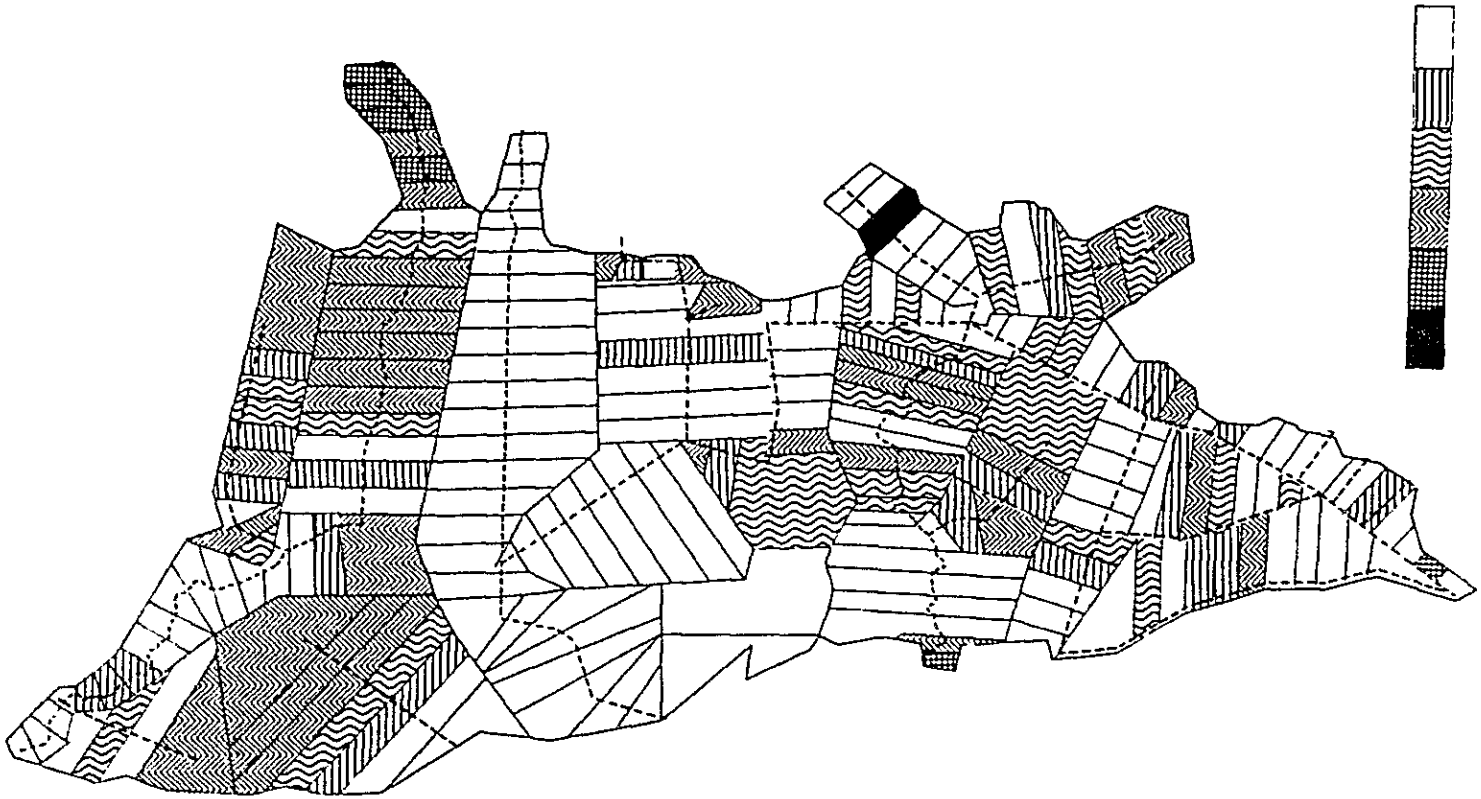

Fig. 5-125 Inundation Condition Case I-3-2-MAX.

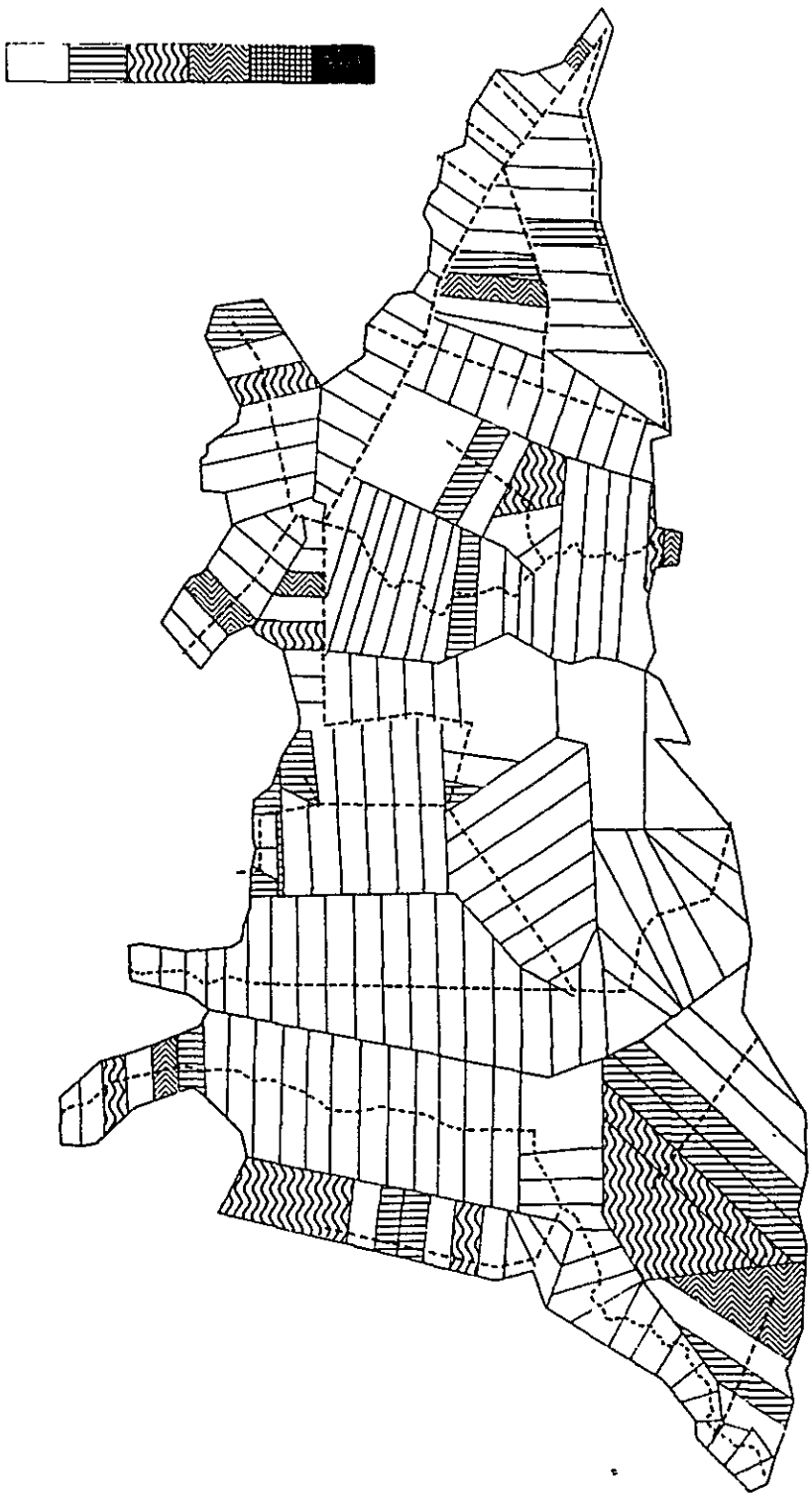

Fig. 5-126 Inundation Condition Case I-4-2-MAX.

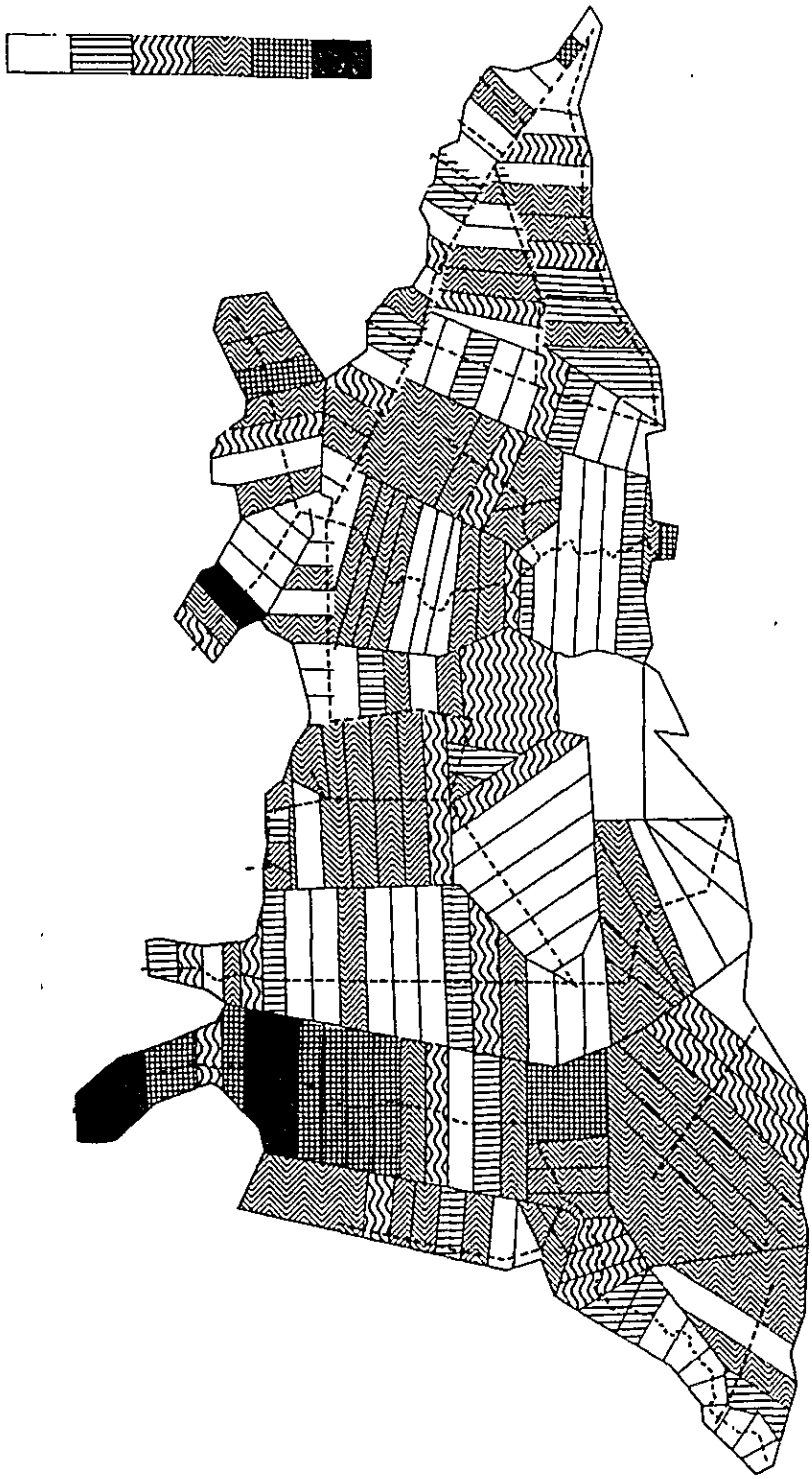

Fig. 5-127 Inundation Condition Case I-1-3-MAX.

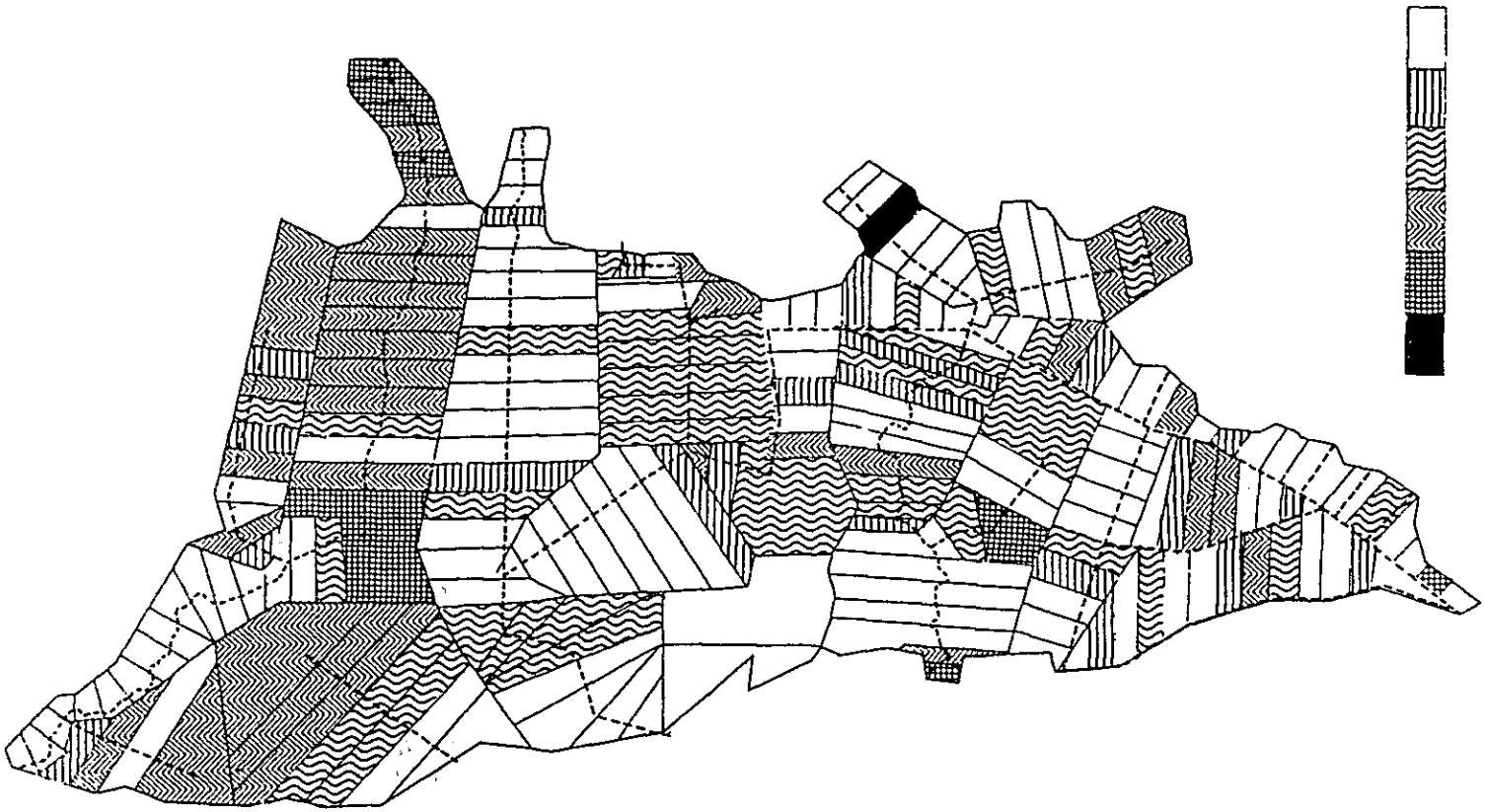

Fig. 5-128 Inundation Condition Case I-2-3-MAX.

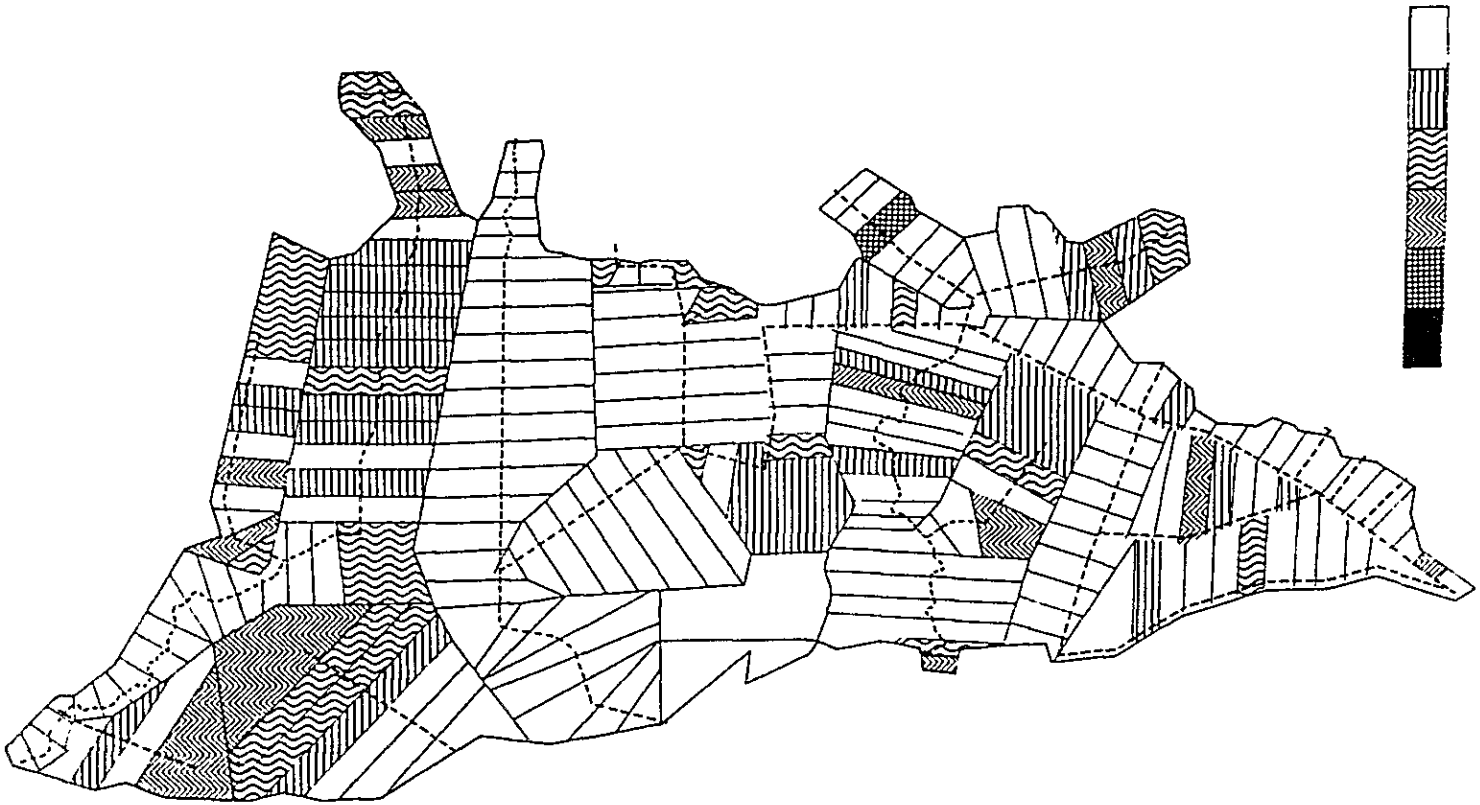

Fig. 5-129 Inundation Condition Case I-3-3-MAX.

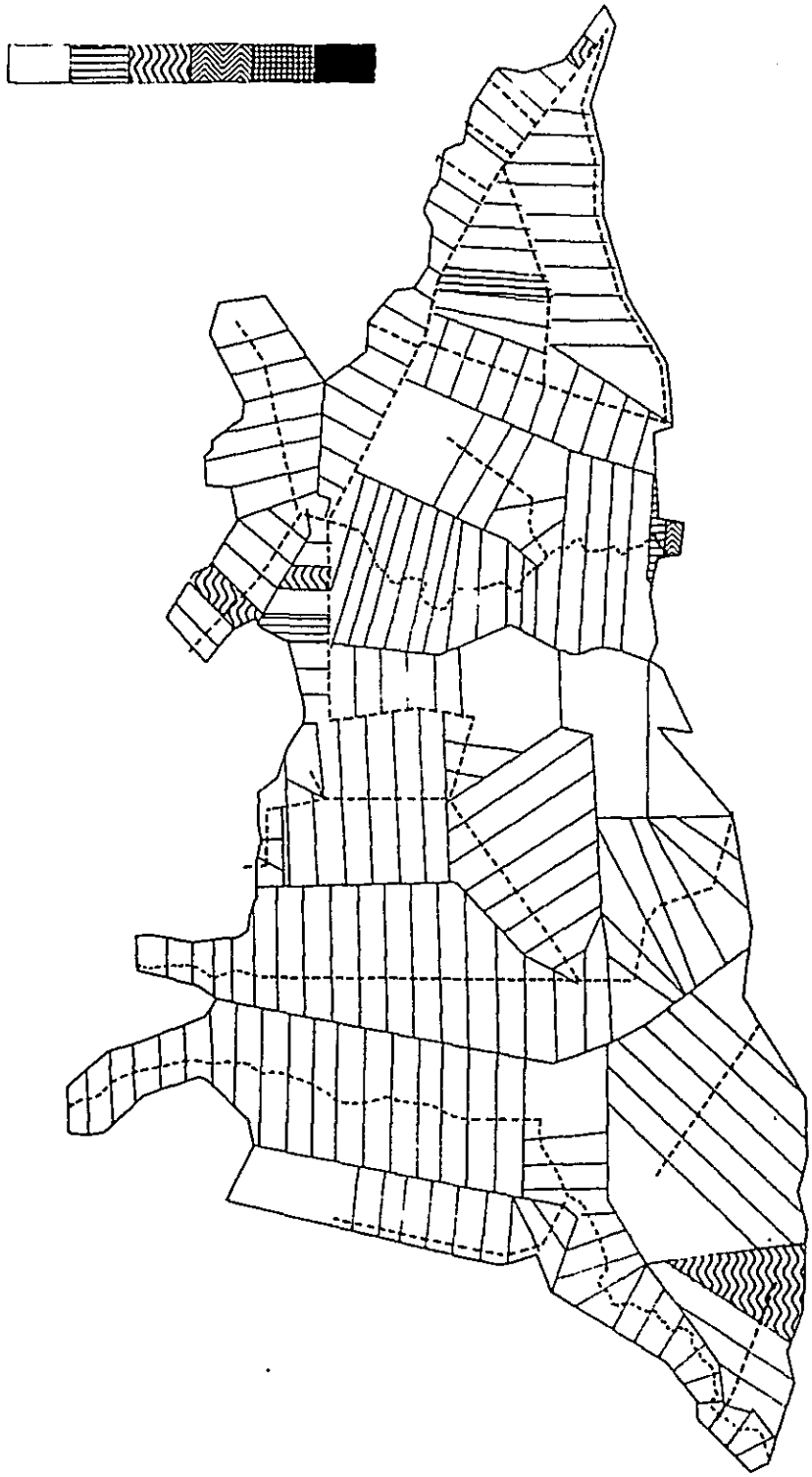

Fig. 5-130 Inundation Condition Case I-4-3-MAX.

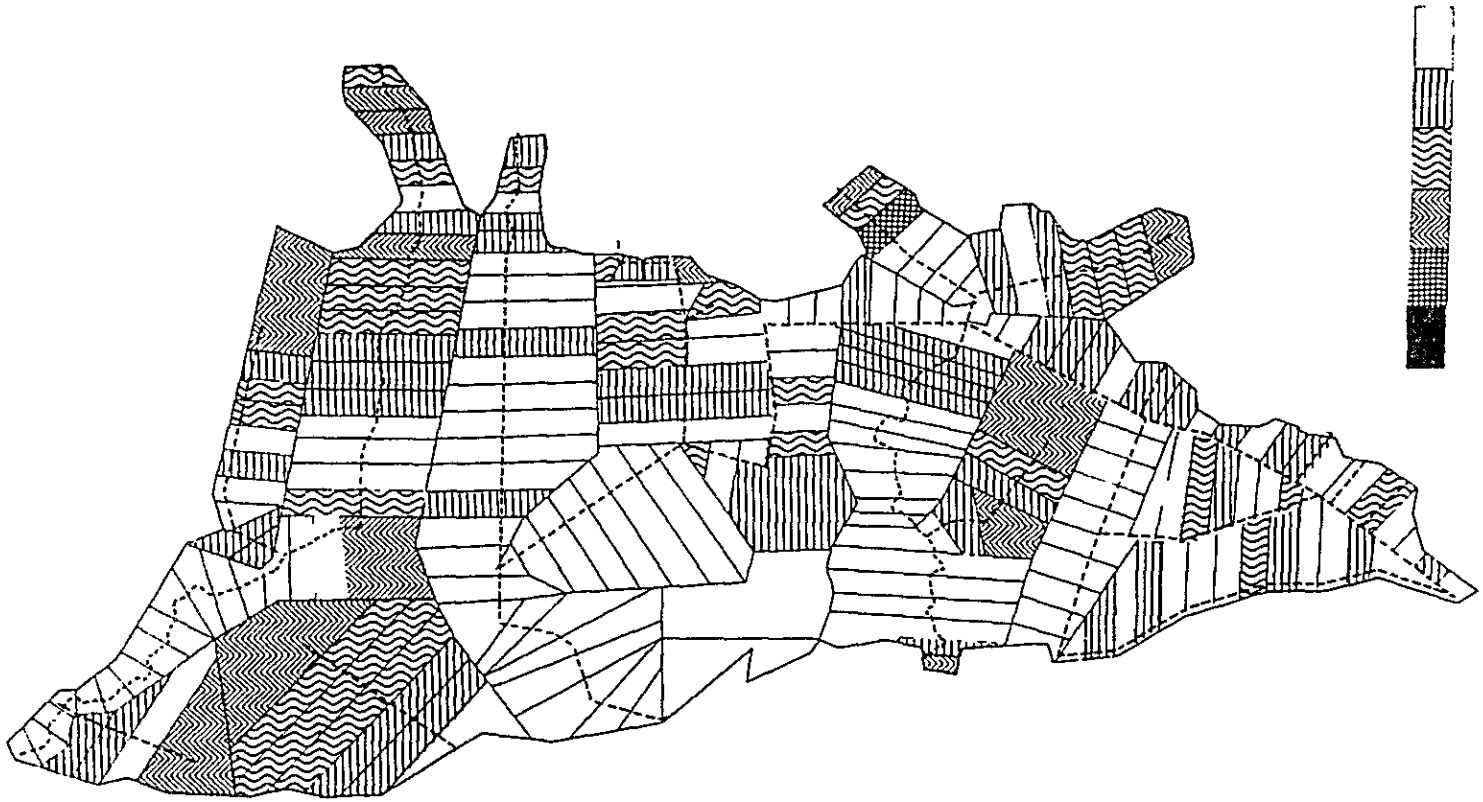

Fig. 5-131 Inundation Condition Case I-1-2-10H

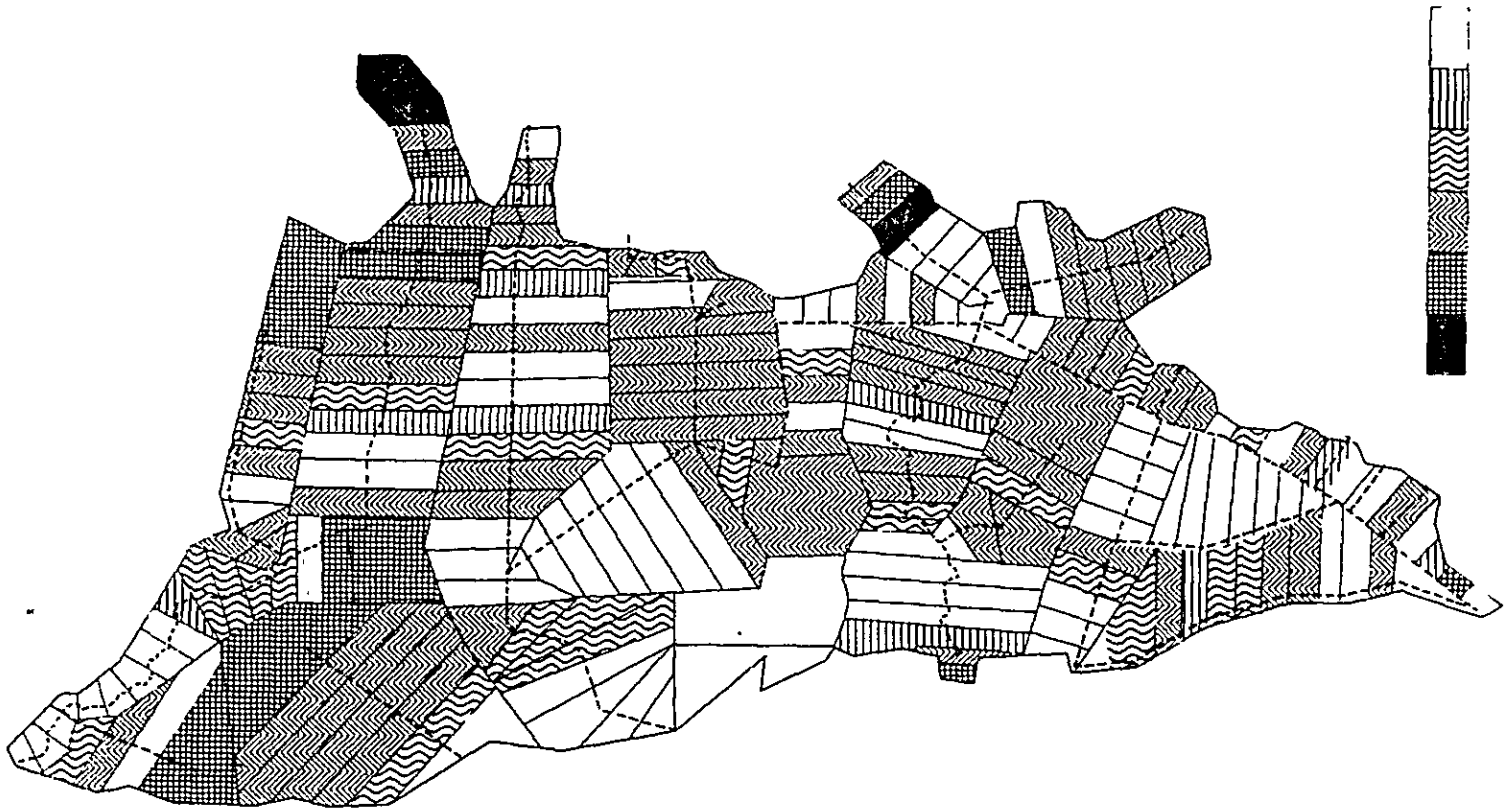

Fig. 5-132 Inundation Condition Case I-1-2-20H

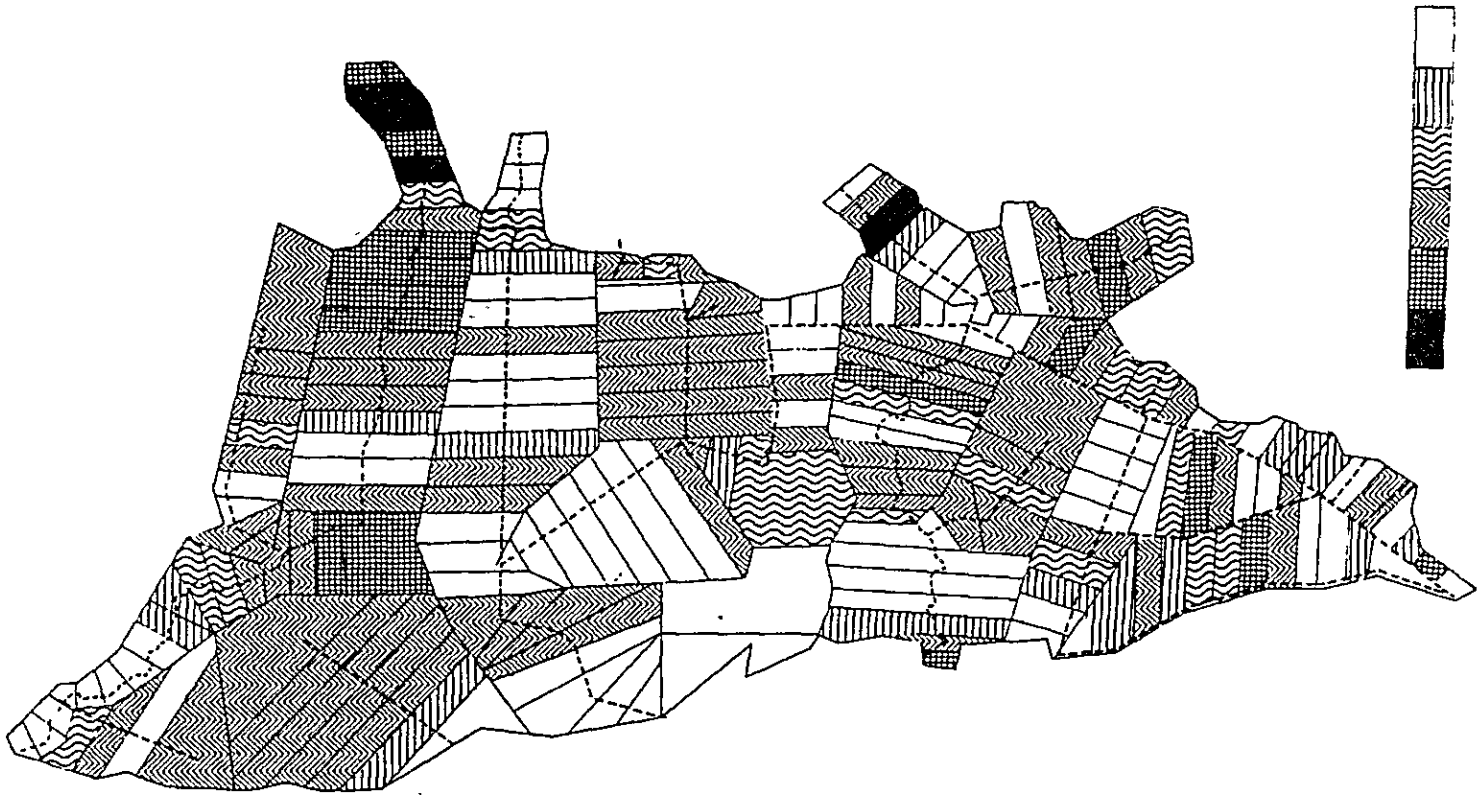

Fig. 5-133 Inundation Condition Case I-1-2-30H

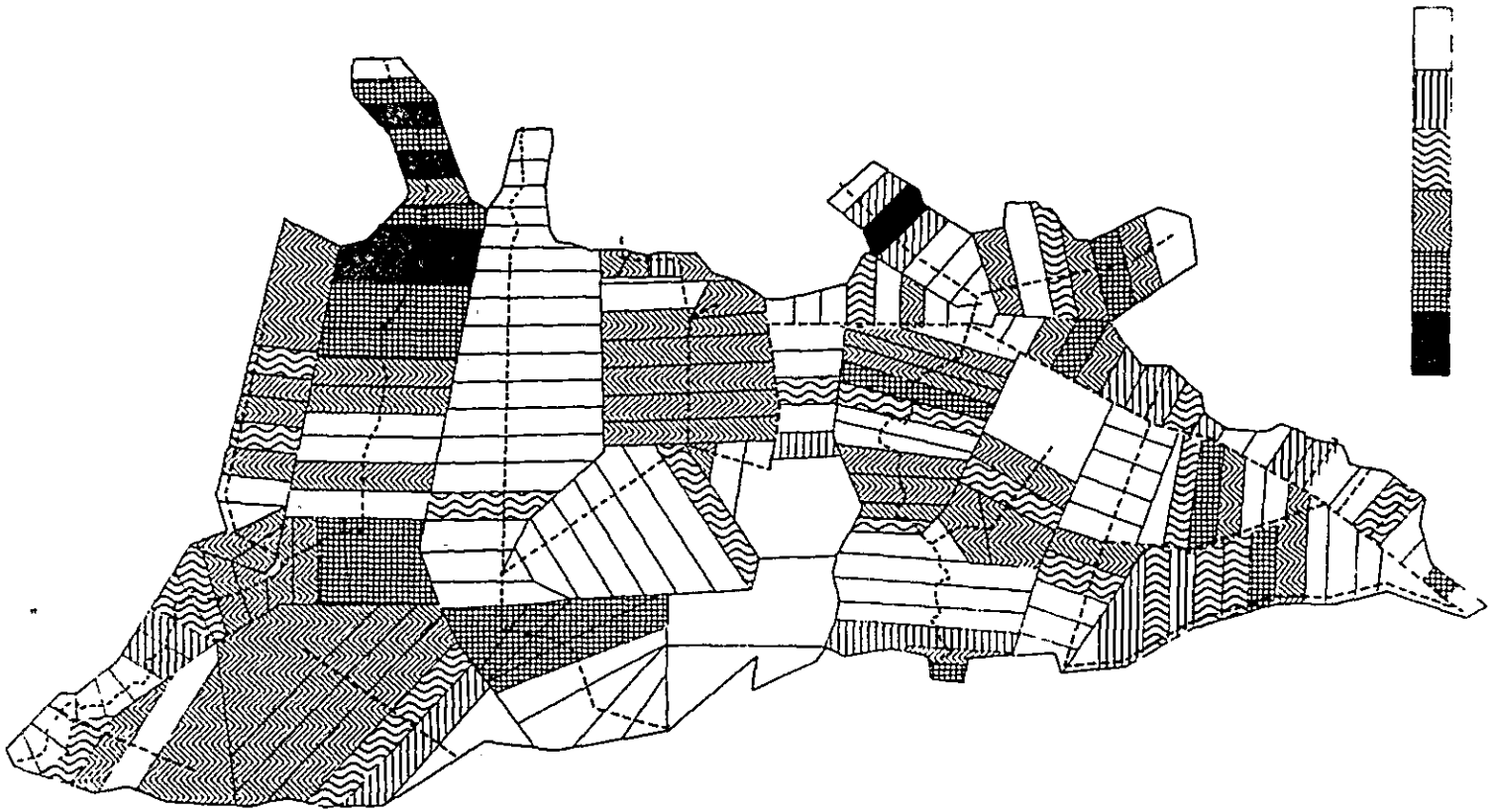

Fig. 5-134 Inundation Condition Case I-1-2-40H

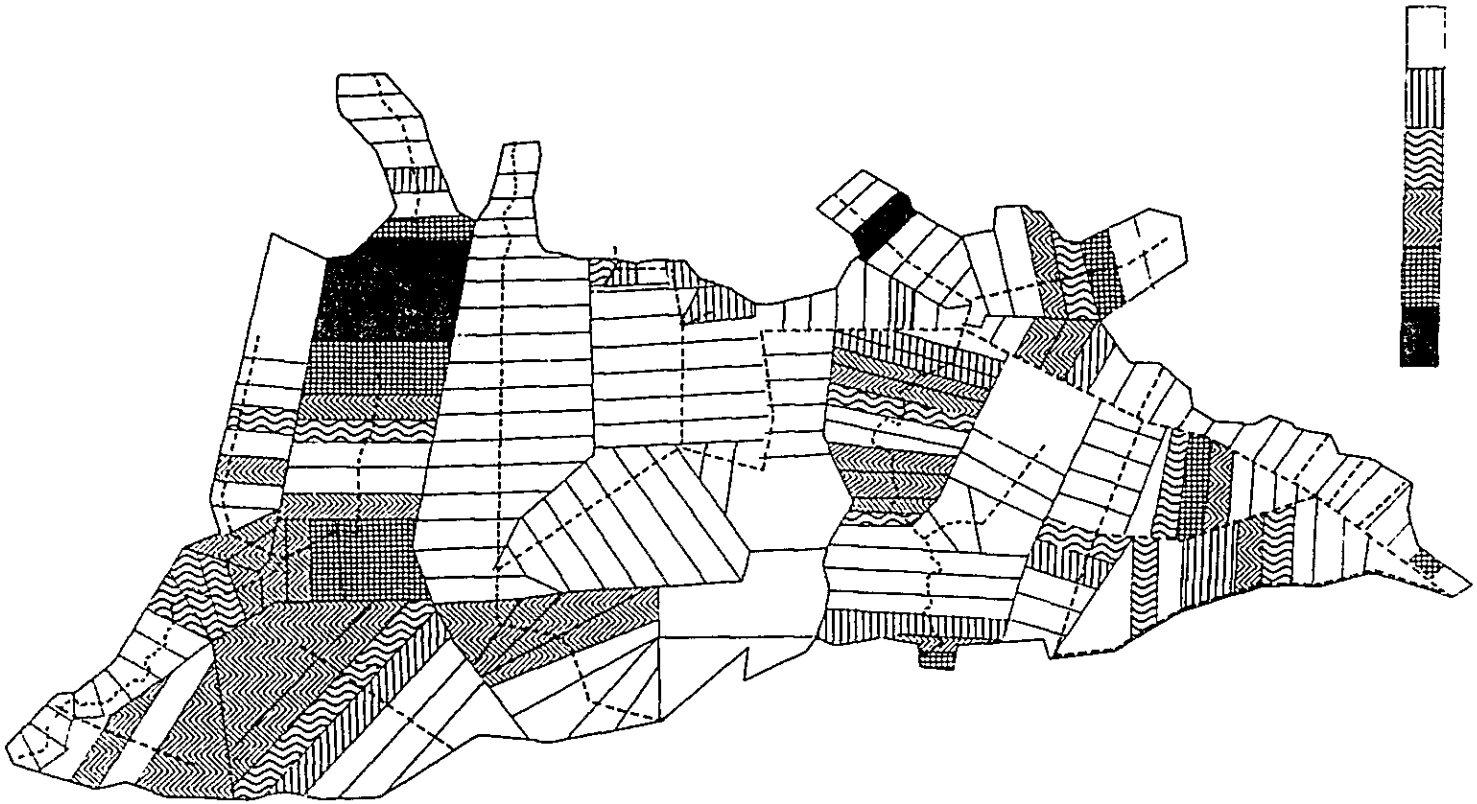

Fig. 5-135 Inundation Condition Case I-1-2-60H

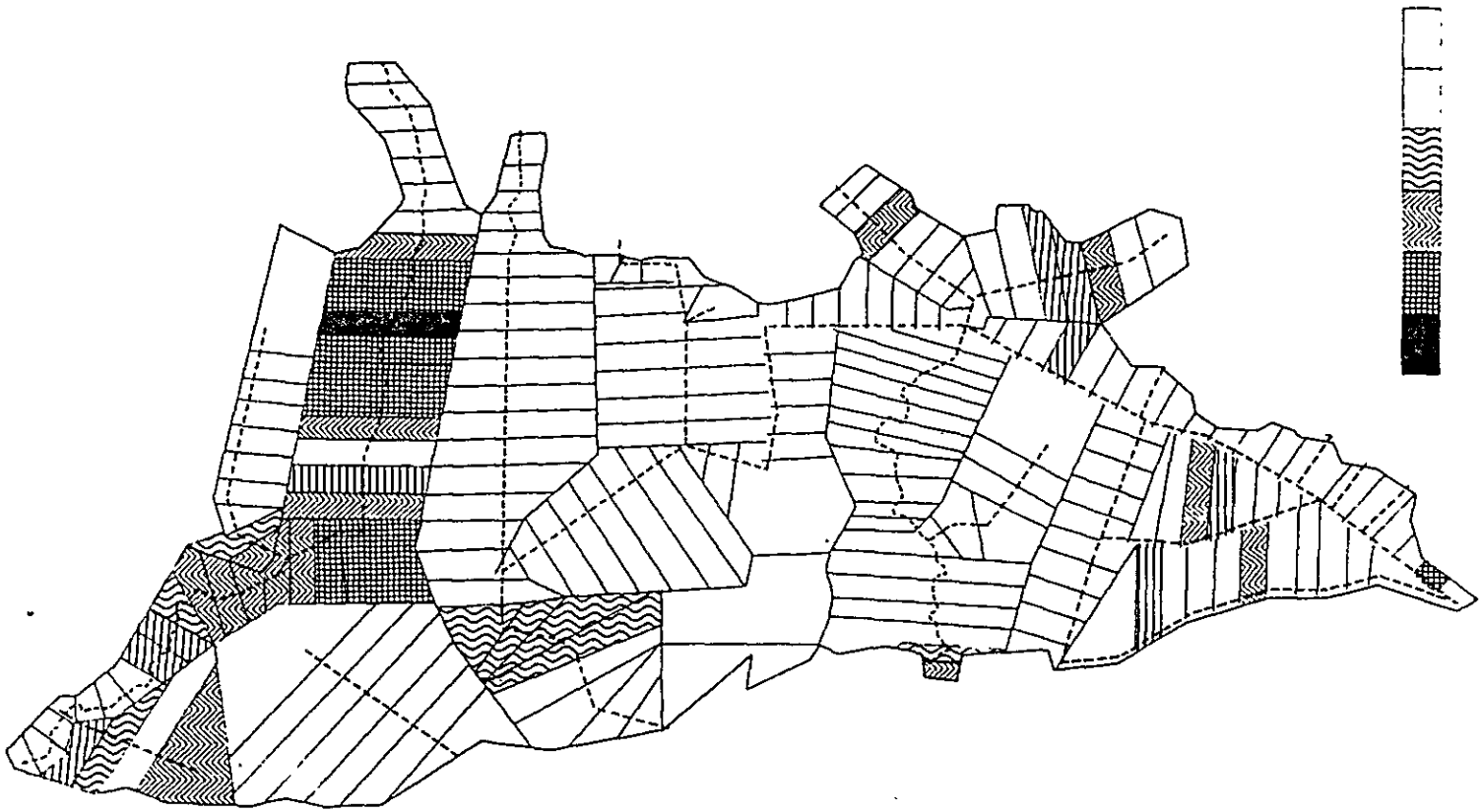

Fig. 5-136 Inundation Condition Case I-1-2-80H

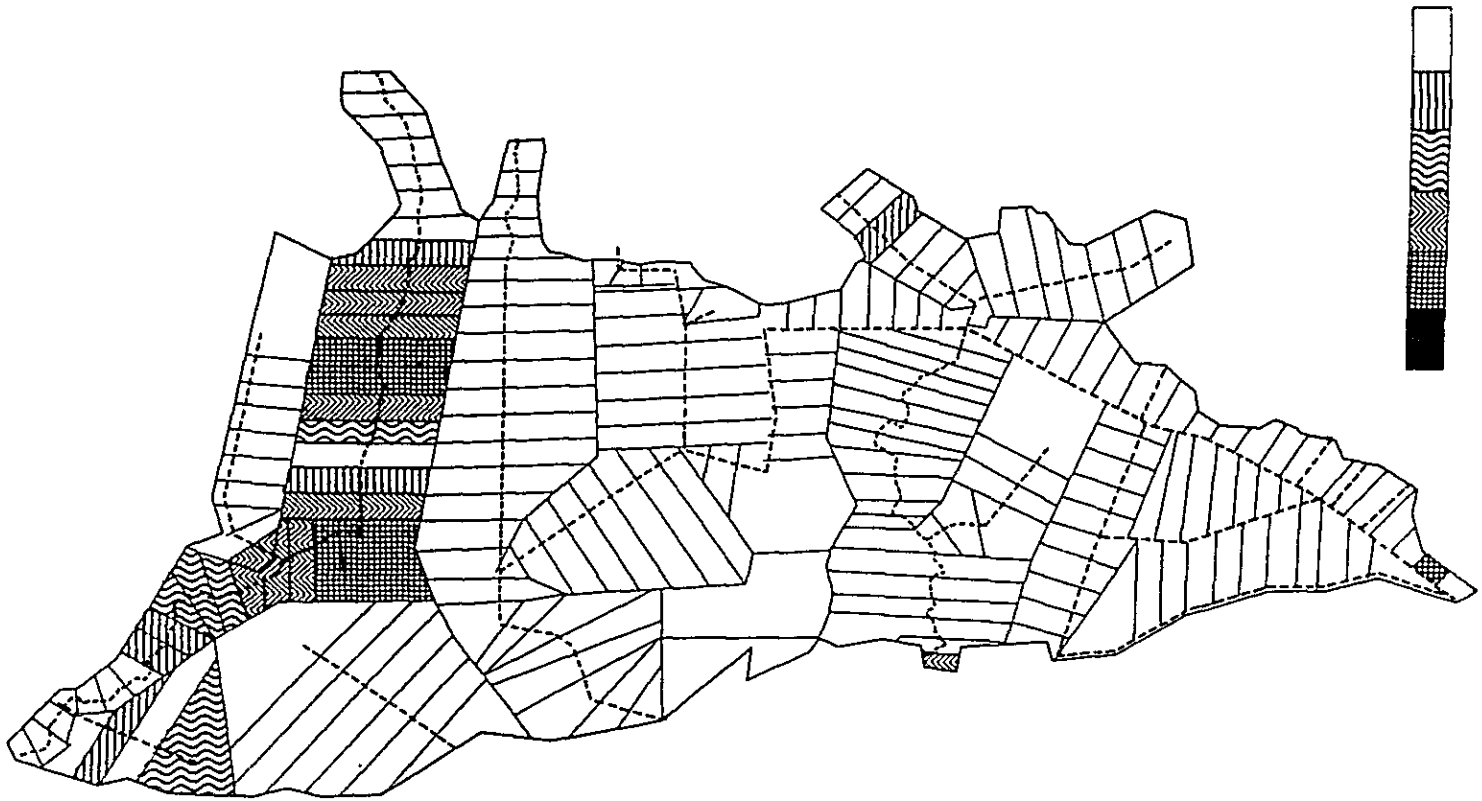

Fig. 5-137 Inundation Condition Case I-1-2-100H

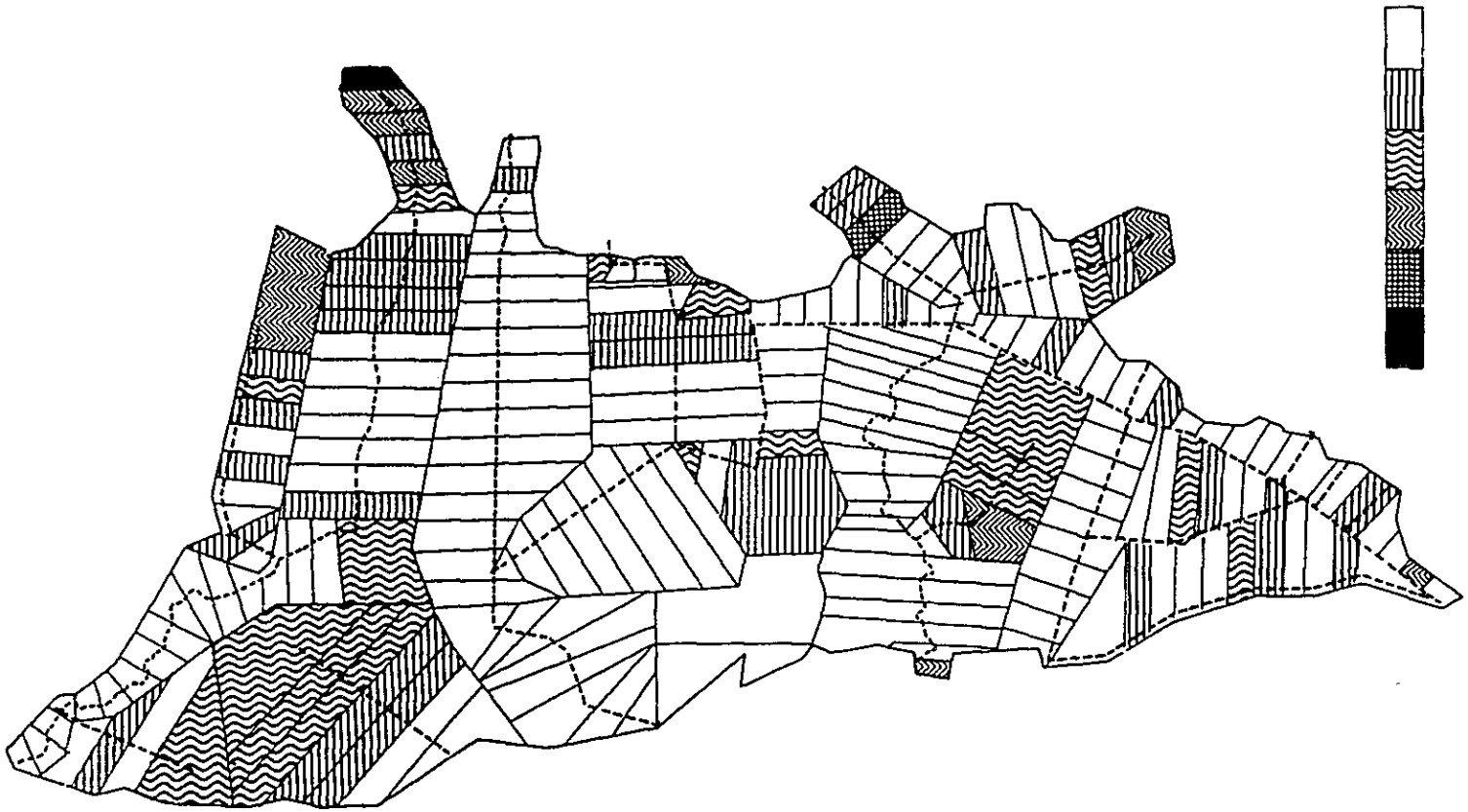

Fig. 5-138 Inundation Condition Case I-2-2-10H

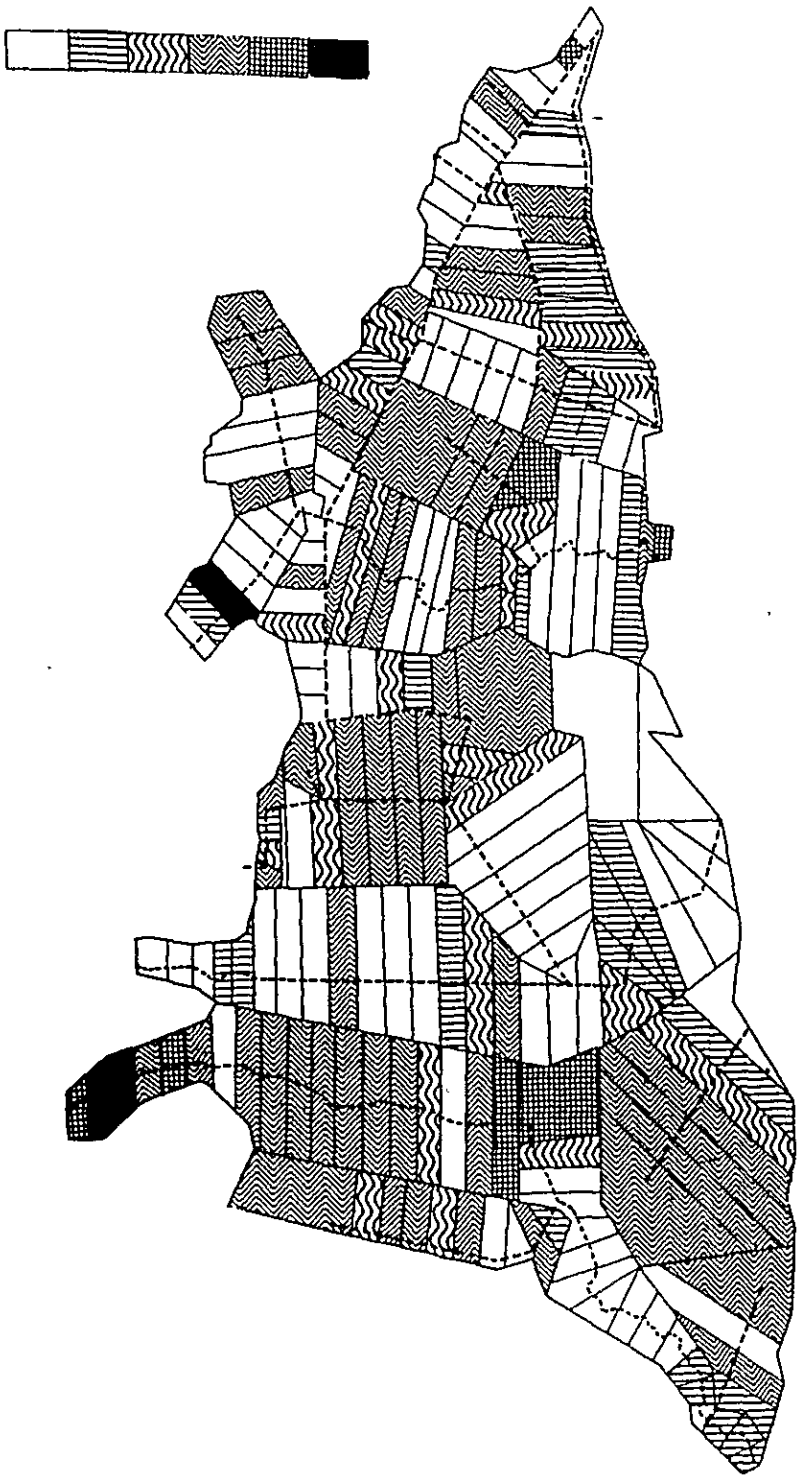

Fig. 5-139 Inundation Condition Case I-2-2-20H

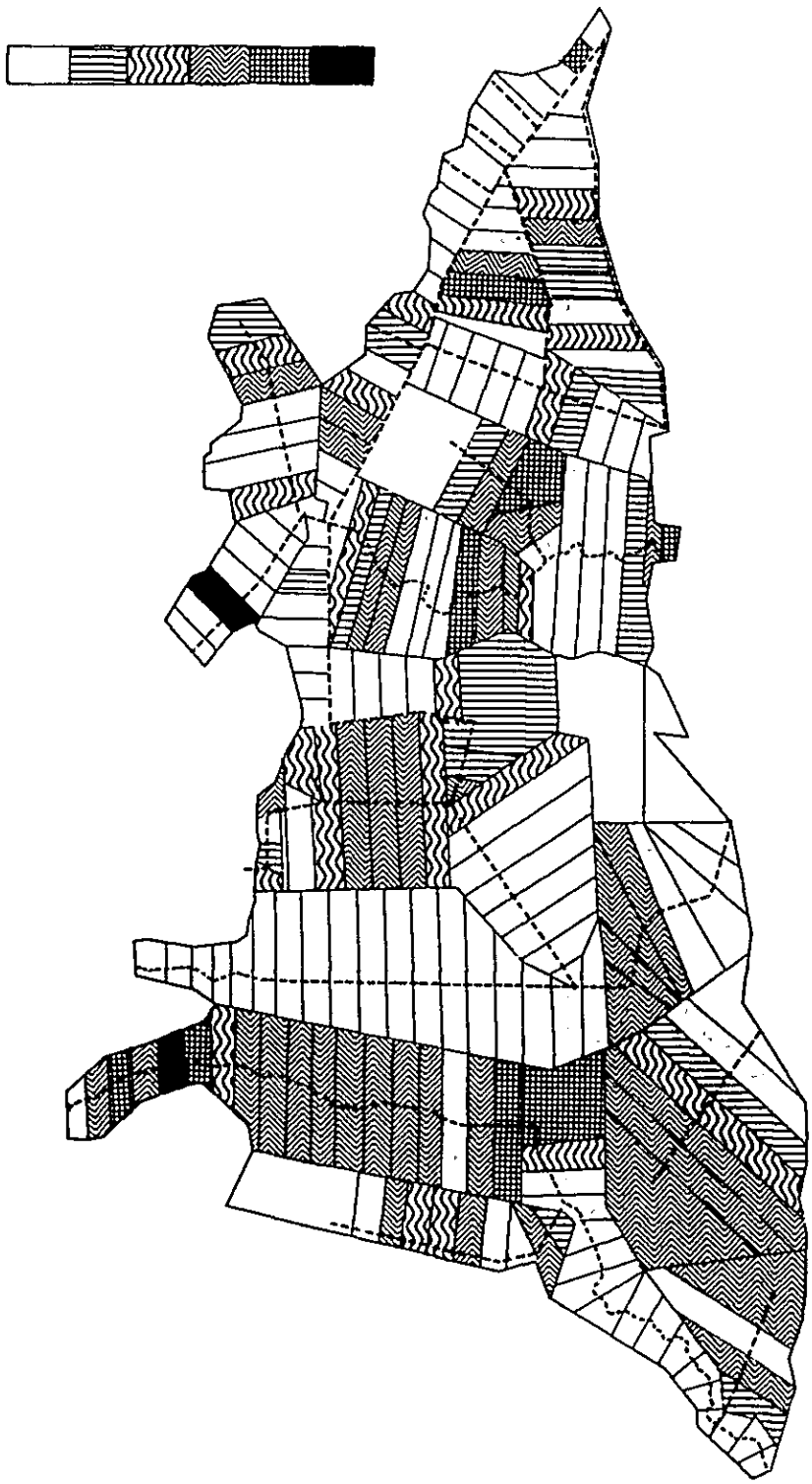

Fig. 5-140 Inundation Condition Case I-2-2-30H

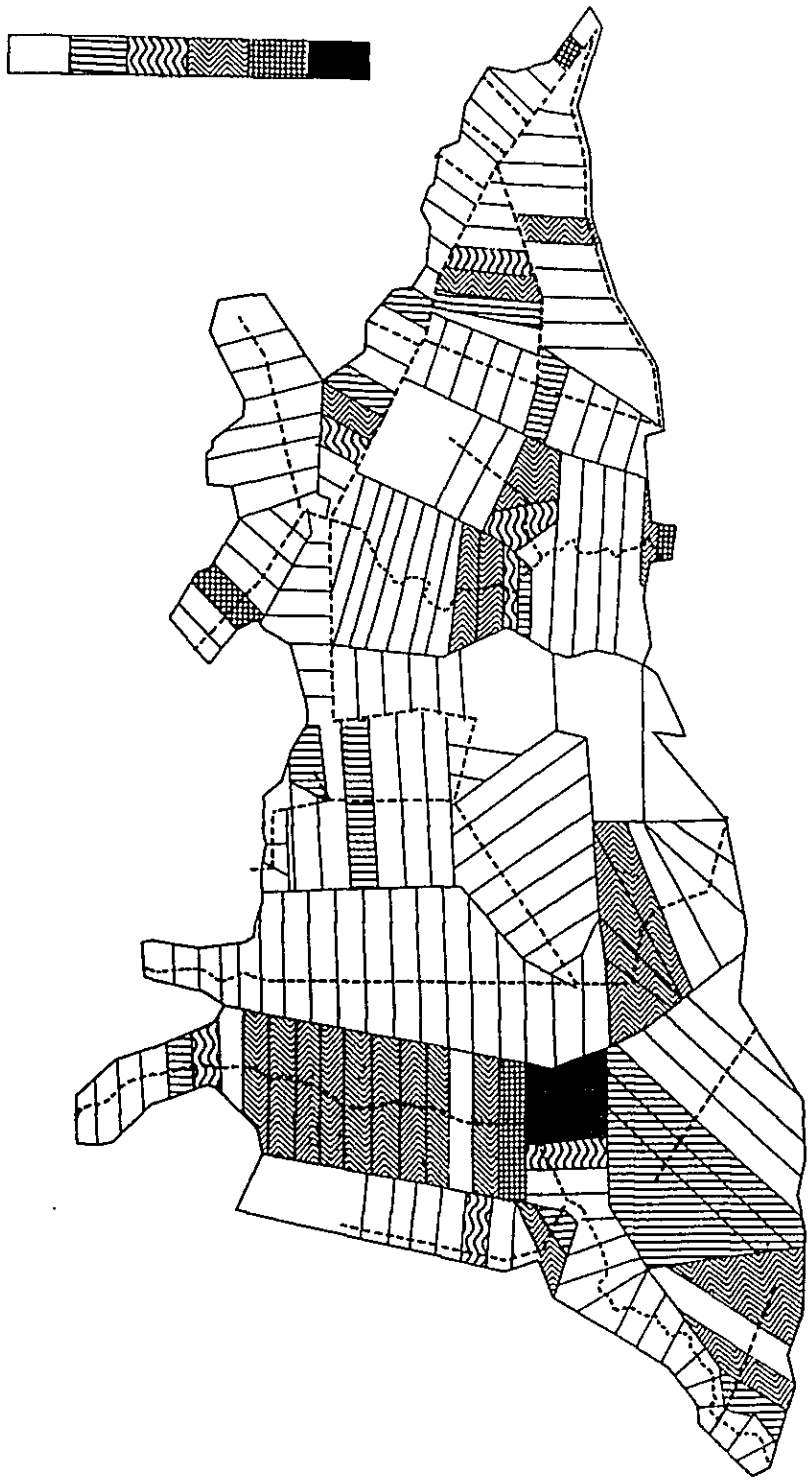

Fig. 5-141 Inundation Condition Case I-2-2-40H

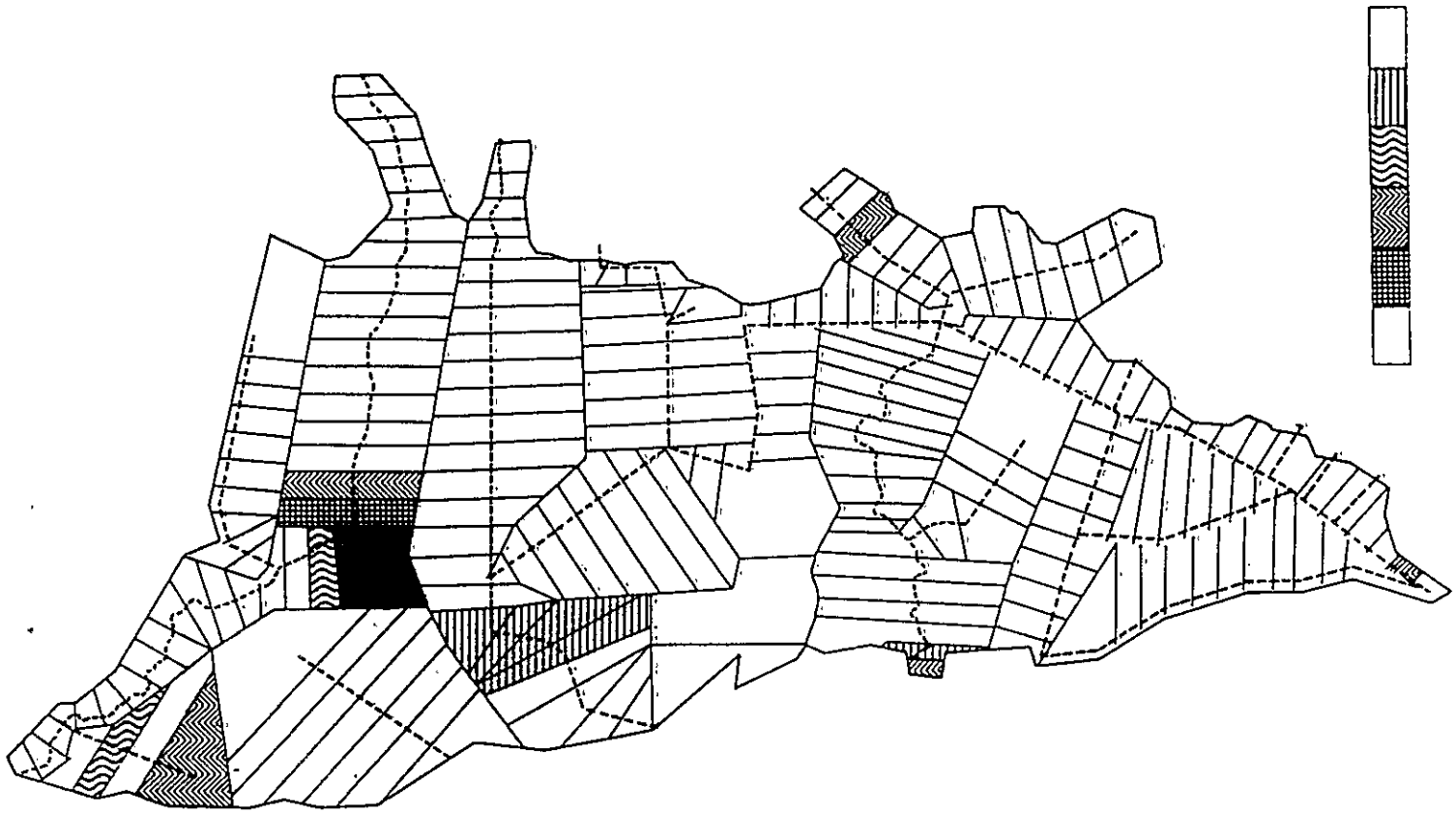

Fig. 5-142 Inundation Condition Case I-2-2-50H

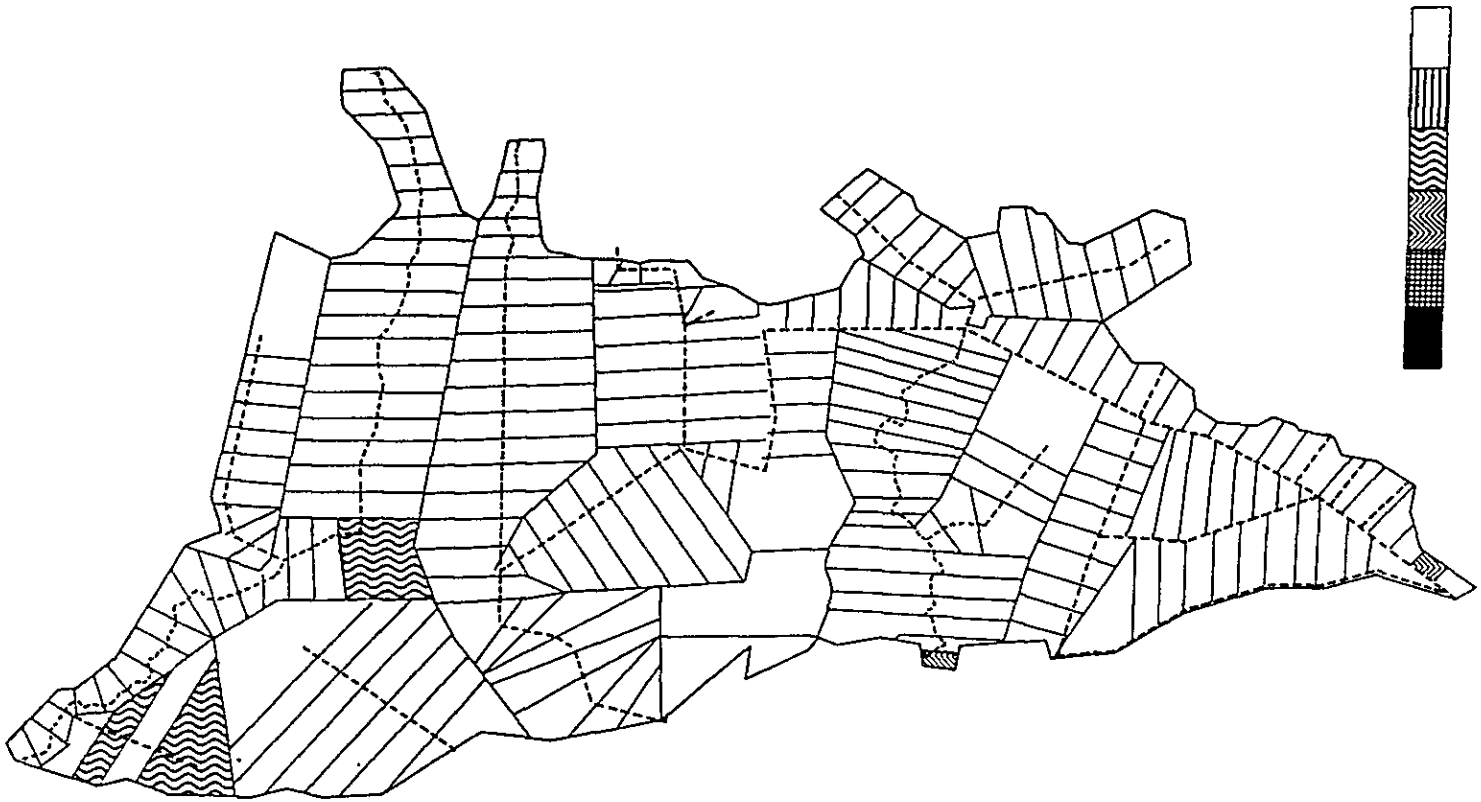

Fig. 5-143 Inundation Condition Case I-2-2-60H

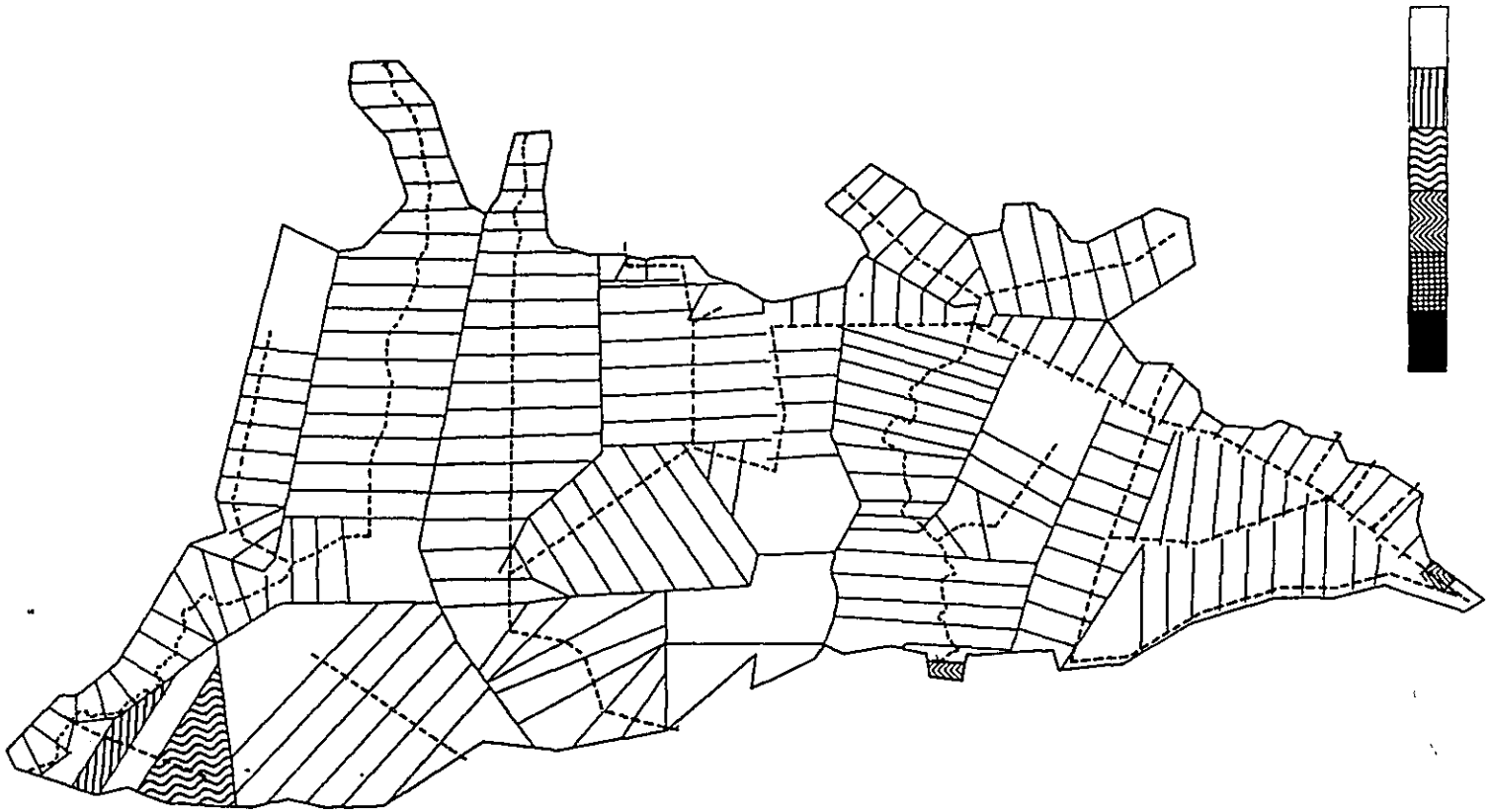

Fig. 5-144 Inundation Condition Case I-2-2-70H

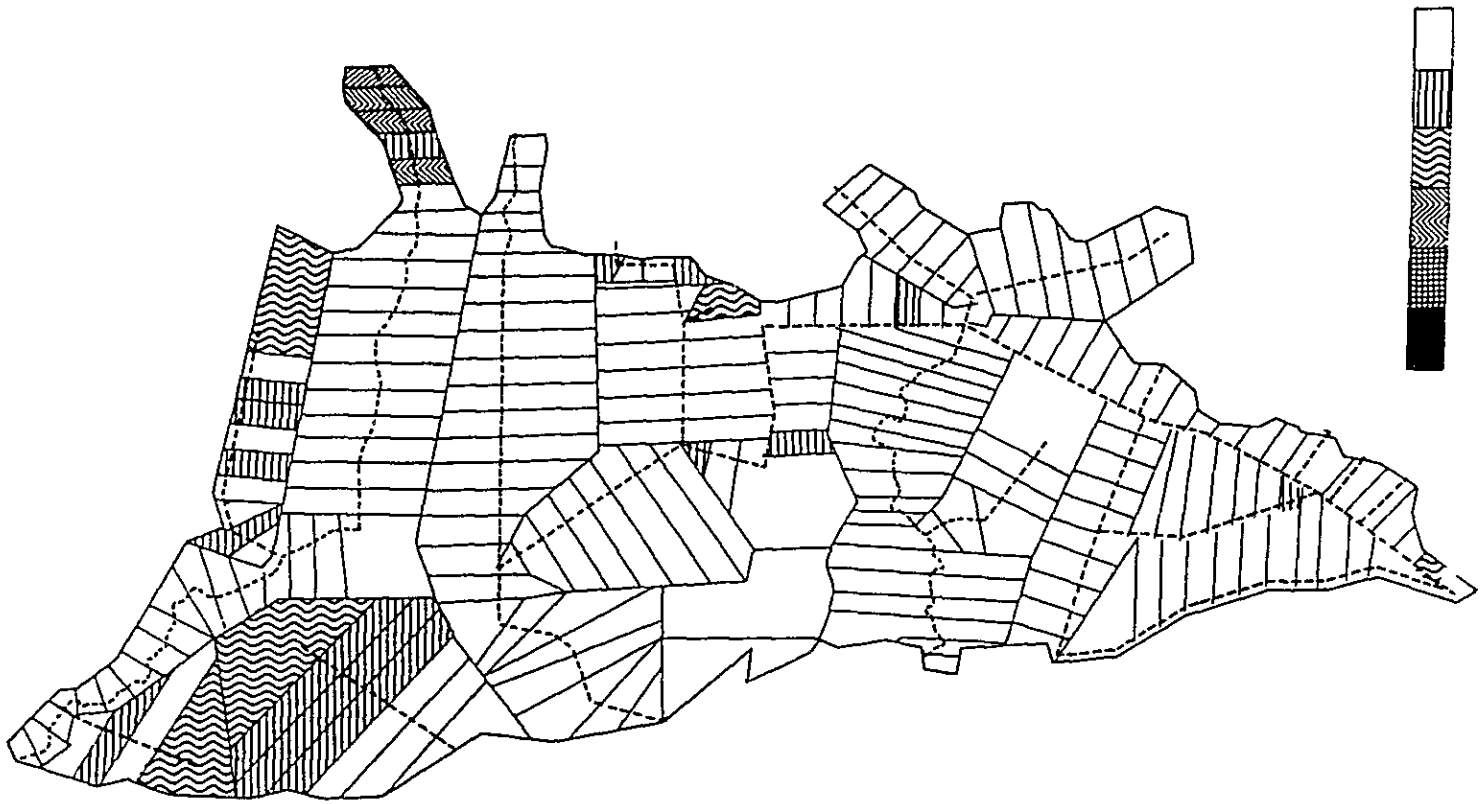

Fig. 5-145 Inundation Condition Case I-3-2-10H

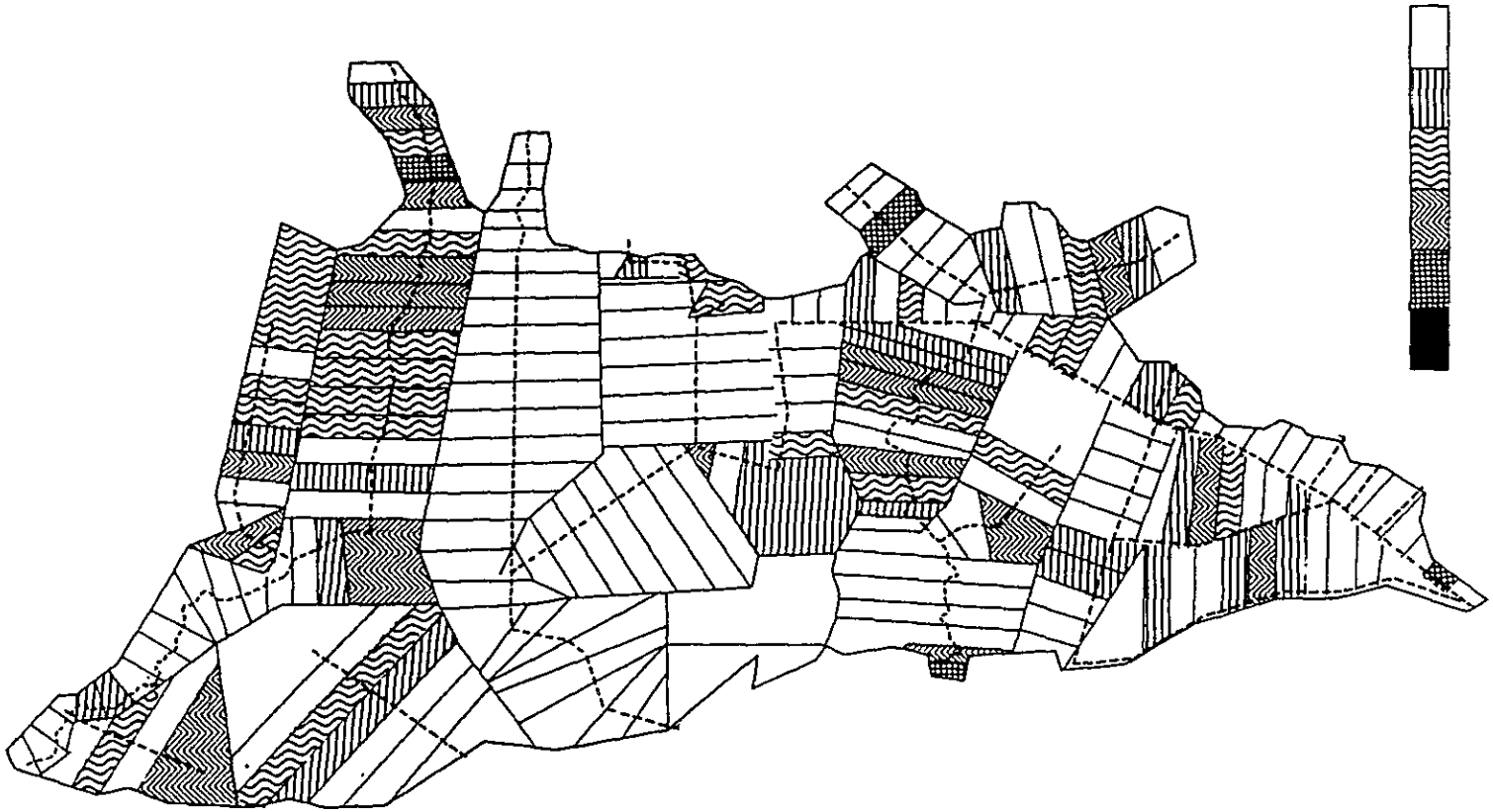

Fig. 5-146 Inundation Condition Case I-3-2-20H

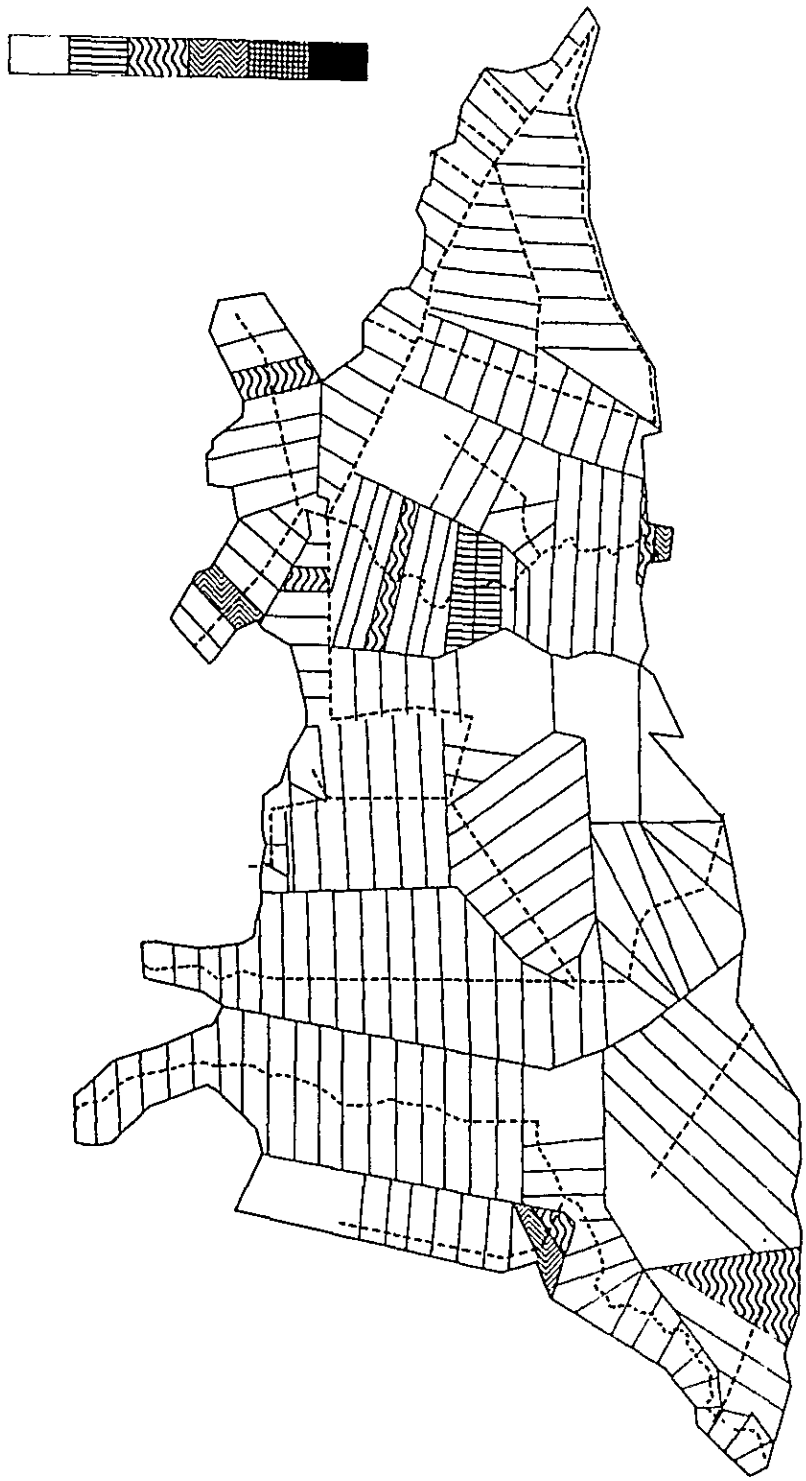

Fig. 5-147 Inundation Condition Case I-3-2-30H

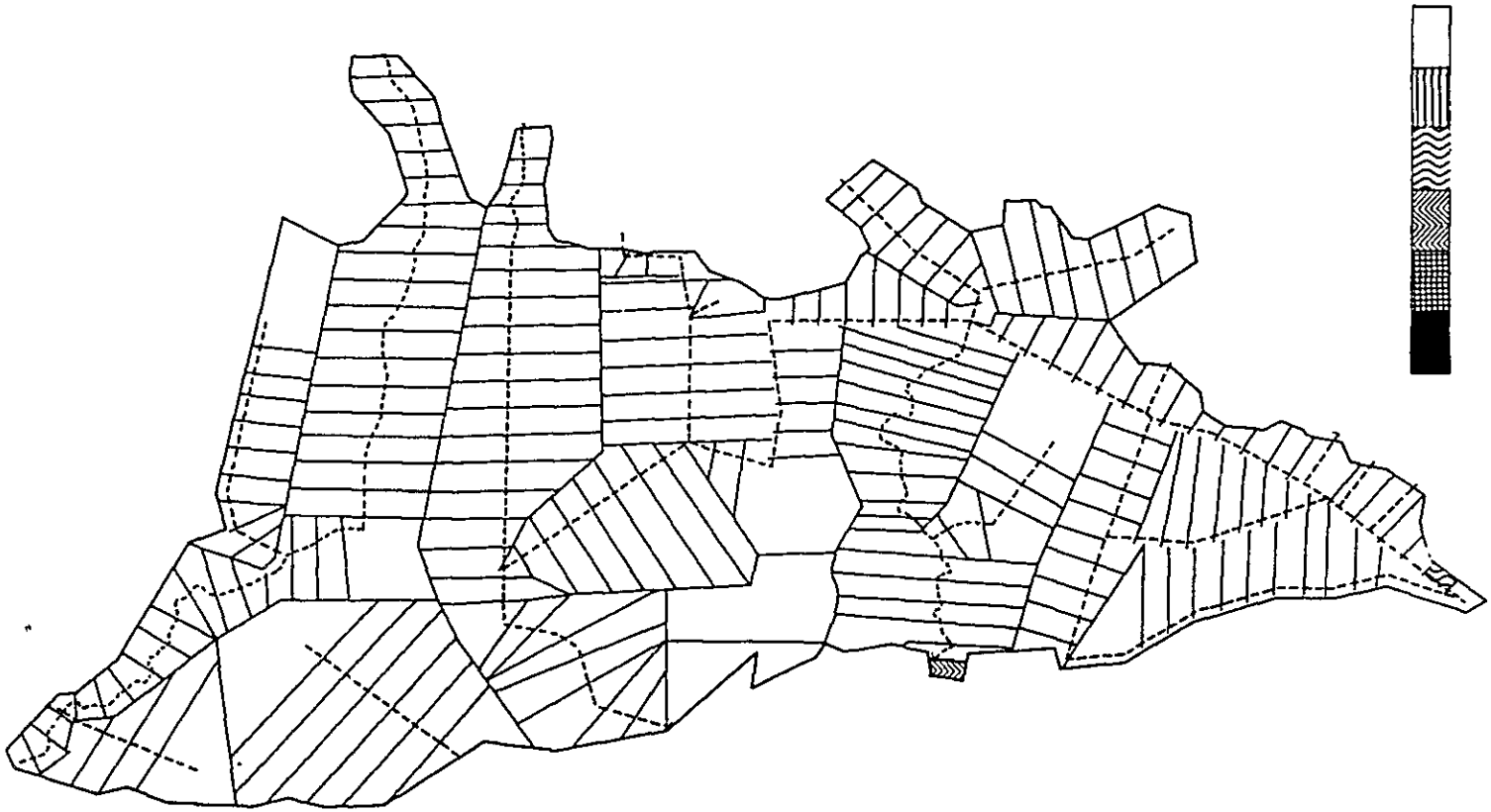

Fig. 5-148 Inundation Condition Case I-3-2-40H

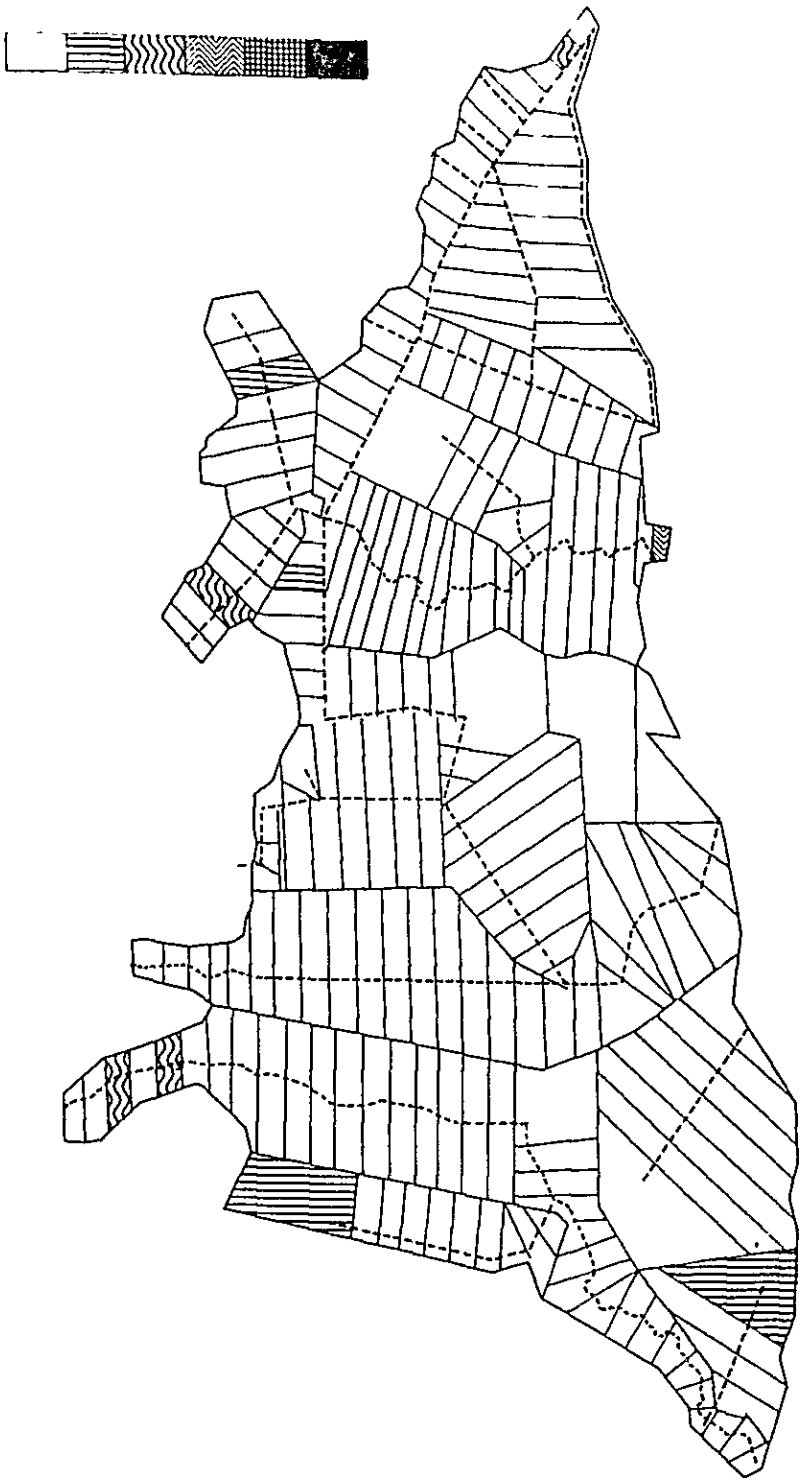

Fig. 5-149 Inundation Condition Case I-4-2-10H

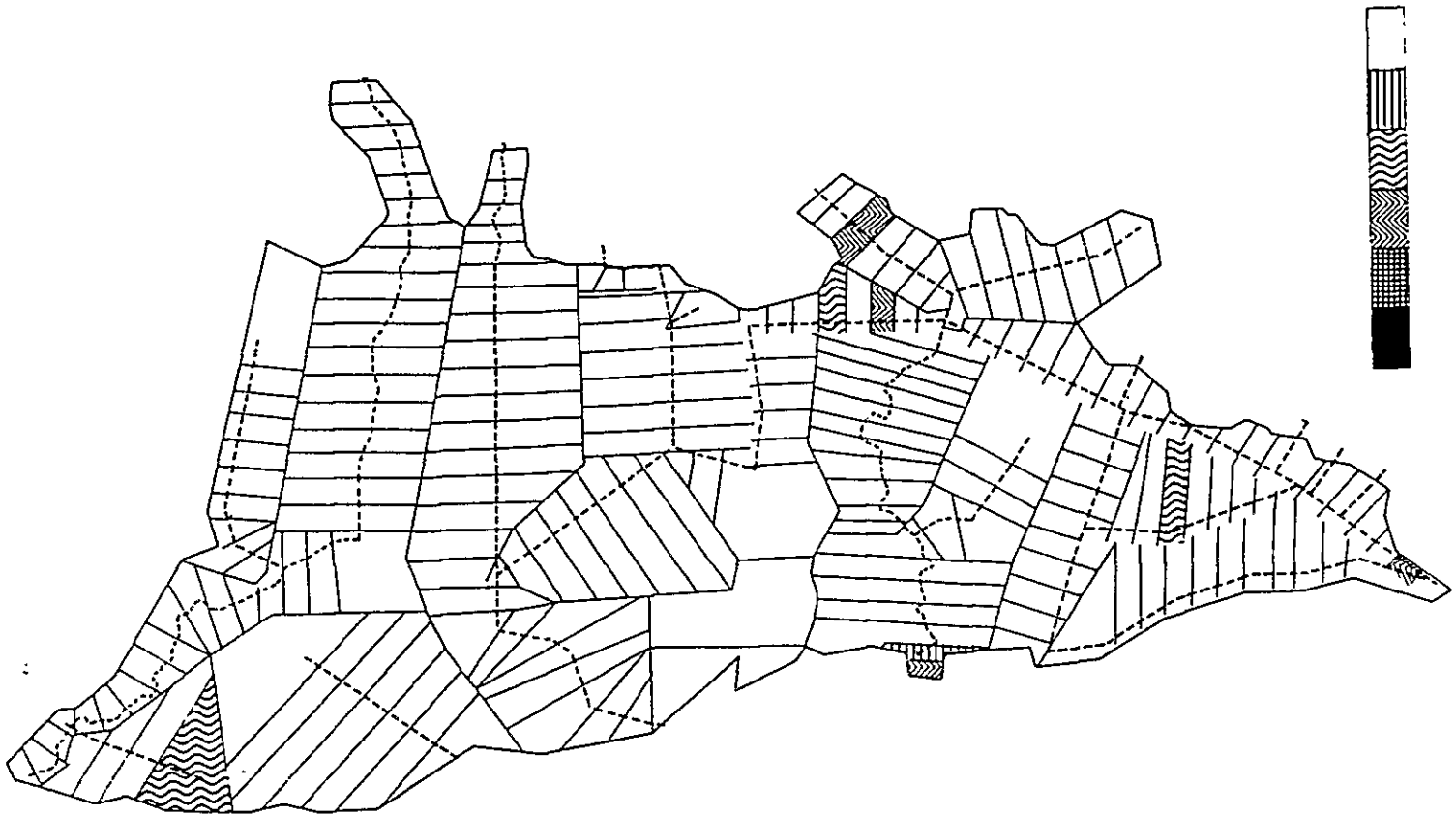

Fig. 5-150 Inundation Condition Case I-4-2-20H

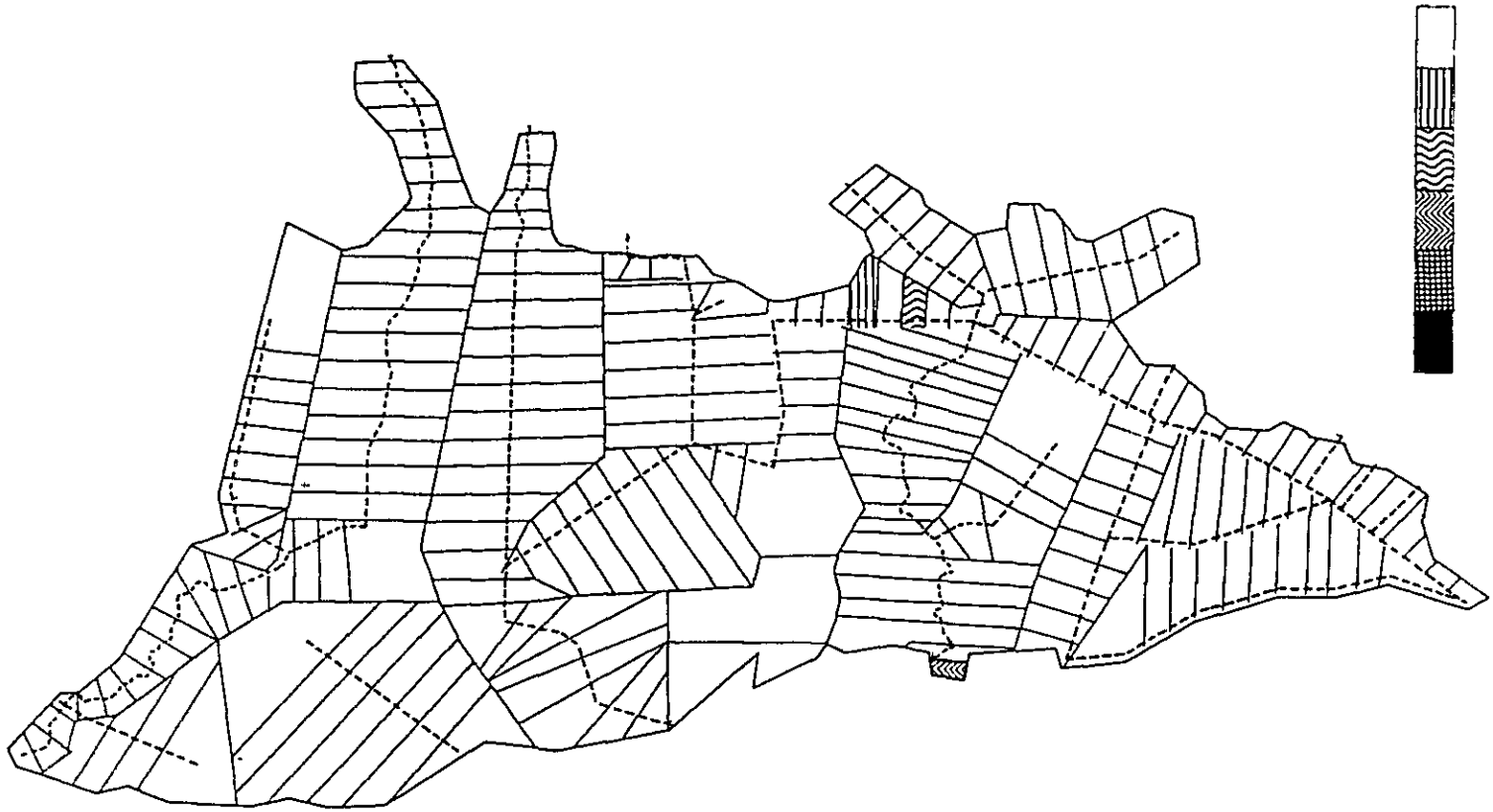

Fig. 5-151 Inundation Condition Case I-4-2-30H

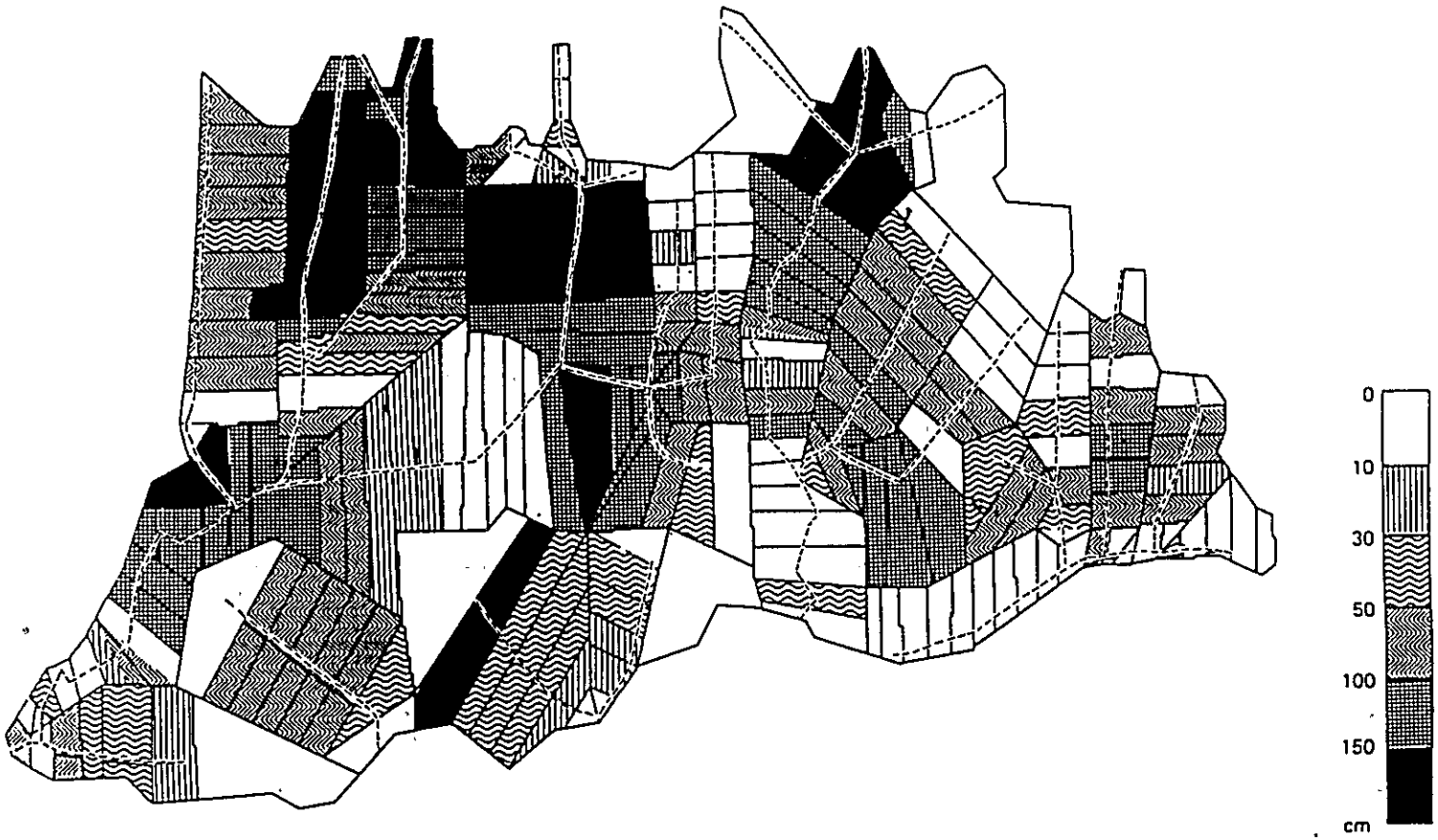

Fig. 5-152 Inundation Condition Case II-1-1-MAX.

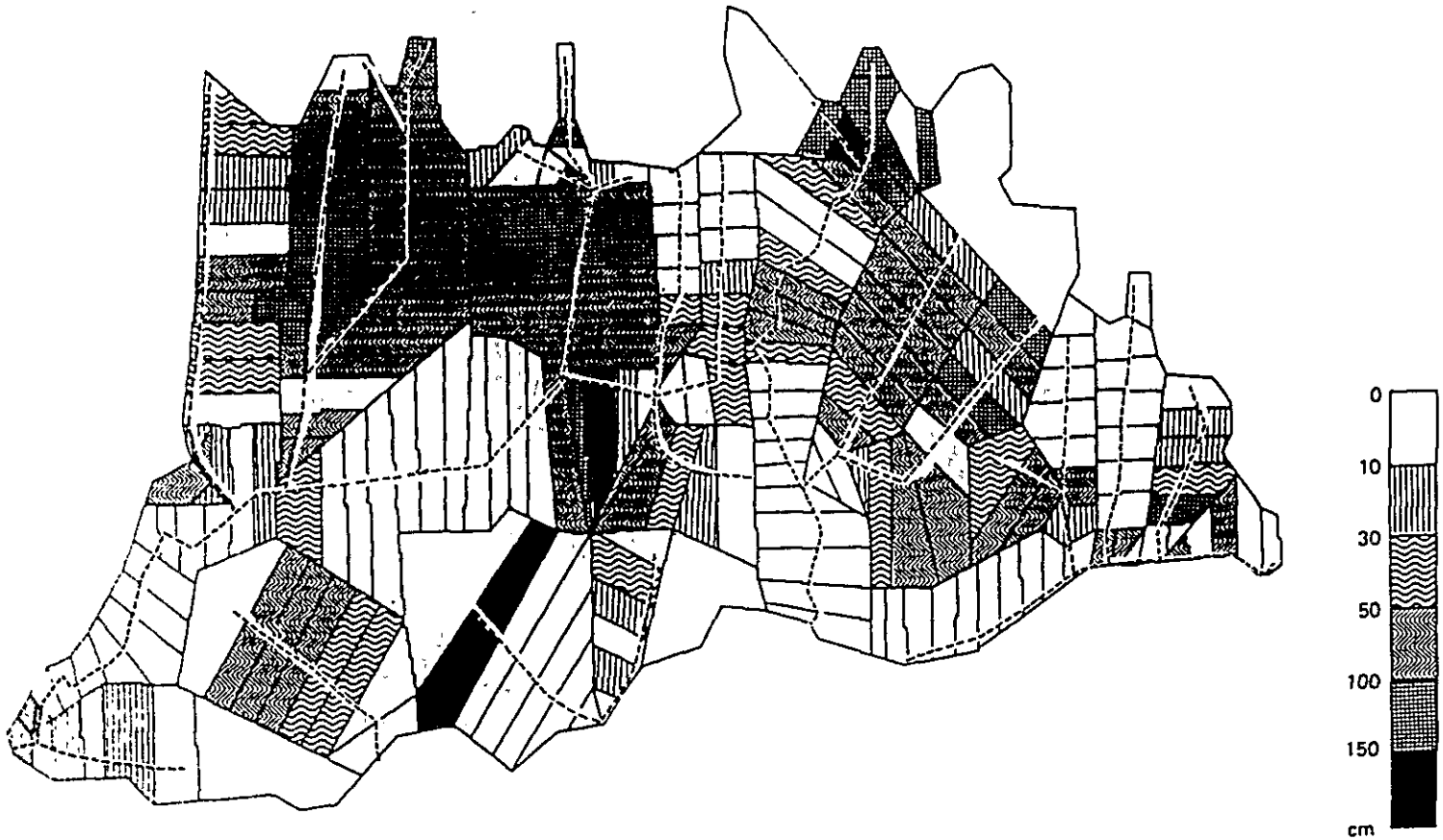

Fig. 5-153 Inundation Condition Case II-2-1-MAX.

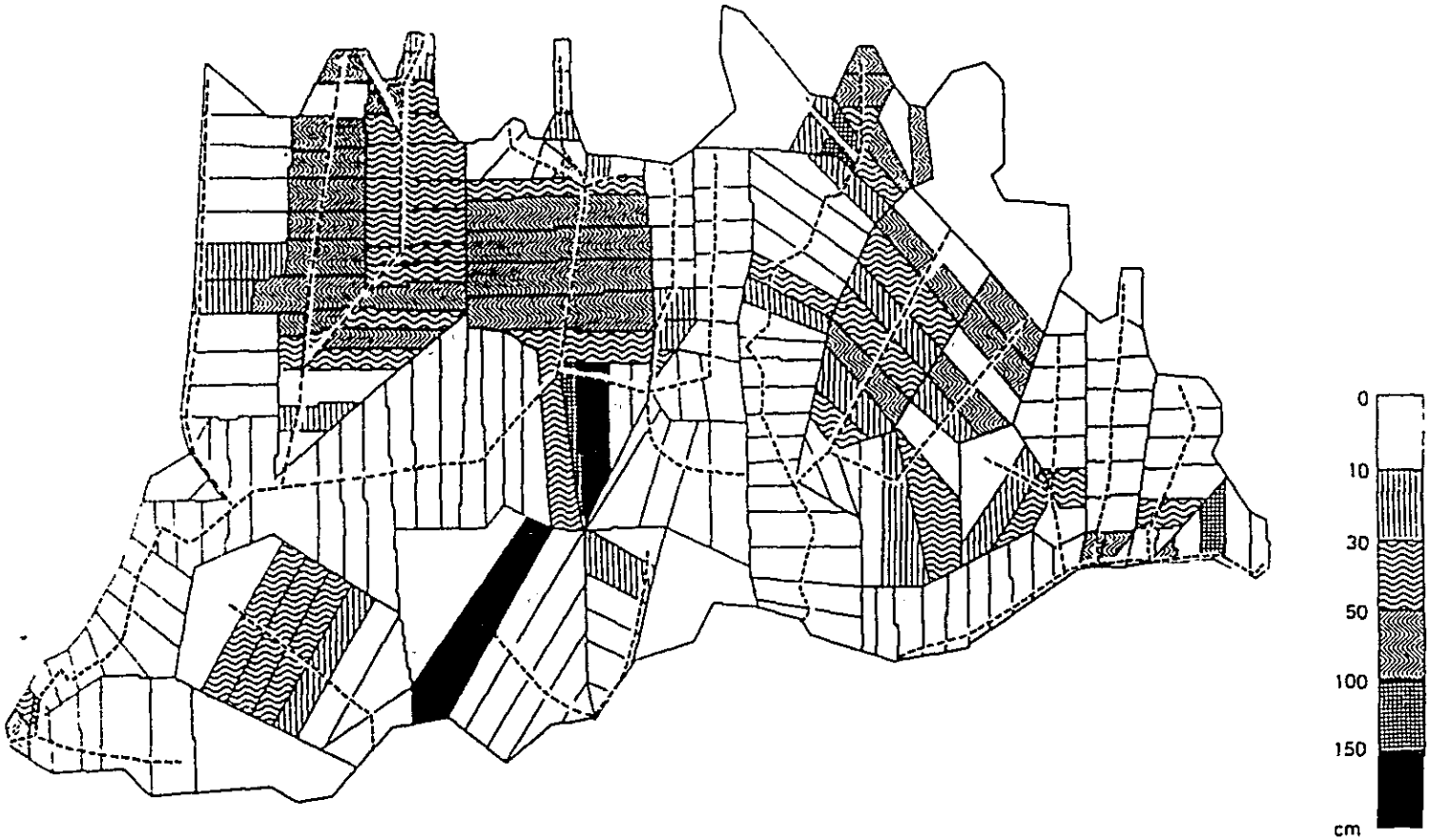

Fig. 5-154 Inundation Condition Case II-3-1-MAX.

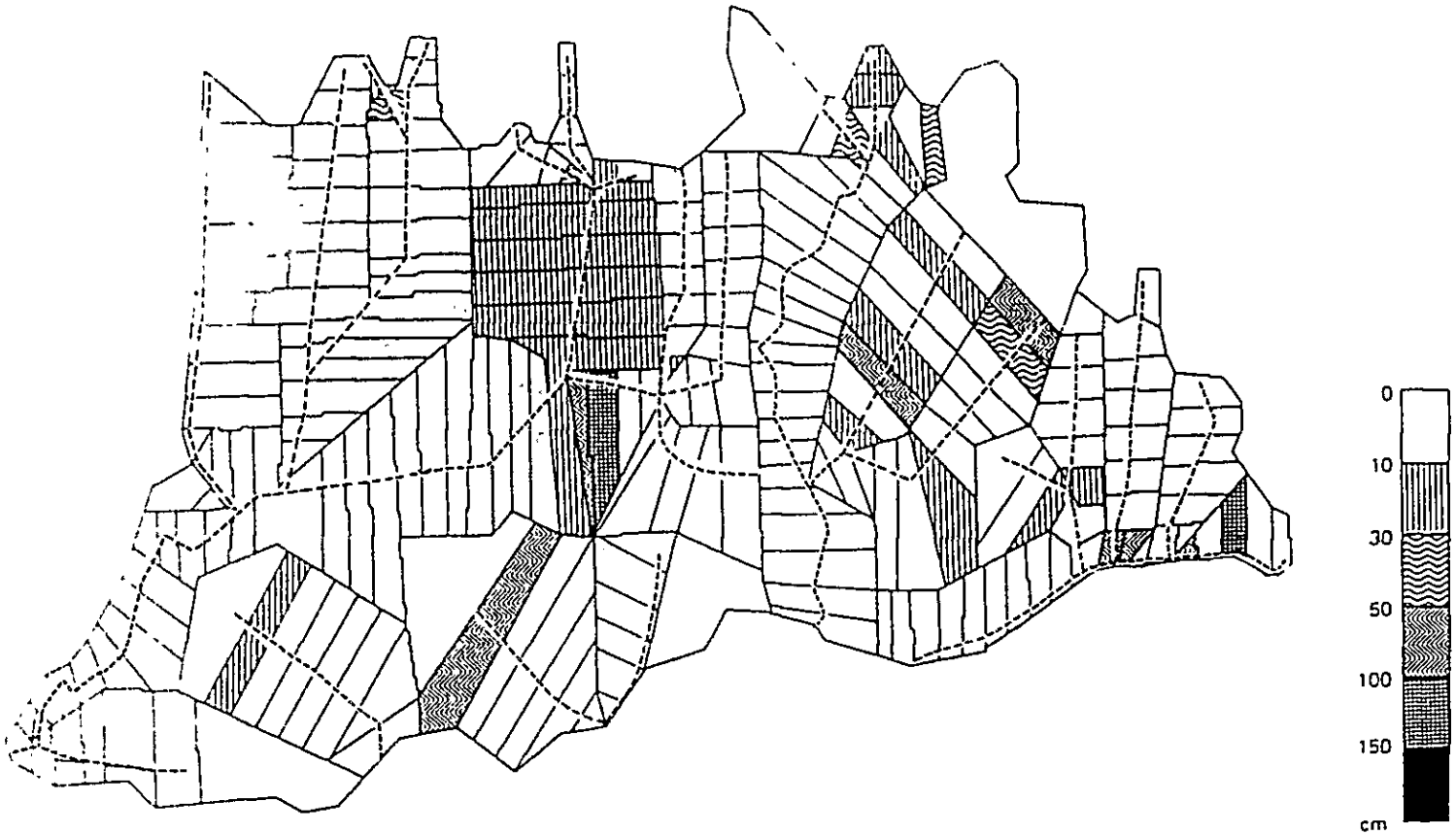

Fig. 5-155 Inundation Condition Case II-4-1-MAX.

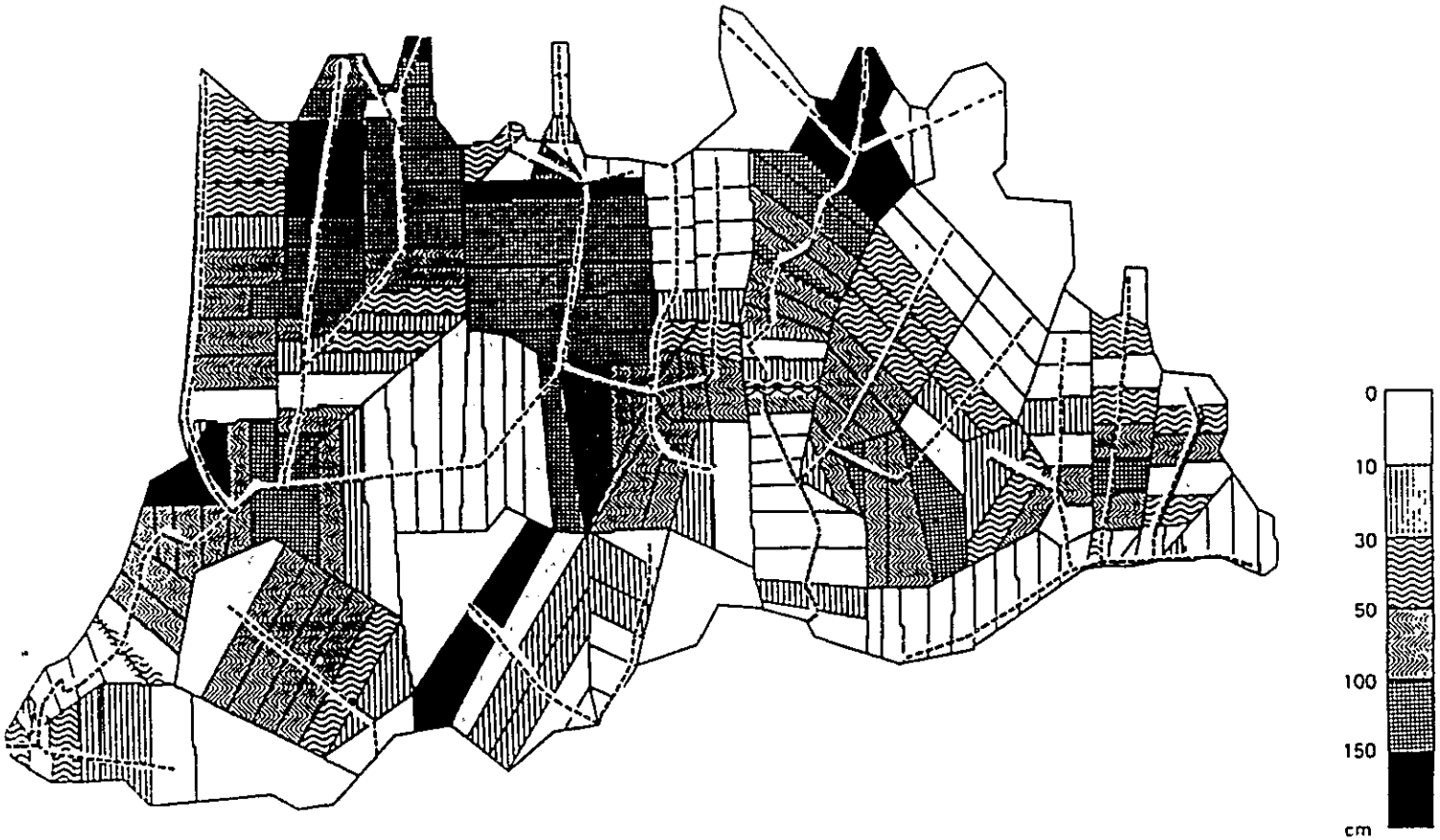

Fig. 5-156 Inundation Condition Case II-1-2-MAX.

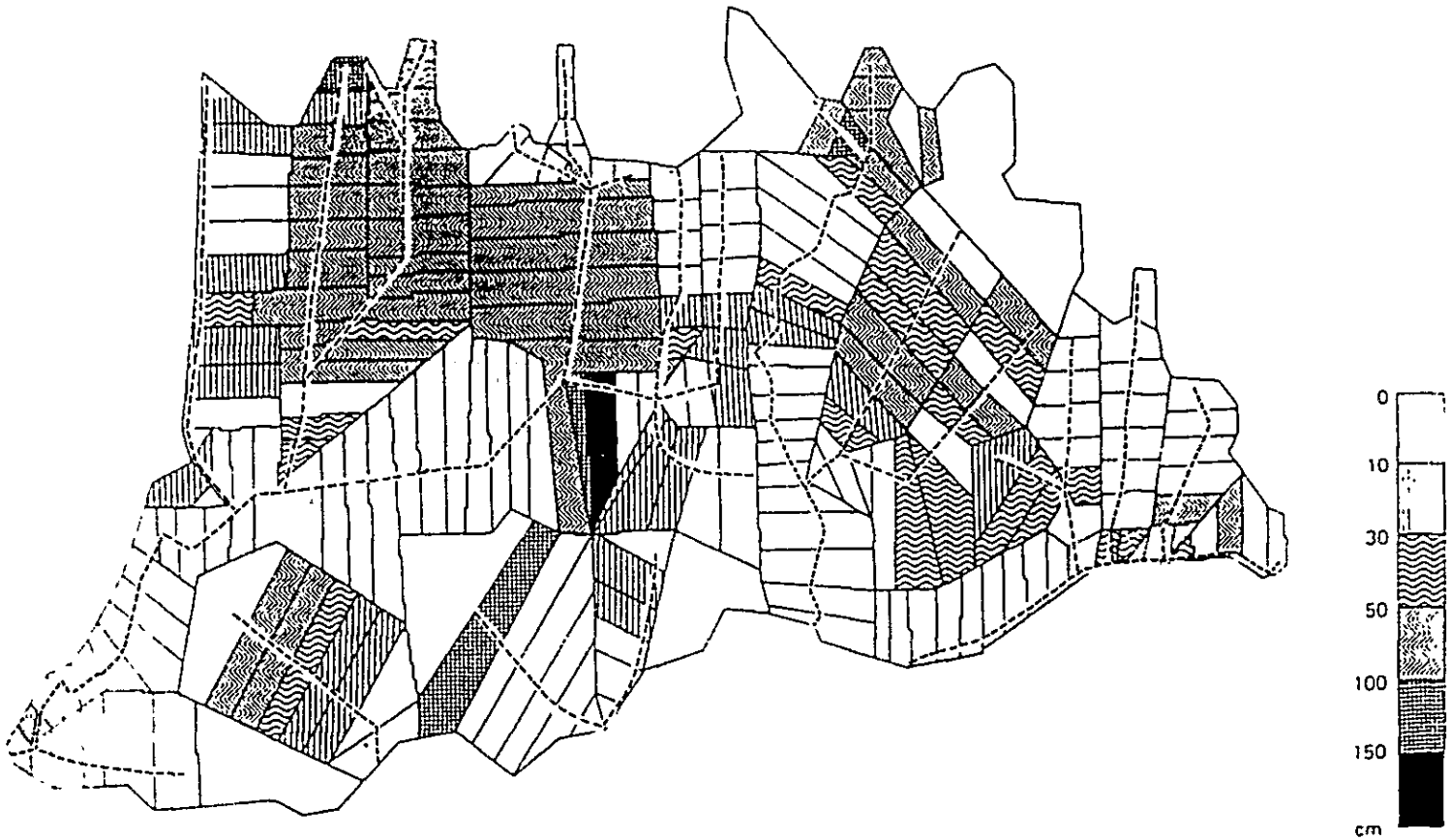

Fig. 5-157 Inundation Condition Case II-2-2-MAX.

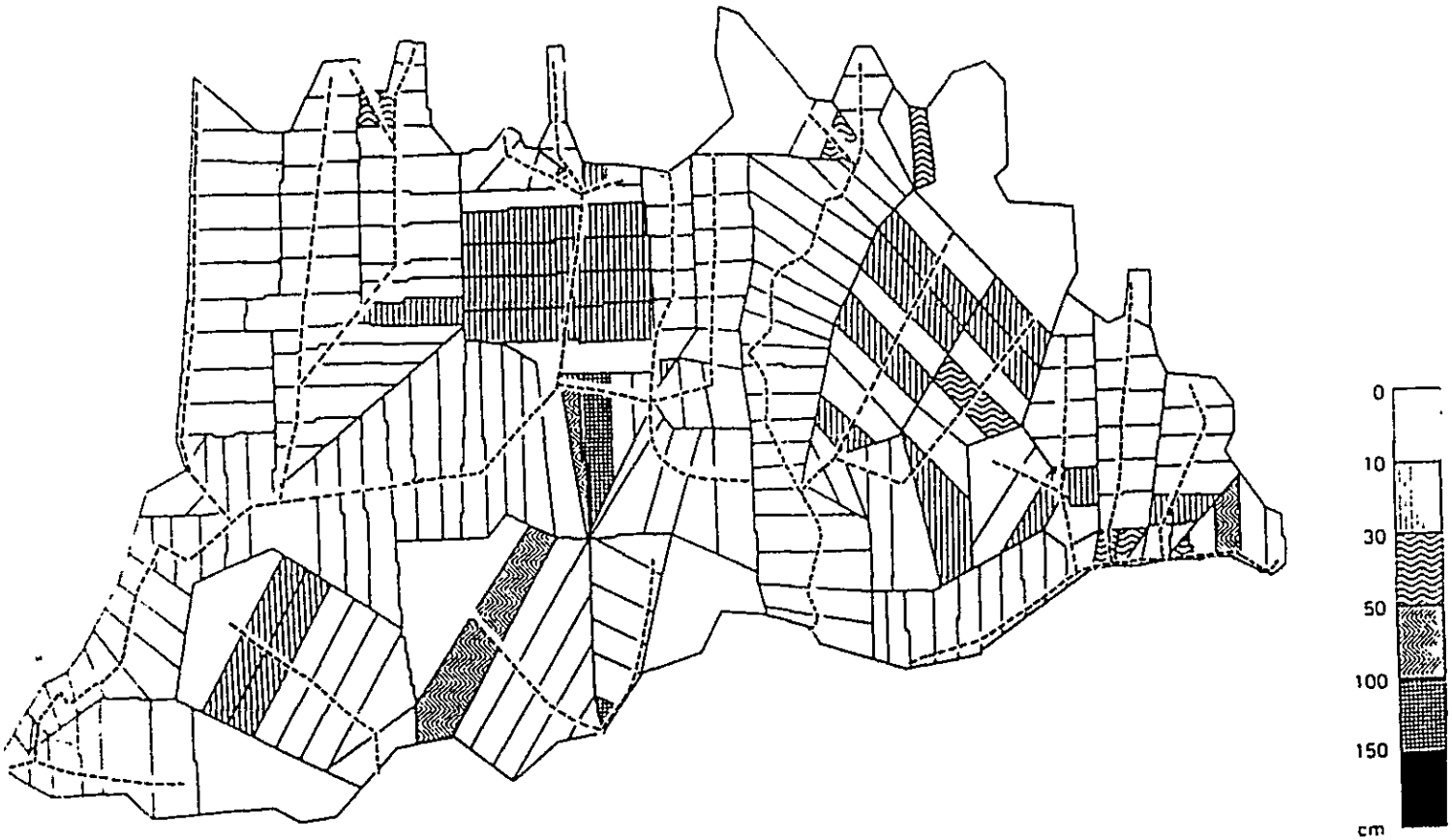

Fig. 5-158 Inundation Condition Case II-3-2-MAX.

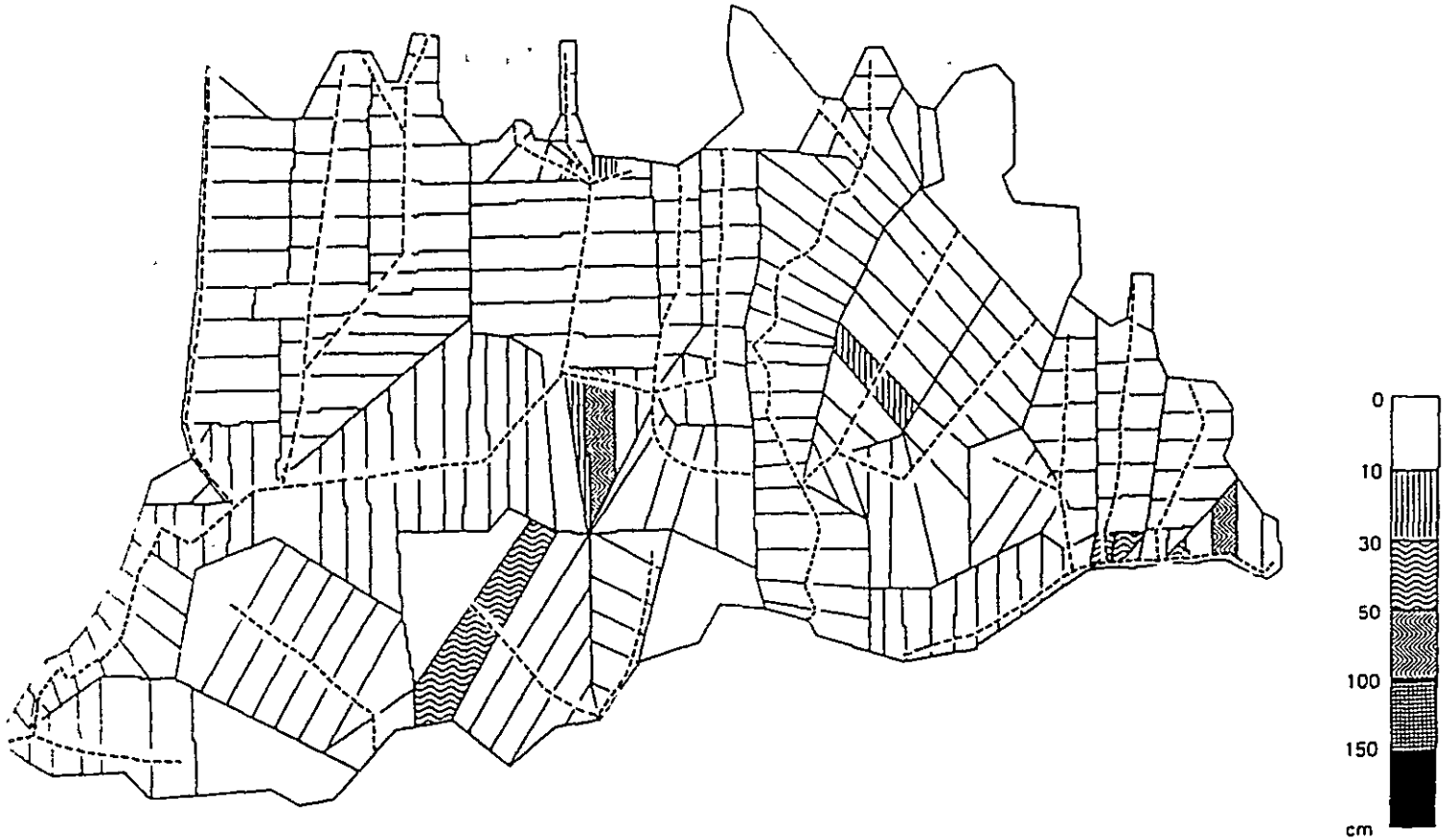

Fig. 5-159 Inundation Condition Case II-4-2-MAX.

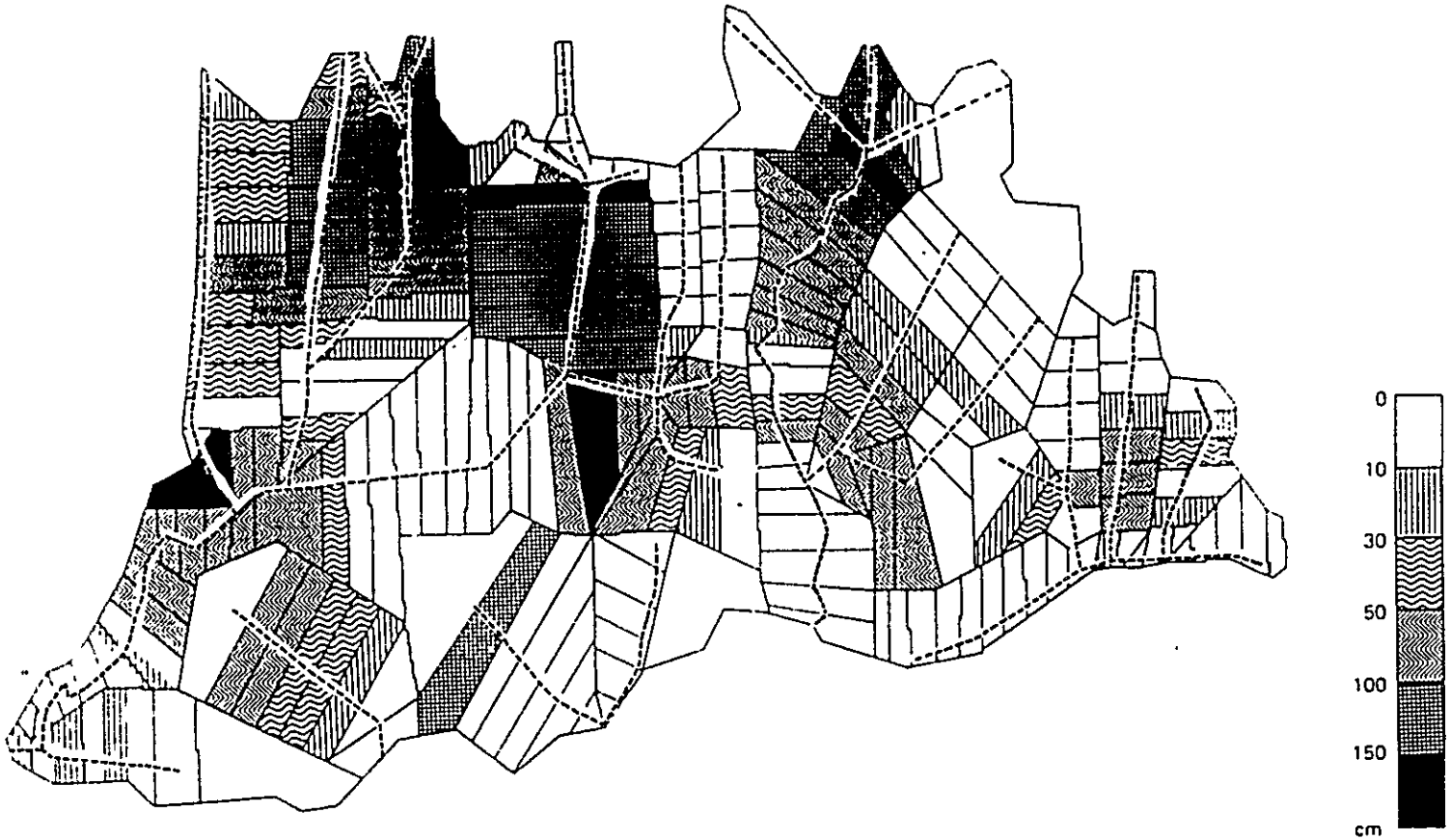

Fig. 5-160 Inundation Condition Case II-1-3-MAX.

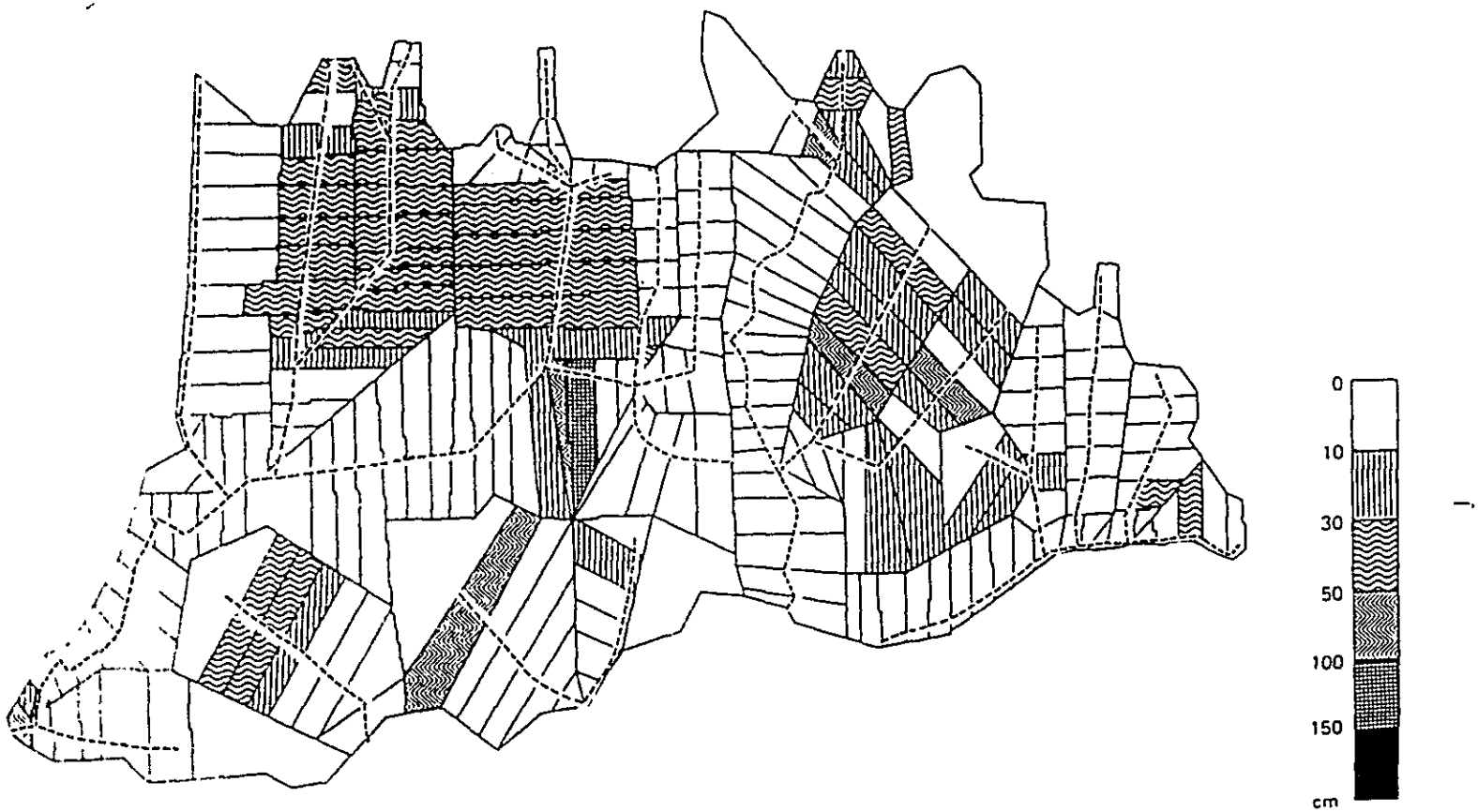

Fig. 5-161 Inundation Condition Case II-1-3-MAX.

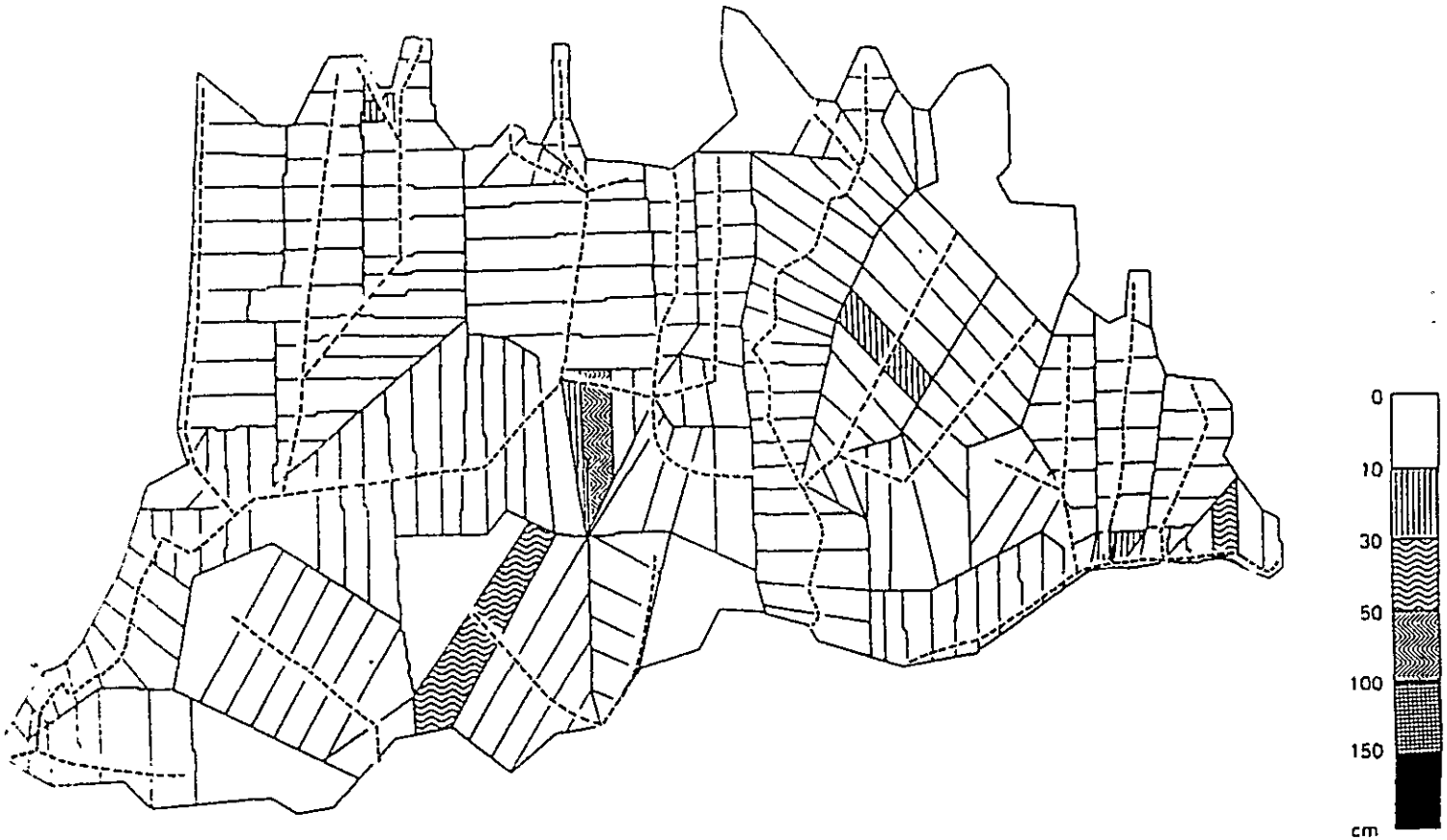

Fig. 5-162 Inundation Condition Case II-3-3-MAX.

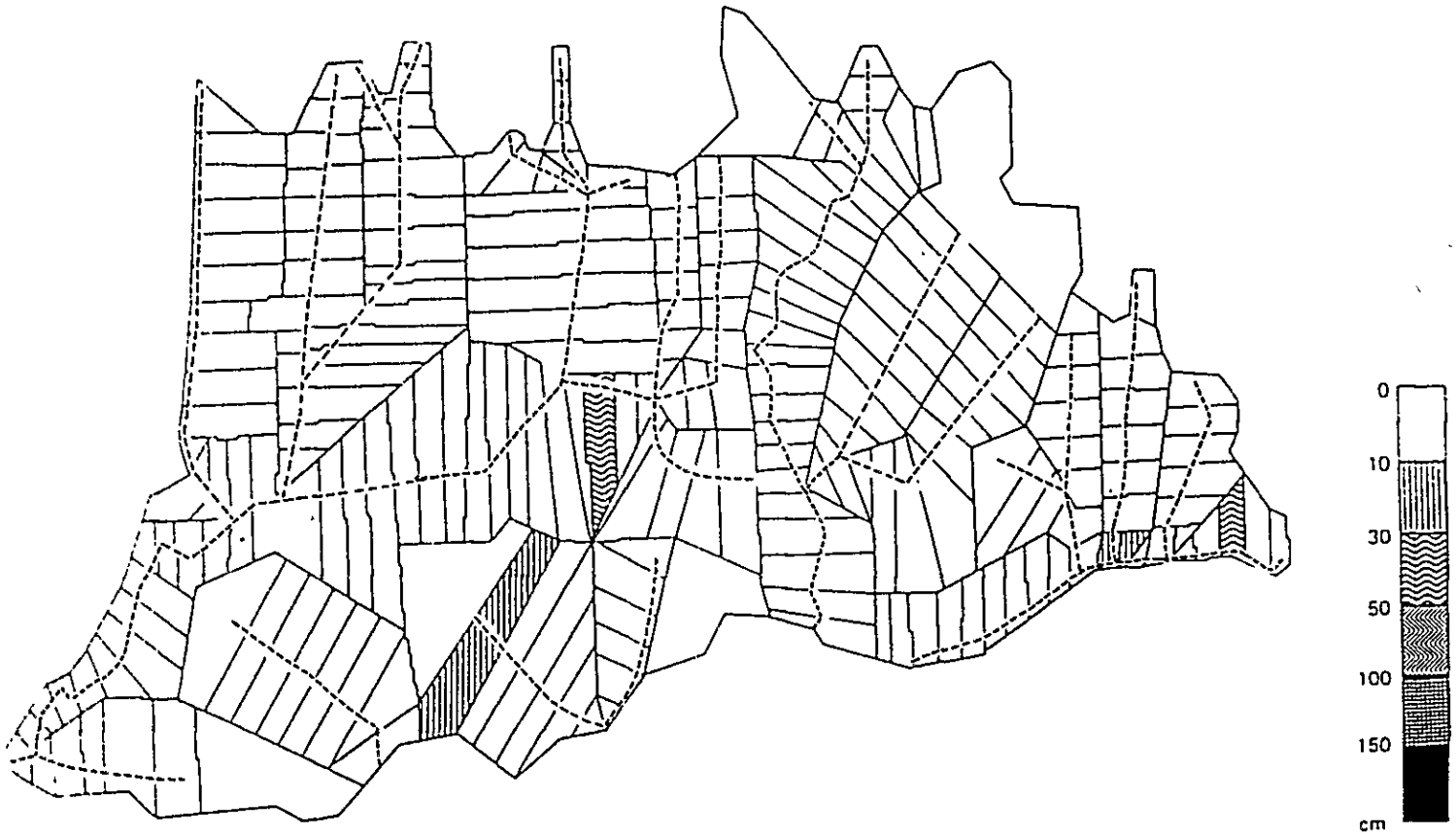

Fig. 5-163 Inundation Condition Case II-4-3-MAX.

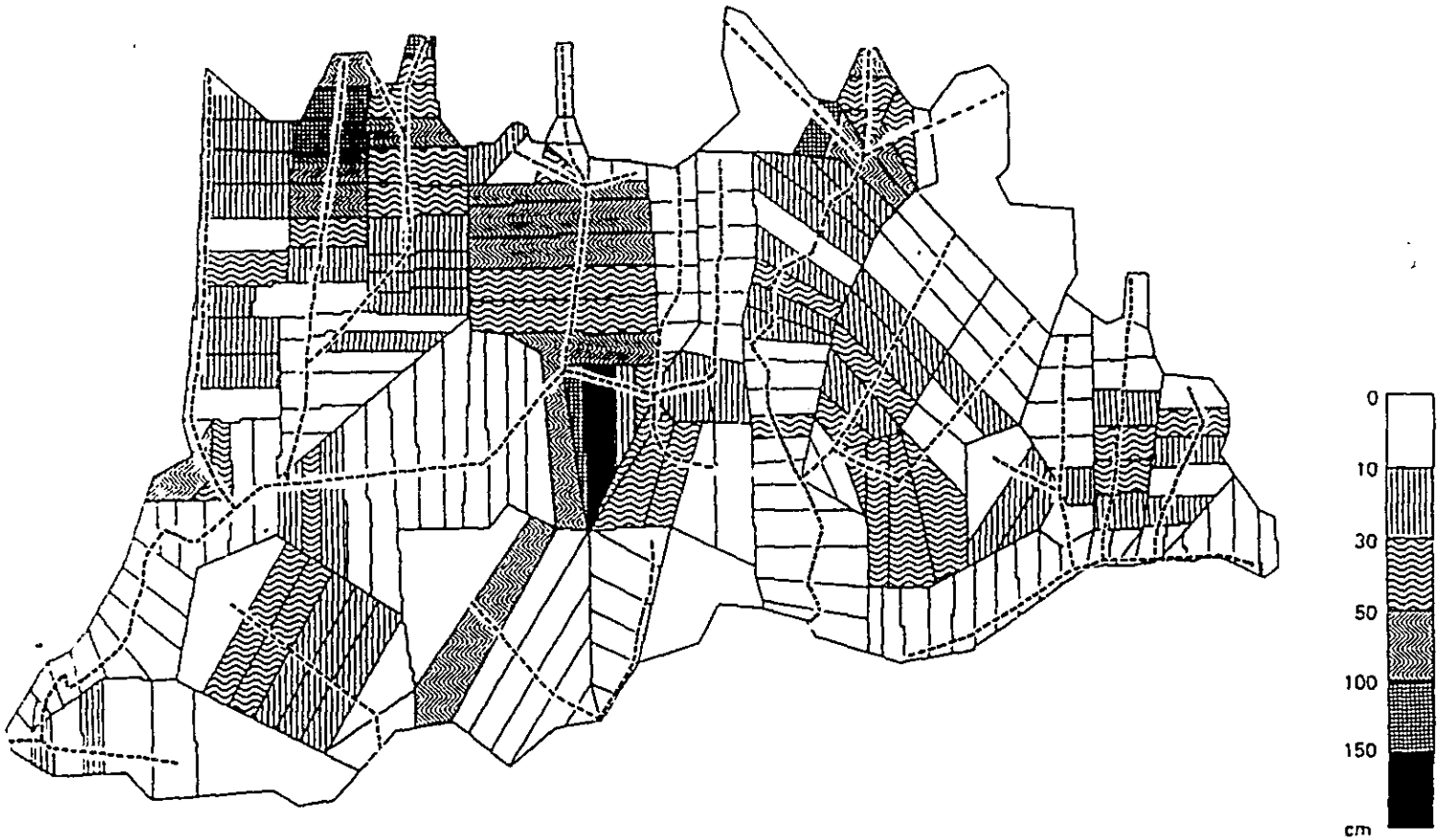

Fig. 5-164 Inundation Condition Case II-1-2-10H

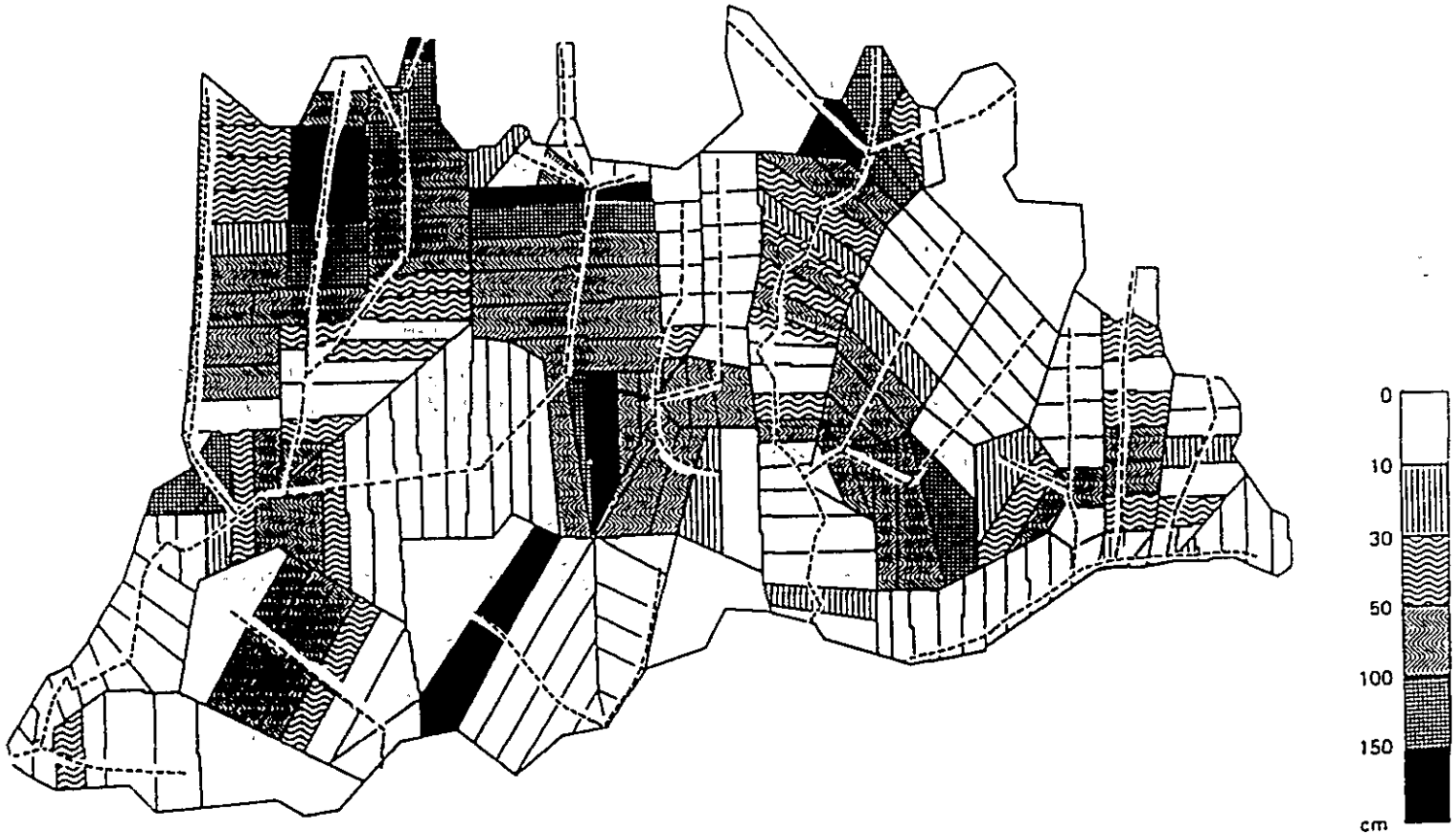

Fig. 5-165 Inundation Condition Case II-1-2-20H

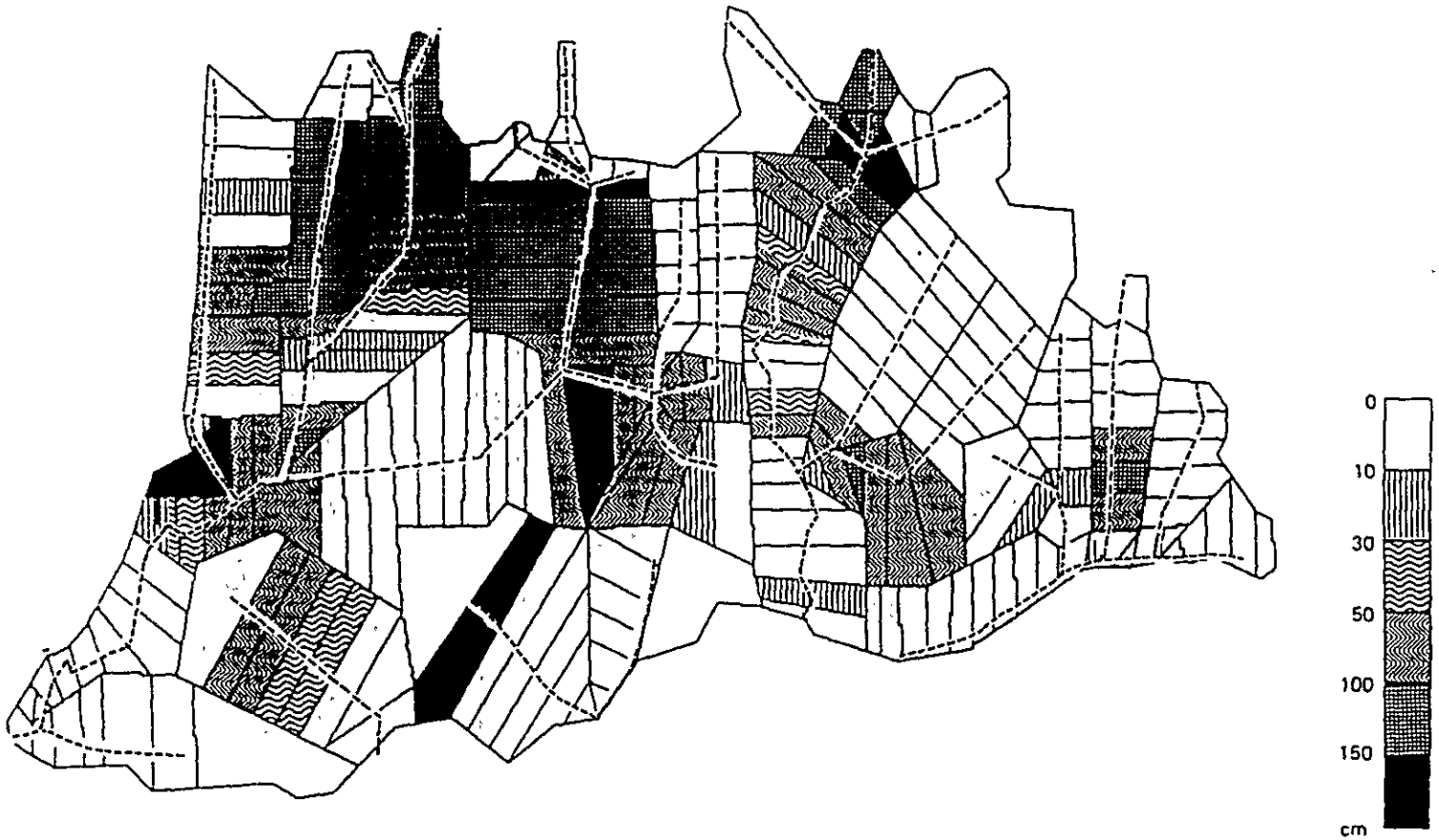

Fig. 5-166 Inundation Condition Case II-1-2-30H

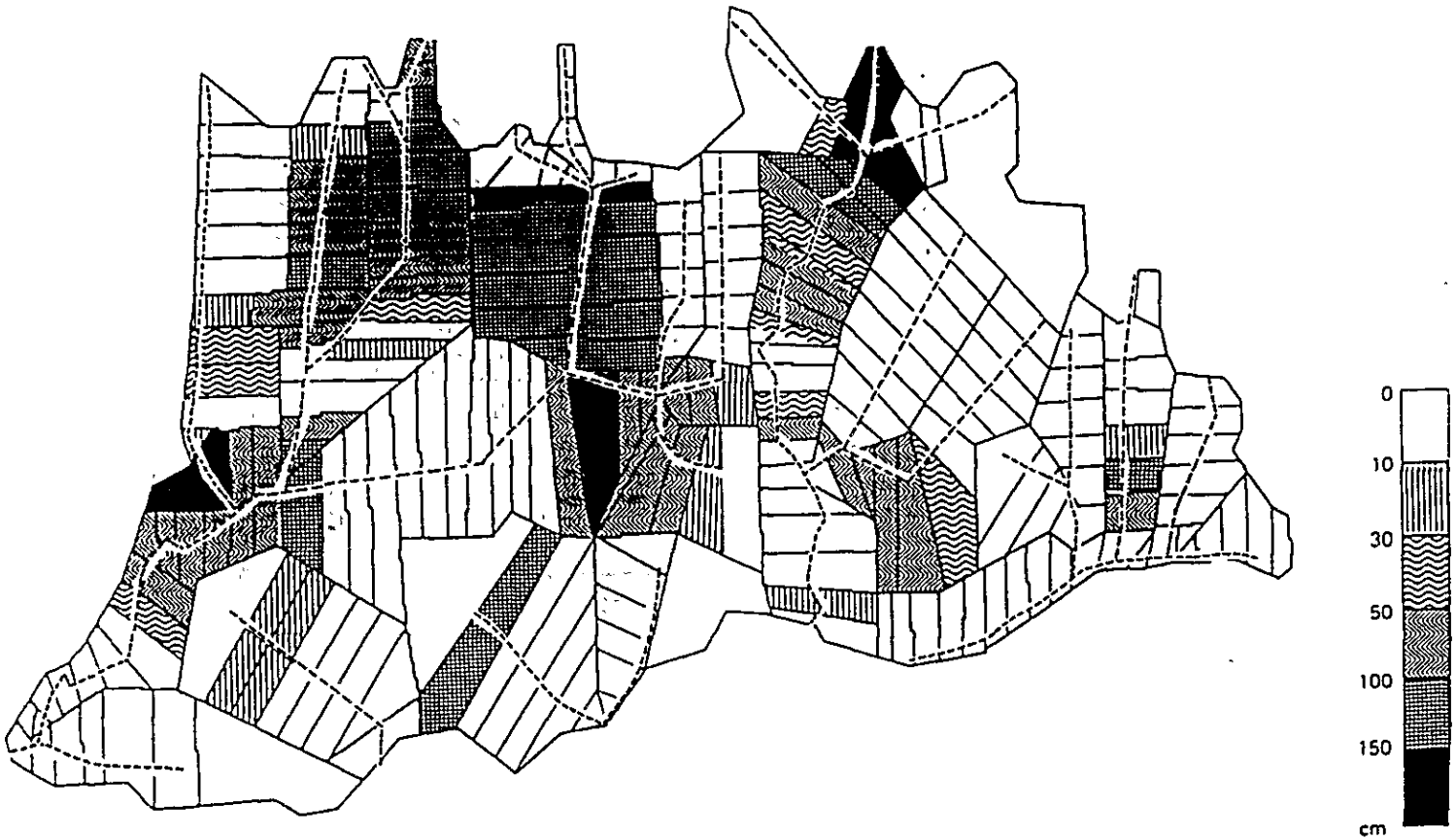

Fig. 5-167 Inundation Condition Case II-1-2-40H

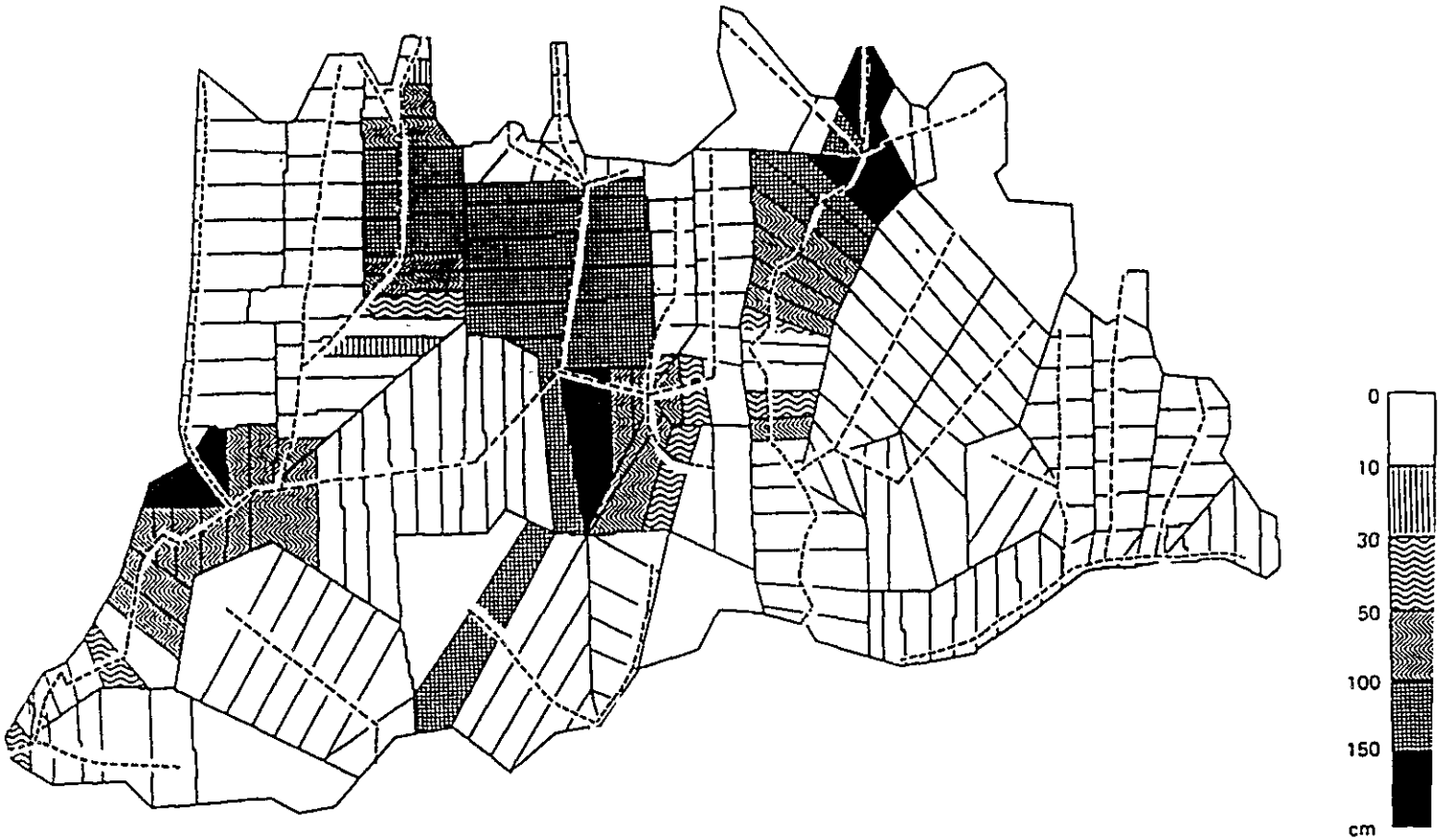

Fig. 5-168 Inundation Condition Case II-1-2-60H

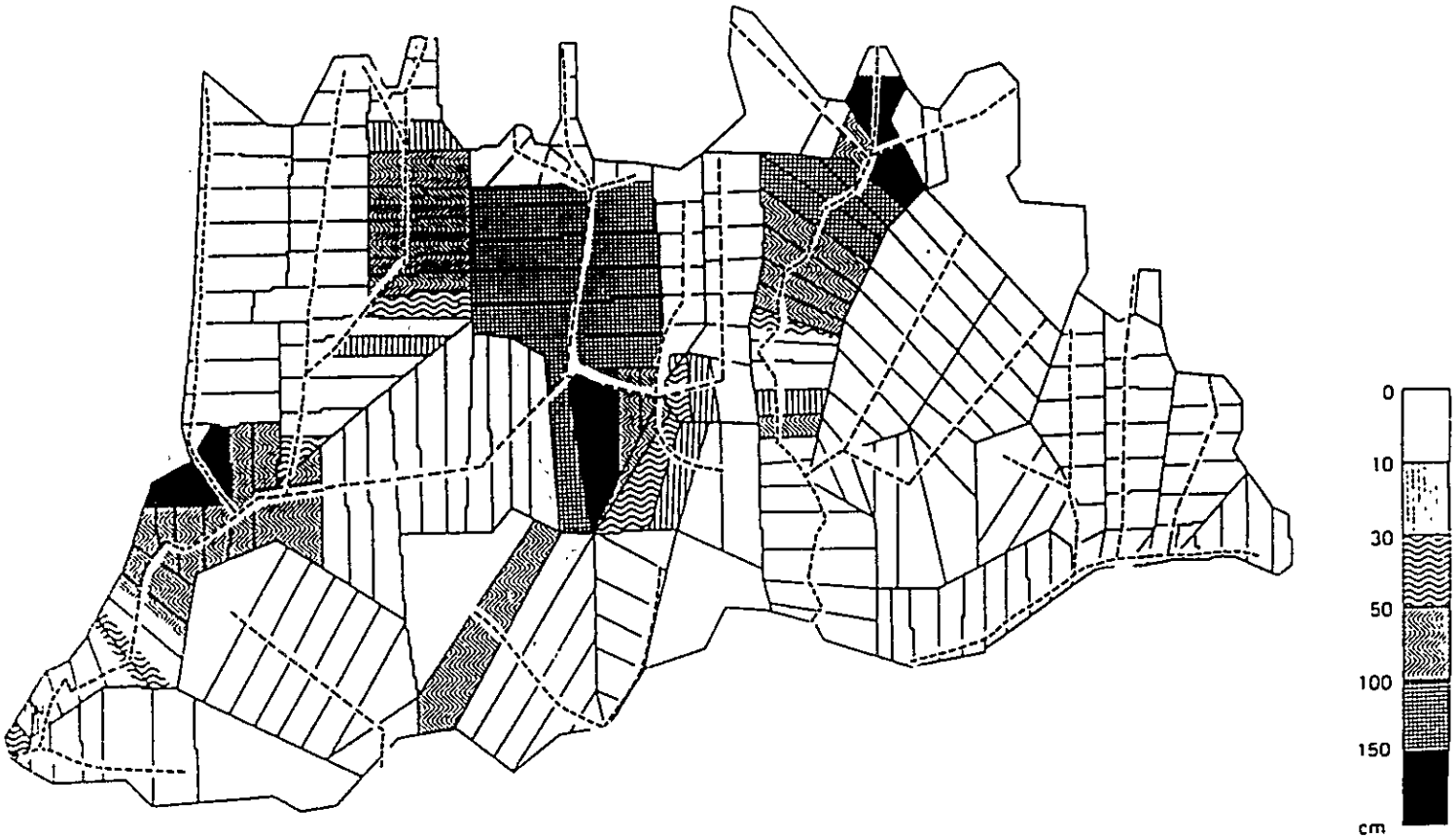

Fig. 5-169 Inundation Condition Case II-1-2-80H

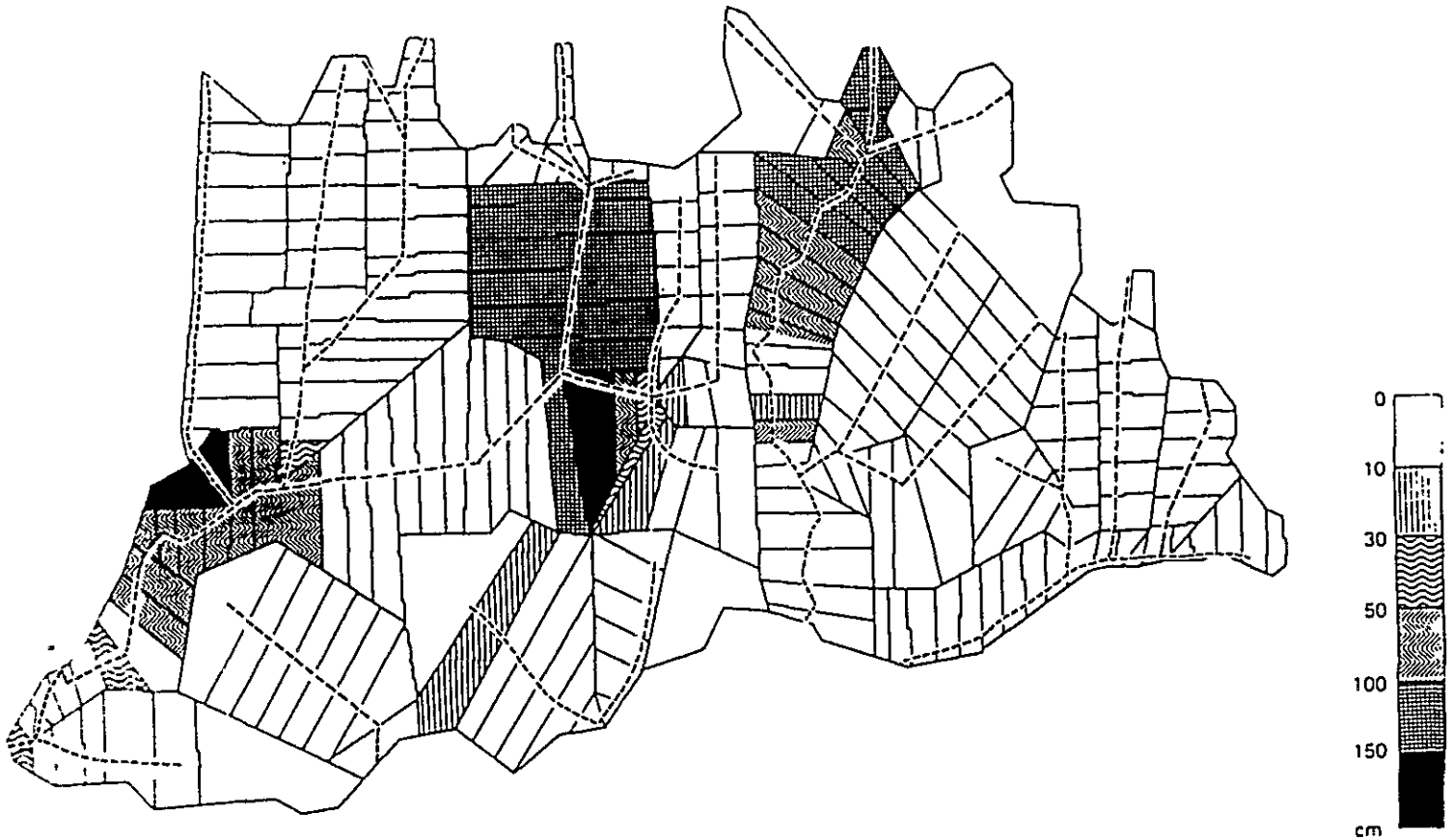

Fig. 5-170 Inundation Condition Case II-1-2-100H

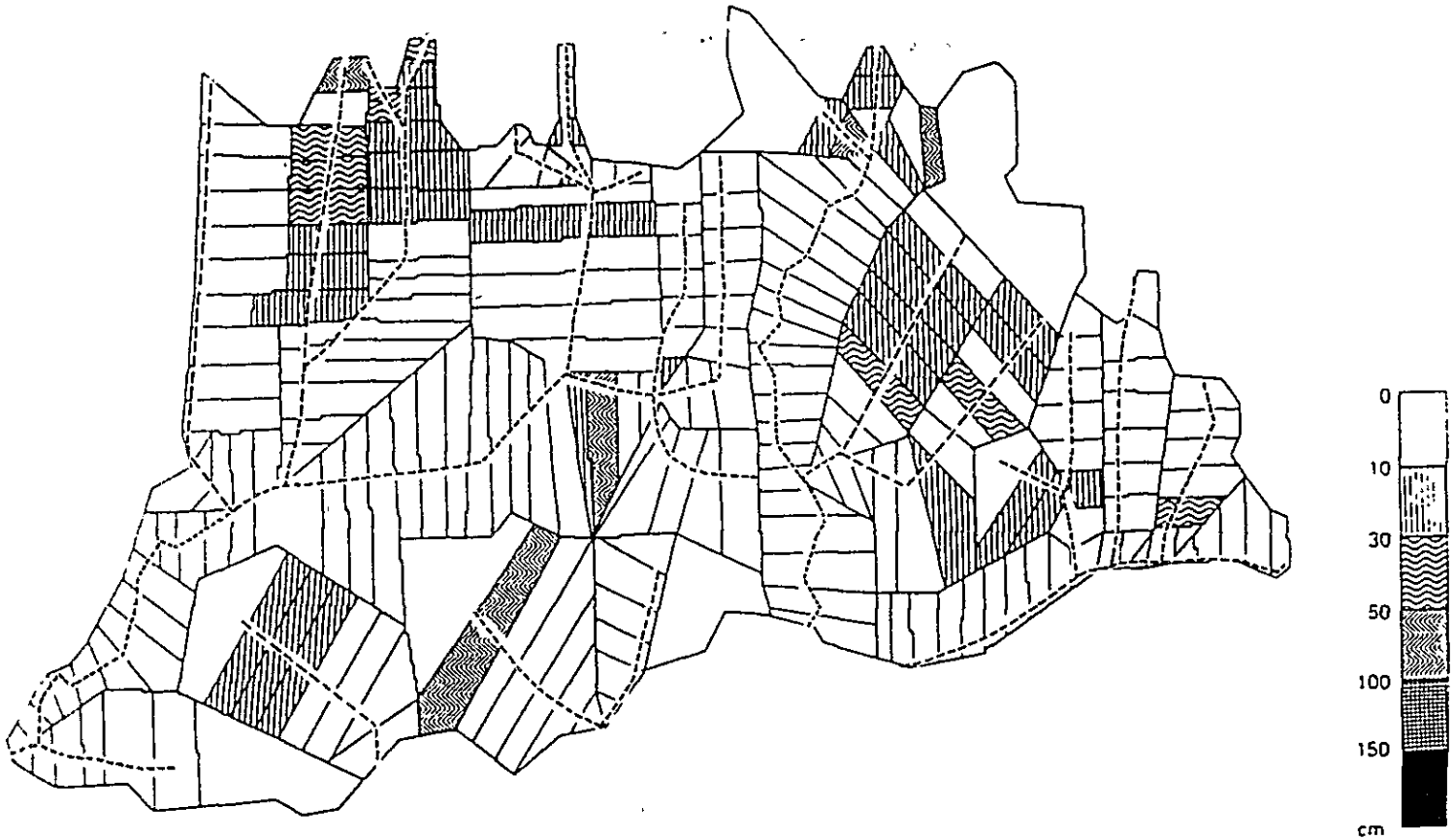

Fig. 5-171 Inundation Condition Case II-2-2-10H

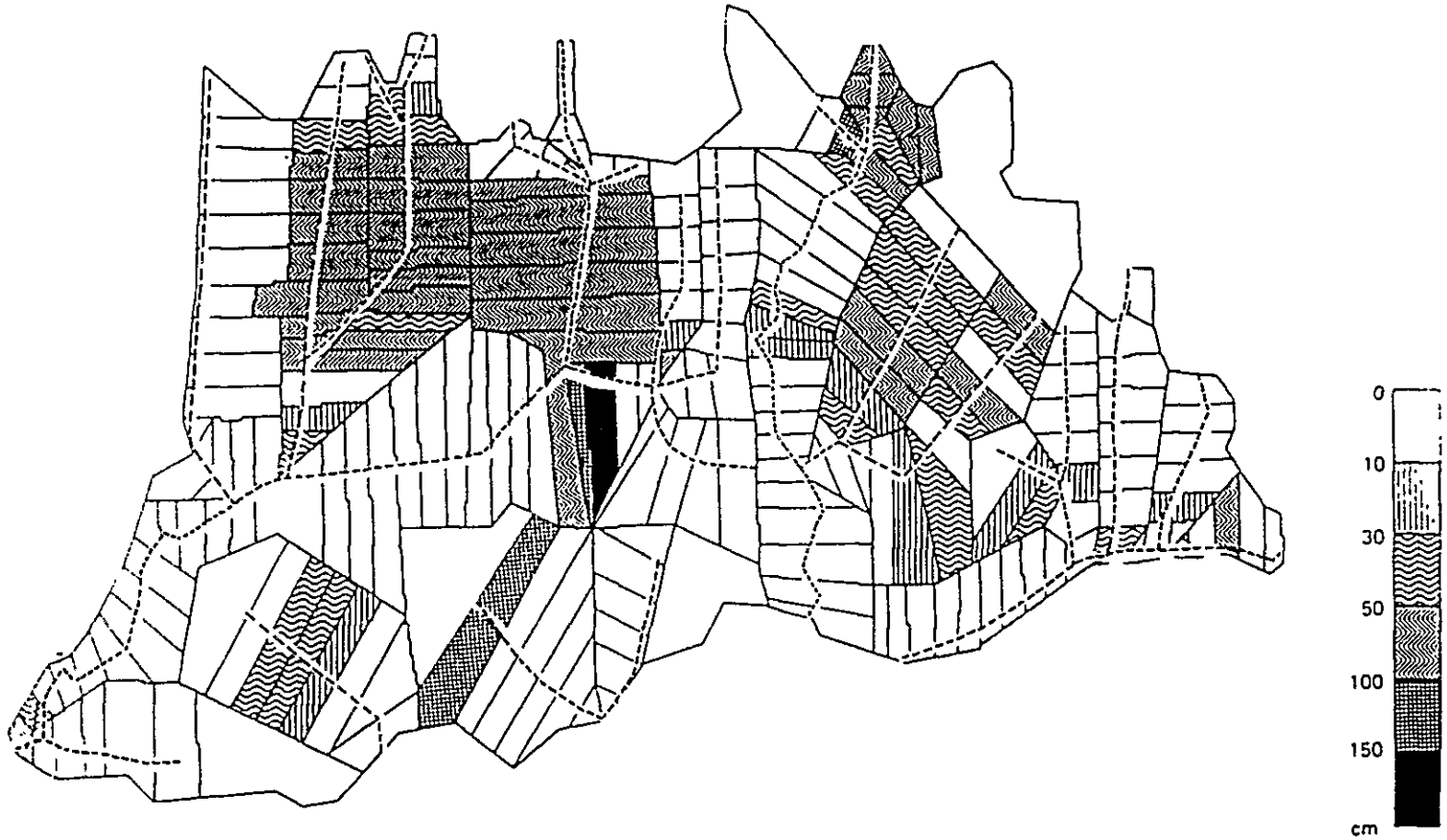

Fig. 5-172 Inundation Condition Case II-2-2-20H

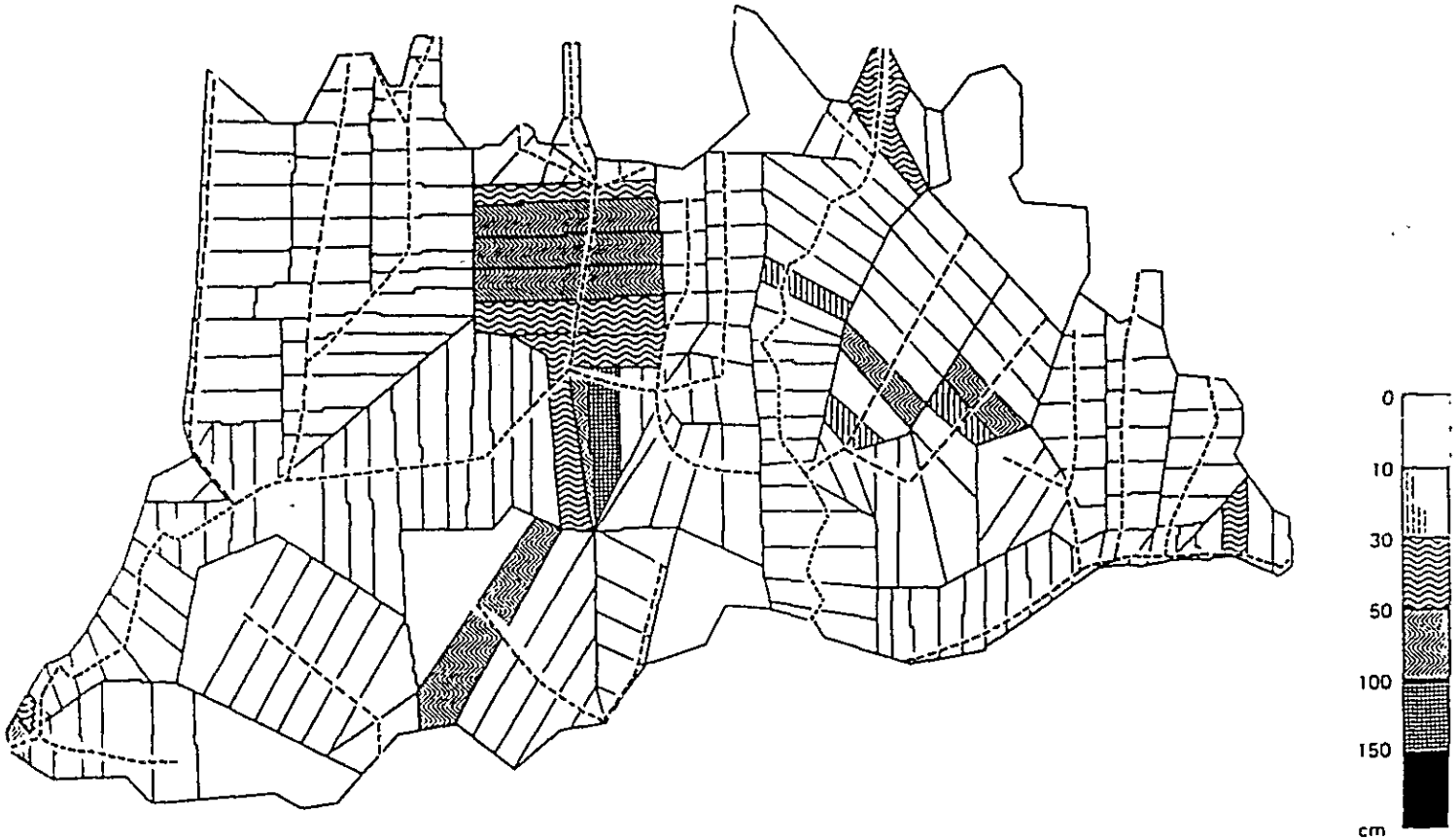

Fig. 5-173 Inundation Condition Case II-2-2-30H

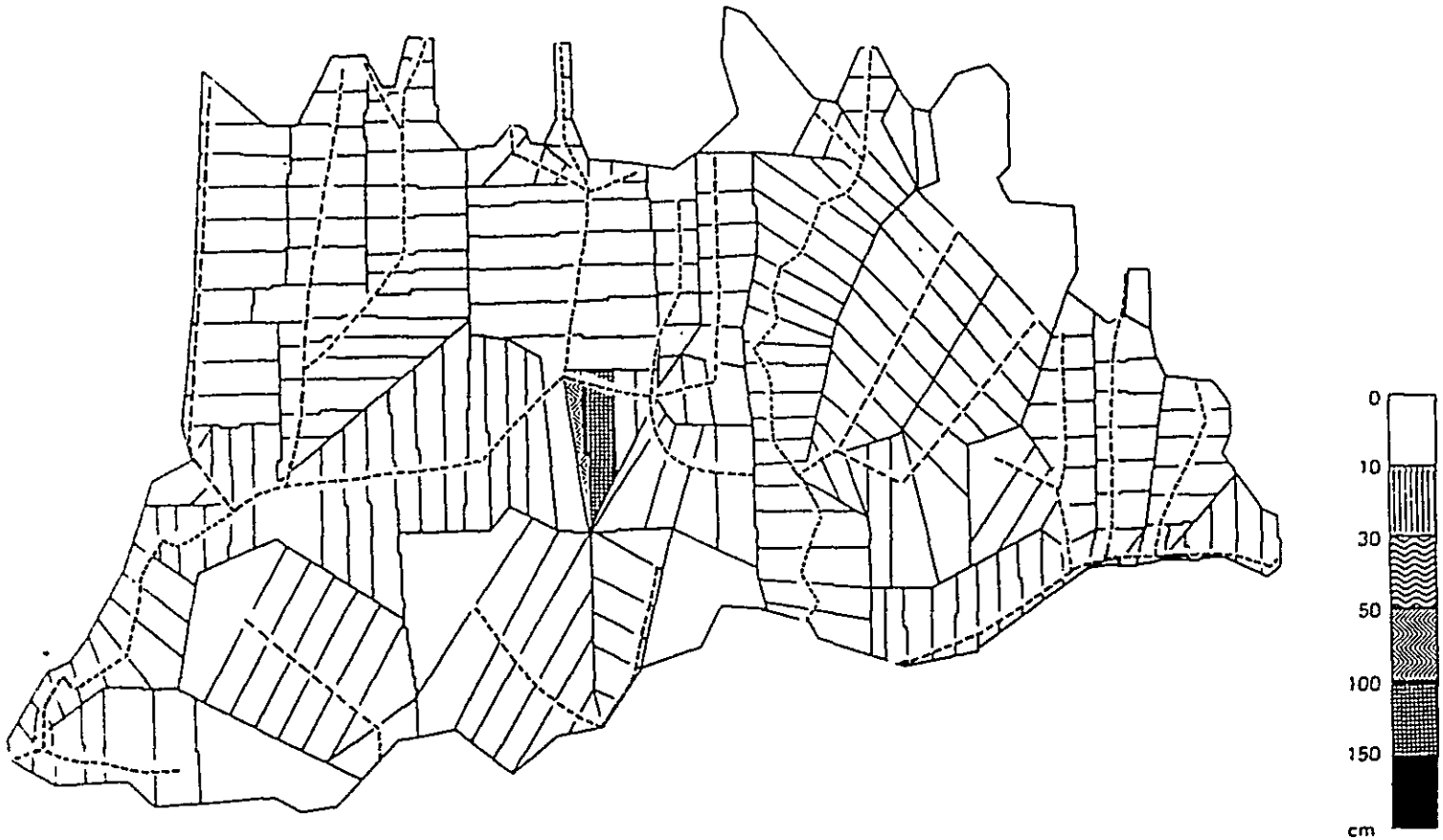

Fig. 5-174 Inundation Condition Case II-2-2-40H

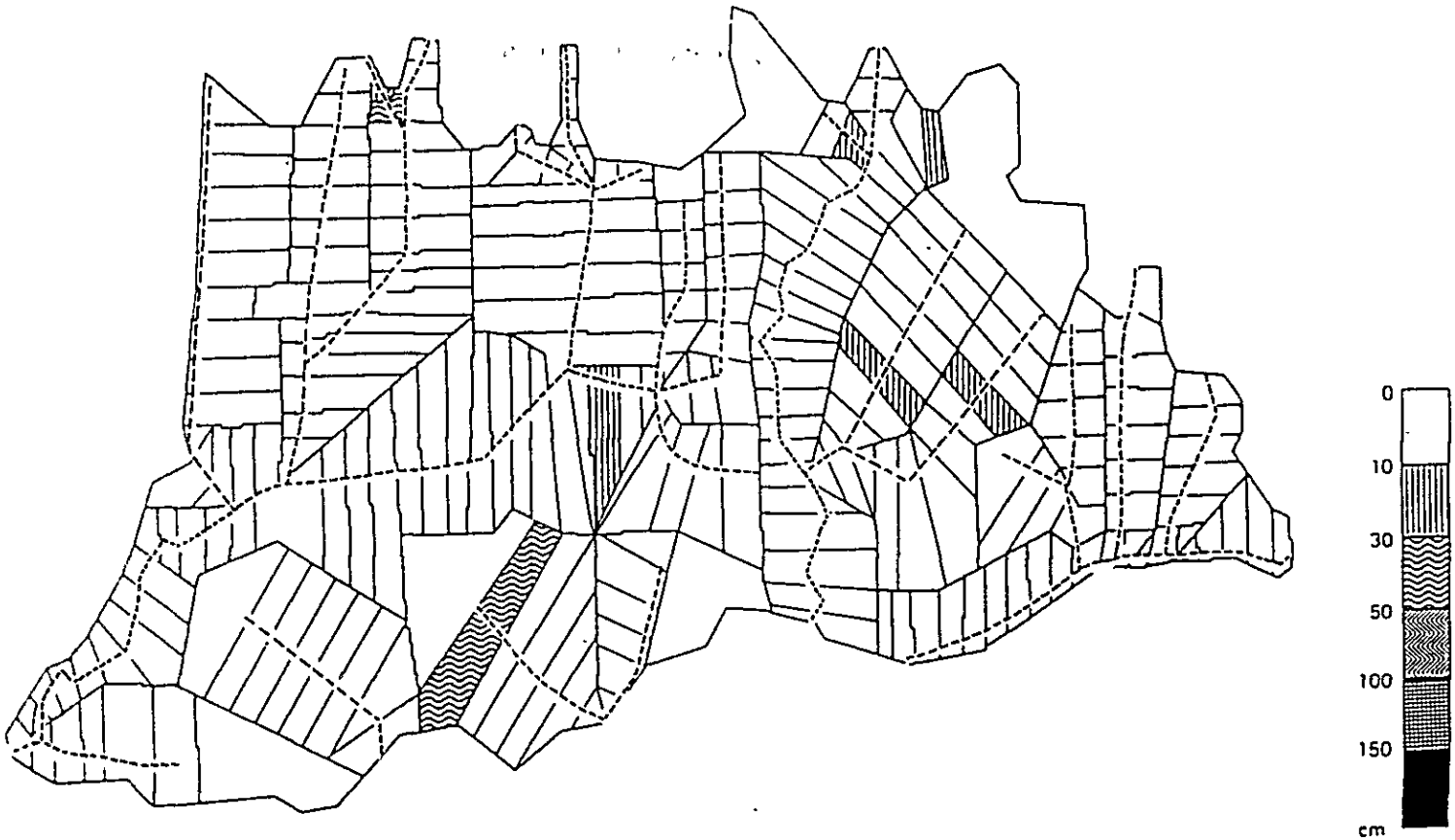

Fig. 5-175 Inundation Condition Case II-3-2-10H

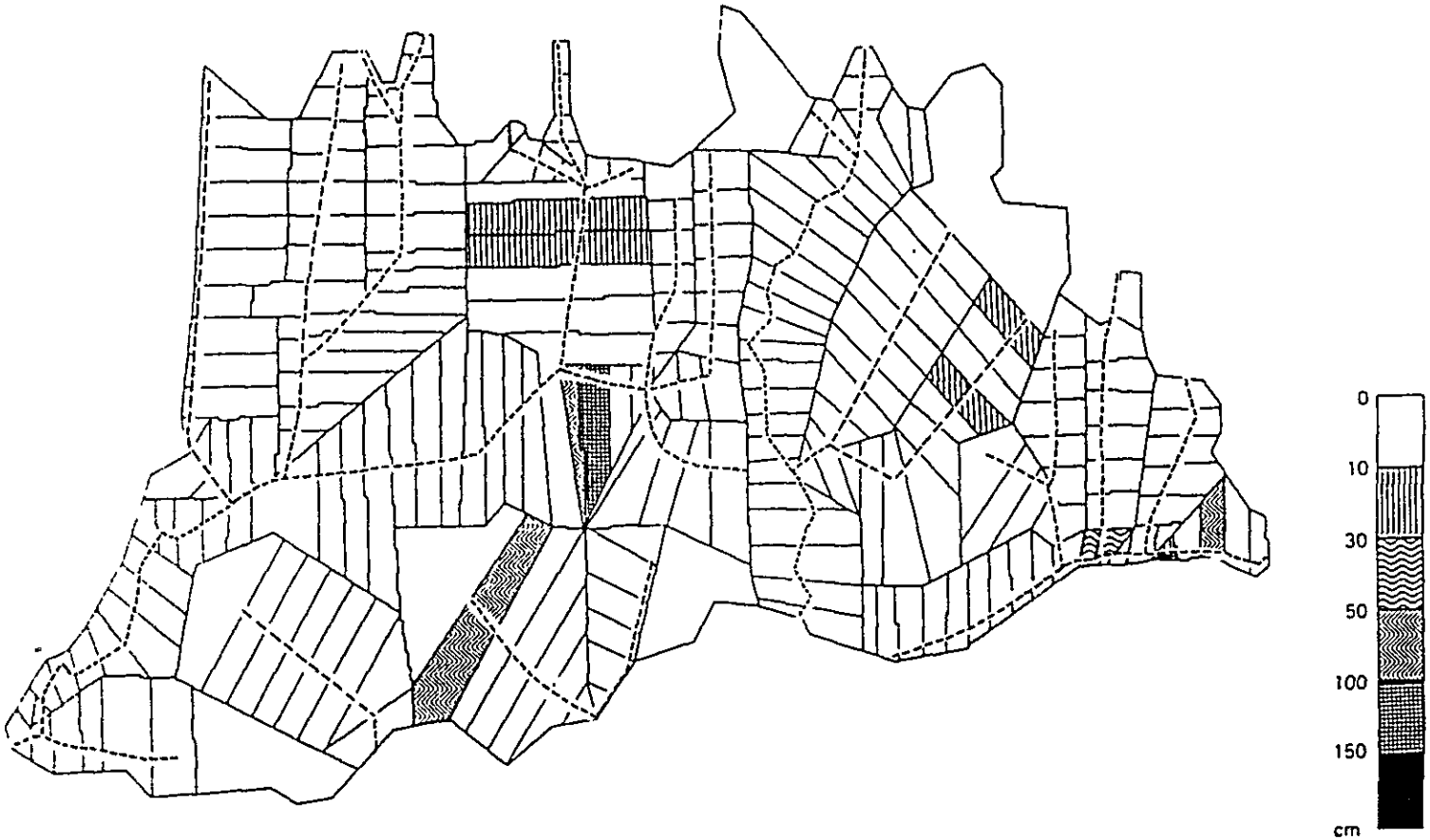

Fig. 5-176 Inundation Condition Case II-3-2-20H

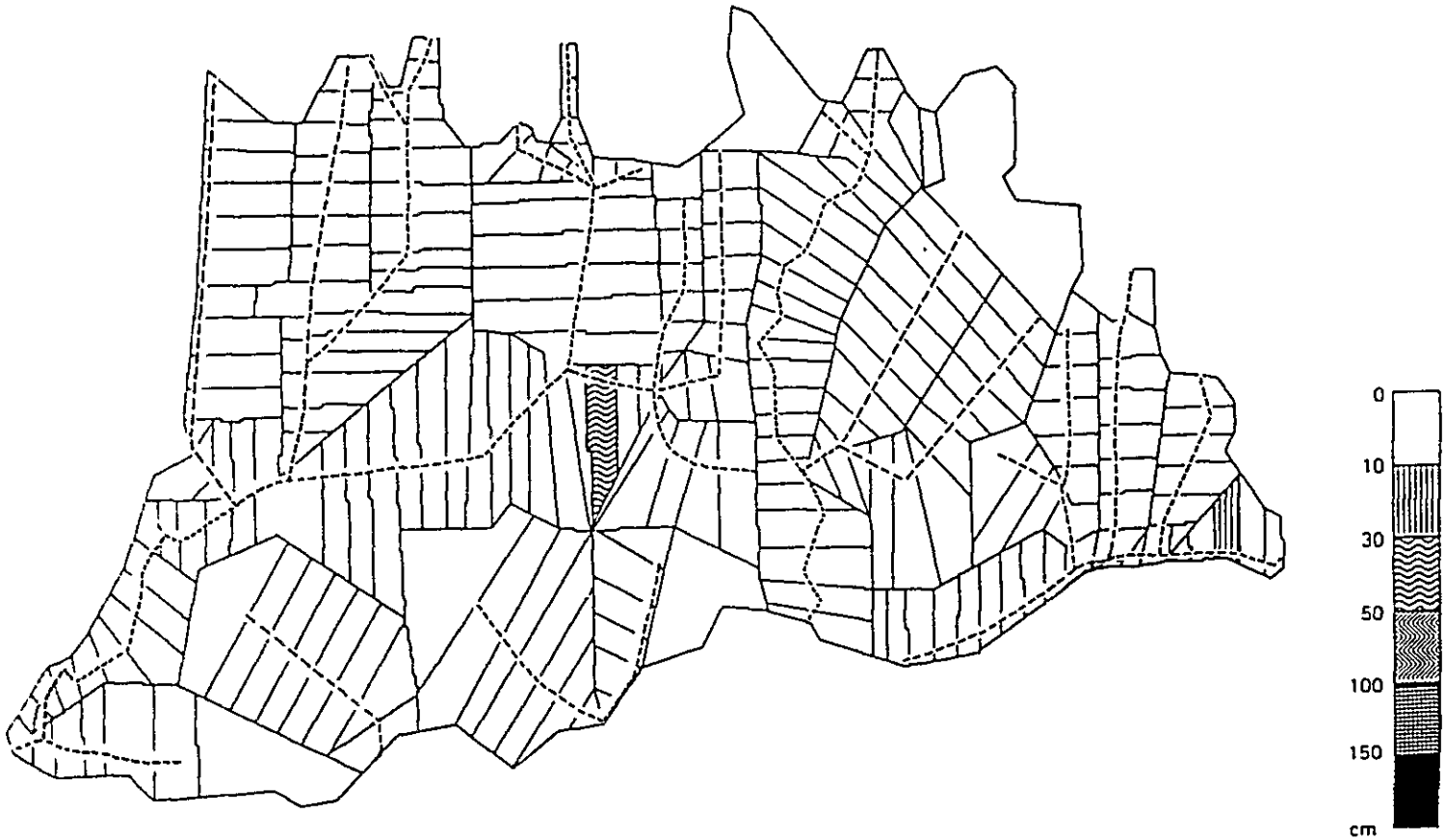

Fig. 5-177 Inundation Condition Case II-3-2-30H

Table 5-8 List of Inundated Area

System I, Amount of rainfall loss 0.0 m/m

	CASE 1-1		CASE 2-1		CASE 3-1		CASE 4-1	
NO RANK	MENSEKI	WARIAI	MENSEKI	WARIAI	MENSEKI	WARIAI	MENSEKI	WARIAI
1 0.0 CM--	46581.00	27.25	38572.51	22.56	26608.66	15.56	12881.22	7.53
2 5.0 CM--	44192.16	25.85	36203.24	21.18	24508.96	14.34	11552.61	6.76
3 10.0 CM--	41850.29	24.48	33879.21	19.82	22439.89	13.13	10292.05	6.02
4 15.0 CM--	39544.85	23.13	31595.10	18.48	20398.92	11.93	9095.58	5.32
5 20.0 CM--	37264.47	21.80	29394.15	17.19	18447.97	10.79	8001.53	4.68
6 25.0 CM--	35055.89	20.51	27266.76	15.95	16636.06	9.73	7017.38	4.10
7 30.0 CM--	32904.20	19.25	25206.13	14.74	15027.71	8.79	6102.91	3.57
8 35.0 CM--	30784.68	18.01	23226.82	13.59	13559.63	7.93	5227.95	3.06
9 40.0 CM--	28713.23	16.80	21383.28	12.51	12190.71	7.13	4404.54	2.58
10 45.0 CM--	26714.69	15.63	19629.58	11.48	10927.16	6.39	3715.35	2.17
11 50.0 CM--	24780.15	14.50	17972.66	10.51	9742.16	5.70	3130.42	1.83
12 55.0 CM--	22905.22	13.40	16360.92	9.57	8610.91	5.04	2665.15	1.56

Table 5-9 List of Inundated Area

System I, Amount of rainfall loss 50.0 m/m

	CASE 1-2		CASE 2-2		CASE 3-2		CASE 4-2	
NO RANK	MENSEKI	WARIAI	MENSEKI	WARIAI	MENSEKI	WARIAI	MENSEKI	WARIAI
1 0.0 CM--	34953.23	20.45	26213.66	15.33	15252.26	8.92	5167.84	3.02
2 5.0 CM--	32760.86	19.16	24172.12	14.14	13611.01	7.96	4533.30	2.65
3 10.0 CM--	30619.94	17.91	22195.50	12.98	12091.61	7.07	3946.67	2.31
4 15.0 CM--	28529.54	16.69	20301.86	11.88	10767.68	6.30	3429.56	2.01
5 20.0 CM--	26494.25	15.50	18520.34	10.83	9572.34	5.60	2968.73	1.74
6 25.0 CM--	24496.36	14.33	16824.49	9.84	8436.83	4.94	2576.32	1.51
7 30.0 CM--	22567.62	13.20	15196.52	8.89	7346.49	4.30	2232.55	1.31
8 35.0 CM--	20699.10	12.11	13648.95	7.98	6362.77	3.72	1937.09	1.13
9 40.0 CM--	18912.47	11.06	12161.45	7.11	5471.34	3.20	1694.63	0.99
10 45.0 CM--	17211.47	10.07	10740.66	6.28	4643.64	2.72	1491.91	0.87
11 50.0 CM--	15570.96	9.11	9392.85	5.49	3910.74	2.29	1296.82	0.76
12 55.0 CM--	14001.94	8.19	8186.51	4.79	3297.59	1.93	1126.68	0.66

Table 5-10 List of Inundated Area

System I, Amount of rainfall loss 80.0 m/m

	CASE 1-3		CASE 2-3		CASE 3-3		CASE 4-3	
NO RANK	MENSEKI	WARIAI	MENSEKI	WARIAI	MENSEKI	WARIAI	MENSEKI	WARIAI
1 0.0 CM--	26806.79	15.68	17226.93	10.08	8070.76	4.72	2512.58	1.47
2 5.0 CM--	24781.98	14.50	15545.77	9.09	7070.50	4.14	2288.87	1.34
3 10.0 CM--	22787.49	13.33	13960.08	8.17	6151.35	3.60	2078.87	1.22
4 15.0 CM--	20870.35	12.21	12438.99	7.28	5318.06	3.11	1868.87	1.09
5 20.0 CM--	18985.85	11.11	10984.62	6.43	4514.68	2.64	1672.33	0.98
6 25.0 CM--	17159.97	10.04	9611.80	5.62	3783.25	2.21	1492.10	0.87
7 30.0 CM--	15452.02	9.04	8355.82	4.89	3162.63	1.85	1327.10	0.78
8 35.0 CM--	13797.07	8.07	7205.81	4.22	2685.68	1.57	1180.16	0.69
9 40.0 CM--	12187.82	7.13	6175.01	3.61	2281.57	1.33	1038.76	0.61
10 45.0 CM--	10702.52	6.26	5303.50	3.10	1915.55	1.12	911.33	0.53
11 50.0 CM--	9318.33	5.45	4518.79	2.64	1584.51	0.93	815.22	0.48
12 55.0 CM--	8135.25	4.76	3842.89	2.25	1368.51	0.80	725.22	0.42

Table 5-11 List of Inundated Area

System II, Amount of rainfall loss 0.0 m/m

	CASE 1-1		CASE 2-1		CASE 3-1		CASE 4-1	
NO RANK	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)
1 0. CM--	48094.76	30.42	28302.80	17.96	13750.46	8.73	5167.13	3.28
2 5.0 CM--	45780.65	28.96	26376.44	16.74	12415.85	7.88	4473.20	2.84
3 10.0 CM--	43504.07	27.52	24534.66	15.57	11128.56	7.06	3891.32	2.47
4 15.0 CM--	41229.48	26.08	22741.94	14.43	9955.00	6.32	3413.44	2.17
5 20.0 CM--	38970.20	24.65	21043.23	13.35	8813.67	5.59	3065.64	1.95
6 25.0 CM--	36756.37	23.25	19416.59	12.32	7758.10	4.92	2799.66	1.78
7 30.0 CM--	34577.42	21.87	17830.55	11.31	6811.77	4.32	2592.49	1.65
8 35.0 CM--	32513.29	20.56	16316.70	10.35	5914.12	3.75	2393.08	1.52
9 40.0 CM--	30545.24	19.32	14869.12	9.44	5083.68	3.23	2221.55	1.41
10 45.0 CM--	28626.91	18.11	13456.67	8.54	4328.28	2.75	2073.51	1.32
11 50.0 CM--	26790.52	16.95	12164.51	7.72	3695.37	2.35	1939.11	1.23
12 55.0 CM--	25021.37	15.83	10986.15	6.97	3185.12	2.02	1792.56	1.14

Table 5-12 List of Inundated Area

System II, Amount of rainfall loss 50.0 m/m

	CASE 1-2		CASE 2-2		CASE 3-2		CASE 4-2	
NO RANK	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)
1 0. CM--	34608.49	23.15	17725.40	11.25	4721.74	3.00	2137.57	1.36
2 5.0 CM--	34384.33	21.75	16145.96	10.25	4021.52	2.55	1969.41	1.25
3 10.0 CM--	32172.24	20.35	14640.36	9.29	3453.12	2.19	1795.38	1.14
4 15.0 CM--	30055.21	19.01	13151.46	8.35	2993.34	1.90	1639.18	1.04
5 20.0 CM--	23043.31	17.74	11699.20	7.42	2653.31	1.68	1504.14	0.95
6 25.0 CM--	26079.23	16.50	10319.29	6.55	2371.48	1.50	1393.31	0.88
7 30.0 CM--	24202.69	15.31	9050.94	5.74	2130.07	1.35	1288.31	0.82
8 35.0 CM--	22426.19	14.18	7937.43	5.04	1921.09	1.22	1185.96	0.75
9 40.0 CM--	20716.56	13.10	6947.54	4.41	1734.97	1.10	1095.36	0.70
10 45.0 CM--	19109.35	12.09	6027.64	3.83	1585.14	1.01	1005.36	0.64
11 50.0 CM--	17614.52	11.14	5169.90	3.28	1470.93	0.93	934.45	0.59
12 55.0 CM--	16216.11	10.26	4374.01	2.78	1370.00	0.87	874.45	0.55

Table 5-13 List of Inundated Area

System II, Amount of rainfall loss 80.0 m/m

NO	RANK	CASE 1-3		CASE 2-3		CASE 3-3		CASE 4-3	
		Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)
1	0. CM--	27539.94	17.42	9110.74	5.78	1878.26	1.19	1285.65	0.82
2	5.0 CM--	25589.89	16.19	7904.03	5.02	1697.60	1.08	1180.65	0.75
3	10.0 CM--	23721.90	15.00	6750.60	4.28	1547.45	0.98	1081.64	0.69
4	15.0 CM--	21987.02	13.91	5732.04	3.64	1414.27	0.90	994.19	0.63
5	20.0 CM--	20279.96	12.83	4821.95	3.06	1294.67	0.82	919.19	0.58
6	25.0 CM--	18632.48	11.79	3972.64	2.52	1186.42	0.75	854.41	0.54
7	30.0 CM--	17082.49	10.80	3257.76	2.07	1106.03	0.70	794.41	0.50
8	35.0 CM--	15593.28	9.86	2700.98	1.71	1031.03	0.65	734.41	0.47
9	40.0 CM--	14197.26	8.98	2300.68	1.46	969.27	0.62	678.63	0.43
10	45.0 CM--	12862.07	8.14	2064.89	1.31	909.27	0.58	647.85	0.41
11	50.0 CM--	11570.46	7.32	1900.11	1.21	856.34	0.54	617.85	0.39
12	55.0 CM--	10393.92	6.57	1750.11	1.11	811.34	0.51	587.85	0.37

Table 5-14 List of Inundated Area by Drainage Basins

System II, Depths of Inundation over 5 cm

Drainage system	Amount of Rainfall loss (RL) (m/m)	Case 1		Case 2		Case 3		Case 4		Notes
		Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	
Yabebyry River (83,500 ha)	0.0	28,367	34.0	15,353	18.4	6,405	7.7	1,340	1.6	
	50.0	21,233	25.4	9,166	11.0	1,210	1.4	324	0.4	
	80.0	15,885	19.0	4,144	5.0	347	0.4	105	0.1	
Atinguy River (32,700 ha)	0.0	11,092	33.9	7,875	24.1	4,369	13.4	2,269	6.9	
	50.0	9,081	27.8	5,101	15.6	2,071	6.3	1,131	3.5	
	80.0	7,214	22.1	2,859	8.7	1,103	3.3	888	2.7	
Yacyreta Dam secondary channels (19,300 ha)	0.0	3,479	18.0	1,687	8.7	940	4.9	610	3.2	
	50.0	2,166	11.2	972	5.0	458	2.4	387	2.0	
	80.0	1,138	5.9	409	2.1	119	0.6	137	0.7	
Others (22,600 ha)	0.0	2,842	12.6	1,461	6.5	701	3.1	254	1.1	
	50.0	1,904	8.4	906	4.0	282	1.2	127	0.6	
	80.0	1,352	6.0	492	2.2	128	0.6	50	0.2	

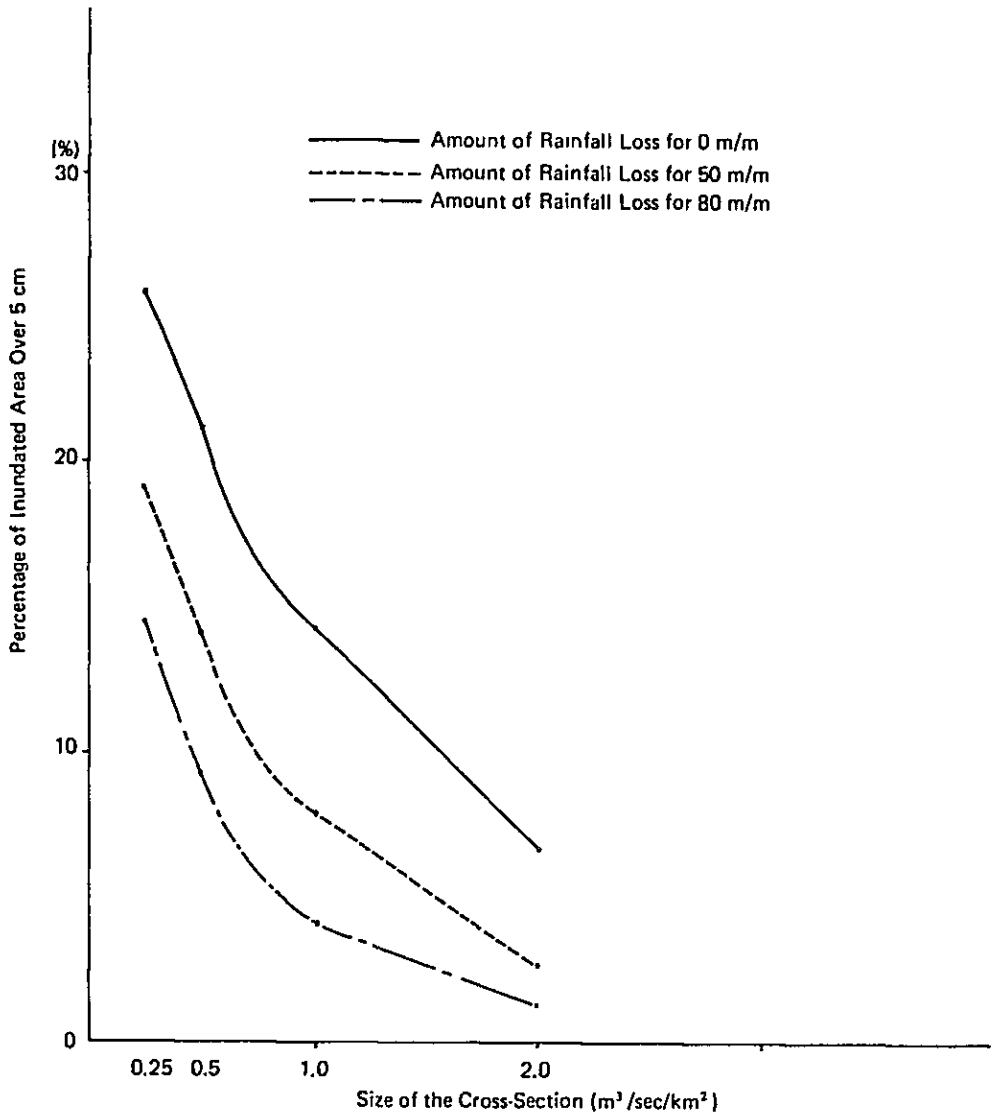

Fig. 5-178 Relationship between the Size of the Cross-Section of the Drainage Canal and the Percentage of the Inundated Area (System I)

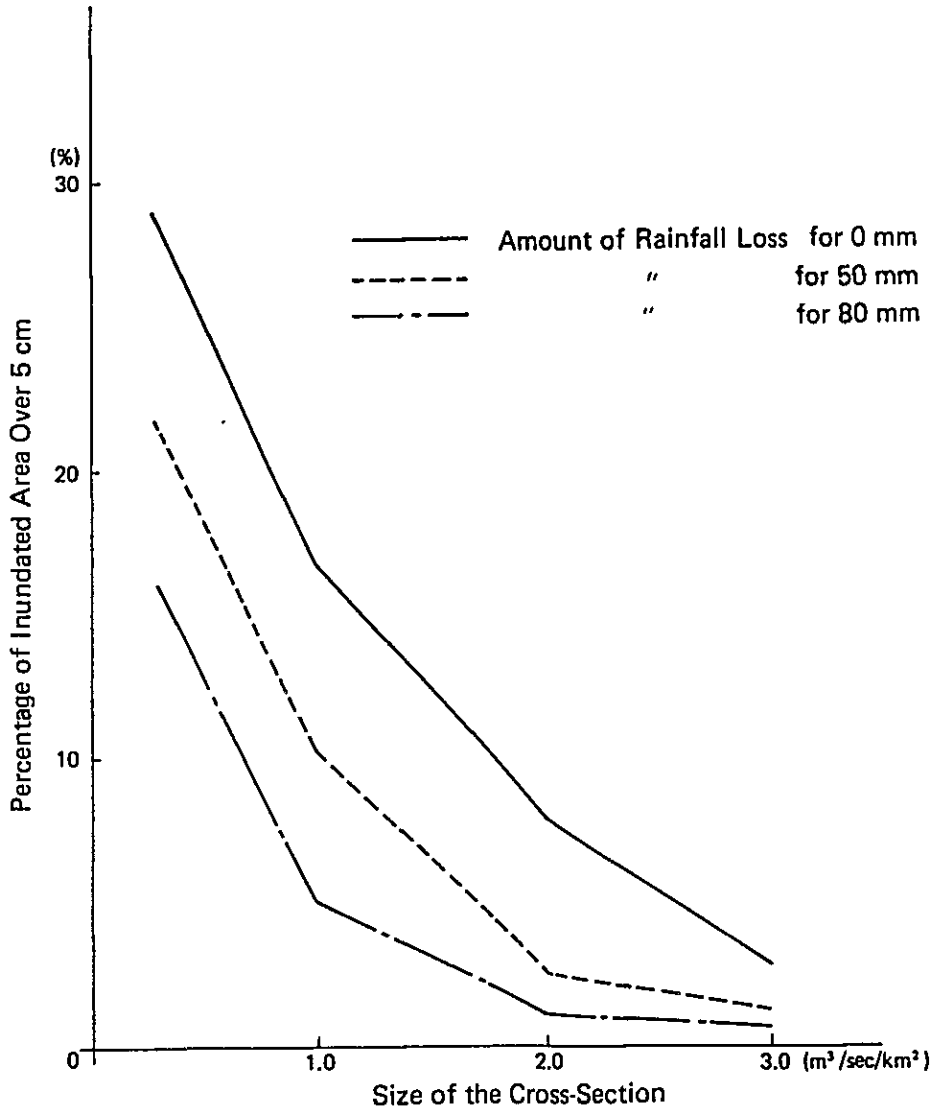

Fig. 5-179 Relationship between the Size of the Cross-Section of the Drainage Canal and the Percentage of the Inundated Area (System II)

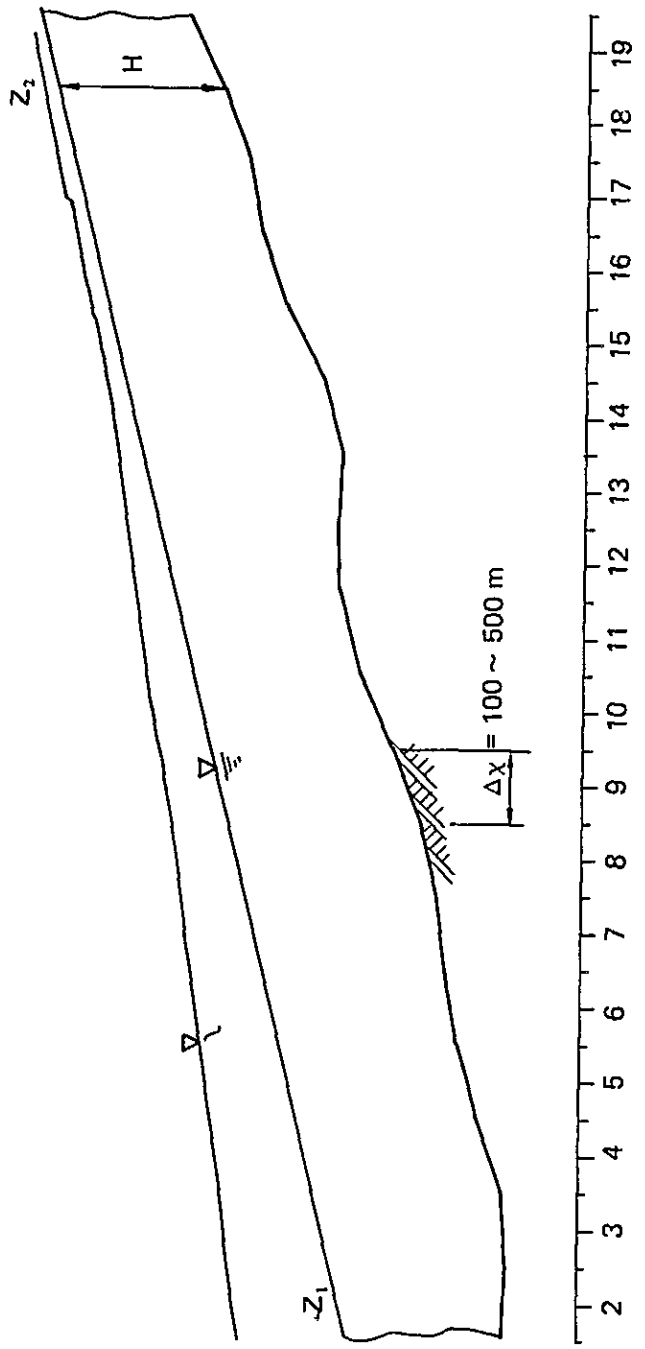

Fig. 7-1 Longitudinal Rivers Regime

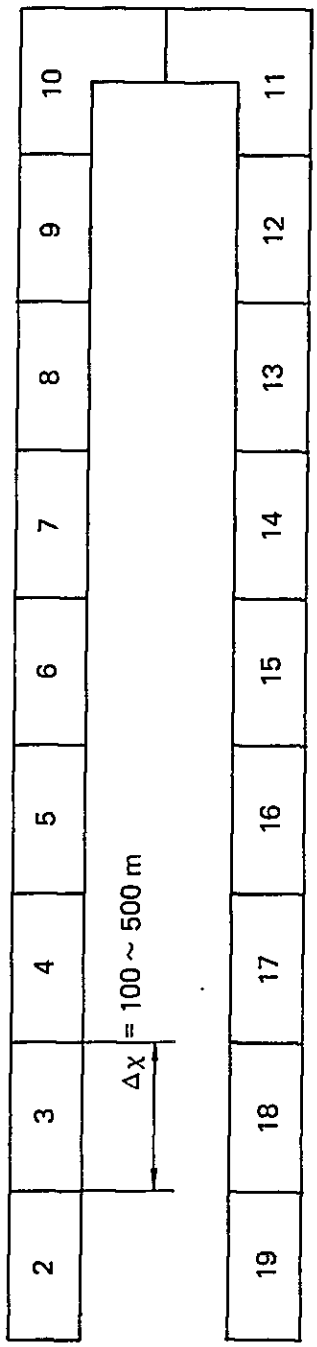

Fig. 7-2 Grid for the Analysis of Flow Regime of Rivers (Numerical Model)

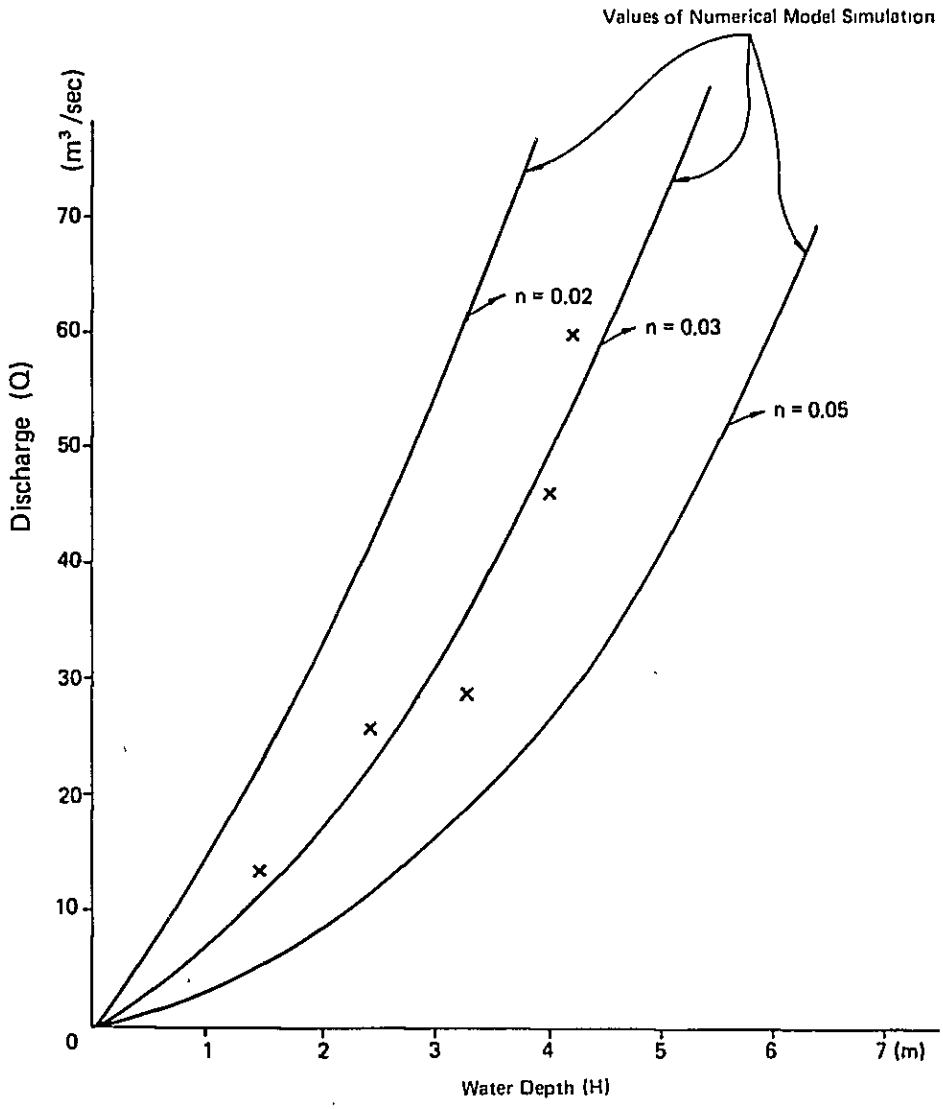

Fig. 7-3 Q-H Curve (Comparison between the Calculated Values and the Measured Values)

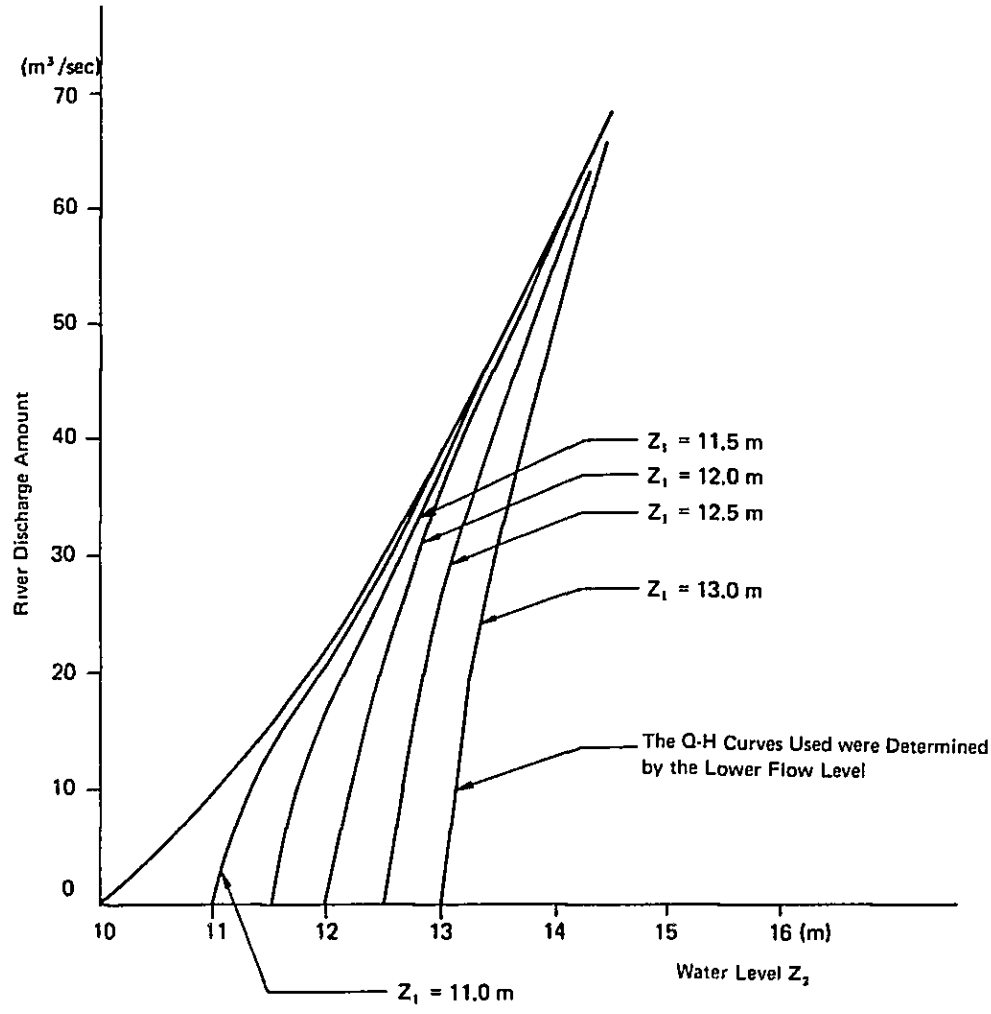

Fig. 7-4 Q-H Curve (Locations Which Are Affected by the Downstream Water)

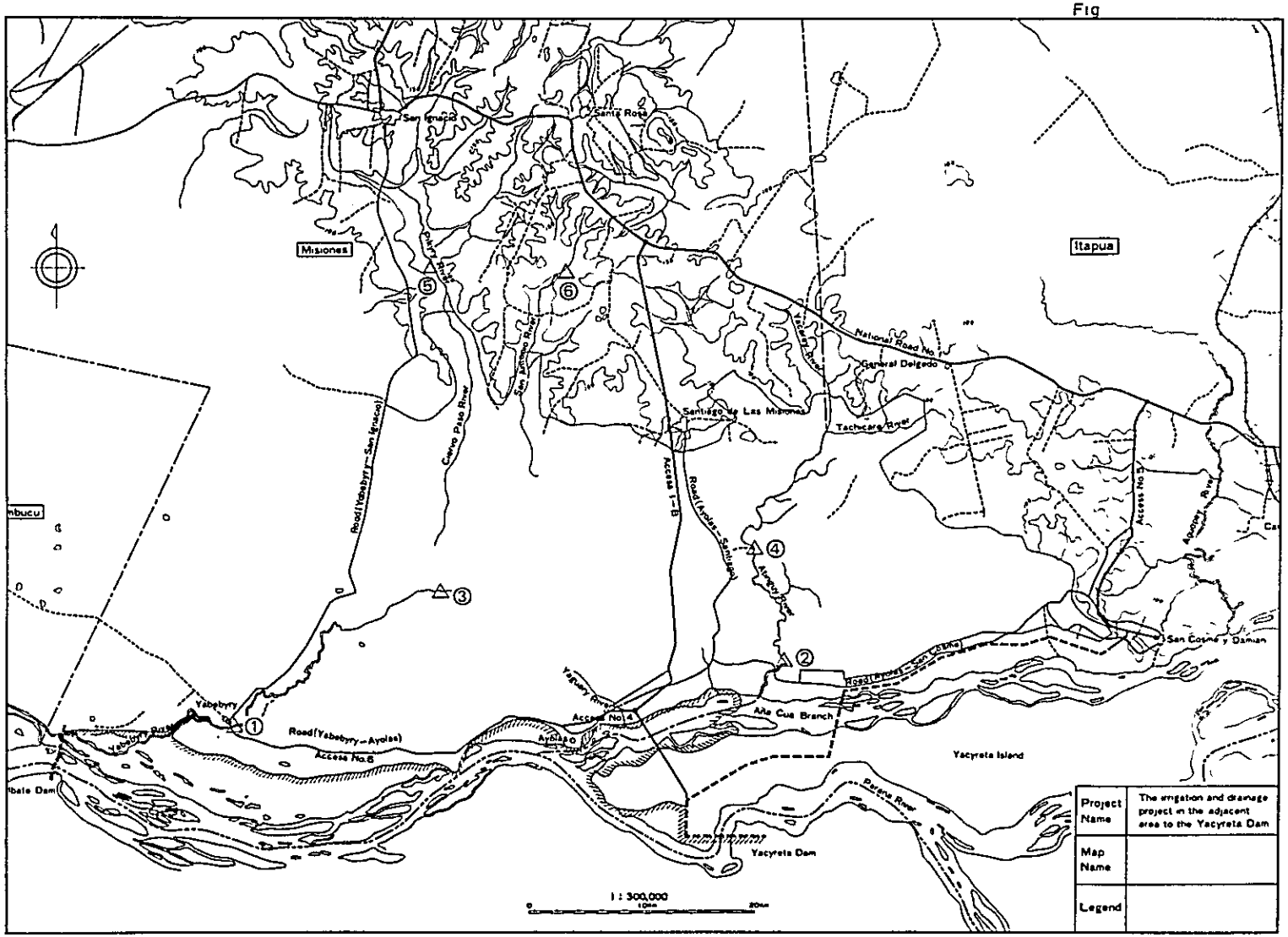

Fig. 7-5 Locations of the River Discharge Observation Station