Table 2.8 Summary of Irrigation Water Requirement

Seasonal water requirement in depth

			(U	nit: mm)
	Wet Seas	son Paddy	Dry Seaso	
Year	ND .	DR	ND	<u>DR</u>
1973	326	509	677	1,058
1974	400	625	693	1,083
1975	344	538	698	1,091
1976	416	650	618	966
1977	531	830	633	989
1978	345	539	692	1,081
1979	451	705	688	1,075
1980	411	642	658	1,028
Average	e	630		1,046

## Maximum unit diversion water requirement

(Uni	t: //sec/ha)	·	(Unit	: //sec/ha)
Dry Season	Paddy		Wet Season	Paddy
Occurrence	Maximum Value	Occu	rrence	Kaximum Value
1973 Dec. P	1.65	1973	<b>М</b> ау Г	1.06
1974 Dec. M	1.59	1974	Jun. F	1.46
1975 Dec. F	1.54	1975	Jun. L	1.01
1976 Dec. M	1.61	1976	Нау М	1.27
1977 Dec. F	1.47	1977	Jun. P	1.23
1978 Dec. P	1.51	1978	May L	1.01
1979 Dec. F	1.77	1979	May H	1.44
1980 Dec. F	1.68	1980	Hay L	1.22
80 % dependable capacity	1.65			1.35

Table 3.1 Irrigation Area in Critical Low Plow Periods (1/2)
(Wet season paddy)

.1		irst to		Sec	cord los	<del></del>			first lov		Se	cond Lo	
265	<b>Month</b>	Date	Jrriga- ble Area	Bonth	Date	Irriga. Die Area	Year	Konth		Irriga-	Month	Date	Irriga-
- 77	<del></del>	•	(ha)	<del></del>	· · ·	(ha)		<del></del>		ble Area (ba)			ble Are (ha)
73	პათ.	12	21,730	-			1977	Jul.	5	8,700	Jun.	21	11,800
		13	24,570						6	7,600		22	10,300
		14	20,000	eore	than 2	0,000			7	8,709		23	8,300
	÷	35	17,400						8	6,800		24	7,000
		16	15,800	1.					9	6,400		25	7,000
		1 17	15,100						10	6,000		26	8,700
		18	16,700		-				11	5,300		27	7,600
		19	15,100						12	7,700		28	7,800
		20	12,849						13	7,700		29	7,800
		21	16,600						14	11,200		30	7,400
		rean	17,580						nean	7,610		rean.	8,390
974	Jen.	1	7,900	Apr.	21	32,700	1978	Kay	20	21,100			
		2	6,800		22	11,500		=	21	14,000			
		3	6,000		23	10,990			22	12,100	DOI	e than	20,000
		. 4	5,700		24	6,700	:		23	10,300			
		5	5,700		25	5,000			24	10,900			
		6	5,300		26	4,600			25	23,760			
		7	6,860		27	4,600			26	14,500			
		8	8,400	•	- 28	4,300			27	10,300			
		9	5,700		23	4,000			28	9,200			
		10	5,200	-	39	5,000			29	10,300			
		sean	6,350		rean	6,930			<b>E</b> ean	13,760			
				<b>-</b>	31	22.100	1070	Wass	20	. 6 000	3.50	1	7,50
713	Apr.	)7 18	4,500	Jun.	21 21	22,100 18,100	1573	Kay	21	6,900 8,600	yag.	2	7,50
		19	8,200		23	17,400			. 55	7,700		3	7,3
		20			24	16,000			23	7,700		. 4	7,3
		21	2,450	- -	25	14,700			24	7,700	•	. 5	7,00
		22	2,200		26	17,400			25	7,700		6	7,00
		23	2,160		27	17,490	-		26	7,700		7	7,00
: .	.*	24	2,260		28				27	5,900		8	7,00
		25			29	18,900			28	5,200		9	** *
		26			30	17,400			29	4,800		10	
:	:	Bean	3,480		ደረ <del>መ</del> ን	17,830			eean	6,990		rean	7,50
976	Eay	16	5,400	Jul.	16	4,700	1980	Jul.	22	8,800	Jul.	3	9,7
		17	1		17	4,500			23	11,000		4	9,1
		18	4		18				24	8,100		5	14,5
		19	24		19	4,400			25	8,100		. 6	12,0
		20			20	4,200			26	8,100		. 7	17,3
		21			53	4,600			27	8,100			9,7
•		22			22	4,600			28	8,100		. 9	8,1
	٠.	23			23	4,600			29	6,900		. 10	7,2
		24			24	5,200			30	6,900		, si	8,8
												32	. 63
:		2	2,500		25	5,200			31	6,400			8,2

Table 3.1 Irrigation Area in Critical Low Plow Periods (2/2)
(Wet season paddy)

	F	irst Lo	est		second Lo	west		F	irst los		Se	cond L	west
ear	Month	Date	Irriga-	Month		Brrigs-	Year	Month	Date	lrriga-	Month	Date	Irriga-
			ble Area (ha)			ble Area (ha)				ble Area			ble Are
973	Nov.	16	10,100	Oct.	11	18,400	1977	Nov.	9	2,100	Oct.	21	3,000
		17	8,700		12	15,700			10	2,100		22	3,600
		18	8,200		13	13,200			- 11	2,000		23	3,000
		19	7,600		14	12,400			15	2,000		24	2,900
		20	7,300		15	11,600			13	2,000		25	2,900
		21	6,500		16	10,800			14	2,000	•	26	2,900
:		. 22	5,700		- 17	10,800			15	2,000		27	2,900
		23	5,700		18	13,200	•		16	2,000	100	28	2,900
		24	6,600		19	10,800			17	2,000		29	3,000
		25	8,500		20	15,700			18	2,100		30	3,000
		rean	7,530		rean	13,260	•		rean	2,030		een	2,950
974	Dec.	13	5,400	Jan.	9	6,900	1978	Dec.	. 4	6,900	Nov.	21	6,160
	•	14	4,700		10	5,490			5	7,700	1.	22	4,000
		15	4,400		11	5,700	-		6	5,500		23	3,400
		16	4.400		12	6,100			7	4,500	100	24	3,700
		17	6,800		13	6,100			8	4,000		25	4,000
		18	7,100		114	6,100			9	4,500		- 26	7,600
		19	5,100		15	6,500			10	4,200		27	7,200
		50	4,200		16	6,500	•		11	4,300		28	7,200
		21	6.700	•	- 17	6,500			12	3,700		29	5,000
		22	6,300		18	7,600			- 13	9,700		30	7,200
٠		cean	5,510		rean	6,280			rean	5,500	E	ezn	5,540
75	Dec.	22	4,600	Jan.	: 8	6,400	1979	Dec.	6	1,900	Nov.	20	6,100
		23	8,000		9	7,600			- 7	2,100	•	21	3,900
		24	8,900		10	6,000			8	2,100		22	3,100
		25	3,600		11	6,500			9	2,700		23	3,400
		26	3,600		13	6,100		٠.	10	2,100		24	3,600
		27	3,600		13	6,500			11	2,600		25	3,900
		28	3,600		14	6,500			12	2,600	•	26	3,100
		29	3,600		15	6,500			13	2,600		27	4,600
		30	3,600	*	16	5,700			14	2,600		. 28	3,400
		. 31	3,600		17	6,500			15	2,000		29	2,600
		ean	4,670	:	Eean	6,395			Eean	2,090	·	can	3,790
76	Deç.	, <b>7</b> ,	5,000	Jan.	<b>33</b> .	5,100	1980	Sov.	11	3,100	Dec.		2,000
	. :	8.	3,200		12	5,600			12	2,900		2	1,850
		9	3,500		13	4,800			13	2,900		3	1,800
		10	2,800		14	6,800			34	2,930		. 4	2,200
		<b>31</b>	2,450		15	5,600			15	2,900		5	4,300
		12	2,600		16	4,800			16	3,160		6	3,300
: .	:	13	1,900		17	4,400		. :	27	3,900		. 1	4,300
		14	1,900	٠.	18	3,700			16	3,000		8	3,800
		15	1,900		19	3,700	:		19	3,600		. 9	4,000
 		16	3,300		20	3,700			20	3,900		10	
		ean	2,850	11.		4,820					•	1.0	6,200

Table 4.1 General Features of Existing Plans

		Description		DOI Plan	Master Plan
١.	Name o	of project	:.	Bila Irrigation Project	Bila Irrigation Project
•	Source	e of irrigation water		Bits river	Bila river
	Net is	rigation area	(ha)	9,288 (Final design 1980)	10,500
	Maxim	m diversion water requirement	(m³/sec)	14.6	13.8
		t facilities			13.0
•	-	His intake structure			
	-	location		3 Km downstream of confluence	
				with the Setau river	1 Km upstream of the DOI site
	•	Catcheent area	(1,11 <sub>5</sub> )	370	376
	3	dverbed EL.	(EL.m)		
		Seology		Conglocerate	Conglowerate
		Design flood	(m3/sec)	1,135	1,200
	:	feir type		Cascade type	Concrete gravity type
		Yest EL.	(EL.a)	39.3	35.0
		feir height	(a)	8.3	13.5
		Crest length	(a)	70 p includ. scoring sluices	86 m with width of pier
		Scouring sluice		2.0 m width x 2 mos.	8 m vidth x 2 nos.
	1	intake gate	:	Left bark; 2.0 m width x 3 cos. Right bark;	Left bank; 2.0 m width x 6 nos.
				1.3 a vidth x 1 ao.	
		farth estankment		Crest EL. 36.15 m	Crest Et. 40.3 m
	(2)	Irrigation canal			
-	1	Sain caral	i		•
		Type		Trapezoidal earth canal	Tracezoidal earth canal
		Length	(IS)	left; 21.0 Right; 2.3	Left; 42.0 Right; 1.0
		Discharge	(x³/sec)	Left : 12.1 to 5.8 Fight: 2.5	Left ; 12.2 to 1.9 Right; 1.6
	:	Secondary canal			
-		Type		Trapezoidal earth canal	Trapezoidal earth canal
		Leagth	<b>(</b> ₹.2 <b>)</b>	81.3	91
	٠.	K-zčet	(Nos.)	<b>65</b>	11
	(3)	Drainage canal			
	15	Canal type		<del>-</del> , ·	Tragezoidal earth canal
-		length	(Kn)		63
	(4)	Tertiary system			
•		Area to be served		(under designing)	10,500
	11	Textisky unit			Average 150 ha
		Facilities			Tertiary and quaternar canal, tertiary and quaternary drain and
					farm road
	(5)	tand preparation	:	•	200 ha

Tablo 4.2 Water Balance Study in Master Plan

Tel Ta Ts Qr Ud Ta Ts Qr Oct Doll 137 10,500 10.11 137 10,500 10.11 137 10,500 10.11 137 10,500 10.11 137 10,500 10.11 13.0 10,500 10.12 10.500 11.500 11.2 0.63 11.9 10,500 12.2 0.63 11.9 10,500 12.2 0.63 11.9 10,500 12.2 0.14 201.0 7,500 14.8 10,500 13.1 1.01 13.0 7,500 14.8 10.500 13.1 1.01 13.0 7,500 14.8 10.500 13.1 1.01 13.0 7,500 14.8 10.500 13.1 1.01 13.0 7,500 14.8 10.500 13.1 1.01 13.0 7,500 14.8 10.500 13.3 1.0 10.500 11.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Vont)						q	1					
26.6 0.03 NL 10.500 15.1 0.11 137 10.500 10.1 45.2 0.28 66.1 10.500 23.7 25.4 0.26 0.39 116 10.500 16.8 0.46 36.5 10.500 23.7 28.5 0.46 36.2 10.500 33.7 28.2 0.46 10.500 12.2 0.63 18.8 10.500 33.3 36.1 28.2 0 NL 10.500 12.2 0.63 18.8 10.500 33.3 36.1 28.2 0 NL 10.500 12.2 0.63 18.8 10.500 28.9 14.8 10.500 14.8 28.1 0.78 36.0 6.600 18.3 0.77 23.8 7.500 14.8 28.1 0.78 36.0 6.600 13.1 1.01 7.5 7.500 14.8 28.9 0.59 14.9 0.55 52.2 7.500 14.8 28.9 0.59 14.9 0.55 52.2 0.14 201.0 7.500 14.8 28.9 0.59 14.9 0.55 52.2 0.13 22.7 7.500 10.0 10.0 10.0 10.0 10.500		, O	gg	T.	s; H	ž	3	e T	S.T.	ä	g	Ia	SI
45.2 0.39 116 10,500 16.8 66.1 10,500 25.4 56.5 0.28 66.1 10,500 25.4 56.5 0.39 116 10,500 16.8 0.46 36.5 10,500 25.4 56.5 0.84 60.2 10,500 33.3 1.9 0.53 18.8 10,500 33.3 3.3 3.5 10,500 15.2 0.84 60.2 10,500 33.3 18.8 10,500 18.3 0.77 23.8 7,500 14.8 10.5 0.5 0.5 10.5 0.5 10.5 0.5 10.5 0.5 10.5 0.5 10.5 0.5 10.5 0.5 0.5 10.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	7	3 %	0.0	ţ		1.5.1	0.11	137	o	10.1	0:14	72.1	10,500
25.6 0.8 NT 10,500 16.8 0.46 36.5 10,500 25.4 25.7 0.84 60.4 10,500 11.2 0.63 18.8 10,500 36.1 33.3 35.1 0.500 11.500 11.2 0.63 18.8 10,500 37.2 10,500 37.2 10,500 37.3 31.3 10,500 11.0 0.26 56.2 0.18 10,500 11.0 0.26 56.2 0.18 10,500 11.0 0.75 56.2 0.600 11.3 1.01 1.01 1.3 0.7,500 11.0 0.26 56.0 11.0 1.3 1.3 1.5 1.5 0.5 14.9 6,600 11.3 1.01 1.01 1.3 0.7,500 11.0 0.5 5.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5		) (		3 9		( V)	0.28	ق	10,800	33.7	ó	ঠ	10,500
The contraction of the contracti	> § ,	1 t	) ) (	2 1	•	) (d	) (   \d		10,500	25.4	90.0		10,500
28.2 0 NL 10,500 21.2 0.63 18.8 10,500 47.2 36.3 18.8 10,500 47.2 36.3 18.8 10,500 28.3 18.8 10,500 28.9 14.9 6,600 18.3 0.77 23.8 7,500 14.8 28.9 14.9 6,600 18.3 0.77 23.8 7,500 14.8 28.9 1.17 6.6 6,600 18.3 0.77 23.8 7,500 14.8 28.9 0.59 14.9 6,600 28.7 0.55 52.2 7,500 11.0 5.6 5.6 0.500 13.3 1.01 1.01 1.3.0 7,500 11.0 5.6 5.6 0.500 13.3 1.3 1.01 1.3.0 7,500 11.0 5.6 5.6 0.500 10.5000 10.5000 10.500 10.500 10.500 10.5000 10.5000 10.5000 10.5000 10.5000 10.5000 10.5	9	20.07	) )	2 (	•	9 6	) (	) c	000	ر د .	6 6	68.1	10,500
28.2 0 NL 10,500 12.2 0.63 18.8 10,500 47.2 18.5 18.5 10,500 47.2 18.5 0.15 130 6,600 18.3 0.77 23.8 7,500 14.8 10.5 0 14.8 10.5 0 14.8 1.01 7,500 14.8 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	747.		40.0	9.00	•	٠ ١	7	7.00	) () () () () () () () () () () () () ()		•	166	10.500
19.5 0.15 130 6,600 28.2 0.14 201.0 7,500 28.9  14.6 0.26 56.2 6,600 18.3 0.77 23.8 7,500 14.8  28.1 0.78 36.0 6,600 13.1 1.01 13.0 7,500 11.0  28.1 0.78 36.0 6,600 13.1 1.01 13.0 7,500 11.0  28.1 0.78 36.0 6,600 13.1 1.01 13.0 7,500 11.0  28.1 0.78 36.0 6,600 28.7 0.55 52.2 7,500 11.0  28.2 0.59 14.9 6,600 28.7 0.55 52.2 7,500 10.0  28.3 0.59 14.9 6,600 29.5 0.13 227 7,500 10.500 1974/75  21.6 0.56 10,500 17.2 0.38 45.3 10,500 1975/76  10.9 0.43 22.3 10,500 17.2 0.54 31.9 10,500 1975/76  11.8 0.48 24.6 10,500 17.2 0.54 31.9 10,500 1975/76  11.9 0.17 28.8 9,000 2.4 0.25 9.6 6,300 Average  9.5 1.05 9.0 9,000 31.0 0.94 33.0 6,300 Average  9.5 1.05 9.0 9,000 31.0 0.94 27.7 6,300 Average	Aug.	•	0	艺	•	12.2	0.63	18.8	10,500	رن به در	S	9 1	2000
th. 6 0.16 56.2 6,600 18.3 0.77 23.8 7,500 14.8 14.6 0.26 56.2 6,600 18.3 0.77 23.8 7,500 14.8 18.9 0.77 1.17 6.6 6,600 13.1 1.01 13.0 7,500 11.0 5.6 8.8 0.59 14.9 6,600 28.7 0.55 52.2 7,500 11.0 5.6 8.8 0.59 14.9 6,600 28.7 0.55 52.2 7,500 3.5 5.6 5.6 0.50 14.9 6,600 23.3 0 NL 7,500 10.0 10.0 10.0 10.0 10.0 10.0 10.0 1	90		0	K	•	54.2	Ο,	N.	ं	47.2	o .	H.	10,500
th. 6 0.15			·			α	41.0		7,500	00	60.0	321	10,500
th constant of the constant of	2	•	•	) (		1 C		0 00	, r	4	0.03	15.9	10,500
28.1 0.78 36.0 6,600 13.1 1.01 1.3.0 7.50 5.50 5.5 5.2 7,500 5.6 8.8 0.59 14.9 6,600 23.3 0 NL 7.5 7,500 10.0 10.0 10.50 10.500 10.50 10.500 10.50 10.500 10	20%	14.6		56.2	0,000	7.2		0 0	1 .	,		7	10.500
T.7 1.17 6.6 6,600 9.8 1.31 7.5 7,500 5.6 3.5 8.8 0.59 14.9 6,600 28.7 0.55 52.2 7,500 10.0 10.0 10.0 10.0 10.0 10.0 10.0 1	Sec.	28.1		36.0	6,600	13.1	101 101	) · · · · · · · · · · · · · · · · · · ·	200,	4 1	) ( ) (	· ·	
th Or Ud Is 10,500 14.9 6,600 28.7 0.55 52.2 7,500 10.0  2.7 0 NY 6,600 23.3 0 NY 7,500 10.0  2.1 0	Jan	7.7		9.9	6,600	တ တ	1.31	7.5	7.500		9	) (	5 6
th Or Ud Is S.7 0 NL 6,600 23.3 0 NL 7,500 10.00  th Or Ud Is S.7 10,500 29.5 0.13 227 10,500 1973/74  21.6 0.56 38.6 10,500 17.2 0.38 45.3 10,500 1974/75  16.5 0 NL 10,500 17.2 0.38 45.3 10,500 1974/75  10.9 0.43 25.3 10,500 10.6 0.84 12.6 10,500 1975/76  11.8 0.48 24.6 10,500 17.2 0.54 31.9 10,500 1976/77  2.9 0 NL 10,500 2.4 0.25 9.6 6,300 1977/78  4.9 0.17 28.8 9,000 2.4 0.25 9.6 6,300 Average 9.5 1.05 9.0 9,000 18.3 0.66 27.7 6,300 Minimum 9.5 1.02 9.0 9,000 18.3 0.66 27.7 6,300 Minimum	( e			14.9	6,600	28.7	0.55	52.2	7,500		0.0	۸ ۱	•
th Or Ud Is Ta Is Or Ud Is Is Sold Is Is Year Ta Is Or Or Ud Is Is Is Or Or Ud Is	7 a		<b>,</b>	Ę	6,600	23.3	0	넍	7,500	•	0	N	TO. 500
th Or Ud Is Is Or Ud Is Is Is Or Ud Is	ļ												
th Or Ud Is Is Or Ud Is Is Or Ud Is Is Is Xear  7.8 0.14 55.7 10,500 29.5 0.13 227 10,500 1973/74  21.6 0.56 38.6 10,500 17.2 0.38 45.3 10,500 1974/75  10.9 0.43 25.3 10,500 17.2 0.84 12.6 10,500 1976/77  11.8 0.48 24.6 10,500 17.2 0.54 31.9 10,500 1976/77  2.9 0 NL 10,500 17.2 0.54 31.9 10,500 1976/77  2.9 0 NL 10,500 2.4 0.25 9.6 6,300 Average 1.05 9.0 9,000 31.0 0.94 33.0 6,300 Minimum 9.2 1.02 9.0 9,000 18.3 0.66 27.7 6,300 Minimum		-1	-			- 1						(unit	it. ha
th Or Ud Is Is Or Ud Is Is Is Sold Is			, 976	1011			1977/	1978	::		Summary	nary	
21.6 0.56 38.6 10,500 29.5 0.13 227 10,500 1973/74 21.6 0.56 38.6 10,500 17.2 0.38 45.3 10,500 1974/75 10.50 10.50 10.50 10.50 1974/75 10.50 10.50 10.50 10.50 1974/75 10.50 10.50 10.50 1976/77 10.50 10.50 1976/77 10.50 10.50 1976/77 10.50 10.50 1977/78 4.9 0.17 28.8 9,000 2.4 0.25 9.6 6.30 Average 5.5 1.05 9.0 9,000 31.0 0.94 33.0 6.30 Minimum 9.2 1.02 9.0 9,000 18.3 0.66 27.7 6,300 Minimum 9.2 1.02	Cath		70/67	1,7		3	701	EH	IS	T CONT	Rainy Season	ason Dry	y Season
7.8 0.14 55.7 10,500 29.5 0.13 227 10,500 17.2 0.38 45.3 10,500 17.2 0.38 45.3 10,500 17.2 0.38 45.3 10,500 10.9 0.43 24.6 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 11.5 0.54 21.3 9,000 2.4 0.25 9.6 6,300 6.3 6,300 9.5 1.05 9.0 9,000 31.0 0.94 33.0 6,300 9.5 1.02 9.0 9,000 18.3 0.66 27.7 6,300 9.2		ä	g D	7.0		Ž,	3						
21.6 0.56 38.6 10,500 17.2 0.38 45.3 10,500 16.5 0 Nt. 10,500 10.9 0.84 12.6 10,500 10.9 0.84 12.6 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.5 0.94 33.0 6,300 9.5 1.05 9.0 9,000 31.0 0.94 33.0 6,300 9.2 1.02 9.0 9,000 18.3 0.66 27.7 6,300 9.2	, AG	7.89		55.7	•	29.5	0.13		10,500	1973/74	10,500	8	0 0 0
14.5 0 NT 10,500 25.8 0 NT 10,500 10.6 0.84 12.6 10,500 11.8 0.48 24.6 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.2 0.54 31.9 10,500 17.5 0 NT 10,500 17.5 0 NT 10,500 11.5 0.54 21.3 9,000 2.4 0.25 9.6 6,300 11.5 0.54 21.3 9,000 31.0 0.94 33.0 6,300 9.5 1.02 9.0 9,000 18.3 0.66 27.7 6,300 9.2	>5	21.6		•	ò	17.2	0.38	45.3	10,500	1974/75	10,500	0	7,500
10.9 0.43 25.3 10.500 10.6 0.84 12.6 10.500 11.8 0.48 24.6 10.500 17.2 0.54 31.9 10.500 17.2 0.54 31.9 10.500 2.9 0 NL 10.500 2.4 0.25 9.6 6.300 2.4 0.25 9.6 6.300 2.5 0.40 6.3 6.300 9.5 1.05 9.0 9.000 31.0 0.94 33.0 6.300 9.5 1.02 9.0 9.000 18.3 0.66 27.7 6.300	i i			片	•	25.8	Ö	넔	10,500		•		0
11.8 0.48 24.6 10,500 17.2 0.54 31.9 10,500 2.9 0 NL 10,500 2.5 0 NL 10,500 11.5 0.25 9.6 6,300 11.5 0.54 21.3 9,000 2.4 0.25 9.6 6,300 9.5 1.05 9.0 9,000 31.0 0.94 33.0 6,300 9.5 1.02 9.0 9,000 18.3 0.66 27.7 6,300			4		•	10.6	0.84	12.6	10,500	19/5//6	ON COT	3	30.
2.9 0 NI 10,500 2.5 0 NI 10,500 1.5 0 1.5	, pay	8.11	4		•	17.2	0.54	9. IE	10,500	1976/77	10,500	8	000
4.9 0.17 28.8 9,000 2.4 0.25 9.6 6,300 11.5 0.54 21.3 9,000 2.5 0.40 6.3 6,300 9.5 1.05 9.0 9,000 31.0 0.94 33.0 6,300 9.2 1.02 9.0 9,000 18.3 0.66 27.7 6,300	Q Q	2.9	•	技	•	ς, Ω	0	벍	10,500		•		700
11.5 0.54 21.3 9,000 2.5 0.40 6.3 6,300 9.5 1.05 9.0 9,000 31.0 0.94 33.0 6,300 9.2 1.02 9.0 9,000 18.3 0.66 27.7 6,300			1			4.0	0.25	9	6,300	81/1/61	200.01	3	220
11.5 0.54 71.3 9,000 31.0 0.94 33.0 6,300 9.2 1.02 9.0 9,000 18.3 0.66 27.7 6,300		1		9 6	•	ů Ĉ	04.0	4	6.300				000
9.5 1.05 9.0 9,000 18.3 0.66 27.7 6,300	Ş	~	90.0	5.43	•	:.			000	Average		3	0
9.2 1.02 9.0 9,000 18.3 0.66 27.7 9,300	.00	ห <u>ุ</u> ด	1.05	0	•	31.0	0 (				000	9	200
	T T	9.3	1.02		•	18.3	99.0	27.7	200	MUMTUTM	0 OT	3	2
.2 0.60 22.0 9,000 11.7 0.65 18.0 6,30	ç	ന	09.0	22.0	000	11.7	0.65	18-0	6,300				
7.7 0 7.7	7	~	0	岩	•		ſ	•	\; <b>!</b> ;				

Table 4.3 Past Activities made by DOI

	Work Items	
	NOTA ECCHO	Descriptions
1.	Topographic mapping : and survey	Topographic mapping on a scale of 1:5,000 covering 13,000 ha with contour interval of 1 m by P.T. TRICON in 1976.
		Longitudinal and cross section survey of main and secondary canals by P.T. TRICON in 1979.
2.	Geological : investigation	Geological investigation on coupure/intake site by P.T. TRICON in 1976 and 1978
	er en	(a) Test pitting, 2 to 3 m in depth of 20 sites
		(b) Hand augering, 1.8 to 3.5 m in depth of 7 sites
	e e e e e e e e e e e e e e e e e e e	(c) Standard penetration testing, 15 m in depth of 1 site
		Geological investigation on canal route and structure sites by P.T. TRICON in 1976 to 1978; by means of Deutch cone penetration testing, 2.0 to 4.5 m in depth of 26 sites.
3.	Soil rechanical : investigation	Soil mechanical investigation on intake site, canal route and structure sites by P.T. TRICON
•		(a) Intake site by Deutch cone penetration testing, 2.9 to 7.8 m in depth of 7 sites
		(b) Canal route and structure sites by Deutch cone penetration testing, 1.8 to 16.0 m in depth of 27 sites.
4.	Hydraulic model test :	Hydraulic model test of the preliminary design of intake structure by DPMA in 1977.
5.	Detailed design :	Detailed design of intake structure, main and secondary irrigation canals and related structures by P.T. WECON.

## Table 4.4 List of Reports and Drawings prepared by DOI

No.	•			Description
1.	Bila 1	rrigat	ion	Project in South Sulavesi, Design and Drawings by P.T. WECON.
	Volume	1:	Bi	la Weir
	Volume	11:	A.	Design of Bila Kanan main canal, Palabulu secondary canal section 1 and 2, Bila Parat secondary canal
			8.	Design of division structures/turnout and crossing structures for the above canal
	Volume	111:	A.	Design of Falabulu secondary canal from section 3 to section 9
				Design of division structures/turnout and crossing structures for the above canal
	Volume	w:	λ.	Design of Bila Kiri rain canal from BBKR. 10
				Design of division structures/turnout and crossing structures for the above canal
	Volume	V2		Design of Bila Kiri main canal from BBKR. 10 to BBKR. 18 and Jordany secondary canal from BBKR. 18 to B.J.2
			В.	Design of division structures/turnout and crossing structures for the above canal
	Volume	VI:	λ.	Design of Joebang secondary canal from section 3 to section 10 and tonking secondary canal
				Design of division structures/turnout and crossing structures for the above canal
	Volume	VII:		Design of Joshang secondary canal from section 11 to section 17 and follow secondary canal
			B.	Design of division structures/turnout and crossing structures for the above canal
	Volume	VIII:		Design of Febiah secondary canal
				Design of division structures/turnout and crossing strucutres for the above canal
	Volume	IX:		Design of Kalosi secondary canal and Logong secondary canal
				Design of division structures/turnout and crossing structures for the above canal
	Volume	X:		Design of False secondary canal from SEKR. 10 to B.P.11
				Design of division structures/turnout and crossing structures for the above canal
	Volume	XI.		
				Design of False secondary canal from B.F.11 to S.M.F.14 TG. Uebul and Londra secondary canal
			В.	besgin of division structures/turnout and crossing structures for the above canal
2.	Pila Ir Trrigat	rigati ion Pr	on P ojec	roject in South Solawesi, design and drawings. Layout of tertiary block of Bila t by P.T. NECCO.
3.	Bila Ir	rigati	ca F	roject in South Selevesi. Final design of Bila weir by P.T. VECCON.
4.	Feport Enginea	on roc ring.	el t	est for hydraulic characteristic of Bila weir. No. P.434 by Directorate of Hydraulic
<b>s.</b>	Geologi	cal ar-	اختا	11 perhantnat talangan sa
	caral a	nd rel	ated	il sechanical investigations on exhantment material for the proposed Bila veir, main structures from structures EB.O to BEFR. 17, by P.T. TRICON.

- Geological and soil mechanical investigations on the proposed Bila weir site by P.T. TRICON.
- Topographic maps on a scale of 1:5,000.
- General layout of irrigation canal system on a scale of 1:25,600.

Table 4.5 Basic Values for Estimate of the Irrigation Water Requirement

	Description	DOI. Plan	Master Plan
1.	Method	Empirical prediction method by modified penman method	Prediction method by the product of with crop coef- ficient
2.	Crop coefficient		
	1st month	1.10	0.85, 1.10 (half month)
:	2nd month	1.35	1.20, 1.32 (half month)
	3rd ronth	1.30	1.30, 1.12 (half month)
	4th month	1.05	0.85 - (half month)
3.	Puddling water requirement	180 mm	120 mm
4.	Percolation rate	6, 5, 4 and 2 mm/day for 1st, 2nd, 3rd and 4th months	l rsv/đay
5.	Irrigation efficiency	•	
	Conveyance loss	10 %	20 %
	Application loss	20 %	15 %
	Total irrigation efficiency	<b>72</b> %	68 %
6.	Maximum diversion requirement	1.80 lit/sec/ha	1.31 lit/sec/ha

Table 4.6 Revised General Features of Master Plan and DOI Plan

		Description	1 1	DOI Plan	Master Plan
l.	Proj	ect Area			
		antee irrigation area		8,500	10,000
	(1)	Wet Season Cropping	(ha)	4,600	4,600
	(2)	Dry Season Cropping	(ha)	2,600	2,600
•	Wate	r Source		Bila river	Bila river
•	Irri	gation Water Requireme	ent ( <b>/</b> /sec/ha)	2.0 x ≪	1.65
.:	Proj	ect Facilities			
	(1)	Bila intake			
					en personal de la companya de la co
		- Intake structure si	ite	3 km downstream	1 km upstream of
				of confluence	DOI Site
				with Betau river	
		- Туре		Masonry Cascade	Concrete gravity
		- Diversion method		Coupure method	Multiple stage method
		- Intake water level	(EL.E)	30.0	35.0
		- Weir height	(m)	8.3	17.2
	(2)	Irrigation canals			
		- Main canal	(km)	22.4	45,7
		- Secondary canal	(km)	103.3	74.2
		- Tertiary system	(ha)	8,500	10,000
	(3)	Drainage canals	(km)	81.0	مه د
				01.0	92.5
	(4)	Road system	(km)	28.0	29.0
•	Exte	nt of Irrigation Area			
	٠.	From:	(EL.a)	30.0	35.0
	4.0		•		

Table 4.7 Revised Work Quantities of Master Plan and DOI Plan

Tritidate Wail   Conal System   Co		Description	mit	Plan	Plan	The state of the s	2 TuO	Plan	nal q
2. Irrigation Canal System  (1) Main canal  (2) Main canal  (3) 476,000 4,500 Exervation  (4) 8,600 2,700 Exervation  (5) 8,600 2,700 Exervation  (6) 9,700 Exervation  (7) 1,000 Exervation  (7) 1,000 Exervation  (7) 1,000 Exervation  (8) 1,000 Exervation  (8) 1,000 Exervation  (9) 1,000 Exervation  (9) 1,000 Exervation  (1) 1,000 Exervation  (2) 1,000 Exervation  (2) 1,000 Exervation  (3) 1,000 Exervation  (4) 1,000 Exervation  (4) 1,000 Exervation  (5) 1,000 Exervation  (6) 1,000 Exervation  (7) 1,000 Exervation  (8) 1,000 Exervation  (8) 1,000 Exervation  (9) 1,000 Exervation  (1) 1,000 Exervation  (1) 1,000 Exervation  (2) 1,000 Exervation  (8) 1,000 Exervation  (9) 1,000 Exervation  (1) 1,000 Exervation  (1) 1,000 Exervation  (2) 1,000 Exervation  (3) 1,000 Exervation  (4) 1,000 Exervation  (5) 1,000 Exervation  (6) 1,000 Exervation  (7) 1,000 Exervation  (8) 1,000 Exervation  (9) 1,000 Exervation  (1) 1,000 Exervation  (1) 1,000 Exervation  (2) 1,000 Exervation  (3) 1,000 Exervation  (4) 1,000 Exervation  (6) 1,000 Exervation  (7) 1,000 Exervation  (8) 1,000 Exervation  (9) 1,000 Exervation  (1) 1,000 Exervation  (1) 1,000 Exervation  (2) 1,000 Exervation  (3) 1,000 Exervation  (4) 1,000 Exervation  (5) 1,000 Exervation  (6) 1,000 Exervation  (7) 1,000 Exervation  (8) 1,000 Exervation  (9) 1,00									
(iii) 476,000 4,500 Executade (iii) 542,000 1.0.0 Executade (iiii) 1.0.0 Executade (iiiii) 1.0.0 Executade (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		Intake Wear							
(m <sup>2</sup> ) 47600 4,500 Excesseion (m <sup>2</sup> ) 451000 10.200						4.			
(m <sup>2</sup> ) = 2,700 Sod facing (m <sup>2</sup> ) = 2,700 Sod facing (m <sup>2</sup> ) = 2,700 Sod facing (m <sup>2</sup> ) = 2,200 for Canal Lating (m <sup>2</sup> ) = 2,200 for Sod facing (m <sup>2</sup> ) = 1,200 for Soc facing (m <sup>2</sup> ) = 1,000 f		ATOM COTTON	4	476 000	005.7		(Em)	631,000	1,323,000
(m <sup>3</sup> ) = 900 Canal Lining (m <sup>3</sup> ) = 125,000 Retained Concrete (m <sup>3</sup> ) = 1,200 Canal Lining (m <sup>3</sup> ) = 1,200 Canal Lining (m <sup>3</sup> ) = 1,200 Canal		EXCAVA GLOD			2.700	はいいない。	(EE)	541,000	1,041,000
(m <sup>2</sup> ) 8,600 2,000 Net stone masont (m <sup>2</sup> ) 1,200 1,200 (m <sup>2</sup> ) 8,600 2,000 Net stone masont (m <sup>2</sup> ) 1,200 (m <sup>2</sup> ) 1,200 Net stone masont (m <sup>2</sup> ) 1,000 Net Network (m <sup>2</sup> ) 1,000 Network (m <sup>2</sup> ) 1,00		1	) (F)		000	Social factory	(£	329,000	635,000
(m <sup>2</sup> ) 8,600 Relationship pavement (m <sup>2</sup> ) 1,200 Excavation (m <sup>2</sup> ) 2,000 Retained concrete (m <sup>2</sup> ) 1,4,600 Retained concrete (m <sup>2</sup> ) 1,000 1,000 Retained concrete (m <sup>2</sup> ) 1,000 2,000 Sed facing (m <sup>2</sup> ) 2,000 3,500 Sed facing (m <sup>2</sup> ) 2,000 3,000 Sed facing (m <sup>2</sup> ) 1,000 Sed fac		Plain concrete	C E		8	Canal lining	(ZE)	•	114,100
(m <sup>3</sup> ) 8,600 (m <sup>3</sup> ) 1,200 (m <sup>3</sup> ) 1,000 (m <sup>3</sup>						Asobalt Devement	(m <sup>2</sup> )	67,200	136,100
(m <sup>3</sup> ) 6,600 2,000 (2) Secondary canal (m <sup>3</sup> ) 14,600 (m <sup>3</sup> ) 10,000 (m <sup>3</sup>		Incake wear	Ę,	i	000 361	Reinforced congrete	e E	7,200	002,4
100   1,000   Matel works   (ton)   2		EXCAVACE OF	`ń	8	000.6	Ken stone second	(т.)	14,600	18,900
rete (m <sup>2</sup> ) 100 1,000 (2) Secondary canal (m <sup>2</sup> ) 94,000 (m <sup>2</sup> ) 2,000 2,600 2,600 8 Extintil (m <sup>2</sup> ) 91,000 8 64,000 (m <sup>2</sup> ) 2,000 1,000 8 64		540×144	'n		000	Matal works	(ton)	ก	<b>S</b>
Compared to the content of the con		Plain concrete	Ē		000				
(m²) 36,200		Reinforced concrete	î.	00	7,000				
(m <sup>2</sup> ) 2,000 2,600 Exarthilli (m <sup>2</sup> ) 913,000  Sed facing (m <sup>2</sup> ) 2,000 2,600 Sed facing (m <sup>2</sup> ) 913,000  Sed facing (m <sup>2</sup> ) 218,700  Sed facing (m <sup>2</sup> ) 218,700  Sed facing (m <sup>2</sup> ) 218,700  Sed facing (m <sup>2</sup> ) 11,000  Sed facing (m <sup>2</sup> ) 12,000  Sed facing (m <sup>2</sup> ) 1,024,000  Sed facing (m <sup>2</sup> ) 1,000  Sed facing (m		Wet stone masonry	ે E )	36,200	ľ				***
(m <sup>2</sup> ) 2,000 2,600 Searchfill (m <sup>2</sup> ) 921,000  Lote (m <sup>2</sup> ) 32 18 Sealing (m <sup>2</sup> ) 213,700  Lote (m <sup>2</sup> ) 400 Ancluded in Wet stone maneonry (m <sup>2</sup> ) 14,2800  Lote (m <sup>2</sup> ) 11,000 26,300 3. Drainage Canal System (m <sup>2</sup> ) 1,024,000  (m <sup>2</sup> ) 86,000 10,000 Excevation (m <sup>2</sup> ) 1,024,000 1,000  (m <sup>2</sup> ) 6,000 10,000 Wet stone masonry (m <sup>2</sup> ) 1,99,000  (m <sup>3</sup> ) 2,400 2,000 Wet stone masonry (m <sup>2</sup> ) 1,80,000  (m <sup>3</sup> ) 2,400 2,000 Wet stone masonry (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,80,000 Excevation (m <sup>3</sup> ) 1,80,000  The stone masonry (m <sup>3</sup> ) 1,90,000 Excevation (m <sup>3</sup> ) 1,90,000  The stone masonry (m <sup>3</sup> ) 1,000 Excevation (m <sup>3</sup> )		Curtain erouting	æ	•	3,500	が欠めておけらり	() E	484,000	286,000
(m²) 32 18 Sod facing (m²) 902,000  Asphalt pavement (m²) 218,700  Reduced concrete (m³) 12,900  Team (2) Hetal works (fon) 11,000  Team (2) 11,000 26,300  Team (2) 11,000 Excavation (m³) 1,024,000  Team (2) 10,000 Excavation (m³) 1,0024,000  Team (2) 10,000 Excavation (m³) 1,0024,000  Team (2) 10,000 Excavation (m³) 1,000  Team (2) 10,000 Excavation (m³)		-	4	2.000	2,600	数なかないよう	(a)	9,3,000	671,000
Asphalt pavement (m <sup>2</sup> ) 218,700 22		Cabaon	7		96	Sed factor	(m)	902,000	336,000
(m <sup>3</sup> ) 400 included in Het atone mansonry (m <sup>3</sup> ) 14,800 11 11,000 26,300 3. Drainage Canal System (m <sup>3</sup> ) 1,024,000 1,14 (m <sup>3</sup> ) 1,024		Special	( IE)	3	3	は行きをうちなり、私におから	(E)	218,700	222,600
(m3)     400     included in trom     wer stone mansonry     (m3)     12,800     11       (m3)     11,000     26,300     3. Dradnage Canal System     (m3)     1,024,000     1,124,000       g     (m)     -     4,800     Excavation     (m3)     1,99,000     1,24,000       g     (m3)     2,400     10,000     Wet stone masonry     (m3)     4,200       g     (m3)     2,400     10,000     Wet stone masonry     (m3)     59,000     1,500       g     (m3)     2,500     4,200     4,200     4,200     4,200     1,58,000     1,58,000     1,58,000       g     (m3)     5,300     6,300     1,600     2,200     6,000     1,000     2,200     6,000     1,000 <td< td=""><td></td><td></td><td>,</td><td></td><td></td><td>The Carton Concrete</td><td>E E</td><td>906</td><td>468</td></td<>			,			The Carton Concrete	E E	906	468
Mark accept (m²)   400   Ancided an mark accept (m²)   11,000   26,300   3. Drainage Canal System (m²)   1,024,000   2,300   2,400   Excavation (m²)   1,024,000   2,400   2,400   2,400   2,400   2,000   Mainforced concrete (m²)   2,500   Mainforced concrete (m²)   2,500   Mainforced (m²)   2,50		Inspection brings		***			(13)	008	17,400
Ttom (2)   Ttom (2)   Metal Works   Cont.		Reinforced concrete	î E	400	ğ :		\ 101\	) ·	6
Maphamic (m3)   11,000   26,300   3. Dradnage Canal System (m3)   1024,000   1.5     Matter (m3)   8,000   78,400   26,300   2,800     Matter (m3)   6,000   10,000   2,000     Matter (m3)   2,400   2,000   2,000     Matter (m3)   2,400   2,000   2,000     Matter (m3)   2,400   3,800   4. Farm Road Network (m3)   59,000     Matter (m3)   2,300   2,000   2,000     Matter (m3)   2,300   2,300   2,300     Matter (m3)   2,300   3,300     Matter (m4)   3,300   3,300     Matter (m5)   3,300   3,300     Matter						Metal sorks	(1001)	4	1
Action (m <sup>3</sup> ) 11,000 26,300 3. Drainage Canal System (m <sup>3</sup> ) 1,024,000 1  An grouting (m) - 4,800 Earthfill (m <sup>3</sup> ) 1,024,000 1  An grouting (m) (m <sup>3</sup> ) 6,000 10,000 Reinforced Concrete (m <sup>3</sup> ) 9,500 1  An onerete (m <sup>3</sup> ) 2,400 2,000 Wet stone masonry (m <sup>3</sup> ) 59,000 1  Concrete (m <sup>3</sup> ) 2,400 2,000 (m <sup>3</sup> ) 59,000 (m <sup>3</sup> ) 158,000 (m <sup>3</sup> ) 158,000 (m <sup>3</sup> ) 1,800 (m <sup>3</sup> ) 1		Earth embankment	,						
### ### ##############################		Excavation	(a.	00011	26,300				
### ### ##############################		Karch #122	(£	88,000	78,400		•	•	
Earthfill (m3) 6,000 10,000 Gabion (m3) 9,500 Gabion (m3) 9,500 (m3) 2,400 2,000 2,000 (m3) 9,500 (m3) 2,400 2,000 (m3) 2,400 (m3) 2,000 (m3) 2,500 (m3) 2,500 (m3) 2,500 (m3) 2,500 (m3) 2,500 (m3) 2,500 (m3) 2,000 (m3) 2		\$ 0,44500 C 44500	Ē		4,800	Bacavation	(ફ ફ	1,024,000	1,148,000
Cablon     (m³)     9.500       Action     (m³)     40       Action     2,000     10,000     wet atone masonry     (m³)       Action     2,000     4. Farm Road Network     (m³)     580       Corced concrete     (m³)     250     3,800     4. Farm Road Network       Stone masonry     (m³)     1,800     280     28,000       Solo     Excavation     (m³)     158,000       Solo     Excavation     (m³)     1,800       And     Antion     (m²)     1,800       Antion     (m²)     <						BATCHELL	(EE)	199,000	227,000
### ### ### ### ### ### ### ### ### ##		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			. •	Cabion	(EE)	9.500	3,88
(m <sup>2</sup> ) 2,400 2,000 wet atone meaonry (m <sup>3</sup> ) 2,400 2,000 wet atone meaonry (m <sup>3</sup> ) 2,500 4. Farm Road Network (m <sup>3</sup> ) 2,900 (m <sup>3</sup> ) 2,900 (m <sup>3</sup> ) 3,900 Excavation (m <sup>3</sup> ) 158,000 Earthfill (m <sup>3</sup> ) 158,000 (m <sup></sup>	ò	Intoxe	, F	*	400	それをおりむくと からかさんきょう 中国	ς E	9	8
(m <sup>2</sup> ) 2,400 2,000  Wet stone masonity (m <sup>3</sup> ) - 4,200  4. Farm Road Network (m <sup>3</sup> ) 59,000  5.300 - Excavation (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 158,000  (m <sup>3</sup> ) - 1,800 Earthfill (m <sup>3</sup> ) 15		EXCAVATION	E	0000	200	)	, (i)	Cay	068
## 4,200  4. Farm Road Network  ## concrete (m <sup>3</sup> ) 2.50 3,800  ## concrete (m <sup>3</sup> ) 5,300  ## Excavation (m <sup>3</sup> ) 158,000  ## Asphalt pavement (m <sup>2</sup> ) 84,000  ## Concrete pipe (# 300) (m) 450  ## Excavation (m <sup>3</sup> ) 8500		なるのとかしし	າ E `	2,400	2,000	Ver grone mesonry	C E	200	Ì
(m <sup>3</sup> ) 250 3,800 4. Farm Road Network.  (m <sup>3</sup> ) 5,300		Plain donozete	ξŒ)	•	4,200				
(m <sup>3</sup> ) 5,300		Reinforced congrete	(E)	250	3,800				
(m <sup>3</sup> ) = 500 Excavation (m <sup>3</sup> ) 59,000 (m <sup>3</sup> ) 158,000 (m <sup>3</sup> ) 158,00		Wat atons manony	e E	5,300	,•		•		
## (m <sup>3</sup> ) 158,000			ń	•	000	EXCENSE CO.	ر ا	29.000	61,000
(m <sup>2</sup> ) 35 28 Sod facing (m <sup>2</sup> ) 71,000 (m <sup>2</sup> ) 94,000 (m <sup>2</sup> ) 950 (m <sup>2</sup> ) 950 (m <sup>2</sup> ) 950 (m <sup>2</sup> ) 950			` [ (	•	900	たれたはないのか	(EE)	158,000	162,000
(ton) 4 Asphalt pavement (m²) 34,000 (con), works (ton) (m) 450 (concrete pipe (# 300) (m) 450 (x) (x) (x) (x) (x) (x)		Dord Brown	, m,		,	CO CO	€ E	27,000	73,000
(ten) (ten) (m) (ten) (m) (450 (m) (m) (450 (m)		61.60	E	C C	ů ·		Ŕ	94 000	87,000
Concrete pupe (Ø 300) (m) 450		Metal south	(to)	1	₹.	ARDIALT DAVERSON	E .	0 1 1	
005.6		:				Concrete pipe (6 300)	æ	<b>8</b>	0
PARTY CARLES							17.4	0	10.000

Table 4.8 Revised Cost Estimate of Master Plan and DOI Plan

			(Unit: 10 <sup>6</sup> Rp.)
	Item	DOI Plan	Master Plan
1.	Civil Works		
	(1) Preparatory works	1,066	1,398
	(2) Bila intake weir	2,665	5,262
	Intake weir Intake structure Diversion channel Closure embankment	1,123 203 1,215 61	4,396 866
	Bridge	63	<del>-</del>
	(3) Canal and road system	8,571	9,964
	Main canal system Secondary canal system Draiange system Road system	2,003 4,565 1,223 780	4,263 3,480 1,418 803
	(4) Tertiary system	3,892	4,578
	(5) Office and quarters	448	448
	Total - 1	16,642	21,650
2.	Land Acquisition	1,372	1,600
3.	O & M Equipment	992	992
4.	Administration Expenses	612	612
5.	Engineering Services	2,879	3,346
6.	Physical Contingency	3,376	4,230
7.	Price Contingency	16,186	18,845
	GRAND TOTAL	42,059	51,275
	Economic Construction Cost (1+3+4+5) x 1.15 x 0.9	21,864	27,531

Table 4.9 Anticipated Benefits of Master Plan and DOI Plan

	٠	なからのなが	Master Plan (IO,000 na)	JOG 047	3	ישני ההבים והדי דהו	
Description		Without	With	Incre- ment	without	भ्राटभ	ment
Planted/Harvested Area (ha)	(ha)				:	:	
	·	4.420	4.600	081	4,420	4,600	180
Andreas and the second		280	2,600	2,320	280	2,600	2,320
Polowijo crops		1,270		-1,270	1,270		-1,270
2. Unit Yield (ton/ha)							
			•		2 07	•	2.03
Set season beady	;	× 0	) N W			s vo	2.16
		4 6	n i	24			
Polowijo erops		6.73	•				
3. Unit Prices (x1038p./ton)	સં				-		
Charles which		200	200	*	200	200	
Polowijo crops		275	275	•	275	275	•
4. Unit Production Comt (x103Rp.)	10382.)						
		224.54	224.54	1	224.54	224.54	•
STORES TORING THE		205.41	205.41	99.28	205.41	205.41	99.25
Polowijo erope		90.87	90.87	-90.87	90.87	90.87	-90.87
	(4) (689.)	3.039	7,200	4,161	3,039	7,200	4,161
מיים אולים מיים מיים מיים מיים מיים מיים מיים מ	7						
Wet season paddy	٠	2,625	4,600	1,975	2,625	4.600	ስ . አ
Dry season paddy		159	2,600	2,447	651	2,600	7,441
Polowije eropa		255	1	-255	255	• .	-255
6 monal Production Cost (x10 <sup>6</sup> Rp.)	x106xp.)	1,165	1,567	402	1,165	1,567	402
		000	1.012	44	992	1,033	14
Year season boardy		* 0	, 4	476	66 65	534	476
bry meason paggy Polowijo grops		1 1 1 1 1 1 1 1	3 '	-115	118		-115
7. Net Production Value (x10 <sup>6</sup> Mp.)	106Rp.)	1,874	5,633	3,759	1,874	5,633	3,759
		. 693	1 863	1.034	1.633	3,567	1,934
2020		200.4	200.0	1,965	101	2,066	1,965
	-	4 6	,	044	140		-140
SCORU OCASOCOR		?		•			

Remark: To be referred ANNTX-V.

Table 5.1 Maintenance Flow in Bila River

:						(Unit:	106×43)
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Total	(m³/sec)
1973/74	43.60	10.66	43.42	1.05	13.46	112.19	(8.60)
1974/75	69.38	21.34	8.12	6.83	74.60	180.29	(13.82)
1975/76	71.03	10.85	2.08	0	2.33	36.29	(6.61)
1976/77	4.46	12.06	3.68	23.91	7.98	52.09	(3.99)
1977/78	2.13	. 0	51.81	32.44	18.41	104.79	(8.03)
1978/79	17.32	0.64	27.36	2.60	24.21	72.13	(5.53)
1979/80	2.26	0	4.61	11.72	7.11	25.70	(1.97)
1980/81	3.12	0.08	0	. 0	1.60	4.80	(0.37)
<del>:</del>	<del></del>		· · · · · · · · · · · · · · · · · · ·		Av.	79.79	(6.12)
		•			Min.	4.80	(0.37)
•					Max.	180.29	(13.82)

Table 5.2 Required Storage Capacity of Alternative Bila Dam (1/8)

	200	ö	3	3	3	ĉ	100	mon cu	days	ž	*	×					Qays Qays					
								,			•	1			700	\$ \$	,	70	5.14	6.17	8	
1973 Max.	н						1973	ANG	;	76-67	o (		1 0		ì		ı e	٠.		2.7	25	-1.25
	۲۱						-		٠.	77.74	>	1	7					- 1	. 1		200	
	~								17	5.44	6.57	0-17	6.10			:						8
	-									7.78	0.17	0.17	7.44						٠.		0	
	,			:				-	٧,	7.65	•	0.17	7.48	:				3.20	7.8.7		77.0	2
	۰,		:							10.06	•	0.2	9.85	:								7
-	o		.*		12												. :	•				
								9	٠,	10.80		0.17	10.63			der.			2,72	0.17	6.43	\$ \$
À X	<b>-ŧ</b>	: :					:		1 6	.00	٠,	11	0								90	Ý
	14					•			ą c	22.00	•		22.47				ė,	5.10	-	617	3	-1-72
-	m			1. 1.							: i		10 67							0.17	4.07	લં
	4	-		-						0.0		į .								71.0	3.63	
	٧ì		-	. :				:		15.38	4	3	1							<b>,</b>	ģ	
	· vò	10.76	3.89	0.17	6.70	٠			ø	15.90	•	0.77	15.73							2		
	•											-24 -					:		:			
> 5	•	11.79	4.58	0.17	7.04			864	ri	9.16	0.0	0.17	7.95	٠.								
?	ć	7	8	-	10.01				N	4.54	Š	0.17	4.33				٠.					
			1		15.00				្តកា	3.89	2.72	0.17	8	:								
	٠.	1			0					-	2 72	0	0.44			•	200		•			٠
	<b>3</b> 1	7		•	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					10.07	1.42	0.17	98.			ζ.	Vermon ve	•				
	'n	27.39	7	7	C 44 0 C 7								19.44				ő	3118	ALVEY INOW	¥ 800	for 5 da	96 >>
	ø	29.70	2.44	0.21	17.05	٠.				20.17	•	1 2 >								,	(106 m <sup>3</sup> )	î
			3		,			NO.	•	10.71	3,67	0.17	6.87							3	E 40 1 1 1 1 1 1	4
ŝ	<b>⊣</b> t	41.11	20		1			•	t c			-	00				3	78470		4	21 901	ń
	ď	40.0	0.86		16.6				ų (		2							HOH	מי סססיסו		3	E
	<b>(</b> )	7.39	0.30	0.17	6.02			:	*	<b>X</b>	*			•			8	144		SOUTH STATE OF THE	Soci	
	4	5,27	9	0.17	4.80	:			₹	4,62	V 40		3				3	1			9017	e E
	wi	14.26	0	0.17	14.09	,			ĸĠ.	3.93	ė,	Ċ O	. 2. 1.2	01.5						:		í
	×	21.00	0	0.17	20.83				S	6,31	5.88	O L	0.26	2.00	1		Š	Water	Water deficit	Lt for	S days	
	>								•				.	:					,	:	90°C	Ê
	•	. A7. 83	9	0.17	47.05			ő		6.87	7.13	0.17	-0-43	•				٠ ٥	01 + 02 - 03	έ C		
1 3 0	* 4		9		76.07					19.05	7.13		17:75	œ			Υ		Accountained deficit	defic	4 (106 p	ê
-	4 4	2 0 0	<b>&gt;</b> •	• •						12.23	3		6.23									
i,	<b>~</b> ,	K7-07	2		1 6					10.70	A A		15.78	٠								•
		44.0	2		1		-		ď	96	50		4.15				:					
	Α.		4 : 4	1				:		000	7		2,63									
		- C																				

Table 5.2 Required Storage Capacity of Alternative Bila Dam (2/8)

Kear	Year Month	Tive Cays	οı	8	8	8	Ş	YOUR	r Month	Five	οĵ	92	83	Ş	8	Xeax	Year Month	Five	70	<b>6</b>	ខ	8	\$\$
1974	MAY.	-1	1.86		71.0	1.69	,	1974	, in	-4	13,31	3.59	0.17	9,55		1974	, %		7.08	2.98	0.17	3.93	·.
		CII	1.47	•	0.17	8				'n	16.16	3.59	0.17	12.40				N	11.15	2.98	0.17	8	
		n	7.30	•	0.17	7.13			:	e3	22,33	70	0.17	21-12				m	8-68	5.07	6.17	3.50	
		ų	2.30	•	0-17	1.13				4	10.54	1.04	0.17	9.33				v	10.41	5.01	0.17	5.23	
	.*	٧Ņ	1.86	8	0.17	1.65				κ'n	7.47	1,43	0.17	5.87				'n	\$ 40	6.57	0.17	1.34	7.3
		\$	2.38	0.03	0.21	2.12		٠.		۰	15.76	1.71	0.17	13.88	٠			ø	3.89	6.57	0.17	-2.85	61.9
-	Apr	H	3.15	0.78	0.17	2.16			Aug.	·	6.91	1.73	0.17	5.01			Dec		90	6.74	0.17	1.99	-2-20
1. 		ĊĮ	7.95	0.78	0.17	ř				ćŧ	5.83	1.73	0.17	3.93				ų	3.41	6.74	0.17	-3.50	-5.70
÷.		n	6.78	2.25	0.17	٠.		٠.		6	4.67	0.56	0.17	3.94				m	4.02	6.87	0.17	-3.02	-8.72
		4	15.29	2:25	0.17	•	;		٠	4	3.84	0.56	0.17	3.27				4	3.67	6.87	0.47	-3.37	-12.09
		ĸ	6.10	4.36	0.17		.43			'n	4		0.17	4.97				ŵ	8-81	4.10	0.17	4.54	-7.55
		ø	1.99	4.36	0.17					•	6.22		0.21	6.01				<b>\$</b>	6.17	4.92	0.23	7.0	6.51
	ं <b>१</b>	, 14	3	2.72	0.17	1.65	1.32		Sec.	in	10.58		0.17	10.41		1975	Jan.	et	4.28	5.62	0,17	15.17	-8-02
		7		47.	0.17	7.18	5.86		<b>k</b>	N	20.26	i	0.17	20.03				N	3.97	5.62	0.17	-1.82	-9.84
	÷	m		7.64						r	63.59		0.17	63.42		7		ń	3.03	4.84	0.17	1.94	-11-78
		4		8	0.17					4	19.44	ě	0.17	19-27				4	3.24		0.17	-1.77	-13.55
		*		7.12		- 1			٠	eń	9.76	•	0.17	9.59				vi	4.32		o.17	0.39	-13.16
		<b>м</b> Ф,	10.94	2.56		8.19				v	15.05	•	0.17	14.88		-	-	ø	10.78		0.21	8	-7.10
	, g	H	.06	6.37	0.17	-2.42	-2.42		90	н	9.72	800	0.17	9.51			00	H	17.50	1.08	0.17	16.25	9-15
		Cŧ.		6.32	0.17	-2.55	-4.97			: Сі	12.10	0.0		11.89				М	24.49	8	0.17	23-24	
		n		0.48	0.17	2.55	-2.42			n	16.42	0.95	0.17	15.30				es	15.68	3	0.17	13.87	-
			16.29	84.0	0.17	15.64	13.22			4	27.64	0.58		20.52	:		:	4	87,6	7.04	0.17	7.48	_
:	:	ķ	- 5-	0.78	0.17	8.34		.:		'n	3	2.46		8		:	٠,	Ŋ	8	0.48	0.17	8	
		v		9.78	0.17	7.52				છ	7.26	2.95	1	4.10				v	6-25	0.23	0.10	5.86	
	5	1 1 7		1 1 1																			

Table 5.2 Required Storage Capacity of Alternative Bila Dam (3/8)

Į																							l
				:								;	-			0.0	4	,	o o	9	0.17	6.83	
1975	Mari	-4	9.81	1		Š	:	1975	į	-1	0	3	1	1		,			6	a	6	200	
			4.08	•		13.91				: :	7.73	60	\.	) 1					3 6				
			15.0	Ì		10.24					4.52	9	0.17	13.31		:		ń	٠ أ	¥ .	3		. •
				· 1		7 67	٠				07.6	ð	0.17	18.19			-	¥	4.92	7.72	7	3	7
	۲.											C		23.85				s)	3.43	6.26	6,17	14,02	Ų
				90.0	0.17	4.07						> (				٠			2	7	0.37	900	
		¢		50.0	0.23	9.12				•	72.55	0	0.21	*				>					
						j				:.								÷		77 7			Š
	100				0.17	6.57			Aug.	-4	. 52	4.	0.17	10.0			Š	4	2			; ;	,
	1			1 -		2. 23				Z.	9.46	34	0.17	7.65				~•		300			
						76				٠	8	0	0.17	20.01			٠	m	٠,.	6,48			Ť
			:		*	0 / - /	4							4				4		6,48	6		φ
			. 1			16.0-	10.01			٠,	2	\ .	1	0 1						64.4		C7.75	-0-17
						17.50	-4.02				8		0.17	7.13				^					
	٠.	1		76		. 77	25				26.49	1	0.17	26.32				ø	2.44	6-73	0.27		7
				•						. '		:				٠		٠.		-			1
	٠								1		•	į		10.43		1076	JAB.	· e-i		4.23	0.17	87:7	-14.8
	MAY.		15.55			13.65	12.40		000	-₹	A .	•		10.00		•		ťć	-			56.00	5.5
	•					27.72				Ų.	3.66	•	0,17	25,49				4					4
						17.50	٠				19.79	•	6.17	19.62				r's	20.2			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	٠	٠,									5	. •	0.17	10.20				4				- 58.2	é.
											6	ı		Q.				<b>4</b> 3				7,555	۳ ۲
		v)				16.00			:		?	ľ	•								:	- 35	-23.23
		٠.٧ ف		3.47	0.27	19.86					.2.83		7	74.00				, ,		•			
	4			1		1	•											•					
		-		S, S		58			8	-1	24.32	0.0	0.17	24-12			0.64	-₹	7	* 1 * 1	;		,
	G S	٠.			r •	9 0 1					7.02	0	0.17	16.81	-			۲,			57.0	8	9
									:					5				m			0.17	9,30	ķ
						11:76					3 ;		4					4			0.17	-0-38	-27.25
		<	16.24	8.1	0.77	14.13				4	200	7.75	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0								60	9
•				72. 7	0.17	3.16					9.37	1.77	0.7	4				^		<b>7</b>	;		
												2,13	2	00				9			0.10		Ş
				30	1						1				٠			. :		: .			

Table 5.2 Required Storage Capacity of Alternative Bila Dam (4/8)

Table 5.2 Required Storage Capacity of Alternative Bila Dam (5/8)

722 832 E 21883 K18842 HX3X X 8										***			•		1	1	4		7				
1 2.72 - 0.17 2.55 1977 JUL 1 7.99 4.62 0.17 -1.51 1977 Nov. 1 0.95 4.45 0.17 -1.57 1.55 1.52 1.51 1.55 1.52 1.52 1.52 1.52	-	\$	럲	22	83	8	8			\$ X X	ಕ	8	8 	8	6	1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		gays Gays	<u>,</u>			ł	
1 2.72 - 0.17 2.55  1977 Jul. 1 7.79 4.25 0.17 -1.51 1.55 1.50 0.59 4.45 0.17 -3.75 1.86		2										•		300	1.22	1977	× × ×	<b>~</b>				-3.67	-10.52
1.86		_	2, 72	ı	0,17	2.55	-	1977	ヺ			4 6		, c		1						-3.63	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
1.81 - 0.17 1.64		. (		,		69.						70.5		1 6 1 6 1 6 1 6								-2.97	-18-12
2 1.28		N	0									6		20	7							44	-22-8
2.29 - 0.17 2.12		"		Ĭ	0.17	Š								9	-1.17						٠,	}	32 66
\$ 5.71 0.04 0.17 3.50 \$ 5.79 0.05 0.21 5.05 \$ 5.79 0.05 0.21 5.05 \$ 5.79 0.05 0.21 5.05 \$ 5.79 0.05 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.21 5.05 \$ 5.70 0.25 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 0.25 0.25 \$ 5.70 0.25 \$ 5.70 0.25 \$ 5.		~	2.20		0.17	2 4 5									2.00			v				200	3
6 3.21 3.06 0.21 -0.06 -0.09  1 23.72 0.05 0.17 22.60  1 23.72 0.05 0.17 22.60  1 24.15 0.05 0.17 17.72  2 10.77 0.05 0.17 22.60  1 24.15 0.05 0.17 17.72  2 10.72 0.05 0.17 22.60  1 24.25 0.17 22.60  1 25.2		•		?	,	4			-			, N		1			:	4				0.43	-23.08
6 6.29 0.05 0.21 8.03  Nug. 1 3.93 0.95 0.17 2.81 2.75 Dec. 1 3.15 6.35 0.17 -3.37  1 23.72 0.95 0.17 22.60  2 10.37 0.95 0.17 22.60  2 10.37 0.95 0.17 2.80  2 10.37 0.95 0.17 2.80  2 10.37 0.95 0.17 2.80  2 10.37 0.95 0.17 2.80  2 10.37 0.95 0.17 2.80  2 10.37 0.95 0.17 2.80  2 10.38 0.17 2.80  2 10.39 0.17 2.80  2 10.30 0.17 2.80  2 10.30 0.17 2.80  2 10.30 0.17 2.80  2 10.30 0.17 2.80  2 10.30 0.17 2.80  2 10.30 0.17 2.80  2 10.30 0.17 0.95  2 10.30 0.17 0.95  2 10.30 0.17 0.95  3 10.30 0.17 0.95  4 10.30 0.17 0.90  5 10.30 0.17 0.90  5 10.30 0.17 0.90  6 10.30 0.17 0.90  7 2 10.30 0.17 0.90  7 2 10.30 0.17 0.90  7 3 10.40 0.17 0.90  7 4 10.40 0.17 0.90  7 5 10.30 0.17 2.80  7 6 10.30 0.17 2.80  7 7 10 0.17 1.80  7 8 10		n		3						· £	3.2	3.08		90.0	o O			•					
1 23.72 0.95 0.17 22.60		Φ	8.39	0.0	77.	.0				•			-									1	7
1 23.72 0.95 0.17 22.60														, a	2.74		ğ	<b>~</b> 1					
1 10.37 0.95 0.17 9.25 0.17 9.25 0.17 9.25 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.05 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 9.06 0.17 0.05 0.1		•		40		22.60			740	-1		٠ ١					,	•			. : 1	8	-25.41
2 10.37 0.95 0.17 5.22 2 18.19 0.50 0.17 13.16 5 13.28 0.17 13.47 5.62 5 13.28 0.17 15.47 5 2.80 -0.17 2.59 6 6.05 2.89 0.17 2.99 6 6.05 2.89 0.17 7.43 1 9.85 2.25 0.17 7.43 2 11.88 2.25 0.17 7.43 5 5.62 4.92 0.17 7.43 5 5.62 4.92 0.17 7.43 5 5.62 0.17 7.43 5 5.62 4.92 0.17 7.43 5 5.62 4.92 0.17 7.43 5 5.62 4.92 0.17 7.43 5 5.62 4.92 0.17 6.95 1 1.88 2.25 0.17 7.43 5 5.62 4.92 0.17 7.43 5 5.63 4.92 0.17 7.43 5 5.63 4.92 0.17 7.43 5 5.63 4.92 0.17 7.43 5 7.31 0.17 3.02 0.17 0.03 6 7.31 0.17 1.09 6 7.31 0.17 1.09 6 7.31 0.17 1.09 7 7.65 0.17 0.03 7 7.65 0.17 0.03 8 7.65 0.17 0.03 9 7.65 0.17		-ŧ							•			9	0.17	000								4 00	3-71
\$ 9.72 3.28 0.17 5.27  4 18.92 3.28 0.17 15.47  5 2.85 -0.17 2.68  6 0.05 2.89 0.17 2.99  6 0.17 2.68  7.73 2.89 0.17 2.99  6 0.05 2.89 0.17 2.99  7 1.17 -0.17 1.00  7 1.08 2.25 0.17 0.55  8 2.10 2.10 0.51  8 2.25 0.17 0.55  8 2.10 0.17 0.51  8 2.25 0.17 0.52  8 2.10 0.17 0.51  8 2.25 0.17 0.52  8 2.25 0.17 0.53  8 2.25 0.17 0.54  8 2.25 0.17 0.55  8 2		~		, 0	0.17	67.8						ç	0.17	17.72				M.				4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	l
4 18.92 3.28 6.17 15.47 4.67 5 2.85 - 0.17 2.68 6 8.90 5.29 6.21 6 6.05 2.89 0.17 4.67 5 2.89 0.17 2.89 0.				1.28	0.17	6,27												4				80	
4 18.92 3.28 0.17 4.67 5 2.85 - 0.17 2.89 6 8.90 5.29 0.21 6 6.05 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 2.89 0.17 0.85 2.25 0.17 0.85 2.25 0.17 0.85 2.25 0.17 0.85 2.25 0.17 0.85 2.25 0.17 0.81 2.80 0.17 0.13 0.10 0.11 0.12 0.17 0.13 0.10 0.11 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.17 0.12 0.17 0.13 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.11 0.12 0.11 0.11				1		17						8	71.0	į								9 4	
\$ 7.73 2.89 0.17 4.67 6 2.80 - 0.71 2.59 6 8.90 5.29 0.21 6 6.05 2.89 0.17 2.99 6 6.05 2.89 0.17 7.43 5.79 1.117 - 0.17 1.00 1978 Jan. 1 10.54 5.62 0.17 2.118 2.25 0.17 7.43 5.70 2.21 0.17 0.95 3 11.66 2.51 0.17 0.91 4 7.34 2.51 0.17 0.91 4 7.34 2.51 0.17 0.91 6 5.70 2.51 0.17 0.61 5 1.04 - 0.17 0.91 6 5.39 4.25 0.17 0.91 6 5.39 0.17 0.91 6 5.31 0.17 1.09 6 5.31 0.17 1.09 7.04 0.17 0.09 7.00 7.00 7.00 7.00 7.00 7.00 7.0				. 28	17.0	12004							0.17	2.68	:			'n				3	
6 6.05 2.89 0.17 2.99 6 2.80 0.17 1.00 1978 Jan. 1 10.54 5.62 0.17 2.99 1.12 0.17 1.00 1978 Jan. 1 10.54 5.62 0.17 2.17 2.18 2.25 0.17 7.43 5.62 0.17 0.95 3 1.08 0.17 0.91 4 7.34 2.51 0.17 0.51 5.62 0.17 0.91 4 7.34 2.51 0.17 0.51 5.70 2.51 0.17 0.51 5 1.08 0.17 0.91 5 1.08 0.17 0.91 5 1.08 0.17 0.91 5 1.08 0.17 0.91 6 5.39 4.25 0.17 0.87 1 3.01 0.21 4.09 6 1.04 0.17 0.04 0.17 0.09 5 1.09 1.00 0.17 0.09 1 3.07 2.59 0.17 1 4.09 1 1.09 1.00 0.17 0.09 1.56 0.17 0.09 1 3.07 2.59 0.17 1 4.09 1 1.09 1.56 0.17 0.09 1.				2.89	0.17	4.67	•				9		1	ď				ø				Š	
1 9.85 2.25 0.17 7.43 Sep. 1 1.17 - 0.17 1.00 1978 Jan. 1 10.54 5.62 0.17 2 11.88 2.25 0.17 7.43 2.25 0.17 7.43 2.25 0.17 9.46 2.25 0.17 9.46 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.25 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 2.51 0.17 0.55 0.17 0.55 0.17 0.55 2.55 0.17 0.55 0.17				4	7	2.99					2.80	•	·	4 - 1									
1 9.85 2.25 0.17 7.43		۰		*	•						٠.	÷.						•				4.75	
1 9.85 2.25 0.17 7.43 5.97 1.112 - 0.17 0.95 2 8.21 5.62 0.17 2.11.88 2.25 0.17 9.46 2.51 0.17 9.46 2.51 0.17 0.91 2.52 0.17 0.91 0.53 11.66 2.51 0.17 0.91 0.51 0.17 0.91 0.51 0.17 0.91 0.91 0.51 0.17 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91				•							1	1	,	00.7		1978	Jan	-1	40.0		· ·		:
2 11.88 2.25 0.17 9.46 2.51 0.17 0.53 3 1.08 - 0.17 0.91 4 7.34 2.51 0.17 3.54 4.92 0.17 0.63 4.92 0.17 0.63 4.92 0.17 0.63 5.70 4.92 0.17 0.63 5.70 2.51 0.17 5.02 5.10 0.21 4.09 5.10 0.21 4.09 6 5.39 4.25 0.17 0.87 5.31 0.17 1.09 7.04 0.17 0.87 76b, 1 3.07 2.59 0.17 1 9.24 5.31 0.17 1.09 7.04 0.17 0.83 7.05 7.01 2.59 0.17 1 9.24 5.31 0.17 1.09 7.04 0.17 0.83 7.05 7.01 7.00 7.00		•	a o	7.25	0.17	7.43			CONT	i.	1			Ç				Á	8.21		0.17	444	
2 5.62 4.92 0.17 0.53 3 1.08 - 0.17 0.91 4 5.70 4.92 0.17 0.63 5 5.70 2.51 0.17 0.63 6 7.31 3.01 0.23 4.25 0.17 1 9.24 5.31 0.17 3.76 1 1.04 0.04 0.17 0.96 1 1.04 0.04 0.17 0.96 1 1.04 0.04 0.17 0.96 1 1.05 0.17 1.09 2 6.57 5.31 0.17 1.09 3 1.04 1.56 0.17 0.69 3 1.04 0.17 0.73 4.65 4 1.05 0.17 1.4.65 5 0.99 3.28 0.17 -2.46 -3.89 6 2.07 0.13 0.10				,		9.46				r;	- 1	•	7.0	ń kie				•	65		0.17	8.98	
3 5.62 4.92 0.17 0.53 4 5.70 4.92 0.17 0.64 5 5.70 2.51 0.17 3.02 6 7.31 3.01 0.21 4.09 1 9.24 5.31 0.17 3.76 1 9.24 5.31 0.17 3.76 2 6.57 5.31 0.17 1.09 3 1.04 0.17 0.69 3 4.61 1.64 0.17 4 26.31 0.17 24.89 5 0.99 3.28 0.17 -0.73 5 0.13 0.10 5 4.58 5.14 0.17 -0.73 -0.73 5 6 2.07 0.13 0.10		N	77.00								1.08	•	0.17	0				5			1	7 66	
4 5.70 4.92 0.17 0.63 5 5.70 2.51 0.17 5.02 6 7.31 3.01 0.21 4.09 6 7.31 3.01 0.21 4.09 6 7.31 3.01 0.23 4.25 0.17 1 9.24 5.31 0.17 3.76 1 9.24 5.31 0.17 3.76 2 1.04 0.17 0.89 2 1.04 0.17 0.89 3 4.05 1.17 1.25 0.17 14.65 4 26.31 1.25 0.17 24.89 5 0.99 3.28 0.17 -2.46 -3.89 6 2.07 0.13 0.10		67	65		0 17	, i						. (		0.0				4	7.34		3		
5 5.70 2.51 0.17 3.02 5 1.08 - 0.17 0.87 6 5.39 4.25 0.21 6 7.31 3.01 0.21 4.09 6 5.39 4.25 0.21 6 7.31 3.01 0.21 4.09		` <	6		0.17	6.63				ď	۵ ۲							v	3,35		0.17	0	
5 5.70 2.51 0.17 2.50 0.17 0.87 6 1.04 - 0.17 0.87 7eb, 1 3.07 2.59 0.17 1 9.24 5.31 0.17 1.09 0.17 0.04 0.17 0.09 7eb, 1 3.07 2.59 0.17 2 6.57 5.31 0.17 1.09 1.54 0.17 0.04 0.17 0.69 0.69 3 4.41 1.64 0.17 2 6.57 5.31 0.17 1.09 1.56 0.17 -0.69 -0.69 3 4.41 1.64 0.17 3 16.07 1.25 0.17 24.89 4 4.06 1.64 0.17 4 5.65 1.4 0.17 -0.73 -0.73 5 0.99 3.28 0.17 -2.46 -3.89 5 0.33 0.22 0.17 5 4.58 5.14 0.17 -1.25 -1.98 6 1.19 3.94 0.21 -2.96 -6.85		÷				ć				vš	7.08	\$	0.17	4					ç		0,21	0.93	-
6 7.31 3.01 0.21 4.09 6 7.31 3.01 0.22 4.09 7 8 6.25 5.31 0.17 3.76 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8		'n	7.70	70.7						~	1.04		0.73	0.87				٥,					
1 9.24 5.31 0.17 3.76 2 1.04 0.04 0.17 0.96 2 6.57 5.31 0.17 1.09 3 1.04 0.04 0.17 0.83 3 4.41 1.64 0.17 3 16.07 1.25 0.17 14.65 4 26.31 1.25 0.17 24.89 5 0.99 3.28 0.17 -2.46 -3.89 6 2.07 0.13 0.10 6 1.19 3.94 0.21 -2.96 -6.85		S	7.31	ಕ ಕ	0.27	40.0		٠.		>				1								,	
1 9.24 5.31 0.17 3.76 0ct. 1 1.17 0.04 0.17 0.83 2 6.57 5.31 0.17 1.09 3 4.41 1.64 0.17 0.69 -0.69 3 4.41 1.64 0.17 3 16.07 1.25 0.17 14.65 4 4.06 1.64 0.17 0.74 -1.43 4 4.06 1.64 0.17 4 26.31 1.25 0.17 24.89 5 0.09 3.28 0.17 -2.46 -3.89 5 9.33 0.22 0.17 5 4.58 5.14 0.17 -0.73 0.73 5 1.19 3.94 0.21 -2.96 -6.85 6 2.07 0.13 0.10		:						-		:				č			Á	- 1	307		0.17	45.0	
2 1.04 0.17 0.83 0.15 1.09 3 4.41 1.64 0.17 0.83 0.69 3 4.41 1.64 0.17 2 6.07 1.25 0.17 1.09 1.56 0.17 0.74 1.43 4 4.06 1.64 0.17 4 6.17 1.25 0.17 24.89 5 0.18 0.17 1.24 1.89 5 0.18 0.17 1.24 1.89 5 0.18 0.17 1.24 1.89 6 2.07 0.13 0.10 6 2.14 0.17 1.25 1.25 1.29 6 1.19 3.94 0.21 1.296 6 2.07 0.13 0.10	- 7	•	•			2.76			S S		1:17	5		?				ć	28		617	, S	
6.57 5.34 0.17 14.65 4.06 1.64 1.56 0.17 -0.69 -0.69 4 4.06 1.64 0.17 16.07 1.25 0.17 14.65 4.06 1.64 0.17 26.31 1.25 0.17 24.89 5 0.99 3.28 0.17 -2.46 -3.89 5 9.33 0.22 0.17 4.58 5.14 0.17 -0.73 -0.73 6 1.19 3.94 0.21 -2.96 -6.85 6 2.07 0.13 0.10 4.06 5.14 0.17 -1.25 -1.98	•	•	77	•	· ·					~	8	ó	7	0							61.0	2.60	
16.07 1.25 0.17 14.65 26.31 1.25 0.17 24.89 4.58 5.14 0.17 -0.73 -0.73 5 0.99 3.28 0.17 -2.46 -3.89 6 2.07 0.13 0.10		N	6-57	٠, د	•					•	2	V	0.17	69.0	0			4	1			C	
26.31 1.25 0.17 24.89 5 .33 0.22 0.17 2.46 3.89 5 6 2.07 0.13 0.10 4.58 5.14 0.17 -0.73 -0.73 6 1.19 3.94 0.21 -2.96 -6.85 6 2.07 0.13 0.10 4.06 5.14 0.17 -1.25 -1.98		نع	16.07	1.25	77.0	14,65				2	) (				نم 1			4	4.00		7	4.4	
4.58 5.14 0.17 -0.73 -0.73 5 0.99 3.28 0.17 -2.96 -3.69 6 2.07 0.13 0.10 4.56 5.14 0.17 -1.25 -1.98 6 1.19 3.94 0.21 -2.96 -6.85 6 2.07 0.13 0.10		•		•	C	24.89		٠.		4	0	2	1					ď	0.33	1	6.70	Å,	
4.58 5.14 0.17 -0.13 -0.13 0.14 0.21 -0.24 0.21 -0.96 -6.85 6 1.19 0.14 0.17 -1.25 -1.98		3	10.07				4.0			wi:	66.0	ω 13	0.17	-2.46	7			٠,			ć	Va	
4.06 5.14 0.17 *1-25 -1.98 6 4:19 0:21		¥'n	5.50	5.14	0.7	7	?			٠,	C	70	0.21	-2.96	6.00			Þ	>		*	1	
		4	4.06	5.14	0.17	1-25	86,1			خ	7111		***										

Table 5.2 Required Storage Capacity of Alternative Bila Dam (6/8)

March Mark of G2 G2 G2 G2 Vear World Mark G1 G2 G2 G2 Vear Month Arg G1 G2 G3 C4 Vear Month Arg G1 C4		_		٠.		:												ĺ						
1 6-48 - 0.17 6.13	Year		7.1 Ve	ಕ	8	63	å	S			rive	ខ	05	8	š	8	Year		3478	ಕ	8	8	8	8
May         1         0.04         0.17         0.17         0.14         0.17         0.1	L														7, 52		1978	, 20,	~1	96.0	3,13		0.34	-0.34
2 12.203 - 0.17 21.206		r X	-1	6.43	1	0.17	0.31		2	1					4				. ~	2.72	24.5		09.0	-0-94
11.15			r v	22.03	E	0.17	27.86							3 -					-	6	3.59		0.57	1.51
4 11.28 - 0.17 11.11			m	11.45	3	0	11.28							\	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4				) <b>4</b>	4.23	3.50		0.47	1.04
\$ 9.29 0.00 0.17 9.08				11.28	•	0.17	וויוו							7	***				F¥		6		CC.	-4.62
6 12.23 0.03 0.21 11.97 6 18.03 2.95 0.21 14.87 6 4.06 5.22 0.17 -1.09 1.15 1.14 1.15 1.14 0.17 9.55				0	0.00	0.17	90.6							0	20.02			-	n. 1	4 1	4 C			200
1 11.15 1.47 0.17 9.55			٠.	12.23	0	2	11.97						2.95	0.21	14.87				٠ و	90.5	26.6		20.7	
1 11.19 1.47 0.17 9.55			•							-													3	74
1.00   1.00	٠.	-	•		•					7117			26.0	0.17	7.86			ပ္ပိ	H	7.60	6.52	\ •	٠	*/-
2 16.59 1.47 0.17 14.45 2 16.59 1.41 0.17 14.45 3 12.27 6.00 0.17 14.45 4 5.14 0.17 1.73 5 6.14 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 6.15 0.17 1.73 5 7.43 6 7.60 7 7.43 7 7		Apr	ŧ	¥ 1 . 1 .	1	1				P					12.87				4	2.98	6.52	0.17	-3.71	74.00
3 8.08 3.41 0.17 4.50 3 8.04 0.22 0.17 6.35 4 6.35 5 6.13 5.66 0.17 12.49 5 16.59 1.91 0.17 14.45 5 1.10 - 0.17 10.28 5 1.10 30.59 0.17 14.45 5 6.15 0.17 14.43 5 6.16 1.20 0.17 14.43 5 6.16 1.20 0.17 14.43 5 6.17 0.17 14.43 5 6.18 0.17 1.18 5 6.18 0.17 1.18 5 6.19 0.10 0.17 1.18 5 6.10 0.17 1.1			N	16.59	4	0	14.45								0				er)	2.27	8	0.17	9,10	-3.35
4 5.31 3.41 0.17 1.73 5.66 0.17 6.35 5 6.86 1.64 0.17 5.05 6 13.67 6.79 0.20 6.68 6 16.59 1.64 0.17 5.05 6 13.67 6.79 0.20 6.68 6 16.59 1.97 0.17 14.45 6 1.30 5.66 0.17 14.43 5.64 0.17 14.43		-	زنع	80.8	3.4	0.17	4.50							7	17.0					8	6		97.61	9.14
5 6.186 1.64 0.17 5.05 6 4.10 - 0.17 4.02 5 6.13 5.00 0.10 0.10 0.10 0.10 0.10 0.10 0.10							1.73							77.0	6.35			. •	·	00.0	5	· ·		
5 6.86 1.64 0.17 3.09 5 1.67 0.17 14.45 6 16.59 1.97 0.17 14.45 6 16.59 1.97 0.17 14.45 1 33.09 2.33 0.17 30.59 2 21.30 2.33 0.17 30.59 2 21.30 2.33 0.17 19.40 2 21.30 2.33 0.17 19.40 2 21.30 2.33 0.17 19.40 3 44.24 3.02 0.17 41.05 3 44.24 4.88 0.17 1.13 3 44.24 3.02 0.17 41.05 3 44.24 3.02 0.17 41.05 3 44.24 3.02 0.17 41.05 3 44.24 3.02 0.17 41.05 3 44.24 3.02 0.17 41.05 5 6.44 4.89 0.17 1.13 5 6 4.45 - 0.17 14.43 5 6 4.45 - 0.17 14.43 5 6 3.21 4.56 0.21 1.26 1 21.25 0.35 0.17 20.13 6 4.45 - 0.17 4.84 6 5.24 0.17 20.13 7 2.64 2 1.10 2.03 0.17 1.10 8.60 3 2.51 1.56 0.17 2.64 5 1.10 0.10 0.17 1.10 8.5 5 6.44 2.81 0.17 3.46 6 1.87 0.23 0.17 1.15 5 6.86 0.17 7.87 5 6.86 0.17 7.87 6 1.87 0.23 0.17 1.26 6 1.87 0.23 0.17 1.26 6 1.87 0.23 0.17 1.26			2	10.0		1								0.17	4.02				s.	6-13	2.06	i i	3	
6 16.59 1.97 0.17 14.45 6 16.59 1.97 0.17 14.45 1 13.09 2.33 0.17 30.59 2 10.45 - 0.17 6.44 1 13.09 2.33 0.17 30.59 2 10.45 - 0.17 10.28 2 21.50 2.33 0.17 30.59 2 21.50 2.33 0.17 30.59 2 21.50 2.33 0.17 30.59 3 3.15 4.10 0.17 1.13 3 4.20 - 0.17 7.43 4 11.05 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.26 4.36 0.17 7.91 5 7.91 5 8.65 5.24 0.17 20.13 5 7.91 5 7.92 0.95 0.17 20.13 5 7.93 0.17 20.13 5 7.93 0.17 20.13 5 7.94 5 7.95 0.17 10.85 5 8.64 0.60 0.17 7.87 5 8.64 0.60 0.17 7.87 5 8.64 0.60 0.17 7.87 5 8.64 0.60 0.17 7.87 6 1.87 0.21 0.10 1.56 6 1.87 0.21 0.10 1.56			<b>~</b>	6.86	<b>3</b>		7.07									-			9	13.67	8	0.20	6.68	
1 33.09 2.33 0.17 30.59 Sep. 1 6.61 - 0.17 6.44 1979 Jan. 1 3.33 4.88 0.17 -1.72 2 21.90 2.33 0.17 19.40 2 2.30 0.17 19.40 2 3.40 10.45 2 10.45 2 10.45 2 3.15 4.10 0.17 1.13 2 4.20 0.17 1.10 2.23 2.17 1.22 2 2.30 0.17 1.23 2 2.40 2 2.31 4.56 0.17 1.22 2 2.30 0.17 1.23 2 2.40 2.31 4.56 0.17 1.20 2 2 2.40 2.17 4.23 2 2.40 2.17 1.20 2.17			ø	16.59	1.97		14.45					6.10	•	3					•				•	
1 33.09 2.33 0.17 30.59 Sep. 1 6.61 - 0.17 10.28 2 21.30 2.33 0.17 30.59 2.33 0.17 30.59 2.33 0.17 30.59 2.33 0.17 19.40 2 2 10.45 - 0.17 10.28 2 21.30 2.33 0.17 41.05 2 21.30 2.33 0.17 41.05 2 21.30 2.33 0.17 41.05 2 21.30 2.37 0.17 7.43 2 4.24 4.10 0.17 7.43 2 4.24 4.10 0.17 7.43 2 4.24 4.10 0.17 7.43 2 4.24 7.50 2 14.50 2.17 7.51 2.54 2.31 4.28 2.31 4.28 2.31 4.28 2.31 4.28 2.44 2.31 1.20 2.32 2.17 10.85 2 2.85 0.04 0.17 2.64 2.81 0.17 2.64 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.46 2.81 0.17 2.40 0.20 0.17 7.87 2 4.87 0.21 2.64 2.81 0.17 2.46 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 0.17 2.48 2.81 2.48 2.81 2.48 2.81 2.48 2.81 2.48 2.48 2.81 2.48 2.81 2.48 2.81 2.48 2.81 2.48 2.81 2.48 2.81 2.48 2		٠			14.	*									** *		0.01	QV)	ы	3.33	4.88	0.17	-1.72	
2 21.90 2.33 0.17 19.40 2.3 10.45 2 10.45 2 0.17 10.28 3 3.15 4.10 0.17 -1.12 2 44.24 3.02 0.17 7.91 41.05 3 14.60 2 0.17 7.43 4 2.46 4.10 0.17 7.91 4 7.60 2 0.17 7.93 5 4.84 3.80 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.36 6.36 0.21 3.20 0.17 7.91 5 6.26 4.36 0.17 7.91 5 6.36 6.36 0.21 3.20 6 3.21 4.56 0.21 1.86 7.30 0.17 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7 7.91 7.90 7.91 7.90 7 7.91 7.90 7.91 7.90 7 7.91 7.90 7.91 7.90 7 7.91 7.90 7.91 7.90 7 7.91 7.90 7.90 7.91 7.90 7.91 7.90 7.90 7.90 7.90 7.90 7.90 7.90 7.90		26	-	33.09	2.33		30,59			Ç.	t	2.61		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	****			j	Ę	6.44	8	0.17	1.39	
4 0.17 5.23 4 2.46 4.10 0.17 -1.81 5.23 4 2.46 4.10 0.17 -1.81 5.24 5.02 0.17 7.43 5 4.84 5.80 0.17 -1.81 5.26 6.17 7.91 6.26 4.36 0.17 7.91 6.26 4.36 0.17 7.91 6.26 4.36 0.17 7.91 6.26 4.36 0.17 7.91 6.26 6.17 7.91 6.20 0.17 7.91 6.20 0.17 7.91 6.20 0.17 7.91 6.20 0.17 7.91 6.20 0.17 7.91 6.20 0.17 7.91 6.20 0.17 7.91 6.20 0.17 7.90 0.19 0.17 1.90 6.17 7.97 6 6.22 3.37 0.21 2.64 2.81 0.17 3.46 6 1.87 0.21 0.10 1.56 18.01 0.60 0.17 7.87 6 6.22 3.37 0.21 2.64		ì		23.00	2		19.40				~	10.45	ŧ	0.17	20.28	-					Ć		5	
11.10 3.02 0.17 7.53 12.10 3.02 0.17 7.53 12.10 3.02 0.17 7.53 12.25 6.35 0.17 14.43 12.25 6.35 0.17 14.43 12.25 6.35 0.17 2.64 12.25 0.35 0.17 20.13 12.25 0.35 0.17 20.13 12.30 0.17 10.85 12.30 0.17 10.85 12.31 1.56 0.17 0.78 12.31 1.55 0.17 10.50 12.32 0.17 10.85 12.33 1.25 0.17 10.85 12.34 0.17 10.85 12.31 1.32 0.30 0.17 10.85 12.31 1.32 0.30 0.17 10.85 12.31 1.32 0.30 0.17 10.85 13.31 1.32 0.30 0.17 10.85 13.31 1.32 0.37 1.35 13.31 1.32 0.30 1.32 0.17 1.35 13.31 1.32 0.30 1.32 0.17 1.35							90 (7				_	5.40	•	0.17	5.23				7	3	7		ć	
11.10 3.02 0.17 7.94 5 14.60 - 0.17 14.43 5 4.84 3.80 0.17 0.87 6.26 4.36 0.17 1.55 6.26 4.45 - 0.17 14.28 6 3.21 4.56 0.21 -1.56 8.65 5.24 0.21 3.20 6 4.45 - 0.17 4.84 7.85 0.17 1.86 2.03 0.17 1.86 2.03 0.17 1.86 2.03 0.17 2.64 2.85 0.04 0.17 2.64 3 11.92 1.25 0.17 10.80 3 11.92 1.25 0.17 10.80 3 11.92 1.25 0.17 10.80 3 11.92 1.25 0.17 10.80 3 11.90 0.17 10.80 5 1.90 0.17 10.80 5 1.90 0.17 10.80 5 1.86 0.17 1.90 6 1.87 0.21 0.10 1.56 1.80 0.17 1.47 8.60 0.17 7.87 5 6.44 2.81 0.17 2.64 6 1.87 0.21 0.10 1.56 18.01 0.60 0.17 7.87 6 6.22 3.37 0.21 2.64			**	44.44	2		1				-	4		0.17	7.43				₹	2,46	4	1		
6.26 4.36 0.17 1.53 5 14.60 7 1.28 6 3.21 4.56 0.21 -1.56 8.65 5.24 0.21 3.20 6 3.21 4.56 0.21 1.86 8.65 5.24 0.21 3.20 6 4.45 7 0.17 4.84 7 0.20 1 4.06 2.03 0.17 1.86 9.72 0.95 0.17 20.13 0.17 2.64 9.17 2.64 9.17 2.64 9.17 2.64 9.17 2.64 9.17 2.64 9.17 1.90 9.17 1.90 9.17 1.90 9.17 1.90 9.17 1.60 9.17 1.			₹.	04-14	3		1.54				•	3							•>:	4.8%	8	0-17	0.8	
8.65 5.24 0.21 3.20 6 4.45 - 0.17 4.84			Ą	6.26	4.36		7.53				ń	14.60		1			-		٧	1.21	4.56	0.21	-1.56	
21.25 0.95 0.17 20.13 0ct. 1 5.05 0.04 0.17 2.64 7eb. 1 4.06 2.03 0.17 1.86 9.72 0.95 0.17 8.60 3 11.92 1.25 0.17 10.50 14.90 0.30 0.17 14.43 3 2.51 1.56 0.17 0.78 4 7.39 1.25 0.17 10.50 11.32 0.30 0.17 10.85 4 7.39 1.25 0.17 1.90 5.97 8.64 0.60 0.17 7.87 5 6.44 2.81 0.17 3.46 6 1.87 0.21 0.10 1.56 18.01 0.60 0.17 7.74			ø	8.65	5.24	•	3.20				Ψ	4.45	:	0.17	67		:		>					
21.25 0.95 0.17 20.13 0ct. 1 5.05 0.04 0.17 2.64 9.72 0.95 0.17 2.03 0.17 1.90 1.25 0.17 1.050 1.4.43 3 11.92 1.25 0.17 10.50 1.4.90 0.30 0.17 14.43 3 2.51 1.56 0.17 0.78 4 7.39 1.25 0.17 10.50 11.32 0.37 0.17 10.85 6.14 2.81 0.17 1.90 5.97 5.97 5.97 5.97 5.97 5.97 5.97 5.97			: '	. :		1					: 1			•	Č				ø	8	2.03	0.17	1.86	
9.72 0.95 0.17 8.60 2 2.85 0.04 0.17 2.64 3 11.92 1.25 0.17 10.50 14.90 0.30 0.17 14.43 3 2.51 1.56 0.17 0.78 4 7.39 1.25 0.17 5.97 11.32 0.30 0.17 10.85 4 3.63 1.56 0.17 1.90 5.97 5.97 5.97 5.97 5.97 8.64 0.60 0.17 7.87 5 6.44 2.81 0.17 3.46 6 1.87 0.21 0.10 1.56 18.01 0.60 0.17 17.24	:	•	,	27. 28	0.0		20.13			ų,	-1	n N	3	1						9	-	0.17	4.90	
14.90 0.30 0.17 14.43 3 2.51 1.56 0.17 0.78 4 7.39 1.25 0.17 5.97 11.32 0.30 0.17 10.85 1.39 0.35 0.17 1.90 5.97 5.97 5.97 5.99 0.35 0.17 1.90 5.00 0.17 7.87 5 6.44 2.81 0.17 3.46 6 1.87 0.21 0.10 1.56 1.80 0.17 7.87 6 6.22 3.37 0.21 2.64		3	• •			1					~	2.85	0.0		2,00								<b>S</b>	*
14.90 0.30 0.17 10.85 11.32 0.30 0.17 10.85 8.64 0.60 0.17 7.87 18.01 0.60 0.17 7.24 6 6.22 3.37 0.21 2.64	*		¥	7.	, ; > ;		_				•	2.5	8	0.17	0.78		•			7.4.1			) (	٠.
11.32 0.30 0.17 10.85 4 3.53 4.30 0.17 1.46 5 1.99 0.35 0.17 8.64 0.60 0.17 7.87 6 1.87 0.21 0.10 18.01 0.60 0.17 17.24 6 1.87 0.21 0.10			•^•	3	9	2.0					٠.				0					7.39		0.17	5	
8.64 0.60 0.17 7.87 6 1.87 0.21 2.64 8.81 0.17 3.49 6 1.87 0.21 0.10 18.01 0.60 0.17 17.24				11,32	0,30		٠.				4	o e	Č.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>&gt;</b>					8		0.17	1.47	
18.01 0.60 0.17 17.24				7	4	٠.					ĸ,	6.44	2.8	0.17	3.46								<b>.</b>	
100 CO 10					•					٠.	·	6. 22	3	77.0	2.64	2				•		} :	1	
	:		-	18.01	3						)					-								

Veer Month		ី ទ	8	8	Š	S	XOAT N	Month	200	Or Or	Š.	3	· •	<b>\</b>	100	rear month days	days	,	į.			•
	gay.	١	•																	١		
į	1	. '	:		•			•				6.34	64	1.64	1979	2			777			7, 76
1979 x	Max.	4,84	:	0.17	4.07		× × ×	****						d			ć	76.		- 7170	45.4	-7-30
	-	2 2 85	ا د	0.17	2.7							1	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7								X
	. •		1		00			٠				0.17	6.83									
	7		1										7.52								•	20.0
	•			0.17	40.0							1									•	13.59
	-				2.25								2									4
		4 17.92	0.05		17.66				ý	2.5	2.85	0,22	0.42	-0.42			φ				,	7
	-				1																	
									-			0.17	*0.65	-1.07		Š			7.65 0	0.17	-3.63 -	8
~	Apr.	7 9.20			04.			3		`				, Y			2				6.18	-27.07
																					A 57	39.00
												0.17		10.1							•	Ċ
												0.17	44.0	-0.63							いったよう	
	-													,							1,44	28.88
																					92.0	-28, 58
		6 19.48	8 1.87	0.17						3.89	4	42.0	3.68							,		
									•		•	;			000	5		9.12	0 67.7	0.17	4.46	-24.12
-	MAV				12.09			o O		47.0	J		* * * * * * * * * * * * * * * * * * * *		) }						60.0	-24.03
										٠ د د د د د د د د د د د د د د د د د د د			12.88									•
										6	•		13.74								ر الم	2
																		5.44			4.15	13.87
		4 4.62								9		1	•						0	,	84.0	13.39
										1.43	ı	71.0	0								6	7, 7,
			5.96	0.27	-2.23	-5.25			ø	1.21	;	0.17	ы 0.					77.7		٠.		•
													č	٠		4	-				1.04	-13-13
•	4.5					45		o Ç	<b>-</b> •			74.0	2									25.30
-	:		1							7.17			96.0				N		4/4	71.	7	
													40-17	0							1 77.0	74.4
					•													24			96.0	-12.88
													\$ :								78 .	11,10
													18.1	52.2								0
	,								¥		3.94	0.21	-2.70	-4.94			ø	8		2	è	3
									•													

Table 5.2 Required Storage Capacity of Alternative Bila Dam (8/8)

3.93			P. L. C.								46.00													
Mar. 1 3.93 - 0.17 3.76 -4.47 1980 Jul. 2 3.97 - 0.17 3.80 -0.67 4 1.51 - 0.17 1.36 5 1.21 0.04 0.17 1.36 6 2.12 0.04 0.17 1.36 7 1 3.93 0.99 0.17 2.77 7 1 3.93 0.99 0.17 2.77 7 1 3.93 0.99 0.17 2.77 7 1 3.93 0.99 0.17 7.26 5 10.15 2.72 0.17 7.26 5 10.18 2.72 0.17 7.26 5 10.19 2.72 0.17 7.55 6 10.84 3.02 0.17 7.55 6 10.84 3.02 0.17 7.55 7 1 26.57 2.75 0.17 23.64 7 1 26.57 2.75 0.17 23.64 7 1 26.57 2.75 0.17 23.64 7 1 26.57 2.75 0.17 23.64 7 10.15 2.75 0.17 7.55 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25 7 10.21 3.50 0.17 7.25	ăr X		2	ձ	8	2	8	8	ы 1		dayn	ខ	ទ	3	ઢ	8	Year	Month	days	ದ	<b>5</b>	63	8	88
Apr. 1 3.93 - 0.17 3.80 -0.67 3.00 3.01 3.80 -0.67 3.25 - 0.17 2.08 1.41 4.15 4.15 5.00 5.17 1.00 6 2.12 0.04 0.17 1.00 6 2.12 0.04 0.17 1.00 6 2.12 0.04 0.17 1.00 6 2.12 0.04 0.17 1.00 6 2.12 0.04 0.17 1.00 6 2.12 0.00 6.17 1.00 6 2.10 0.00 6.17 1.00 6 2.10 0.00 6.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.17 1.00 6 2.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10	•	1		40.	i	. e		•		1												1 :		
2 2.57 - 0.17 3.80 -0.67 1.31 1.32 1.41 1.34 1.31 0.04 0.17 1.34 1.41 1.34 1.32 1.41 0.04 0.17 1.34 1.37 1.30 1.39 0.17 1.34 1.41 1.34 1.37 1.30 0.17 1.36 1.41 1.36 1.36 0.17 1.36 1.36 1.37 1.36 1.37 1.36 1.37 1.36 1.37 1.36 1.37 1.35 0.17 1.36 1.38 1.37 1.35 0.17 1.36 1.38 1.37 1.35 0		•			•	\ \ \ \	0	10.01	1980	75	-t			o: 1-1	6.43		1980	02	o-t		3.02		8.7	ķ.3
2 2.25 - 0.17 2.08 1.41  5 1.21 0.04 0.17 1.34  1 3.93 0.09 0.17 1.00  2 14.12 0.09 0.17 1.00  3 14.43 2.72 0.17 1.26  5 10.15 2.72 0.17 1.26  5 10.15 2.72 0.17 7.26  5 10.15 2.75 0.17 7.26  6 10.84 3.02 0.17 7.35  6 10.84 3.02 0.17 7.55  7 10.85 0.99 0.17 23.64  8 8.89 0.99 0.17 7.73  6 5.66 0.30 0.17 5.66  7 10.41 3.50 0.17 5.66  8 19.05 0.30 0.17 15.58  6 5.31 0.35 0.17 15.58  6 5.31 0.35 0.17 15.58  7 77 0.35 0.17 15.58  6 5.31 0.35 0.17 15.58				7.57		0.17	., BO	-0.67		-	έų			6.17	0.27						3.02		- 3	8.20
4 1.51 - 0.17 1.34  5 1.21 0.04 0.17 1.00  6 2.12 0.04 0.17 1.00  1 1.93 0.99 0.17 2.77  4 10.15 2.72 0.17 11.54  5 10.43 2.72 0.17 11.54  6 10.84 3.02 0.17 7.55  7 10.84 3.02 0.17 7.55  8 10.8 5.27 0.17 7.55  8 1.9 0.99 0.17 7.73  8 1.6 5.27 0.17 3.20  8 1.6 5.27 0.17 3.20  8 1.6 5.27 0.17 3.20  8 1.6 5.27 0.17 3.20  8 1.6 5.27 0.17 3.20  8 1.6 5.27 0.17 7.73  8 24.66 1.19 0.21 23.26  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58  8 20.5 0.17 18.58				, 12 13	ſ	0.17	2,08	7.47					2,59	0.17	50				~	1.21				
5 1.21 0.04 0.17 1.00 6 2.12 0.04 0.21 1.87 2 14.12 0.09 0.17 2.77 Aug. 3 14.43 2.72 0.17 1.26 4 10.15 2.72 0.17 1.26 5 10.71 3.02 0.17 7.65 6 10.84 3.02 0.17 7.65 1 26.57 2.75 0.17 7.65 2 11.36 2.76 0.17 23.64 5 6.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 7 10.41 3.50 0.17 5.66 8 6.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 7 10.41 3.50 0.17 30.20 8 30.67 0.30 0.17 18.58 8 30.67 0.30 0.17 18.58 8 5.31 0.35 0.17 7.25 6 5.31 0.35 0.17 7.25				1.51	ſ	0.17	1.34							0.17	0						7		ć	3,
6 2.12 0.04 0.21 1.87  1 3.93 0.99 0.17 2.77						0.17	00						- 1		ç	20								V
1 3.93 0.39 0.17 2.77 Aug. 2 14.12 0.39 0.17 12.96 3 14.43 2.72 0.17 11.54 4 10.15 2.72 0.17 11.54 5 10.71 3.02 0.17 7.26 5 10.84 3.02 0.17 7.55 6 10.84 3.02 0.17 7.55 7 11.36 2.75 0.17 23.64 2 11.36 2.75 0.17 23.64 2 11.36 2.75 0.17 7.55 6 5.89 0.99 0.17 7.73 6 5.46 1.19 0.21 23.26 7 10.21 3.50 0.17 5.66 7 10.22 3.50 0.17 18.58 7 19.05 0.30 0.17 18.58 7 19.05 0.30 0.17 18.58 7 10.21 3.50 0.17 7.25 6 5.31 0.35 0.17 7.25			:			0.23	1.87	,				23	3.02	0.27	66.0	-1.38			φ	8 2	2,72		6	15.85
1 1.93 0.39 0.17 2.96 2 14.12 0.39 0.17 12.96 3 10.15 2.72 0.17 11.54 4 10.15 2.72 0.17 11.54 5 10.71 3.02 0.17 7.26 5 10.84 3.02 0.17 7.65 6 10.84 3.02 0.17 7.65 7 11.36 2.75 0.17 23.64 2 11.36 2.75 0.17 23.64 5 6.00 5.27 0.17 3.20 6 6.00 5.27 0.17 3.20 6 6.00 5.27 0.17 7.73 6 24.66 1.19 0.21 23.26 7 10.21 3.50 0.17 18.58 7 19.05 0.30 0.17 18.58 7 19.05 0.30 0.17 18.58 7 19.05 0.30 0.17 18.58 7 19.05 0.30 0.17 4.79			•										1								V.	- :		;
2 14.12 0.89 0.17 12.96 3 14.43 2.72 0.17 11.54 4 10.15 2.72 0.17 11.54 5 10.71 3.02 0.17 7.65 6 10.84 3.02 0.17 7.65 7 11.36 2.75 0.17 23.64 2 11.36 2.75 0.17 23.64 2 11.36 2.75 0.17 7.55 6 8.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 7 10.41 3.50 0.17 5.66 7 10.41 3.50 0.17 5.66 7 10.41 3.50 0.17 15.58 6 24.65 1.19 0.21 23.26 7 27 0.35 0.17 7.25 6 5.31 0.35 0.17 7.25	₹						2.75			Aug.				6.14	7.47	1.09		Ç	~₹		7.26	0.17	-5.66	-21.51
3 14.43 2.72 0.17 11.54 4 10.15 2.72 0.17 7.26 5 10.15 2.72 0.17 7.26 6 10.84 3.02 0.17 7.55 6 10.84 3.02 0.17 7.55 7 12.65 2.75 0.17 23.64 7 1.65 2.75 0.17 23.64 7 1.65 2.75 0.17 23.64 7 1.65 2.75 0.17 23.64 7 1.65 2.75 0.17 2.25 7 10.21 3.50 0.17 5.66 7 10.21 3.50 0.17 18.58 7 17 0.35 0.17 18.58 7 17 0.35 0.17 18.58 7 27 0.35 0.17 4.79			1 :				12.96							6.17	3.55				N		7,26	0.17		-25.73
4 10.15 2.72 0.17 7.26 5 10.71 3.02 0.17 7.52 6 10.84 3.02 0.17 7.65 1 26.57 2.75 0.17 23.64 2 11.36 2.76 0.17 3.20 4 6.06 5.27 0.17 3.20 5 8.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 7 10.41 3.50 0.17 5.66 7 19.05 0.30 0.17 15.58 6 3.31 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79							11.54							61.0	1.47				ń		96.9	0.17		86.62
5 10.71 3.02 0.17 7.52 6 10.84 3.02 0.17 7.65 1 26.57 2.75 0.17 23.64 2 11.36 2.76 0.17 3.20 4 6.66 5.27 0.17 3.20 5 8.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 7 10.41 3.50 0.17 5.66 7 10.41 3.50 0.17 5.66 6 3.31 0.35 0.17 15.58 7 77 0.35 0.17 15.58 6 5.31 0.35 0.17 4.79						0.17	7.26			•.			0.52	0.17	2.64						96.9	0.17		-35.55
\$ 10.84 3.02 0.17 7.65 1 26.57 2.75 0.17 23.64 2 11.36 2.76 0.17 3.20 4 6.06 5.27 0.17 3.20 5 8.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 1 9.33 3.50 0.17 5.66 2 10.41 3.50 0.17 5.66 4 30.67 0.30 0.17 15.58 6 5.31 0.35 0.17 4.79						0.17	7.52					4.84		0.17	4.67		:		٧		2,5	0.17		-32,96
1 26.57 2.75 0.17 23.64 Sep. 2 11.36 2.76 0.17 23.64 8.43 8.64 5.27 0.17 3.20 4 6.00 5.27 0.17 0.56 5.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 7.74 6.74 7.75 6.30 0.17 5.66 0000 5.27 0.30 0.17 10.58 7.77 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79				:		0.17	7.65					3.99	•	42.0	3.78					2.28	3.01	0.27		-33.90
1 26.57 2.75 0.17 23.64 Sep. 2 11.36 2.76 0.17 8.43 3.20 4 6.00 5.27 0.17 9.26 5.20 6.17 9.56 5.27 0.17 0.56 5.20 0.17 7.73 6 24.66 1.19 0.21 23.26 6 0.17 5.66 7.45 7.75 0.30 0.17 5.66 0.70 5.17 15.25 6 7.77 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79	- ;											. :		: :-:				• :						
2 11.36 2.76 0.17 8.43 3 8.64 5.27 0.17 3.20 4 6.00 5.27 0.17 0.56 5 8.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 1 9.33 3.50 0.17 5.66 2 10.41 3.50 0.17 5.66 2 15.05 0.30 0.17 15.58 6 5.31 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79	Z.	<u>&gt;</u>	٠.			:	23.64			Sep.	-	3.33		0.17	3.16		1981	Jan.	et	1.29	5.66	0.17	4.54	-38.44
3 8.64 5.27 0.17 3.20 4 6.00 5.27 0.17 0.56 5 8.89 0.99 0.17 7.73 6 24.66 1.19 0.21 23.26 1 9.33 3.50 0.17 5.66 2 10.21 3.50 0.17 18.58 4 30.67 0.30 0.17 18.58 5 7.77 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79						0.17	8.43					2.12	ı.	0.17	1.95				ćŧ	1.29	5.66	0.17	7	42.98
4 6.00 5.27 0.17 0.56 \$ 8.89 0.99 0.17 7.73 \$ 24.66 1.19 0.21 23.26 1 9.33 3.50 0.17 5.66 2 10.21 3.50 0.17 5.66 4 30.67 0.30 0.17 18.58 4 30.67 0.30 0.17 7.25 5 7.77 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79	٠	٠.		1.2		0.17	3.20					1.98	•	0.17	7.8				'n	1.12	4.80	0.17		-46.80
\$ 8.89 0.99 0.17 7.73 \$ 24.66 1.19 0.21 23.26 2 10.41 3.50 0.17 5.66 2 10.41 3.50 0.17 6.74 3 19.05 0.30 0.17 18.58 \$ 7.77 0.35 0.17 7.25 \$ 7.77 0.35 0.17 7.25 \$ 5.31 0.35 0.17 4.79			•	-		0.17	9,56			:		1.94	•	0.17	7.17				7	4	4.80	6.17		-50.68
6 24.66 1.19 0.21 23.26  1 9.33 3.50 0.17 5.66  2 10.41 3.50 0.17 15.58  4 30.67 0.30 0.17 15.58  5 7.77 0.35 0.17 7.25  6 5.31 0.35 0.17 4.79			٠,.		* .	5.17	7.73					1.77	•	6.17	1.60		٠.		١'n	1,21	3.80	0.17		-53.44
1 9.33 3.50 0.17 5.66 0ct. 2 10.41 3.50 0.17 6.74 3 19.05 0.30 0.17 18.58 4 30.67 0.30 0.17 30.20 5 7.77 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79						. '	23.26			. •		7-57	ı	0.17	1.34				ن	1,40	4.56	0.21		-56.81
2 10.41 3.50 0.17 6.74 3 19.05 0.30 0.17 15.58 4 30.67 0.30 0.17 30.20 5 7.77 0.35 0.17 7.25 6 5.31 0.35 0.17 4.79	<b>4</b> 5		 .⊣			7.1.7	5.66	:		į			0	, 10 , 10	00			6	_	1.17	2.72	0.17	1.72	-58.53
19.05 0.30 0.17 18.58 30.67 0.30 0.17 30.20 7.77 0.35 0.17 7.25 5.31 0.35 0.17 4.79	1		·. [				46.74				٠,				0			•		1.17	2.75	0.17	- 22	*60.25
30.67 0.30 0.17 30.20 7.77 0.35 0.17 7.25 5.31 0.35 0.17 4.79							88.8					2.38	999	0.17	91.0				i e7	1.29	3	0.17	8	60.77
5.31 0.35 0.17 7.25 5.31 0.35 0.17 4.79				٠,			30.20		:			-		61.0	9	-0.56			4	1.17	1.64	0.17		-61.41
5.31 0.35 0.17 4.79				٠.,	٠		7.25							617	1.86	2.42			v	1.21	0.52	0.27		-60 89
			:	-		7.17	4.79							0.21	-1.98	-4.40			\$	1.22	0.31	0.10	0.81	-60.08
			:						:					. :										
		(4											. ,					MAL	řŧ	2.03	•	0.17	1.86	-58-22
													-		-					3.37		0.17	3.20	-55.02
						1													•	2.81		0.17	2.64	-52.38
			:											-: -:						3.77		0-17	3.55	-48.83

Table 5.3 Design Storage Capacity of Alternative Bila Dam

	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		(Unit:	10 <sup>6</sup> m <sup>3</sup> )
Case	Net Storage/1 Capacity	Evaporation /2 Loss	Domestic /3 Supply	Sedimen- tation	Total
1	8.23	2.56	1.26	17.00	29.05
2	24.09	3.40	1.26	17.00	45.75
3	32.64	3.90	1.26	17.00	54.80
4	61.41	5.53	1.26	17.00	85.20

Remarks: /1 : Irrigation use and maintenance flow (refer to Table 1 and 2).

/2; 0.65(m) x Reservoir Area(m<sup>2</sup>) x 0.75

/3 : Domestic water 83,900 persons  $\times 0.1 \text{ m}^3/\text{day x}$ 150 days = 1.26

Table 5.4 Construction Cost of Alternative Bila Dam

Case	Foreign	Local	Total	US\$ Equiv.	Cornand Area	US\$/ha
	(10 <sup>6</sup> Rp.)	(10 <sup>6</sup> Rp.)	(10 <sup>6</sup> Rp.)	(10 <sup>3</sup> US\$)	(ha)	(US\$/ha)
1	11,957	9,267	21,224	33,958	7,500(4,800)	4,528(7,075)
2	12,772	9,559	22,330	35,728	9,200(6,400)	3,884(5,583)
3	13,904	9,982	23,886	38,217	9,600(7,200)	3,981 (5,308)
4	17,746	11,411	29,156	46,649	10,000	4,665(4,665)

Table 5.5 Required Storage Capacity of Kalola Dam (1/13)

Yeer	Month	ក	D2	ಕ	85	3	6	š	8	8	6	: E	ô	8
1973	Apr.	32	00.00	10.76	2.99	7.77	7,700.00	0.91	9.0	0.86	0,86	6.01	5.15	
	¥.	20	1.06	11.79	3.52	8.27	7,700,00	96.0	0.04	8		•		
		*>	0	16.76	3.63	13.24	7,700.00	0	0	8				
		'n	0.83	10.01	2.96	16.05	7,700.00	18.0	ŏ	0.83				
		<b>.</b>	0.49	2480	2.86	21.04	7,700,00	0.81	δ	0.0				
		en v	0.47	27, 39	en i	25.83	7,700,00	0.43	0.04	0.47				
		¢	0.47	19.70	1.88	17.82	7,700.00	S	6	0.56	4.73	15.86	21.13	•
	Sun.	٠,	0.20	11.15	0.67	10.49	7,700.00	91.0	0.04	0.22				-
		<b>v</b> r.	95.0	3.04	0.67	9.28	7,700.00	0.18	0.0	0.22				
		•	0.07	7.39	0.23	7.16	7,700,00	90.0	6	1				
	:	<u>.</u>	0.07	5.27	0.23	5.04,	7,700.00	0.06	0.04	0.11				
		÷	00.0	14.26	0.00	14.26	7,700.00	80.0	8	0.0				
÷		s.	0.0	21.00	800	21.00	7,700.00	0.00	0.0	0.0	0.75	43.21	42.46	
-	Jul.	•	0.14	47.62	0.47	47.35	7,700,00	6,13	0.04	0.17				
		×	0.14	26.74	0.47	26.27	7,700,00	0.13	800	0.17				
		•	0.83	16.29	2.69	13.60	7,700.00	0.73	0.0	0.78				
		<b>.</b>	78°0	19.44	2.69	16.75	7,700.00	0,73	0.0	0.78				
		×٠	95.0	9.37	1.76	7.61	7,700,00	0.48	0.0	0.52	-			
		¢	0.53	15.61	2.11	13.70	7,700.00	0.58	0.05	0.63	3.04	8,17	5.13	ı
	Aug	: ES	00	24.41	8	24.41	7,700.00	0.0	0.0	0 0				
		•	0.0	19.22	0	19.27	7,700.00	80.0	80.0	o o	٠	:		
		•	ŏ	6.44	0.13	6.31	7,700.00	0.0	0	90.0		٠		
		¥'n.	ŏ	7.78	0.13	7.65	7,700.00	0	9	0	٠			
		<u>در</u> ب		7.65					0	8 0	;	1	1	
		د		90.0		-:	-		0.03	0	0.97	50.59	49.62	•
	Sep.	<b>\$</b>		10.80				٠	40.0	0.04				
		žì.		10.07			-		0	8				
		 •^, ,		3,			-		8	0				
		۸.		19.80			-		o o	0.0				
		n,	;	15.38	174	•			Ö	8				1.1
		^		72.00					0.00	0.0	0.40	43.64	62.55	
Penarkar Dl.		Por requ	Number of day (5 days basis)	iye basta)							Maintenance	flow for	Asingenance flow for Melola asver (Mill.C.K.)	(M11.C.M.)
	22.0	ic diver	aton water	Unite diversion water requirement (litt./sec/ha)	me (11t./	Wec/he)				- 7	Total water	Part Line	Tamil rement (x) 1 C. X. 1	50+50+50
								1						*
•	120	rigation	irrigation area ensured by		oils river flow (ha)	low (ha) 1	*	. 78	7,700 -01/02	07:	Accumulated		of in monthly basis	
	01, 81	to river	Sila river discharge (Mil.	m (M11. C.M.)	7			-		٠.	(M11.)		,1	e wonthly o
	02) WA	ior requi	Water requirement for 7,700	or 7,700 ha	ha (Milio.M.)	~~;		:		60	Kalole river flow (Mil.C.M.)	THE STON CHI	2.C.W.)	
* .		blue die	Surplus dischange or of the		Tev 7	SALVA TEXANT AND DEPTH	. ( M ) . ( M )	õ	: 60	3.760	Water surpl	us or defi	Water surplus or deficit (Mil.C.M.) :	11 28 - 27
	•					****		\$	•	8	TO TAKE THE POTAL CONTROL	7 20000		\$
	•	•												

Table 5.5 Required Storage Capacity of Kalola Dam (2/13)

- A	ć	5	ò			5		}			•	
	*		ا	,		-						
\$	0.0	6.16	0.03	8.13	7,700.00	0.01	0.0	0.05				
40	0.0	4	0.03	4.51	7,700.00	0.0	8	0.05				
	0.63	3.87	2.09	7-80	7,700,00	0.57	8	79.0				
	19.0	25.53	2.09	1.24	7,700,00	0.57	ó	0.6				•
ı d	6	10.07	1.10	9-87	7,700,00	0,10	0.0	0,34		:	**	
٠.		21.36	7	20.05	7,700.00	95.0	0.05	4.0	2.08	15.27	13.19	
,					*	•	*			٠		
•	0.45	10.71	Z .	7. 93	7,700.00	, i	3 6					
Ą	••• ••	2	2.83	8	7,700,00	2.4	o d					
÷		<b>5.</b> 52	4. 23	2.30	7,700-00	1,15	8	61 ×				
	1.27	5.62	4.22	0.40	7,700.00	1,15	0	61.1				
	5	ŏ	4 53	. 05	6.691.95	1.23	ŏ	1.87				
٠.			5		00 002		2	1.27	7.15	24.60	17,45	,
n	8	40.0				` •					!	
· w	39.4	6.87	5.49	1.30	7,700,00	1.49	0.0	7.54				
ي ،	, Y	0 0	\$ 40	13.56	7,700,00	1.49	ŏ	2.54				
٠,					90	6	2	ď				
٨	0.83	77.7		7.47	200	1 6	5 .					
•	0.89	19.79	% %	16.83	7,700.00	0.81	40.0	0.83				
-	1.05	8.86	3.43	, n	7,700.00	0.95	8	66.0				
• •	100	8.29	4.19	4.10	7,700.00	1.14	0.05	1.19	۶. 8	7.77	0.61	•
		: ;				:	•	:				
ŗ.	er.	5.70	8	1.74	7,700.00	90	5	1				
'n	7.19	80.4	Š	0.10	7,700,00	2.08 2.08	8	7.13				
~	71.1	ž	3.72	-0.70	6,078.95	1.	o S					
			3.72	-0.30	6.885.34	1,01	0.0	1.45		٠		
١.	***				200.00		0	4				
n ·		2 4		1	2000	16	ž	76	4.93	0.24	-6.68	89.9
•	0.0	4.5	XC.2	6.0	>>>>>		) )	>	<b>*</b>			
<b>2</b> 0	0.63	2.46	2.09	0.37	7,700.00	0.37	o. 8	79.0				
~		2.01	2.00	0.72	7,700,00	0.57	0.04	3				
. =	000		0	4.14	7.700.00	0.26	ŏ	7.0				
٠.		2	Š		7. 700.00	0.26	0.04	0.31				
	***			, ,	00000	2	2	C				
G	0.0	2	2	٠ ٠	2000	>			3	**	6	9
<u>د</u>	0.0	1.71	0.18	1,53	7,700.00	0.05	20.0	0.0	5	7	4 2 4 4	3
*		70 .					90.0	0.0				
٠.		,					90.0	0				
٠.						•	0.04	0.0				
n :								2				
ė.		30	;		4			5 6				
^	0	7.86	0	B -1	7.700.00	٠ د د د	3	0	;	3	**	Ġ.
•	ਹ ਹ	2.39	ŏ	2.04	7,700,00	o	0.02	0	0.29	60.0		
	81.0	3.11	9,6	2.51	7,700.00	91.0	0.0	0.23				
٠.			4		7,700,00	0.16	90.0	0.23				
n =					700.00	7.47	0.0	2				
٠.	***				200	ć	0	ç				
ė.	0	77.07			1000	į	č	ě				
•	101	0.0	0						66.4	A. 24	, in	-7.31
	ਰ ਹ	1.99	3.39	-1.37	47.204.79	7.0	5	3	•	) <u>{</u>		
¥	0.63	4.34	2.00	4.4	7,700,00	0.57	0.04	300				
	69.0	10.07	2.00	7.00	7,700.00	0,57	9	0.6				
٠,٠			6		2,700.00	8	0.04	0,60				
٠.			, (	2 4	200.00		0.0	0.00				
۸,				7 6	2000	9	0	0.40				
n	***		2	1 4					•	<b>?</b>	63	6.23

Table 5.5 Required Storage Capacity of Kalola Dam (3/13)

1,144   1,90   1,40		ľ	2		>	•		ζ	2	\$	6	ð	ò	8
1,46   1,10	Gus.	-	1.46	4.06	4.85	0.70	6.419.80	3	8					
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		: ·	1.46		4	-0.05	09 .EEC. 9		0	9 6				
1,5,75   0.57   115.02   7,700.00   0.15   0.02   0.15		• <b>•</b> 7	0.11	3.20	0.37	2.63	7,700.00							
9,239 0,660 0,689 7,700,00 0,136 0,00 0,21 13,136 0,279 1,147 7,700,00 0,136 0,04 0,23 13,136 0,279 1,147 7,700,00 0,137 0,04 0,23 13,148 0,43 1,147 7,700,00 0,136 0,04 0,137 1,149 0,43 1,131 1,147 7,700,00 0,136 0,04 0,136 1,149 0,43 1,131 1,132 1,130 1,131 1,132 1,131		• •5	1	16.29	0.37	15,92	7.700.00	0.10	0.04	0.14				
1,14,15   2,46   1,47   1,790,00   0,18   0,04   0,21   5,113   12,23   7,114     1,14,15   2,74   1,145   1,175   1,170,00   0,175   0,04   0,175     1,10,15   2,74   1,110   6,17   7,790,00   0,175   0,04   0,175     1,10,15   2,74   1,110   6,17   7,790,00   0,120   0,04   0,125     1,10,15   1,10   6,17   7,790,00   0,130   0,04   0,14     1,10   1,10   1,10   1,10   7,790,00   0,130   0,04   0,14     1,10   1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10   1,10     1,10   1,10		•	0.18	9.29	0,60	0,00	7,700.00	91.0	0.04	0.21		٠		
13.31 2.76 10.55 7.700.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.79 0.00 0.70 0.7		'n	0.18	6.47	0.60	7.87	7,700.00	0.16	9	0.21	5.13	12.29	7.14	
15.13 0.46 21.34 0.7700.00 0.73 0.04 0.73 0.04 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.73 15.13 0.46 0.41 0.42 0.43 15.13 0.44 0.43 15.13 0.44 0.43 15.13 0.44 0.44 15.13 0.44 0.44 15.14 0.44		¥ņ.	0.83		2.76	10.55	7,700,00	0.75	0.04	0.70				
13.5.3 0.40 21.53 7700.00 0.22 0.04 0.25 15.64 12.78 15.53 15.64 13.54 13.2 13.64 13.79 0.04 0.22 0.04 0.25 15.64 13.2 13.64 13.79 15.64 13.2 13.64 13.79 15.64 13.2 13.64 13.79 15.64 13.		€6	0.83		2.76	13.40	7,700.00	0.75	0.0	0.79				
10.34 0.80 0.74 7700.00 0.12 0.04 0.25 15.64 12.78 11.10 0.80 0.12 0.04 0.25 11.11 11.11 14.44 7700.00 0.13 0.04 0.41 11.11 14.44 7700.00 0.13 0.04 0.41 11.11 11.11 14.44 7700.00 0.13 0.04 0.41 11.1		rì	χ.	22.33	0.80	27.53	7,700.00	0.22	o o	0.36				
1.47   1.10   6.37   7,700.00   0.30   0.04   0.34   0.34   1.5.64   12.78     5.83   1.13   5.48   7,700.00   0.35   0.04   0.04   0.04     5.83   1.13   5.48   7,700.00   0.35   0.04   0.04     5.83   1.13   5.48   7,700.00   0.12   0.04   0.04     5.83   1.13   5.48   7,700.00   0.12   0.04   0.04     5.84   0.43   0.43   7,700.00   0.12   0.04   0.05     5.14   0.43   7,700.00   0.12   0.04   0.04     5.15   0.03   12.07   7,700.00   0.01   0.04     5.15   0.03   12.07   7,700.00   0.01   0.04   0.05     5.15   0.03   12.07   7,700.00   0.01   0.04   0.05     5.15   0.03   12.07   7,700.00   0.02   0.04   0.05     5.15   0.03   12.07   7,700.00   0.02   0.05     5.15   0.03   12.07   7,700.00   0.05   0.05   0.05     5.15   0.03   12.07   7,700.00   0.05   0.05   0.05     5.15   0.03   12.07   7,700.00   0.05   0.05   0.05     5.15   0.03   1.03   0.05   0.05   0.05   0.05     5.15   0.03   0.03   0.05		Ö	0.24	10.54	0.80	9.74	7,700.00	0.22	0.0	0.26		-		
15.76 1.172 14.44 7,700.00 0.36 0.05 0.41 2.86 15.64 17.78 5.81 1.131 4.58 7,700.00 0.36 0.04 0.41 2.86 15.64 17.78 5.81 1.131 4.58 7,700.00 0.36 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0		÷.	0.33	7.47	3.10	6.37	7,700,00	0.30	0,0	0.34				
6.9% 1.33 5.58 7,700.00 0.36 0.04 0.41 0.44 0.41 1.33 5.58 7,700.00 0.36 0.04 0.44 0.44 0.43 0.43 0.770.00 0.36 0.04 0.04 0.44 0.43 0.43 0.770.00 0.32 0.04 0.04 0.04 0.04 0.05 0.05 0.05 0.05		٠¢٠	0.33	15.76	1.32	14.44	7,700.00	0.36	0.0	4.0	2,86	15.64	12.78	•
5.83 1.33 4.36 7.700.00 0.13 0.04 0.14 0.14 0.14 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15			: •	,	:		*							
10.56  1.04  1.04  1.04  1.04  1.04  1.04  1.05		à i		***	) ·	e c	00.007	9	5	T .				
10.59 10.59		Λ,	9	2	1.33	0.30	7 700 00	on i	0 4 0 4	H.				
10.56 5.14 5.14 5.14 5.14 5.14 5.14 5.14 5.14		ć.	0.13	4.07	0.43	4.24	7 700 00	0.12	ò	91.0				
5.34 5.22 10.55 10.25 10		<b>.</b>	11.0	9	0.43	3.41	7,700,00	0.12	0.0	0.16				
6.22  10.56  10.56  10.57  10.58  10.59  10.		æî.		5.14					ò	9	•			
10.36 50.26 50.26 50.26 50.26 50.26 15.46		æ		6,22					\$0.0	0.05	2.23	2,12	0.89	ŧ
20.26 15.26 15.26 15.26 15.26 15.27		٠,											•	
0.0.26 19.44		Ā.		70.58			:		Š	40.0				
15.45 15.44 15.44 15.44 15.44 15.44 15.45 15.10 10.03 15.10 10.04 10.04 10.04 10.04 10.04 10.04 10.04 10.04 10.04 10.05 10.04 10.05 10				20.26					o o	90.0				
19.44 19.44 19.44 19.44 19.46 19.46 19.46 19.46 19.40		*		63,50					0.0	0.0				
15.45  12.76  12.64  12.10  12				19.44			:		6	40.0				
15.65  9.72  9.72  9.72  9.73  9.69  7.700.00  9.01  9.04  9.02  10.03  12.10  9.03  12.10  9.04  9.05  12.10  9.05  12.10  9.05  12.10  9.05  12.10  9.05  12.10  9.05  12.10  9.05  12.10  9.05  12.10  12.		•		9.76					0.0	0.0				
9.72 0.03 9.69 7,700.00 0.01 0.04 0.05 18.42 0.73 13.69 7,700.00 0.01 0.04 0.24 21.64 0.73 13.69 7,700.00 0.20 0.04 0.24 21.64 0.73 13.69 7,700.00 0.20 0.04 0.24 7.26 2.27 4.99 7,700.00 0.22 0.03 0.67 1.82 16.77 14.95 7.00 2.29 4.79 7,700.00 0.62 0.04 0.67 11.13 2.29 4.79 7,700.00 0.63 0.04 0.67 10.41 2.06 6.25 7,700.00 1.05 0.04 1.09 10.41 3.06 6.25 7,700.00 1.05 0.04 1.09 10.42 3.06 6.25 7,700.00 1.05 0.04 1.42 10.43 2.29 4.74 7,700.00 1.04 1.44 10.44 3.00 5.19 1.77 7,700.00 1.04 0.04 1.45 10.45 5.05 -1.16 5.926.09 1.38 0.04 1.45 10.47 7,700.00 1.44 0.04 1.45 10.49 5.05 -1.16 5.926.09 1.38 0.04 1.25 10.40 5.19 -1.27 5.926.09 1.38 0.04 1.25 10.40 5.19 -1.27 5.926.29 1.18 0.04 1.25 10.40 7.72 -0.04 7,626.29 1.18 0.04 1.27 10.40 7.72 -0.04 7,626.29 1.18 0.04 1.77 10.70 7.72 -0.04 6.990.25 1.01 0.04 1.77 10.70 7.72 -0.04 6.990.25 1.01 0.04 1.77 10.70 7.72 -0.04 6.990.25 1.01 0.04 1.77 10.70 7.72 -0.04 6.990.25 1.01 0.04 1.77 10.70 7.72 -0.04 6.990.25 1.01 0.04 1.77 10.70 7.72 7.700.00 0.79 0.04 0.80		٠.	. : '	15.85	•				ó	8	0.26	33.51	33.25	ı
12.10 0.03 12.07 7.700.00 0.00 0.00 0.05 16.42 0.73 13.69 7.700.00 0.20 0.00 0.24 21.64 0.73 13.69 7.700.00 0.20 0.00 0.24 21.64 0.73 13.69 7.700.00 0.20 0.00 0.24 7.26 2.27 4.99 7.700.00 0.52 0.00 0.67 11.13 2.29 4.79 7.700.00 0.62 0.00 0.67 11.13 2.29 4.79 7.700.00 0.62 0.00 0.67 10.41 2.80 4.82 7.700.00 0.62 0.00 0.67 10.41 3.86 4.82 7.700.00 0.62 0.00 0.67 10.42 3.86 4.82 7.700.00 1.03 0.04 1.42 10.43 3.89 5.05 -1.16 5.926.59 1.38 0.04 1.42 10.44 5.19 -1.77 5.60.00 1.41 0.04 1.42 10.45 5.29 -1.27 5.652.08 1.44 0.04 1.45 10.47 5.29 -1.27 5.652.08 1.44 0.04 1.25 10.47 5.29 -1.27 5.652.08 1.44 0.04 1.25 10.47 5.29 -1.27 5.652.08 1.44 0.04 1.25 10.47 5.79 -1.27 5.652.08 1.44 0.04 1.25 10.47 5.79 -1.27 5.652.08 1.44 0.04 1.25 10.47 5.79 -1.27 5.652.08 1.44 0.04 1.25 10.47 5.79 -1.27 5.650.00 0.00 0.00 0.00 1.00 1.25 10.47 5.79 -0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.				•			44 442 2		:	•				
14.2.10 0.03 14.27 7.700.00 0.00 0.00 0.00 0.00 0.00 0.		۸.	7	27.6	0.0	À .	7,700.00	5 6	5 6					
15.42 0.73 13.59 7,700.00 0.20 0.04 0.24 0.24 0.74 1.82 16.77 14.95 7,700.00 0.20 0.04 0.55 1.82 16.77 14.95 7.26 2.27 4.99 7,700.00 0.52 0.04 0.67 1.82 16.77 14.95 7.700.00 0.52 0.04 0.67 1.82 16.77 14.95 11.13 2.29 4.79 7,700.00 0.62 0.04 0.67 1.09 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.00 1.04 1.05 1.00 1.04 1.05 1.00 1.04 1.05 1.00 1.04 1.05 1.00 1.00 1.00 1.00 1.00 1.00 1.00			당 6	12.10	0.0	12.07	7,700,00	0.0	0	4				
21.64 0.73 20.91 7.700.00 0.20 0.04 0.24 7.26 2.27 4.99 7.700.00 0.62 0.04 0.67 1.82 16.77 14.95 7.26 2.27 4.99 7.700.00 0.62 0.04 0.67 11.13 2.29 4.79 7.700.00 0.62 0.04 0.67 11.13 2.29 8.86 7.700.00 1.05 0.04 1.09 10.41 2.86 4.82 7.700.00 1.05 0.04 1.09 10.41 2.86 6.25 7.700.00 1.41 0.04 1.42 3.89 5.05 1.14 7.700.00 1.41 0.04 2.55 3.89 5.05 1.15 5.926.59 1.18 0.04 2.75 3.40 5.19 1.17 7.700.00 1.41 0.04 2.75 3.41 5.19 -1.77 5.65.01 1.44 0.04 2.75 3.41 5.19 -1.77 5.65.01 1.44 0.04 2.75 3.41 5.19 -1.77 5.65.01 1.44 0.04 2.75 3.41 5.19 -1.77 5.65.01 1.44 0.04 2.75 3.41 5.19 -1.77 5.65.01 1.44 0.04 1.20 3.41 5.19 -1.77 5.65.01 1.44 0.04 1.27 3.41 5.19 7.700.00 1.03 0.04 1.27 3.42 5.25 7.700.00 1.03 0.04 1.27 3.57 4.12 -0.35 6.147.74 1.01 0.04 1.27 3.57 5.59 7.700.00 0.79 0.04 0.85 3.24 3.72 -0.35 6.147.74 1.01 0.04 1.27 3.70 5.70 0.00 0.79 0.04 0.85		·	0.27		0.73	15.69	7,700,00	0.20	ò	0.24			٠	
9.63 1.30 7.73 7.700.00 0.52 0.04 0.56 1.82 16.77 14.99 7.26 2.27 4.39 7.700.00 0.62 0.05 0.67 1.82 16.77 14.99 7.00 2.29 4.79 7.700.00 0.62 0.04 0.67 11.15 2.29 8.86 7.700.00 0.62 0.04 1.09 10.41 3.86 4.82 7.700.00 1.38 0.04 1.42 5.40 5.05 0.35 7.700.00 1.38 0.04 2.58 7.52 4.02 -3.50 1.89 5.05 1.16 5.926.59 1.38 0.04 2.75 3.41 5.19 1.71 7.700.00 1.41 0.04 2.75 3.42 5.29 1.27 5.652.08 1.44 0.04 2.75 3.43 5.29 1.27 5.652.09 1.38 0.04 2.75 3.44 5.12 -0.04 7.626.29 1.38 0.04 1.26 3.97 4.32 -0.05 7.700.00 1.03 0.05 1.08 12.52 2.62 -9.90 4.28 4.32 -0.05 7.700.00 1.03 0.04 1.27 3.97 4.32 -0.05 6.347.74 1.01 0.04 1.71 3.24 1.72 -0.05 6.347.74 1.01 0.04 1.57 3.25 7.700.00 0.05 0.05 1.54 3.26 7.700.00 0.05 1.01 0.05 1.57 3.27 3.72 -0.05 6.347.74 1.01 0.04 1.57 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05 0.05 3.28 1.72 -0.05 7.700.00 0.05			0,23	27.64	0.73	20.91	7,700,00	0.20	o o	0.24				
7.26 2.27 4.99 7,700.00 0.62 0.03 0.67 1.82 16.77 14.95  7.00 2.29 4.79 7,700.00 0.62 0.04 0.67  111.15 2.29 8.86 7,700.00 0.62 0.04 0.67  10.41 2.29 8.86 7,700.00 0.62 0.04 0.67  10.42 2.29 8.86 7,700.00 1.05 0.04 1.42  5.05 5.05 6.35 7,700.00 1.38 0.04 2.38 7.52 4.02 -3.50  8.90 5.19 3.71 7,700.00 1.41 0.04 1.46  3.41 5.19 -1.78 5,062.08 1.41 0.04 2.75  3.42 5.19 -1.78 5,062.08 1.41 0.04 2.75  3.43 5.19 -1.78 5,062.08 1.41 0.04 1.20  4.02 5.29 -1.62 7,700.00 1.03 0.04 0.09  4.12 -0.04 7,624.39 1.18 0.04 1.27  3.24 5.72 -0.48 6,347.74 1.01 0.04 1.27  3.24 5.72 -0.48 6,347.74 1.01 0.04 1.27  3.24 5.72 -0.48 6,599.25 1.01 0.04 1.27  3.24 5.72 -0.48 6,599.25 1.01 0.04 1.71		ď.	0.57		7.30	7.73	7,700.00	0.52	0.0	o.5		٠	:	
7.00 2.29 4.79 7.700.00 0.62 0.04 0.67 11.13 2.29 8.86 7.700.00 0.62 0.04 0.67 10.41 3.86 4.82 7.700.00 1.05 0.04 1.09 10.41 3.86 6.55 7.700.00 1.05 0.04 1.09 3.89 5.05 1.15 7.700.00 1.41 0.04 1.42 3.89 5.05 1.15 7.700.00 1.41 0.04 1.42 3.41 5.19 1.17 7.700.00 1.41 0.04 1.45 3.42 5.29 1.42 5.65.08 1.44 0.04 3.10 3.50 1.62 7.700.00 1.03 0.05 1.08 12.52 2.62 -9.70 4.28 4.32 -0.04 7.624.29 1.18 0.04 1.27 3.97 4.32 -0.05 6.347.74 1.01 0.04 1.27 3.07 3.72 -0.05 6.347.74 1.01 0.04 1.27 3.24 5.72 -0.05 6.347.74 1.01 0.04 1.27 3.24 5.72 -0.05 6.347.74 1.01 0.04 1.27 3.27 5.29 1.43 7.700.00 0.05 0.05 0.05		•	0,57	7.26	2.27	4.99	7,700,00	0.62	50-0	0.67	1.82	16.77	14.95	•
11.13 2.29 8.86 7.700.00 0.62 0.04 0.67 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.09 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05			9.60	7.00	2.30	4.70	7,700.00	0.62	40.0	0.67			٠	
8.68 3.86 4.82 7,700.00 1.05 0.04 1.09 10.41 3.86 6.55 7,700.00 1.05 0.04 1.09 5.40 5.05 0.15 7,700.00 1.38 0.04 1.42 3.69 5.05 -1.16 5,926.59 1.38 0.04 1.46 3.41 5.19 -1.78 5,652.08 1.41 0.04 1.46 3.40 5.19 -1.78 5,652.08 1.44 0.04 3.75 3.67 5.29 -1.65 7,700.00 0.06 0.05 1.09 12.52 2.62 -9.70 4.28 4.32 -0.04 7,624.29 1.18 0.04 1.27 3.07 3.72 -0.05 6,347.74 1.01 0.04 1.27 3.24 5.72 -0.05 6,347.74 1.01 0.04 1.27 3.24 5.72 -0.05 7,700.00 0.00 0.05 3.24 5.72 -0.05 7,700.00 0.00 0.00 1.57 3.27 -0.05 6,347.74 1.01 0.04 1.27 3.27 -0.05 7,700.00 0.00 0.00 0.00			0.60	11.15	2.20	4	7,700,00	0.62	0.04	6,67				
10.41 3.46 6.55 7,700.00 1.09 0.04 1.42 7.52 4.02 -3.50 5.40 5.40 5.05 1.09 0.04 1.42 7.52 4.02 -3.50 7.700.00 1.38 0.04 2.58 7.52 4.02 -3.50 3.41 5.19 -1.76 5.052.08 1.41 0.04 1.46 7.75 7.700.00 1.41 0.04 1.45 7.75 7.75 7.700.00 1.03 1.05 1.09 12.52 2.42 -9.70 -1.27 5.455.01 1.44 0.04 1.20 7.75 7.700.00 1.03 0.05 1.09 12.52 2.42 -9.70 -1.20 7.700.00 1.03 0.04 1.27 7.700.00 1.03 1.25 7.700.00 0.04 1.27 7.700.00 0.04 0.04 1.27 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 1.20 7.700.00 0.04 7.700.00 0.			100 100 100 100 100 100 100 100 100 100	4	7.86	4.82	7,700.00	1.05	Š	1.09	:			
5.40 5.05 0.35 7.700.00 1.38 0.04 2.58 7.52 4.02 -3.50 3.89 5.05 -1.16 5.926.59 1.38 0.04 2.58 7.52 4.02 -3.50 3.41 5.19 -1.76 5.052.08 1.41 0.04 2.35 7.52 4.02 -3.50 3.41 5.19 -1.78 5.052.08 1.41 0.04 2.75 3.29 -1.27 5.052.08 1.44 0.04 2.75 3.20 -1.52 7.700.00 0.86 0.04 0.00 12.52 2.62 -9.70 -1.52 7.700.00 1.03 0.05 1.09 12.52 2.62 -9.70 -1.52 7.700.00 1.03 0.04 1.77 3.72 -0.05 6.147.74 1.01 0.04 1.77 3.72 -0.05 6.147.74 1.01 0.04 1.77 3.72 -0.05 6.147.74 1.01 0.04 1.54 3.20 3.72 -0.05 6.147.74 1.01 0.04 1.54 3.20 3.72 -0.05 6.147.74 1.01 0.04 1.54 3.20 3.72 -0.05 6.147.74 1.01 0.04 1.54 3.20 3.72 -0.05 6.147.74 1.01 0.04 1.54 3.20 3.72 -0.05 6.147.74 1.01 0.04 1.54 3.20 3.20 3.20 3.20 3.20 3.20 3.20 3.20			9	10.41	3.06	5	7.700.00	1.0	0	1,09				
3,89     5,03     -1,16     5,926.59     1,38     0.04     2.58     7.52     4.02     -3.50       8,90     5,19     3,71     7,700.00     1,41     0.04     1,46     7.52     4.02     -3.50       3,43     5,19     -1,78     5,062.08     1,41     0.04     2,75     4.02     -3.50       3,40     5,29     -1,27     5,855.01     1,44     0.04     2,75     0.04     2,75       8,40     5,29     -1,27     5,855.01     1,44     0.04     2,75     0.04     0.04     0.09       8,47     3,79     -1,62     7,700.00     1,03     0.04     1,27     -9,20     -9,20       8,47     4,12     -0,04     7,700.00     1,18     0.04     1,27     -9,20     -9,20       9,07     4,12     -0,04     7,624,39     1,18     0.04     1,27     -9,20     -9,20       1,24     4,12     -0,05     6,147,74     1,01     0.04     1,27     -9,20     -9,20       1,24     1,27     -0,05     6,147,74     1,01     0.04     1,01     1,01     0.04     1,01       1,24     1,27     0,04     0,04     0,04     0,04     0,04     1		-	1	8.40	0	Ś	7,700,00	1.38	0.0	1.42				-
8,90 5,19 1,71 7,700,00 1,41 0,04 1,46 1,46 1,46 1,46 1,44 1,44 1,44 1,4			55	3,89	8	-1-16	5,926,59	1.38	0	2,58	7.52	4.02	-3.50	65.47
3.41 5.19 -1.78 5.062.08 1.44 0.04 3.23 3.23 4.02 5.29 -1.62 5.345.25 1.44 0.04 3.23 3.23 5.29 -1.62 5.345.25 1.44 0.04 3.10 5.65 7.700.00 0.86 0.04 0.90 12.52 2.62 -9.90 6.17 3.79 2.38 7.700.00 1.03 0.05 1.09 12.52 2.62 -9.90 4.28 4.32 -0.04 7.624.29 1.18 0.04 1.26 1.26 1.26 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.04 0.08 1.37 0.00 0.04 0.08 1.37 0.00 0.04 0.08 1.37 0.00 0.04 0.08 1.37 0.00 0.04 0.08 1.37 0.00 0.04 0.08 1.37 0.00 0.04 0.08 0.08 0.04 0.08 0.08 0.04 0.08 0.08		ú	3		•	ī	2 700 00	17.4	Č	. 46		٠		
4.02 5.29 -1.27 5,855.01 1.44 0.04 2.75 5.67 5.29 -1.62 5,345.25 1.44 0.04 3.10 8.81 3.16 5.65 7,700.00 0.86 0.04 0.90 4.28 4.32 -0.04 7,624.29 1.18 0.04 1.26 3.97 4.32 -0.05 7,072.06 1.18 0.04 1.57 3.07 3.72 -0.48 6,547.74 1.01 0.04 1.57 4.32 2.83 1.43 7,700.00 0.99 6.34 7.52 0.48 6,547.74 1.01 0.04 0.83 7.24 3.72 0.48 7,700.00 0.79 0.04 0.83					de la companya de la	10.7	7. 062.08	1-61	0.04	(A)				
5.67 5.29 -1.62 5.345.25 1.44 0.04 3.10 8.81 3.16 5.65 7,700.00 0.86 0.04 0.90 12.52 2.62 -9.70 4.28 4.32 -0.04 7,624.29 1.18 0.04 1.25 3.97 4.32 -0.35 7,072.06 1.18 0.04 1.57 3.07 3.72 -0.48 6,547.74 1.01 0.04 1.34 4.32 2.83 1.43 7,700.00 0.04 0.83		٠,	9		5.5	1.27	5.855.01	1.44	0.04	2,75	,			
8.81 3.16 5.65 7,700,00 0.86 0.96 0.90 12.52 2.62 -9.70 6.17 3.79 2.36 7,700,00 1.03 0.05 1.09 12.52 2.62 -9.70 4.28 4.32 -0.04 7,624,39 1.18 0.04 1.27 1.27 1.27 1.27 1.27 1.27 1.21 0.04 1.27 1.27 1.27 1.28 1.01 0.04 1.37 1.34 1.01 0.04 1.34 1.37 1.34 1.34 1.30 0.04 0.04 1.34 1.34 1.34 1.30 0.04 0.04 0.03 1.34 1.34 1.30 0.04 0.04 0.03 1.34 1.34 1.30 0.04 0.04 0.03 1.34 1.34 1.30 0.04 0.04 0.03 1.34 1.34 1.34 1.34 1.34 1.34 1.34 1.3	1		1.59		6	-1.62	5,345,23	1.44	8	9.70			* *4	
6.17 3.79 2.38 7.700.00 1.03 0.05 1.08 12.52 2.62 -9.90 4.28 4.32 -0.04 7.624.29 1.18 0.04 1.26 3.97 4.32 -0.35 7.072.05 1.18 0.04 1.57 3.07 3.72 -0.48 6.347.74 1.01 0.04 1.31 4.32 2.89 1.43 7.700.00 0.04 0.03 7.01 6.48 -1.46		٠.	80		-	5.65	7.700.00	0.86	0.0	0.0				
4,28 4,32 -0.04 7,624,29 1,18 0.04 1,26 1,27 3,97 4,32 -0.05 1,18 0.04 1,57 3,72 -0.65 6,347,74 1,01 0.04 1,57 3,72 -0.48 6,599,25 1,01 0.04 1,54 1,54 1,01 0.04 0,83 2,89 1,43 7,700,00 0,04 0,05 7,01 6,83 -1,46 1,00 0,04 0,05 1,00 0,83		. 40	8		2.4	5	7,700,00	7.03	0.03	1.09	12.52	2.62	-9.30	-13.40
3,97 4,32 -0,55 7,072,06 1,18 0,06 1,57 3,27 3,72 -0,55 6,187,74 1,01 0,04 1,71 3,72 -0,48 6,699,25 1,01 0,04 1,57 4,50 0,04 1,54 7,700,00 0,04 0,05 7,01 6,48 -1,46			<b>*</b>			\ \{\bar{\chi}{\chi}	7 434 30	6	8	ž		:		
3,97 4,32 -0,65 6,347,74 1,01 0,04 1,37 (6,85 -1,45 0,04 0,98 1,37 (7,700,00 0,79 0,04 0,98 1,43 7,700,00 0,04 0,05 7,01 6,85 -1,46 0,04 0,04 1,00 0,04 0,04 0,05 1,00 0,04 0,04 0,04 0,04 0,04 0,04 0,04			2	•		3	*****			) t		-		-
3,24 3,72 -0,48 6,699,25 1,01 0,04 1,54 1,54 4,54 -1,45 7,700,00 0,79 0,04 0,83 -1,45 1,00 0,04 0,83 -1,45 -1,46			2 :	•	7		00.770.7		Š	1				
4.12 2.89 1.43 7.700.00 0.00 0.00 0.00 0.00 0.00 0.00		^•	7.77			0.00	A 400. 24	36	5 6 5 c	1 4		• :	:	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		n e	710	•	, 6		1 200 00	100	5 6	i c				
		•		•	D.			,	>					

Table 5.5 Required Storage Capacity of Kalola Dam (4/13)

705. 17.50 0.83 15.64 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	7,700,00 7,700,00	000000 0000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	27.06	2.63	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
\$ 5.00	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.06	23.46	4. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
15.69  16.69  16	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00		entre de la companya de la companya La companya de la co		23.92	2.63	
0.11	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00		termination of the second of t	enter de la companya	27.08	23.46	6. 4. 5. 5. 4. 5. 5. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
0.11	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00			en de la companya de	27.08	23.46	2. 4. 5. 5. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
6.25  6.25  6.26  7.27  7.26  7.26  7.26  7.27  7.26  7.26  7.27  7.28  7.29  7.20	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.06	22.46	5. 5. 8. 8. 8. 8. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
2 2.25 2 2.35 2.35 2.35 2.35 2.35 2.35 2	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.08	2.65	4 3;
14.00  2.00	7,700.00 6,622.02 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.06	22.46	88. 88.
2 2. 25 2 2. 2	7,700 6,522,02 7,700 6,522,02 7,700				27.06	22.63	8. 8.
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7,700 7,700				27.08	23.63	4
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.08	23.46	8 8 9
6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.06	2.63	8 8 8
6 0.01  6 0.02  6 0.03  7 0.04  7 0.04  7 0.05	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.06	20.25	\$ \$5 \$.
\$ 6.00	7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00				27.06	23.46	88.
5 0.49 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00				27.06	23.46	88 88
\$ 0.49 1.98 1.65 1.65 1.65 1.65 1.65 1.65 1.65 1.65	7,700 7,700				27.06	37.5	88.58
\$ 0.49 1.38 1.65 -0.25 0.40 0.40 1.56 1.56 0.40 0.40 1.56 1.56 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.4	6,522,02 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00				7.00	. <b>%</b>	\$2.5
6.00 24.00 18.55 11.35 14.22 1.35 14.32 1.35 14.32 1.35 14.32 1.35 14.32 1.35 1.35 1.35 1.35 1.35 1.35 1.35 1.35	2,182,70 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00				7.00 0.00	23.46	88.
6.70 2.89 3.81 6.70 2.89 3.81 6.70 2.89 3.81 6.70 19.61 1.33 14.22 6.65 19.61 1.35 11.33 14.22 6.65 19.61 1.50 18.11 6.65 19.61 1.50 18.11 6.65 19.61 1.50 18.11 6.65 19.61 1.50 18.11 6.65 19.61 1.50 18.12 6.65 19.61 1.50 18.12 6.65 19.61 1.50 19.12 6.65 19.61 19.12 6.65 19.61 19.12 6.65 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13 6.49 19.16 1.03 19.13	7,700 7,700				27.08	23.46	88
5 0.40 15.55 1.33 14.22 0.40 19.61 1.33 14.22 0.40 19.61 1.35 14.22 0.45 0.45 19.61 1.35 14.22 0.45 19.61 1.35 14.22 19.61 1.35 14.35 14.22 19.61 1.35 14.35 14.22 1.35 1.35 14.35 1.35 1.35 1.35 1.35 1.35 1.35 1.35 1	7,770 7,770 7,770 7,700	•					· 1
5 0.00 24.00 19.61 1.33 18.28 19.61 1.30 18.21 19.61 1.30 18.21 19.61 1.30 18.21 19.61 1.30 18.21 19.6	7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,	•					
5 0.00 24.02 0.00 24.02 0.00 24.03 20.00 24.03 20.00 24.02 0.00 12.37 1.50 1.50 12.37 1.50 1.50 12.37 1.50 12.	7,700,00						. 1
5 0.67 19.61 1.50 18.11 1.50 18.11 1.50 18.11 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.61 1.50 19.62 1.50 19.62 19.62 19.62 19.62 1.03 19.62 19.62 1.03 19.62 1.03 19.16 1.03 19.15 1.03 19	7,700,00						. 1
6 0.00 19.61 1.50 1.51 1.51	7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00	-	•			• •	• •
5 0.00 24.00 10.00	7,700.00 7,700.00 7,700.00 7,700.00	÷				,	•
5 0.20 19-61 0.67 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 18-95 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.6	7,				, A. A.	7 - 7	
5 0.20 19.61 0.67 18.95 0.20 19.61 0.67 18.95 0.20 19.61 0.67 18.95 1.01 1.50 1.50 1.50 1.50 1.50 1.50 1.5	7,700.00				20.04	***	
5 0.20 19.61 0.67 18.95 12.37 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	7,700.00			<u>.</u>			
5 0.45 13.87 13.80 12.37 13.80 13.37 13.80 13.37 13.80	7,700.00						
5 0.45 16.24 1.50 14.74 1.50 14.74 1.50 1.50 14.74 1.50 17.84 1.50 14.74 1.50 17.84 17.84 17.84 17.84 17.84 17.87	7,700.00						
5 1.01 7.69 3.36 4.33 6.50 0.71 7.65 3.36 4.30 6.30 0.71 7.73 2.36 7.36 7.37 7.73 7.36 7.36 7.37 7.73 7.36 7.36	7.700.00		0.04	-			
5 1.01 7.86 3.36 4.50 0.71 7.86 3.36 4.50 0.71 7.73 2.36 5.39 0.26 13.72 0.80 13.72 0.80 24.62 0.80 22.55 0.50 22.55 0.50 22.55 0.50 22.55 0.50 22.55 0.50 22.55 0.50 22.55 0.50 22.55 0.50 20.55 0.50	• • • • • • • • • • • • • • • • • • • •					•	
5 0.71 7.65 2.36 5.20 5 0.72 7.73 2.36 5.37 5 0.24 14.52 0.80 13.72 5 0.00 24.02 0.80 13.72 5 0.00 24.02 0.80 13.72 5 0.00 22.55 5 0.31 7.52 1.03 6.49 5 0.31 9.16 1.03 8.13 5 0.04 20.35	7,700.00	0.91 0.	0.04 0.96	3.26	12.93	9.67	
5 0.71 7.73 2.36 5.37 5.37 5.38 5.37 5.38 5.37 5.38 5.37 5.38 5.37 5.38 5.38 5.37 5.38 5.38 5.38 5.38 5.38 5.38 5.38 5.38	7,700.00	0.64	0.04 0.69	غ			
5 0.24 14.52 0.80 13.72 5 0.26 19.40 0.80 10.60 5 0.00 24.02 0.00 24.02 6 0.01 7.52 1.03 6.49 5 0.31 9.16 1.03 8.13	7,700.00			_			
5 0.24 19.40 0.80 10.60 5 0.00 24.02 0.00 24.02 6 0.01 7.52 1.01 6.49 7.52 1.03 8.13 7.54 0.15 1.03 8.13	7,700.00	0.22					
5 0.00 24.02 0.00 24.02 6 0.00 22.55 0.00 22.55 5 0.31 7.52 1.03 6.49 5 0.34 9.16 1.03 8.13 5 0.04 20.35 0.13 20.22	7,700,00						
5 0.31 7.52 1.03 6.49 5 0.31 9.16 1.03 8.13 5 0.04 20.35 0.13 8.13	7,700.00		0.00		4		1
5 0.31 7.52 1.03 6.49 0.31 9.16 1.03 8.13 0.04 20.35 0.13 20.22						•	
9.16 1.03 9.13 20.35 0.13 20.22							
20.35 0.13 20.22	00.00						
	7,700.00	0.00					
10.0 51.0 55.0							
		s c		6	14.00	15.09	,
A = 10 X		\$					
99°.79		00	•				
00.00		5 0					
		5 6					
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\							
		0	0 0	0.26	9.72	9.46	•

Table 5.5 Required Storage Capacity of Kalola Dam (5/13)

Mar.   19   19   19   19   19   19   19   1														
10   10   10   10   10   10   10   10	Year	Month	נס	22 01	65	ဝ	D3	å	S	8	6	&	8	8
90. 0.00 17.00 0.00 16.99 7700.00 0.00 0.00 0.00 0.00 0.00 0.0	1975	g.	Ö	.01 24.32	0.03	24.29	7,700,00	10.0	0.06	0.05				
9 0.29 7.04 0.08 7.00 0.00 0.28 0.04 0.21			ó	.01 17,02	0.03	16.99	7,700.00	10.0	0.04	\$.0\$				
10			•	7.04	96.0	6.08	7,700.00	0.26	0.00	0.33				
90, 0,4, 11,11, 11,18, 9,10, 7,700,00 0,437 0,646 0,640 1,647 1,644 1,64			ń	29 8.60	8.0	7.00	7,700,00	0.26	0.0	0.31				
10			ń		1.36	υ·01	7,700,00	65.0	0.0	0.41				
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			6		7,64	9.51	7,700,00	0.45	0.05	0.50	1.63	16.47	14.84	•
1,25   1,25		200	6		2.99	7.90	7,700,00	0.81	80.0	0.86				
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	-				2.99	4.01	7,700.00	18-0	0.04	0.46				
1,445   4,48			ri S		4.02	70.7	7,700,00	91.4	0.04	44.4				
1,445   1,44			'n		4.02	8.0	7,700,00	7.10	90.0	444				
74. 1.44 6.39 6.48 1.57 7700.00 1.31 0.04 1.36 6.11 2.38 5.53  74. 1.14 7.14 7.14 7.14 7.14 7.14 0.04 1.34 0.04 1.34 0.11 2.38 5.53  74. 1.15 7.15 7.15 7.15 7.15 7.15 0.04 1.34 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0			ก่	44.0	4.82	17.41	5,446,10	16-1	0.04	2,77				
Owe.         5         11.54         7.45         5.11         2.11         7.700.00         11.99         0.00         11.40         11.10			4	45. 6.39	4.82	1.57	7,700.00	# 4	0.0	7.36	6-11	2.18	-5.93	-5.93
74. 1.15		į			4		200.00	2	90	1.44	•			
1,150   1,150   1,150   1,150   1,150   1,150   1,150   1,150   1,150   1,171   1,170   1,170   1			i -	4. V. O. V.		, è	7.700.00	ė.	0.0	1.44				
1.15					1 4	3 6	200		0	6				
7.00. 1.00 1.17 1.20 1.17 1.20 1.17 1.20 1.10 1.10 1.10 1.10 1.10 1.10 1.10	-		6.		2 4		A 602 42	1	90.0					
740. 1.10 2.44 5.19 2.73 5.0021.3 1.44 0.05 4.12 1.10 1.10 1.10 1.11 1.10 1.10 1.10 1					n ć		1000	) d	5 6			÷		
7.00. 1.00 3.11. 1.28 -0.13 7,700.00 0.69 0.04 1.08 1.00 1.00 1.00 1.00 1.00 1.00 1.00					0	2 2 2	5.500 P.	1	50.0	4.21	13.69	1.71	-11.98	-17.91
74. 5 0.38 3.11 1.38 0.15 7.7305.00 0.48 0.04 1.05 1.00 1.00 1.00 1.00 1.00 1.00 1.00			÷					;		:				
\$ 0.08	926	JAN.	5		, 76 17	0.13	7,349.09	0.09	8	1.08				
\$ 1,07 1,29 1,356 -0.67 5,400.34 0.97 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0			٠ م		7.38	92.0	7,700,00	0	0	3				
\$ 1.07 1.80 3.56 -1.66 5.276.23 0.59 0.00 1.07 8.85 0.20 -6.61 0.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.08 0.00 1.07 0.00 1.08 0.00 1.08 0.00 1.08 0.00 1.00 0.00 1.00 0.00 0			4		3.56	0 02	5,605,51	0.97	900	2				
\$ 0.62 1.60 2.66 -0.46 5.976.23 0.56 0.04 1.07 8.85 0.24 -0.64 0.65 1.07 1.13 8.85 0.24 -0.64 0.65 1.07 1.13 8.85 0.24 -0.64 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 1.45 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.6		•	4		3,56	36	4,112,15	0.97	0	2.07	•			
6 0.62 2.07 2.47 -0.40 6.443,12 0.67 0.03 1.13 8.85 0.24 -0.04 0.05 1.13 8.85 0.24 -0.05 1.13 8.85 0.24 0.04 0.05 1.13 8.85 0.24 1.26 0.30 1.25 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3		٠	o S		8	-0.46	5,976.23	0.0	0	1.07	1		;	
\$ 0.65 1.45 2.09 -0.66 5.256.47 0.57 0.04 1.28  \$ 0.30 1.25 1.26 -0.03 7.557.25  \$ 0.30 1.25 1.26 -0.03 7.557.25  \$ 0.30 1.25 1.26 0.17 7.700.00 0.04 0.05  \$ 0.00 1.45 0.16 1.29 7.700.00 0.04 0.05  \$ 0.01 1.25 0.16 1.29 7.700.00 0.04 0.05  \$ 0.01 1.25 0.02 1.25 0.05  \$ 0.01 1.25 0.05  \$ 0.01 1.25 0.05  \$ 0.02 0.04 0.05  \$ 0.03 1.25 0.05  \$ 0.04 0.05  \$ 0.04 0.05  \$ 0.05 1.25 0.05  \$ 0.05 1.25 0.05  \$ 0.05 1.25 0.05  \$ 0.05 1.25 0.05  \$ 0.05 0.		-	ó		2.47	0.40	6,443,12	0.07	0.03	1.13	8.83	57.0	0.0	70.07
0.05 1.25 2.00 -0.04 4.554.82 0.57 0.04 1.46  0.30 1.23 1.25 -0.01 7.750.00 0.07 0.04 0.05  0.00 1.43 0.27 1.26 -0.01 7.750.00 0.07 0.04 0.05  0.00 1.43 0.27 1.26 1.20 7.700.00 0.07 0.04 0.05  0.00 1.43 0.03 4.29 7.700.00 0.01 0.04 0.05  0.01 0.04 0.02 1.20 7.700.00 0.01 0.04 0.05  0.04 0.04 0.02 1.20 1.20 1.20 7.700.00 0.01 0.04 0.05  0.04 1.77 1.13 0.04 7.700.00 0.01 0.04 0.05  0.04 1.27 1.26 1.26 1.26 1.26 0.73 0.04 0.05  0.04 0.04 0.05  0.04 0.05 0.04 0.05  0.04 0.05 0.04 0.05  0.05 0.05 0.05  0.06 0.05 0.05  0.07 0.05 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.06 0.05  0.06 0.05  0.07 0.05  0.08		,	0		2,00	-0.66	5.256.47	0.57	40.0	1.28			,	
\$ 0.36 1.25 1.26 -0.01 7,517.73 0.34 0.04 0.39  \$ 0.30 1.43 1.26 0.17 7,700.00 0.04 0.05  \$ 0.08 1.43 0.16 1.29 7,700.00 0.04 0.05  \$ 0.08 1.43 0.16 1.29 7,700.00 0.04 0.04  \$ 0.01 1.32 0.03 4.29 7,700.00 0.01 0.04 0.05  \$ 0.01 1.39 0.04 1.29 7,700.00 0.01 0.04 0.05  \$ 0.01 1.39 0.04 1.39 7,700.00 0.01 0.04 0.05  \$ 0.47 1.27 1.13 0.44 7,700.00 0.03 0.04 0.47  \$ 0.47 1.27 1.15 0.45 7,700.00 0.03 0.04 0.47  \$ 0.47 1.27 1.25 1.25 1.25 0.73 7,700.00 0.43 0.04 0.47  \$ 0.47 1.27 1.28 1.25 0.73 7,700.00 0.43 0.04 0.45  \$ 0.47 1.27 1.29 1.36 0.73 7,700.00 0.43 0.04 0.45  \$ 0.47 1.27 1.29 1.36 0.73 7,700.00 0.43 0.04 0.45  \$ 0.47 1.27 1.29 1.36 0.73 7,700.00 0.43 0.04 0.45  \$ 0.47 1.27 1.29 1.36 0.73 7,700.00 0.43 0.04 0.45  \$ 0.47 1.27 1.38 4.22 1.38 7,700.00 0.43 0.04 0.05  \$ 0.47 1.27 1.38 4.22 1.38 7,700.00 0.43 0.04 0.05  \$ 0.47 1.27 1.38 4.39 1.39 0.04 0.05  \$ 0.47 1.27 1.38 4.39 1.39 0.00 0.00 0.00 0.00 0.00  \$ 0.40 1.27 1.20 0.00 0.00 0.00 0.00 0.00  \$ 0.40 1.27 1.20 0.00 0.00 0.00 0.00 0.00  \$ 0.40 1.20 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00  \$ 0.40 0.00 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00 0.00  \$ 0.40 0.00			o d		5.00	45.	4,594.82	0,57	0.04	1.46				
\$ 0.38			් :		1.26	0.0	7,617,73	ķ	0.04	0				
5 0.08 1.43 0.27 1.16 7,700.00 0.07 0.04 0.12 -3.59  5 0.08 1.45 0.16 1.29 7,700.00 0.04 0.05 0.04  5 0.04 0.05  5 0.07 1.11  5 0.04 0.05  5 0.04 0.05  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  5 0.07 1.15  6 0.08 0.08  6 0.09 0.09  6 0.09 0.09  6			•		1,26	0.17	7,700,00	¥,0	4040	6				
5 0.06 1.45 0.16 1.29 7,700.00 0.04 0.03 0.07 3.71 0.12 7.52 5 0.01 4.32 0.03 4.29 7,700.00 0.01 0.04 0.05 5 0.01 1.99 0.04 7,700.00 0.01 0.04 0.29 0.69 0.59 6 0.34 1.77 1.13 0.64 7,700.00 0.01 0.06 0.35 6 0.34 4.77 1.15 0.64 7,700.00 0.03 0.04 0.47 5 0.47 4.77 1.15 0.44 7,700.00 0.03 0.04 0.47 6 0.47 2.29 1.56 0.49 7,700.00 0.43 0.04 0.47 5 0.47 2.29 1.56 0.43 7,700.00 0.43 0.04 0.45 6 0.47 2.29 1.56 0.73 7,700.00 0.43 0.04 0.45 7,700.00 0.43 0.04 0.05 7,700.00 0.43 0.05 7,700.00 0.43 0.05 7,700.00 0.43 0.05 7,700.00 0.43 0.05 7,700.00 0.43 0.05 7,7			ó		0.27	3.16	7,700.00	0.07	90,0	0	i			<
5 0.01 4.32 0.03 4.29 7,700.00 0.01 0.04 0.04 0.04 0.04 0.04 0.04			0	_	0.16	1.29	7,700.00	0	50.0	0.04	3.71	0.12	7	17.00
5.537 5.537 5.540 5.04 5.04 5.04 5.04 5.04 5.04 5.0		1	٠.	1,72					8	8				
\$ 0.01 4.32 0.03 4.29 7,700.00 0.01 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05				4	٠,				0.0	9				
\$ 0.01 4.32 0.03 4.29 7,700.00 0.01 0.04 0.05  \$ 0.01 1.99 0.04 3.95 7,700.00 0.01 0.05 0.05 0.29 0.09  \$ 0.34 1.77 1.13 0.44 7,700.00 0.03 0.04 0.35  \$ 0.47 4.15 1.13 0.44 7,700.00 0.03 0.04 0.47  \$ 0.47 4.71 1.56 3.41 7,700.00 0.43 0.04 0.47  \$ 0.47 2.29 1.56 0.45 7,700.00 0.43 0.04 0.47  \$ 0.47 2.29 1.56 0.73 7,700.00 0.43 0.04 0.45  \$ 0.47 2.29 1.56 0.73 7,700.00 0.43 0.04 0.65  \$ 0.47 2.29 1.56 0.73 7,700.00 0.61 0.04 0.65  \$ 0.47 2.29 1.56 0.73 7,700.00 0.61 0.04 0.65  \$ 0.47 2.29 1.56 0.73 7,700.00 0.61 0.04 0.65  \$ 0.47 2.29 1.56 0.73 7,700.00 0.61 0.04 0.65  \$ 0.47 2.29 1.56 0.73 7,700.00 0.61 0.04 0.65  \$ 0.47 2.29 1.56 0.70 7,700.00 0.61 0.04 0.65  \$ 0.47 2.29 1.50 0.70 0.61 0.04 0.65  \$ 0.47 2.29 1.50 0.70 0.61 0.04 0.65  \$ 0.67 0.70 0.70 0.70 0.70 0.70 0.70 0.70				55.			-		80.0	8				
\$ 0.01 4.32 0.03 4.29 7.700.00 0.01 0.04 0.05 0.01 3.99 0.04 3.95 7.700.00 0.01 0.05 0.09 0.09 0.09 0.34 4.15 1.11 0.44 7.700.00 0.01 0.04 0.05 0.47 4.77 1.15 0.44 7.700.00 0.01 0.04 0.47 5 0.47 4.72 1.56 3.41 7.700.00 0.04 0.04 0.47 2.58 11.92 9.34 5 0.47 2.29 1.56 0.73 7.700.00 0.43 0.04 0.45 5 0.47 2.29 1.56 0.73 7.700.00 0.43 0.04 0.65 5 0.47 2.29 1.56 0.73 7.700.00 0.61 0.04 0.65 5 0.47 2.29 1.56 0.73 7.700.00 0.61 0.04 0.65 5 0.47 2.29 1.56 0.73 7.700.00 0.61 0.04 0.65 5 1.27 2.29 1.414 7.700.00 0.61 0.04 1.36 5 1.27 2.38 4.22 -0.16 7.700.00 0.61 0.04 0.05 5 1.27 2.30 4.22 -0.16 7.700.00 0.61 0.04 1.36 5 1.27 2.30 4.22 -0.16 7.700.00 1.17 0.05 1.72 10.02 6.70 -3.32 1.08 7.79 4.51 3.59 -2.06 7.700.00 1.17 0.05 1.72 10.02 6.70 -3.32			Ý	2.0					8	ŏ				
1 0.01 1.99 0.04 3.95 7,700.00 0.01 0.05 0.09 0.07 0.09 0.07 0.09 0.07 0.09 0.07 0.09 0.09			ó	4.32	0,0	4.29	7,700.00	ර ර	0.0	0		•	· ·	\$ 66
5 0.34 1.77 1.13 0.64 7,700.00 0.31 0.04 0.35 5 0.47 4.75 1.13 3.02 7,700.00 0.31 0.04 0.35 5 0.47 4.71 1.56 3.45 7,700.00 0.43 0.04 0.47 2.58 11.92 9.34 5 0.47 2.29 1.56 0.73 7,700.00 0.43 0.04 0.47 2.58 11.92 9.34 5 0.67 12.74 2.23 10.51 7,700.00 0.61 0.04 0.65 5 0.67 12.74 2.23 14.14 7,700.00 0.61 0.04 0.65 5 1.27 4.06 4.22 -0.16 7,403.23 1.15 0.04 1.36 5 1.08 1.51 3.59 -2.08 7,700.00 1.17 0.05 1.72 10.02 6.70 -3.32			6		80.0	2, 93	7,700,00	6 0	0.03	8	0	2	\$ .	****
\$ 0.54 4.15 1.13 3.02 7.700.00 0.31 0.04 0.35		You			1.1	0.64	7,700.00	0.31	0.04	0.35				
\$ 0.47 4.97 1.56 3.41 7,700.00 0.43 0.04 0.47 \$ 0.47 4.71 1.56 3.15 7,700.00 0.43 0.04 0.47 \$ 0.47 4.72 1.56 3.15 7,700.00 0.43 0.04 0.47 \$ 0.47 2.29 1.56 0.73 7,700.00 0.43 0.04 0.47 \$ 0.47 2.59 1.56 0.73 7,700.00 0.43 0.04 0.45 \$ 0.67 12.74 2.23 1.4.14 7,700.00 0.41 0.04 0.65 \$ 1.27 2.23 1.4.14 7,700.00 0.41 0.04 1.36 \$ 1.27 2.38 4.22 -1.84 4.339.83 1.15 0.04 3.04 \$ 1.51 3.59 -2.08 3,237.82 0.98 0.04 3.10 \$ 1.51 3.59 -2.08 7,700.00 1.17 0.05 1.72 10.02 6.70 -3.32			•		2-13	3.02	7,700,00	0.33	9.0	0.33				
\$ 0.47 4.71 1.56 3.15 7,700.00 0.43 0.04 0.47 \$ \$ 0.47 2.29 1.56 0.69 7,700.00 0.43 0.04 0.47 2.58 11.92 9.34 \$ \$ 0.47 2.29 1.56 0.73 7,700.00 0.43 0.04 0.47 2.58 11.92 9.34 \$ \$ 0.67 12.74 2.23 14.14 7,700.00 0.61 0.04 0.65 \$ \$ 0.67 12.74 2.23 14.14 7,700.00 0.61 0.04 0.65 \$ \$ 1.27 2.38 4.22 -0.16 7,403.23 1.15 0.04 3.04 \$ \$ 1.27 2.38 4.22 -1.84 4.339.83 1.15 0.04 3.04 \$ \$ 1.08 7.93 4.31 3.59 -2.06 7,700.00 1.17 0.05 1.72 10.02 6.70 -3.32			6		1.56	3,43	7,700,00	0.43	8	Ġ				
\$ 0.47 2.29 1.56 0.69 7,700.00 0.04 0.04 0.47 2.58 11.92 9.34 \$ 0.47 2.29 1.56 0.73 7,700.00 0.04 0.04 0.05 1.09 11.92 9.34 \$ 0.67 12.74 2.23 10.51 7,700.00 0.61 0.04 0.05 \$ 1.27 4.06 4.22 -0.16 7,403.23 1.15 0.04 3.06 \$ 1.27 2.38 4.22 -1.84 4.339.83 1.15 0.04 3.10 \$ 1.08 1.51 3.59 -2.08 3,237.82 0.08 0.04 3.10 \$ 1.08 7.03 4.31 3.62 7,700.00 1.17 0.05 1.22 10.02 6.70 -3.32			ó		1.56	3.15	7,700,00		0.0	0.47				
\$ 0.47 2.29 1.56 0.73 7,700.00 0.03 0.04 0.47 2.58 11.92 7.39 \$ 0.67 12.74 2.23 10.51 7,700.00 0.61 0.04 0.65 \$ 0.67 16.37 2.23 14.14 7,700.00 0.64 0.04 0.05 \$ 1.27 4.06 4.22 -0.16 7,403.23 1.15 0.04 1.36 \$ 1.27 2.38 4.22 -1.84 4.339.83 1.15 0.04 3.10 \$ 1.08 1.51 3.59 -2.08 3,237.62 0.08 0.04 3.10 \$ 1.08 7.03 4.31 3.62 7,700.00 1.17 0.05 1.22 10.02 6.70 -3.32			¢.		1.56	0.69	7,700.00	0.43	Š.	6.47	;	:		4
5 0.67 12.74 2.23 10.51 7,700.00 0.61 0.04 0.65 5 0.67 16.37 2.23 14.14 7,700.00 0.61 0.04 0.65 5 1.27 4.06 4.22 -0.16 7,403.23 1.15 0.04 1.36 5 1.27 2.38 4.22 -1.84 4.339.83 1.15 0.04 3.04 5 1.08 1.51 3.59 -2.08 3,237.62 0.08 0.04 3.10 6 1.08 7.03 4.31 3.62 7,700.00 1.17 0.05 1.22 10.02 6.70 -3.32			\$		7.56	0.73	7,700.00	0.0	40.0	6	7.59	14.34	*	24.
\$ 0.67 16.37 2.23 14.14 7,700.00 0.64 0.04 0.65 \$ 1.27 4.06 4.22 -0.16 7,403.23 1.15 0.04 1.36 \$ 1.27 2.36 4.22 -1.84 4.339.83 1.15 0.04 3.06 \$ 1.08 1.51 3.59 -2.08 3,237.62 0.08 0.04 3.10 \$ 1.08 7.93 4.31 3.62 7,700.00 1.17 0.05 1.22 10.02 6.70 -3.32		24	ó	-	17.	10.51	7,700.00	0.63	0.04	0.65				
4.06 4.22 -0.16 7,403.23 1.15 0.04 1.36 2.38 4.22 -1.84 4.339.83 1.15 0.04 3.04 1.51 3.59 -2.08 3.237.82 0.98 0.04 3.10 7.93 4.31 3.62 7,700.00 1.17 0.05 1.22 10.02 6.70 -3.32	4	ì			2.23	14.14	7.700.00	30.0	0.0	0.63				
2.38 4.22 -1.84 4.339.83 1.15 0.04 3.04 1.51 3.59 -2.06 3.237.82 0.98 0.04 3.10 7.93 4.51 3.62 7,700.00 1.17 0.05 1.72 10.02 6.70 -3.32			,		4.22	-0.16	7,403,23	1,15	0.0	7.36				
1.51 3.59 -2.08 3,237.82 0.98 0.04 3.10 10.02 6.70 -3.32 7.93 4.31 3.62 7,700.00 1.17 0.05 1.72 10.02 6.70 -3.32					4.22	1.84	4,339,83	1.15	0.04	3.04				
7.93 4.31 3.62 7,700.00 1.17 0.05 1.72 10.02 0.70 3.34			e de		3.30	-2.08	3,237,82	96.0	0	0	•	,		45.66
		:	4	1.	4.31	3, 62	7,700.00	1.17	0.0	1.72	10-01	-0/-0	*0.0	20.00

Table 5.5 Required Storage Capacity of Kalola Dam (6/13)

										2		:		
Yeek	Month	TG	05	οπ	03	83	03	8	S	8	٥,	8,	8	8
7076	A.A.	,	81.0	1.38	0,60	0.78	7.700.00	0.16	0.04	0.21				
,		h wi	0.19	3	8	4.24	7 700 00	0.16	ò	6				
		: 	0.18		9.60	4.	7,700,00	0.16	0	0			: : : : : : : : : : : : : : : : : : : :	
		-	0.18	7.69	0	2.09	7 700 00	0	0	12.0				
		ν,	0.97		3.23	1.22	7, 700, 00	0.88	0	0.92				
		×	0.97	\$ 20	3.23	5.97	7.700.00	0.88	0.0	0.92	2.67	35,35	32.68	9-18
	July	•	0.00	7	8	7	7,700.00	0.00	0.04	0.0		Ē		
		**	8	•	8	35.0	7,700,00	0.0	0.0	0.04				
		'n	0.62	3.59	200	1.53	7,700.00	o v	0.0	09.0				
		Ŋ	0.62	1.21	2.06	-0.85	4,519,52	95.0	0.0	2.46				
		M	95.0	7.17	1.86	69-50-	4,838,35	0.53	0.0	7.24		٠.		
		\$	95.0	6.9	2.23	4-72	7,700.00	0.61	0.0	99-0	4.05	22.63	18,58	
	אַפּט.	*	0.45	8.12	1.53	6.59	7,700.00	0.42	0.0	0.46				٠
		*1	0.46		1.53	5.43	7,700,00	0.42	8	0,46				
	=	, N	0.13	\$.79	0.4.0	5.36	7,700.00	0.12	0.0	94.0		-	٠.	
		si.	0.13	•	0.43	4.15	7,700.00	0.12	8	0.16				
		'n		7.4				=	9.0	0.0				
		æ		×.					0.0	0.0	1.34	7.29	5.95	•
	000	*		38	:				0.04	0				
		· vs		1.25					ò	0		•		
		*		1.21					0.0	0				
		•		74.4		٠.			0.04	0				
		ν,		1.21				٠	0.0	9				
		'n		1.08		11			0.0	0.0	0.26	11.51	11.25	•
	8	×n	. 10°0	1.77	0.03	1.74	7,700.00	0.01	0	0.05				
		ķ.	10-0	1.64	0.0	19-1	7,700.00	0.0	0.04	0				
		•^	0°36	2.73	2	0.0	7,700.00	20.0	8	0.37				
		arijo s	90	٠	7.50	0	7,526.32		8 6					
		. ·	7 6	5 6	, ,	1 C	7,700.00	200	6 6	9	2.10	10.15	80.6	•
		0		3	•		2000	•	<b>&gt;</b>	<b>&gt;</b>		•		
		•	18.0	3	2.69	50°7	4,698.76	5.73	ö (	8				
		Λ,	18 O	2.5	o .	0	7,700,00		5	2				
		es e	6 v	10.0	910		7,700,00		8 6					
		* <b>*</b>		0	, ,	00	2000		0	, c				
		s én	9.8	4.67	2.03		7,700.00	44.0	0	6.0	5.49	8.91	3.39	•
	Deg	40	1.57	3.54	5.22	-1.68	5,221,59	1.42	9,0	4.1.				
		ĸ	1.57	2.59	5,22	-2.63	3,820.32	1.42	0.04	4.09				
		st.	19.1	2.63	5.33	-3.92	2,056.88	1.46	90.0	S. 05				
		es i	7.67	4.32	5.33	-1.03	6,213,80	90°	٥	2,53				
	÷		10 d	9		98.0	7,700,00	2	500		ć	3.46	A 44.	13.4.5¢
		0	n	¥. 1.4	4	7	00.00	4	60.	4	40.74	9	70.	**
1977	JAn.	57	0.79	12.70	2.59	10.11	7,700,00	47.0	0.04	0.73				
		*	0.76	•	2.39	1.56	7,700.00	44.0	0.0	7.				
		<b>5</b> 0 (	0 H	•	Š	4.4	4,736.84	86	800	٠, د د د د د د د				
		<b>5</b> 7 -	7.10	•	20.0		04.046.0	9	8 6	× • • • • • • • • • • • • • • • • • • •				
		en 4	র ০	16.42	200	\$ C		0.0		3	, o. a.	0.24	-6.73	-23.28
		ċ	2	•	,		2	2	,					

Table 5.5 Required Storage Capacity of Kalola Dam (7/13)

Mar.   5   0.48   1.185   1.189   0.238   0.458   0.459   0.														,
May. 5 0.23 11.00 11.00 11.00 0.00 0.00 0.00 0.00														
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			0 0	900	9	4.0°	90.069	64.0	0.0	0.77	.1			
1, 10, 10, 10, 10, 10, 10, 10, 10, 10,		. •	3.5	10.4	200		7,700,00	9	0	5				٠,
0.10   0.10		, E.		2.44	1	3	7,700.00	9	Ď	ń.				
1. 0.10 4.13 0.10 1.85 7,700.00 0.03 0.03 0.03 0.03 0.03 0.03 0.0		<b>47</b> 1	0.70	2.76	0.33	4	7.700.00		\$ 8			:		
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		•	0.10	4.15	0.50	3.05	7,700.00	9	0	90.0	2.30	0.12	-2.08	-25.36
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Mar.	<b>w</b> 1		2.72		-			<b>?</b>	~			•	
5 0.02 1.73 0.03 1.66 7.700.00 0.01 0.04 0.05 0.02 0.05 0.05 0.05 0.05 0.05 0.05	.=	•		1.86						5 6				
5 0.00 1.77 0.00 1.00 0.00 0.00 0.00 0.00		**		1.61	:			. •	5 6					
0.02   3.77   0.05   7.700.00   0.01   0.05   0.05   0.02   0.02   0.02   0.02   0.02   0.02   0.03   0.03   0.02   0.03   0.0		5		2.29						5 6				
6 0.01			8.	3-73	0.03	3.68	7,700.00	0	0	č				
0.22 23.72 0.73 23.99 7,700.00 0.20 0.04 0.24 0.24 0.25 0.05 0.05 0.05 0.05 0.05 0.05 0.05	•	•	0.0	8.20	90.0	8.25	7,700,00	0	50	90	0.29	90.0	20.00	\$
0.22	ļ	•	•	:				;		•			***	3
\$ 0.75			77.7	7/ 57	0.73	22.99	7, 700, 00	0.20	0	9				
5 0.076 14.72 2.13 14.19 7.7700.00 0.65 0.04 0.73 11.02 7.77 1.05 0.05 0.04 0.73 11.02 7.77 1.05 0.05 0.05 0.05 0.05 11.02 7.77 1.05 0.05 0.05 0.05 0.05 0.05 11.02 7.77 1.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	٠	() W	7770	10.37	0 73	0	7,700,00	0.50	ò	0,2				
2 0.67 7.12 3.13 3.40 7.7700.00 0.68 0.04 0.03 1.1.02 7.77		<b>α</b> ,	2.0		2.53	7.19	7 700 00	0.69	8	0.73				
\$ 0.57			0.76			16,39	7,700.00	0.69	0	0.73				
5 0.557 6.65 2.23 3.82 7.700.00 0.45 0.65 3.25 11.02 7.77 1.05 0.04 0.45 0.45 3.25 11.02 7.77 1.05 0.04 0.45 0.45 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.1		n,	0.67	7. 73	1.23	9.20	7,700.00	0	ŏ	0.65				
\$ 0.52 9.88 1.73 8.12 7.700.00 0.47 0.04 0.51  \$ 1.14 5.62 1.79 1.015 7.700.00 1.07 0.04 0.51  \$ 1.15 5.70 1.79 1.015 7.700.00 1.07 0.04 0.51  \$ 1.15 5.70 1.79 1.015 7.700.00 1.07 0.04 1.07  \$ 1.15 5.70 1.79 1.79 1.700.00 1.01 0.04 1.07  \$ 1.15 5.70 1.79 1.700.00 1.01 0.04 1.07  \$ 1.12 5.12 5.13 1.700.00 1.11 0.04 1.16  \$ 1.12 5.12 5.13 1.700.00 1.11 0.04 1.16  \$ 1.12 5.12 5.13 1.700.00 1.11 0.04 1.16  \$ 1.13 6.57 0.99 15.11 7.700.00 1.11 0.04 1.16  \$ 1.10 7.700.00 1.11 0.04 0.11  \$ 1.10 7.700.00 1.10 0.04 0.11  \$ 1.10 7.700.00 1.10 0.04 0.11  \$ 1.10 7.700.00 1.02 0.04 1.10  \$ 1.10 7.700.00 1.03 0.04 1.10  \$ 1.10 7.700.00 1.10 0.04 1.10  \$ 1.10 7.700.00 0.15 0.04 1.10  \$ 1.10 7.700.00 0.15 0.04 0.10  \$ 1.10 7.700.00 0.15 0.04 0.10  \$ 1.10 7.700.00 0.10 0.10 0.10  \$ 1.10 7.700.00 0.10 0.10  \$ 1.10 0.10 0.10 0.10  \$ 1.10 0.10 0.10 0.10  \$ 1.10 0.10 0.10 0.10  \$ 1.10 0.10 0.10 0.10  \$ 1.10 0.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10 0.10 0.10  \$ 1.10		•	0.67	6.05	2.23	3.82	7,700,00	0.61	0	0.65	3.25	11.02	7.77	-17.82
\$ 0.52 11.88 1.77 10.15 7.700.00 0.47 0.04 0.55 1.88 1.144 5.70 1.00 1.00 0.47 0.04 0.55 1.144 5.70 1.19 1.10.15 7.700.00 1.00 0.40 0.55 0.04 0.57 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.1	X X	*0	0.52	9,85	2.73	9.12	7,700,00	0.47	0.0	0.5				
\$ 1.14		•	0.52	11.60	2.73	10.15	7.700.00	0.47	0	45.0				
\$ 1.14 \$.70		₩.	1.14	5.62	3,79	4. e.	7,700.00	1.03	0	6				
\$ 0.56 5.70 1.83 3.77 7.700.00 0.52 0.04 0.57 1.10 1.05 1.10 1.10 1.10 1.10 1.10 1.10		ď	1.14	5.70	3.79	1.91	7,700.00	1.03	0.0	1.07				
6 0.56 7.11 2.31 5.00 7.7700.00 0.63 0.05 0.66 4.43 15.24 10.81 5.12 4.13 5.02 1.13 5.02 1.13 0.04 1.15 5.12 4.13 15.24 10.81 5.12 4.13 5.13 5.13 5.13 5.13 5.13 5.13 5.13 5		**	95.0	5.70	1.93	7.77	7, 700, 00	0.52	0	0.57				
5 1.23	:	*	0.58	7.31	2:33	80.0	7,700.00	0.63	0.03	99.0	4.43	15.24	10.81	-7.01
5 1,22 6,57 4,09 2,46 7,700,00 1,11 0,04 1,116 5 0,29 26,11 0,96 25,135 7,700,00 0,26 0,04 0,11 5 1,19 4,58 0,62 7,700,00 1,08 0,04 1,12 5 1,07 7,99 3,56 4,43 7,700,00 1,98 0,04 1,12 5 0,81 2,94 2,76 0,18 7,700,00 0,27 0,04 1,12 5 0,81 2,94 2,76 0,18 7,700,00 0,27 0,04 0,79 5 0,83 4,92 2,76 2,16 7,700,00 0,75 0,04 0,79 5 0,83 4,92 2,76 2,16 7,700,00 0,25 0,04 0,79 5 0,22 4,13 0,73 3,20 7,700,00 0,20 0,04 0,24 5 0,22 4,13 0,73 3,20 7,700,00 0,20 0,04 0,24 5 0,07 3,03 0,73 3,20 7,700,00 0,20 0,04 0,24 5 0,07 3,03 0,23 1,796 7,700,00 0,06 0,04 0,12 5 0,07 3,03 0,23 1,796 7,700,00 0,06 0,04 0,12 5 0,07 3,03 0,23 1,796 7,700,00 0,06 0,04 0,12 5 0,07 3,03 0,23 1,796 7,700,00 0,06 0,04 0,12 5 1,08 0,02 0,04 0,04 0,13 5 1,08 0,02 0,04 0,04 0,04 0,04 0,04 1,09 7 1,08 1,08 1,09 0,04 0,04 0,04 0,04 0,04 1,09 7 1,09 1,09 1,09 0,04 0,04 0,04 0,04 0,04 1,09 7 1,09 1,09 0,00 0,00 0,00 0,00 0,00 0,00	Jun.	₩.	1.23	9.24	4.00	5,13	7,700.00	7.7	ŏ	1.16				
\$ 0.29 16.07 0.96 13.11 7.700.00 0.26 0.04 0.11 1.05 4.56 1.05 0.04 0.11 1.05 1.05 0.04 0.11 1.05 1.05 0.04 0.11 1.05 0.04 0.11 1.05 0.04 0.11 1.05 0.04 0.12 1.05 0.04 0.12 0.04 1.12 0.12 0.14 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 1.12 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0		•••	1.23	6.57	4.00	2.44	7,700,00	11.1	0.0	71.4				•
5 0.27 26.31 0.9% 25.35 7,700.00 0.26 0.04 0.31 5 1.19 4.06 0.16 7,700.00 1.08 0.04 1.12 5 1.19 4.06 3.56 4.43 7,700.00 1.08 0.04 1.12 5 1.07 7.99 3.56 4.43 7,700.00 0.97 0.04 1.01 5 0.83 2.94 2.76 0.18 7,700.00 0.79 0.04 1.29 5 0.89 5.96 1.96 0.18 7,700.00 0.79 0.04 0.79 5 0.22 3.99 0.71 3.20 7,700.00 0.20 0.04 0.24 5 0.22 3.99 0.71 3.20 7,700.00 0.20 0.04 0.24 5 0.22 4.13 0.73 1.796 7,700.00 0.20 0.04 0.11 5 0.07 1.13 0.73 1.796 7,700.00 0.06 0.11 5 0.07 1.13 0.73 1.796 7,700.00 0.06 0.11 5 0.07 1.13 0.07 1.109 0.00 0.00 0.00 0.00 6 0.04 0.04 0.10 6 0.04 0.04 0.04 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00 0.06 0.06 7,700.00		'n	0.29	16.07	8.0	15.11	7,700,00	0.26	0.0	0.31				
5 1.13 4.28 5.96 0.62 7,700.00 1.08 0.04 1.12 5.16 21.10 16.02 1.13 4.06 5.96 0.10 7,700.00 1.08 0.04 1.12 5.16 21.10 16.02 1.07 1.07 1.29 5.56 -0.28 7,700.00 0.79 0.04 1.29 5.96 5.96 0.18 7,700.00 0.75 0.04 0.79 5.96 5.96 5.96 5.96 5.96 5.96 5.96 5.9		<b>4</b> 0-1	67,0	26.32	8	20,25	7,700.00	0,26	8		•			
\$ 1.07 7.99 3.56 4.43 7.700.00 1.08 0.04 1.01 2.118 10.02  \$ 1.07 7.99 3.56 4.43 7.700.00 0.97 0.04 1.01  \$ 0.83 2.94 2.76 0.18 7.700.00 0.75 0.04 0.79  \$ 0.89 3.94 0.79 2.76 2.16 7.700.00 0.75 0.04 0.79  \$ 0.89 3.91 0.73 7.700.00 0.24 0.24  \$ 0.22 3.93 0.73 3.20 7.700.00 0.20 0.04 0.24  \$ 0.02 4.15 0.73 1.79 7.700.00 0.20 0.04 0.11  \$ 0.07 10.19 0.23 1.79 7.700.00 0.00 0.10  \$ 0.07 10.19 0.23 1.79 7.700.00 0.00 0.10  \$ 0.07 0.04 0.11  \$ 0.07 10.19 0.23 1.79 0.00 0.00 0.00  \$ 0.07 0.04 0.04  \$ 0.08 0.09 0.00  \$ 0.09 0.00  \$ 0.00 0.00  \$ 0.00 0.00  \$ 0.00 0.00		n v	6r.	. 58 . 58	8	0.62	7,700,00	80	8	7,75	•		:	
\$ 1.07 7.99 3.56 4.43 7.700.00 0.97 0.04 1.01  \$ 0.43 2.94 2.75 0.04 1.29  \$ 0.43 2.94 2.75 0.04 1.29  \$ 0.43 2.94 2.75 0.04 0.79  \$ 0.59 5.96 1.96 4.40 7.700.00 0.75 0.04 0.79  \$ 0.59 5.96 1.96 4.00 7.700.00 0.50 0.04 0.24  \$ 0.22 3.93 0.73 3.20 7.700.00 0.20 0.04 0.24  \$ 0.22 4.15 0.73 3.42 7.700.00 0.20 0.04 0.24  \$ 0.07 3.43 0.73 3.44 7.700.00 0.20 0.04 0.24  \$ 0.07 3.40 0.73 3.40 7.700.00 0.00 0.04 0.24  \$ 0.07 3.40 0.73 0.77 0.00 0.00 0.00 0.00  \$ 0.07 0.04 0.04 0.04  \$ 0.07 0.04 0.04 0.04  \$ 0.07 0.04 0.04 0.04  \$ 0.04 0.04  \$ 0.04 0		•	1.19	8	å. n	0.10	7,700,00	50.1	Š	7	91.0	21.16	16.02	6
3.26 3.56 -0.28 7,000.00 0.75 0.04 1.29  4.92 2.76 0.18 7,700.00 0.75 0.04 0.79  5.94 2.76 0.18 7,700.00 0.75 0.04 0.79  5.95 1.96 4.00 7,700.00 0.64 0.05  3.93 0.73 3.42 7,700.00 0.20 0.04 0.24  4.15 0.73 3.42 7,700.00 0.00 0.04 0.11  3.63 0.23 3.40 7,700.00 0.06 0.04 0.11  2.85 2.80 0.23 3.40 7,700.00 0.06 0.04  3.63 0.23 3.40 7,700.00 0.06 0.04  3.63 0.23 3.40 7,700.00 0.06 0.04  3.63 0.23 3.40 7,700.00 0.06 0.04  3.60 0.04 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04  3.00 0.04 0.04	Jul	•	70.7	7.99	3.56	4.43	7.700.00	0.97	ó	1.01				
2.84 2.76 0.18 7,700.00 0.75 0.04 0.79 4.92 2.76 0.18 7,700.00 0.75 0.04 0.79 5.96 1.96 2.36 7,700.00 0.64 0.05 0.69 5.16 2.60 -2.56 3.21 2.35 0.73 3.42 7,700.00 0.20 0.04 0.12 4.15 0.73 3.42 7,700.00 0.06 0.04 0.12 3.63 0.23 7,700.00 0.06 0.04 0.11 2.85 0.23 7,700.00 0.06 0.04 0.11 2.85 7,700.00 0.06 0.04 0.11 2.85 7,700.00 0.06 0.04 0.04 3.17 0.04 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04 0.04 3.10 0.04 0.04		÷	1.07	3.20	3.50	-0.28	7,090.87	0.97	ò	1.29				
4.92 2.76 2.16 7.700.00 0.75 0.04 0.79 5.96 1.96 4.00 7.700.00 0.64 0.05 3.91 2.35 0.66 7.700.00 0.64 0.05 3.93 0.73 3.42 7.700.00 0.20 0.04 0.24 4.15 0.73 3.42 7.700.00 0.06 0.11 2.65 0.23 1.40 7.700.00 0.06 0.11 2.65 0.23 1.40 7.700.00 0.06 0.11 2.65 1.17 1.17 1.18 1.08 1.08 1.08 1.09 1.09 1.00		<b>•</b>	0.0	8	2.76	0.18	7,700.00	0.75	8	0.79		:		
3.34 4.36 4.00 7,700.00 0.53 0.00 0.59 3.16 2.60 -2.56 3.21 2.35 0.86 7,700.00 0.20 0.00 0.24 4.15 0.73 3.42 7,700.00 0.20 0.00 0.24 4.15 0.73 3.42 7,700.00 0.00 0.00 0.11 2.63 0.23 3.40 7,700.00 0.00 0.00 0.11 2.85 2.80 0.23 3.40 7,700.00 0.00 0.00 0.00 1.17 0.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00		·	0.43	4.92	2.7	2.16	7,700.00	0.73	ŏ	0.79		:	٠	
3.93 0.73 3.20 7.700.00 0.20 0.04 0.24 4.15 0.73 3.42 7.700.00 0.20 0.04 0.24 3.63 0.23 3.42 7.700.00 0.00 0.04 0.11 2.85 2.80 0.02 0.04 0.04 3.17 3.17 3.17 3.18 3.19 3.10 3.10 3.10 3.10 3.10 3.10 3.10 3.10		r) v	0	2.3	& . 	60.0	7,700.00	0.50	8 0	0 0 0	;	4	4	4
3.93 0.73 3.20 7.700.00 0.20 0.04 0.24 4.15 0.73 3.42 7.700.00 0.20 0.04 0.24 10.19 0.23 17.96 7.700.00 0.06 0.04 0.11 2.85 0.23 3.40 7.700.00 0.06 0.04 0.04 2.80 1.17 1.17 1.18 1.08 1.08 1.09 1.09 1.09 1.09 1.09 1.09 1.09	:	6	× 6.0	77.5	7	2.0	20.00	0	5	6	3.10	9	25.30	97.7
4.15 0.73 3.42 7,700,00 0.20 0.24  16.19 0.23 17.96 7,700,00 0.06 0.04 0.11  2.65 0.23 3.40 7,700,00 0.06 0.04 0.11  2.85 2.80  1.17  1.08  1.08  1.08  2.44  2.44	you.	÷	0.22	3.93	0.73	2.20	7,700.00	0.20	ŏ	0.24				
10.19 0.23 17.96 7,700.00 0.06 0.01 2.63 0.23 3.40 7,700.00 0.06 0.04 0.11 2.85 2.85 0.23 3.40 7,700.00 0.06 0.04 0.12 2.85 0.23 3.74 0.05 0.79 24.53 23.74 1.17 0.04 0.04 0.04 0.26 2.70 2.44		<b>*</b>	0.22	i T	0	3.42	7,700.00	0.30	ŏ	0 13				
3.63 0.23 3.40 7.700.00 0.06 0.11 2.85 2.85 2.85 2.80 0.05 0.05 0.79 24.53 23.74 1.13 1.13 1.08 0.04 0.04 0.04 0.04 1.08 1.08 1.08 0.04 0.04 1.09		<b>v</b> * (	0.0	10.19	5	2.8	7,700.00	8	ò	7				
0.05 0.79 24.53 23.74 0.05 0.79 24.53 23.74 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.0		4	0-04	66	ć. 0	0	7,700,00	\$0.0	8 6	0				
0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04		<u>ه</u> د		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					5 6	5 6			**	,
0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04	;	3 -		Ap. 1					3	3	A	2014	7) - 24	24.44
0.04 0.04 0.04 0.04 0.04 0.04 0.04		<b>ያት</b> (		411					9.0	<b>8</b>		٠		
0.04 0.04 0.04 0.04 0.04 0.04		Α,							8	0				٠
0.04 0.04 0.26 2.70		٠. د	: :	0		-			0	0				
0.04 0.24 2.26		n er		8 6				11	8 8	0 0				
		•		2			•		5					:

Table 5-5 Required Storage Capacity of Kalola Dam (8/13)

Q	Honeh Di	8	•	*	•								
		6	1.17	0.01	1.34	7,700.00	0.01	0.0	0.05				
977 097	A 4	5 6		0	1.34	7,700,00	0.0	8	0.0				:
	` •		8	1.20	0.16	90.069.9	0.33	0.0	0.53				
	n wi	0.36	8	30	77	6,368.42	0.33	8	វិត				
	•	0.76	8	2.53	×.	3,016-62	0.69	0	2.27		•		•
	• •	0.76	1.19	3.03	-1.84 ·	3,021.70	0.83	0.0	2.73	<b>6.19</b>	d P	A	9
5		5	\$6.0	3.42	-2.47	2,135.92	0.93	0.04	3.24				
è	`	5	8	25.62	2.43	2,225,06	0.93	8	3.24	•			
	<b>4</b>	01.1	0	3.66	7	2,000,00	8.7	o o	3.46				
		1,10	8	30	-2.62	2,189.47	2.00	800	3.46			٠	
	<b>.</b>	97	8	1 20	0 12	6,87.37	0.33	8	0.49		:	4	
	1 kg	970	90	2	0.10	7,700.00	0.33	8	0.37	14.26	11.25	70°6-	-7.80
						10.000	-	8	1,21				
D 80	٥.	1.47	9110	, a	* · ·	10000		Š					
	<b>87</b> )	3.47		4 69	2.0	7,700,00	7.	3 8			-		
		7.36	4.91	4.52	30.39	7,700,00	4	5 0					
	<b>1</b>	1.36	14.47	4.32	6.0	7,700.00	n d	3 6	10				
		1.02	13.26	9.39	9,87	7,700,00	77.0	5 6		,	i	* V - Y=	-14.32
	•	1.02	8.	0.0	4.93	7,700,00	7.77	0.0	0	) t .	•		
**	i.e	9	9, 0	4.32	6.22	7,700,00	1.18	0.0	1.22				
	•	0	8.21	4.32	3.89	7,700.00	1.18	90.0	1,22				
		0.58	11,66	10.1	9.73	7,700.00	0.52	40.0	6.57				
	n eri	0.58	7.34	1.93	5-41	7,700.00	0.52	0	0.57			÷ .	
		0.82	23.35	2.73	10.62	7,700.00	0.74	0.0	0.79	,		ş	CT - 91-
	**	0.82	5.39	3.27	2.12	7,700.00	0.89	0.0	Š.	05.4	7	3	
ì		0,0	3.07	2	1.08	7,700.00	0.54	0	0.59				
	•	0.0	4.28	8	2.29	7,700.00	0.54	0.0	0.30				
	<b>1</b>	0.38		1.26	3,15	7,700.00	9,34	0.0	0.30				
	- 47	0.38	4.06	1.26	2.80	7,700,00	0.34	ŏ	20.00				
	*	\$0.0	0.33	0.17	9.16	7,700.00	50.0	o e	5	•	70.4	er C	-13,52
	273	0.05	2 07	0.10	7.01	7,700,00	0.0	200	2		;		
			44.4		6.40	7,700,00	00.0	0	Ö				
Ē			22.03	•	22.03	7,700.00	00.0	0	0.0				
	•	٠	11.45		11.45	7,700,00	0	0	0	-			
	. e/1		11.28		11.28	7,700,00	000	o o	o o				
	. **	0.01	9.29	0.03	9.26	7,700.00	0.0	0	0.0		**	14 01	37.54
	. 40	0.0	12.23	9	12.19	7,700.00	0.01	0.03	90.0	× × ×	9		
2	***	0.34	11.19	1.1	10.06	7,700.00	0.31	0	0.33				
<b>:</b>		0.34	16.59	4	15.46	7,700.00	0.33	0.0	0				
	. •	0.79	80.8	2.6	5.45	7,700.00	47.0	o o	0.76				
	i sei	0.79	3.31	2.63	2,68	7,700.00	4.0	0	0 78				
	4	0.38	90.9	1.26	\$.60	7,700.00	6.54	ò	0 30	•	4	;	A 46
	160	0.38	16.59	1.26	15,35	7,700.00	0.34	ŏ	0.39	N	74.47	4	3
3		. 44	13.09	1.80	31.29	7,700.00	0.49	0.04	0.53				
<b>\$</b>	. ×		21.90	1.80	20.10	7,700.00	0.49	0.0	0.53	1		:	
	) ¢	0.70	44.24	2,33	41.91	7,700.00	0.63	0.0	68.0				
		0.70	11.10	2.33	B.77	7,700.00	0.63	o o	6 0				
	. 67	10.1		3.36	2.90	7,700.00	: o	o e	\$ ;	•		05.19	•
					•	**		2	-	4		•	

Table 5.5 Required Storage Capacity of Kalola Dam (9/13)

11.13 0.771 20.523 7.7700.00 0.200 0	X.e.a.r	Month	ឥ	03	ಕ	8	õ	င်	8	ô	8	Ĉ.	e¢.	ŏ	&
Mar.   1   10   10   10   10   10   10   10							1								
9. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	7.8	263	<b>6</b> 7 1	0 5	21.25	0 0 0 0 0	20.52	7,700,00	0.0	0 0	8 6 0 0				
74. 5 0.07 14.85 0.13 14.87 7,700.00 0.08 0.08 0.08 0.08 0.08 0.08 0.0			ត	0.22	9.72	0.73	00.E	7,700.00	0	o i	N. A				
7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			¥ñ	0.04	14.90	0.23	14.67	7 .700 00	ő	ŏ.	4.0				
Mar.   1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	٠.		an)	0.07	11.32	0.23	11.00	7,700.00	0	0.04	0.11				
74. 5 0.14 18.03 0.47 17.44 77700.0 0.11 0.04 0.17 1.04 47.13 45.08 10.01 0.14 0.15 1.04 47.13 45.08 10.01 0.14 0.15 1.04 47.13 45.08 10.01 0.14 0.15 1.04 47.13 45.08 10.01 0.14 0.15 1.04 10.13 1.04 10.13 10.14			•	0.14	9.64	0.47	6.17	7,700,00	0.13	o o	0.17				
744. 9 0.77 11110 2.55 1.64 7.7700.00 0.71 0.04 0.73 1.00 1.00 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0			'n	0.14	10.01	0.47	17.54	7,700,00	0.13	0.04	0.17	1.04	49.12	48.08	1
We come the control of the control o					•	;	£ 4	2000	,	č	À. 4				
Mag.   1975	٠	100	۸.	2 6	1	7 × ×		2000		2 6	, r				
0.57   1.25   0.57   1.25   0.57   1.25   0.57			۸.	2	7 P - 0 P	20.0	A (	00000							
Mag			'n	0.70	12.57	0.67	11:31	7 700 00	91.0	0.0	77.0	.*			
Number   1			'n	0.70	9	0.67	14,84	7,700,00	0	Š.	27.0				
Mag-   0.35   18.03   2.17   18.76   77700.00   0.05   0			•	0.57	22.6	ò	20.74	7,700.00	0,52	ò	9.26			1	٠
10   10   10   10   10   10   10   10			٠	0.57	18.03	2.27	15.76	7,700.00	0-62	0.00	0.67	3.19	18.63	15.66	,
Mag-				1	•			200,000	<b>6</b>	**	20.0				
\$ 0.05		You.	<b>.</b> .	0.22	8.08	2.1	67.0	00.00.7						-	
\$ 0.05			•	0.22	74.99	0.13	14.10	2 700 00	2 1	3	2 4		:		
\$ 0.05	:		**	0.03	8.64	0.17	6.47	7,700,00	0.0	0	20.0				
\$ 4.15  \$ 4.15  \$ 5.05			wn	0.05	6.74	0.17	6.57	7,700,00	0	0.0	0.0			•	
\$\begin{array}{cccccccccccccccccccccccccccccccccccc			ń	-	4.13					0.0	0.0	;	;	;	
5 10.45 5 10.4			÷	4	4.10					900	0.05	0.76	10.31	9.33	•
5 10.0		- 1	,						٠	90.0	0.04				
5.445 5.445 6.001 2.89 6.001 2.89 6.001 2.89 6.002 2.89 6.003 2.89		Č.	ń		10.0					Č	2				
004. 5 0.00 5.60 0.00 5.02 7,700.00 0.01 0.00 0.00 0.00 0.00 0.00 0.0		-	<b>\$</b> 0		10.4					5 6					
004. 5 0.01 2.85 0.03 5.02 7,700.00 0.01 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05			•		5.40					9	5 6				
004. 5 0.01 5.05 0.03 5.02 7,700.00 0.01 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05		٠	•		7.60					0	*0*0				
000.  001.  002.  003.  003.  003.  003.  003.  004.  003.  005.  003.  005.  003.  005.			**		14.60		-	2	,	8.0	0.0		•		•
004. 5 0.01 5.05 0.03 5.02 7,700:00 0.01 0.00 0.05 0.05 0.05 0.005		: :	•		4.45					0.0	o o	0.26	4.40	11.0	
000.  000.						•	8	20,000	Q.	90.0	0.05				
5 0.36 2.45 1.20 2.45 7.700.00 0.33 0.04 0.37 0.36 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.37 0.06 0.07 0.37 0.06 0.07 0.37 0.06 0.07 0.37 0.06 0.07 0.37 0.06 0.07 0.37 0.06 0.07 0.37 0.06 0.07 0.37 0.06 0.07 0.07 0.07 0.07 0.07 0.07 0.0		8	<u>د</u>	6.0	6		7 6				0				٠
5 0.56 6.44 2.12 2.43 7,700.00 0.13 0.04 0.137 5.65 3.42 0.66 6.65 0.13 0.04 0.137 7,700.00 0.159 0.04 0.137 7,700.00 0.159 0.04 0.170 0.04 0.1			٠ ن	70.0	A		9 5	2000	2	0-0	0.37			*	
5 0.035 6.48 2.42 2.43 7,700.00 0.71 0.05 0.75 2.23 5.65 3.42 0.65 6.65 6.22 2.43 0.24 7,700.00 0.65 0.04 0.70 0.05 0.70 0.05 0.70 0.05 0.70 0.05 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.04 0.70 0.05 0.04 0.70 0.70			n	9.30	i i		1 1	200		5 6				:	
0.05 6.24 2.25 2.55 3.55 7,700.00 0.71 0.05 0.76 2.23 5.65 3.42 0.77 0.77 0.77 0.77 0.77 0.77 0.77 0.7				900	6	7	, . , .			40	0.63				
Nov.         5         0.73         2.24         2.43         0.25         7,700.00         0.66         0.04         0.70           5         0.73         2.72         2.43         0.23         7,700.00         0.66         0.04         0.70           5         0.83         4.23         2.76         0.66         0.04         0.70           5         0.83         4.27         0.70         0.04         0.79         0.70           5         0.83         4.27         7.700.00         0.75         0.04         0.79           5         1.37         4.56         -2.05         4.422.00         1.24         0.04         1.79           5         1.37         4.56         -0.50         1.37         0.04         1.41         4.25           1.45         1.27         7.700.00         1.31         0.04         1.43         0.05         1.23         1.47           1.45         1.27         1.34         7.700.00         1.31         0.04         1.43         1.47         1.47         1.0.27         1.12         4.35           1.44         1.31         1.32         1.34         7.700.00         1.31         0.04			n (	0.00	4.0	9	(7)	7.700.00	12.0	\$0.0	92.0	2,23	5.65	3.42	•
Nov. 5 0.73 2.98 2.43 0.55 7,700.00 0.66 0.04 0.70 0.70 0.05 0.04 0.70 0.05 0.04 0.70 0.05 0.05 0.05 0.070 0.70 0.05 0.070 0.70 0.		.:	ø	60.0	****	À	3								
5 0.73 2.72 2.43 0.29 7,700.00 0.66 0.04 0.79 0.70 0.04 0.75 0.04 0.79 0.04 0.70 0.70		, XOV	ĸ'n.	6.73	2.98	2.43	0.55	7,700.00	0.06	0	0.70				
\$ 0.83 3.19 2.76 0.43 7,700.00 0.75 0.04 0.79 \$ 1.37 2.38 4.23 2.76 1.47 7,700.00 0.75 0.04 0.79 \$ 1.37 2.38 4.36 4.36 -0.30 4,370.20 1.37 0.04 1.49 \$ 1.45 12.27 4.82 7.45 7,700.00 1.31 0.04 1.45 \$ 1.31 13.67 5.23 8.44 7,700.00 1.31 0.04 1.49 \$ 1.31 13.67 5.23 8.44 7,700.00 1.30 0.04 1.49 \$ 1.31 13.67 2.46 7,700.00 1.02 0.04 1.49 \$ 1.31 13.67 2.46 7,700.00 1.02 0.04 1.07 1.12 -0.15 \$ 0.95 2.46 3.16 -0.10 7,670.00 0.40 0.04 0.06 \$ 0.05 1.31 0.21 1.31 0.04 1.07 \$ 0.05 1.31 0.31 0.31 0.31 0.31 0.32 0.31 \$ 0.05 1.31 0.31 0.31 0.31 0.31 0.32 0.30 \$ 0.05 1.31 0.31 0.31 0.31 0.31 0.32 0.30 \$ 0.05 1.31 0.31 0.31 0.31 0.31 0.31 0.32 0.30			•	0.73	2.72	4.4	0.29	7,700,00	99.0	0.0	0,10				
\$ 0.83 4.23 2.76 1.47 7,700,000 0.75 0.04 0.77 2.51 4.25 2.76 4,242.80 1.24 0.04 3.33 8.10 3.81 -4.29 1.37 2.51 4.56 -2.05 4,242.80 1.34 0.04 1.79 8.10 3.81 -4.29 2.55 1.51 2.29 2.58 7,700,00 1.37 0.04 1.36 2.45 1.37 0.04 1.36 2.45 1.37 0.04 1.36 2.45 1.31 1.32 4.82 1.37 0.04 1.37 0.04 1.36 2.45 1.31 1.36 2.48 7,700,00 1.31 0.04 1.35 0.04 1.25 0.04 1.07 1.32 0.04 1.07 1.32 0.04 1.07 1.32 0.04 1.07 1.32 0.04 1.07 1.32 0.04 1.07 1.32 0.04 1.07 0.06 0.04 0.09 1.07 0.06 0.04 0.09 1.07 0.06 0.04 0.09 1.07 0.06 0.04 0.09 0.09 1.07 0.06 0.04 0.09 0.09 1.07 0.06 0.04 0.09 0.04 0.09 0.09 1.01 7,700,00 0.04 0.09 0.04 0.09 0.04 0.09 0.04 0.09 0.04 0.09 0.04 0.09 0.09			*	0.83	3.19	2.76	0.43	7,700,00	0.75	5	, i				
\$ 1.37 2.51 4.56 -2.05 4.242.80 1.24 0.04 1.79 8.10 3.81 -4.29 1.37 4.06 4.36 -0.50 1.37 0.04 1.79 8.10 3.81 -4.29 1.37 2.58 1.27 0.04 1.37 0.04 1.38 1.27 1.30 0.04 1.38 1.30 1.30 1.30 0.04 1.07 1.30 0.04 1.07 1.30 0.04 1.07 1.30 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.07 0.04 1.00 0.04 0.09 0.00 0.04 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0			*^	0-83	4.23	2.76	1-47	7.700.00	0.7						
\$ 1,37 4.06 4.56 -0.50 6,862.83 1.24 0.04 1.41 0.05 1.45 0.04 1.41 0.04 1.45 0.04 1.41 0.04 1.45 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0			•	1.37	2.51	4.56	12.03	4,242.80	7	5	) ( ) (	•	í	4.30	-4.29
Dec. 5 1.51 7760 5.02 2.58 7,700.00 1.37 0.04 3.45 1.25 1.51 2.98 5.02 -2.04 4.570.23 1.37 0.04 3.45 1.25 1.25 1.25 1.27 0.04 1.30 0.04 1.35 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.2			w,	1.37	4.06	\$	0.00	6,862,85	N.	9		2	10.0		
\$ 1.51 2.96 5.02 -2.04 4.570.23 1.37 0.04 3.45 \$ 1.45 12.27 4.82 7.45 7.700.00 1.31 0.04 1.35 \$ 1.45 12.27 4.82 7.45 7.700.00 1.31 0.04 1.35 \$ 1.45 12.64 4.82 13.84 7.700.00 1.32 0.04 1.23 \$ 1.13 13.67 5.23 8.44 7.700.00 1.42 0.05 1.47 10.27 1.12 **9.15  5 1.13 13.67 5.23 8.44 7.700.00 1.02 0.04 1.49 \$ 1.13 6.44 3.76 2.68 7.700.00 1.02 0.04 1.07 \$ 0.95 2.46 3.16 -0.01 7.678.67 0.86 0.04 0.91 \$ 0.95 2.46 3.16 -0.70 5.996.68 0.06 0.05 1.31 7.22 8.22 1.00	,	<b>.</b>		1.51	7.60	5.02	2.58	7,700.00	1.37	40.0	1,41				
5 1.45 12.27 4.82 7.45 7.700.00 1.31 0.04 1.36 5 1.45 18.66 4.82 13.84 7.700.00 1.31 0.04 1.36 5 1.31 6.13 4.36 1.77 7.700.00 1.19 0.04 1.23 6 1.31 13.67 5.23 8.44 7.700.00 1.42 0.05 1.47 10.27 1.12 9.15 7.700.00 1.02 0.04 1.49 5 0.95 3.15 3.16 -0.01 7.678.67 0.86 0.04 1.60 5 0.95 2.46 3.16 -0.07 5.790.00 0.04 0.84 5 0.98 4.86 2.29 1.97 7.700.00 0.04 0.84 7.700.00 0.06 0.08 7.31 1.50		;	**	4	2.98	5.02	-2.04	4,570,23	100	ò	3.43		٠,		
\$ 1.45 18.66 4.82 13.84 7.700.00 1.31 0.04 1.35 \$ 1.31 13.67 5.23 8.44 7.700.00 1.42 0.05 1.47 10.27 1.12 -9.15 \$ 1.13 3.33 3.76 -0.43 6.824.41 1.02 0.04 1.07 \$ 1.13 6.44 3.76 -0.43 6.824.41 1.02 0.04 1.07 \$ 0.95 3.15 3.16 -0.01 7.678.67 0.86 0.04 1.07 \$ 0.95 3.15 3.16 -0.10 5.996.68 0.06 0.04 0.84 \$ 0.98 4.84 2.99 1.90 7.700.00 0.04 0.84 7.22 8.22 1.00				1,45	12-27	4.82	7.45	7,700,00	1.31	ő	9.				
5 1.31 6.13 4.36 1.77 7,700.00 1.42 0.04 1.23 6 1.31 13.67 5.23 8.44 7,700.00 1.42 0.04 1.49 7,700.00 1.42 0.04 1.49 7,700.00 1.02 0.04 1.07 7,700.00 1.02 0.04 1.07 7,700.00 1.02 0.04 1.07 7,700.00 1.02 0.04 1.07 7,700.00 1.02 0.04 1.07 7,700.00 1.03 1.04 7,700.00 0.04 0.04 7,700.00 0.04 0.08 7,700.00 0.04 0.08 7,700.00 0.04 0.08 7,700.00 0.04 0.08 7,700.00 0.04 0.08 7,700.00 0.04 0.08 7,700.00 0.04 7,700.00 0.04 7,700.00 0.04				1.45	18.66	4.82	13,84	7,700.00	7-37	9	9				
Jan. 5 1.13 1.35 8.44 7,700.00 1.42 0.05 1.47 10.27 1.12 7.15  Jan. 5 1.13 1.33 3.76 -0.43 6,826.41 1.02 0.04 1.49  5 1.13 6.44 3.76 2.68 7,700.00 1.02 0.04 1.07  5 0.95 3.15 -0.01 7,679.67 0.86 0.04 0.92  5 0.95 2.46 3.16 -0.70 5,996.46 0.96 0.04 0.96  5 0.95 4.94 2.19 1.91 7,700.00 0.05 1.31 7.22 8.22 1.00			·	1	6.13	4.36	1.1	7, 700, 00	7.19	0	1.13				. A.A. C.V.
Jan. 5 1.13 1.33 3.76 -0.43 6.824.41 1.02 0.04 1.49 5 1.13 6.44 3.76 2.68 7.700.00 1.02 0.04 1.07 5 0.95 3.15 3.16 -0.01 7.678.67 0.86 0.04 0.91 5 0.95 2.46 3.16 -0.70 5.796.68 0.86 0.04 1.60 5 0.95 4.84 2.23 1.91 7.700.00 0.05 1.31 7.22 8.22 1.00	:		•	4	13.67	5.23	3.44	7,700.00	1.42	0 0 0	7.47	10.27	7.7.7	01.8	7
380. 5 1.13 6.44 5.76 2.58 7.700.00 1.02 0.04 1.07 5.04 0.91 5.700.00 1.02 0.04 0.91 5.700.00 1.02 0.04 0.91 5.700.00 0.08 0.08 0.08 0.08 0.08 0.08 0.	`	,	•	•		72.	4.0	6.824.41	1.02	40,0	1.49				
3.15 3.16 -0.01 7,678.67 0.86 0.04 0.91 2.46 3.16 -0.70 5,996.68 0.86 0.04 1.60 4.84 2.93 1.91 7,700.00 0.80 0.04 0.84 2.95 1.91 7,700.00 0.80 0.04 0.84			٠.	3	44.4		2.68	7,700,00	1.02	0.04	1.07		7.		.*
2.46 3.16 -0.70 5.996.68 0.86 0.04 1.60 4.84 2.93 1.91 7,700.00 0.80 0.04 0.84 7.019.47 0.06 0.05 1.31 7.22 8.22 1.00			^ •	3 6	, e		0	7.678.67	980	8	0.91	:			
4.84 2.93 1.91 7,700.00 0.80 0.04 0.84 0.82 1.00	-	•	r .		44.0	9	0.70	5,996.68	96.0	8	39:1				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			. ·	) d	9	0	6.1	7,700,00	08.0	90.0	0.84				;
			 D 4	6 a			0.00	7,039.47	96.0	0.03	#	7.22	8.22	8	-12.44

rable 5.5 Required Storage Capacity of Kalola Dam (10/13)

	\$	\$	\$	•									
	,	0.47	8.3	 %	2,50	7,700.00	0.43	90.0	0.47				
		0.47	4.10	×	2,84	7,700.00	0.43	0.0	6.47			•	
	اي	0.29	11.92	8	800	7,700.00	0.26	0	70				
	. ب	0.20	7.39	800	6.43	7,700,00	0.26	0.0	200				
		2	0	0 2	1 72	7,700,00	0.07	0.0	0-12				
	سو آيا	Č	1.87	0.16	7.	7,700.00	0.04	0.03	0.07	1.73	1.23	\$ \$ \$	-12.8
					,			č	0				
	: يې		4.										
	ų.		7.80					3 3	<b>.</b>				
	÷		2.07					o o	o o				
			1		-			8	o o				
	٠,			ć	2.4	7.700.00	0.01	0.0	0				
	ń	7	7	3		2	ć	<b>?</b>	8	0.20	20.14	19.85	6.91
	œ.	0.0	17.72	5	00.71	3	*						
	•	× <	0.00	9.0		7,700.00	0.23	0.0	0.37				
	D 1		> 6			700.00	0.0	0.04	0.27				
	^	0.43	77.77	2		*****							
	٠,	0.80	7.95	2.68	5.29	7,700,00	0-72	Š	3				
		6	4.45	2.66	1.79	7,700,00	6.73	o.	0.77				٠
	•		*		A 5.5	7,700.00	0.33	0.0	0.37				
	ል	5	0, 0	3		2000		5		9	18.66	15,85	:
	₽	9.0	19.48	1.20	18.28	7,700.00	6.33	5	٠ •	10	<b>2</b>		
		**		9	10 61	7.700.00	0.30	0.04	0.5				
	n :	, n				000	ç	Č	3				-
	ń	0.0	7.7	Z.		*****							
	٠,	1.44	6.39	6.19	. 60	7,700,00	00	0.0	,				
	ď	1.44	4.62	A. 79	.0.17	7,429,82	ģ	000					
	١.		0	2 23	0.0	7,700,00	1.04	0	1.02				
	á,	Q 1	) ·			4 6 7		0.0	100	6.9	40.0	1.98	1
	¢	1.15		40.0		***		•			•		
	•			6	* 20	2,700,00	0,26	0.04	0				
	n	67.0	07.0	Š.	3	2000	2				-		
		0.29	22, 77	X	21.81	7,700.00	0.26	0	2				
		0	0. 4	00	4.10	7, 700, 00	00.0	ŏ	ŏ				
	٠,	3			5	700 00	Č	90.0	0.04				
	ń	0	7 7 7 A	3:	100			3	0				
	e)	Š	9.42	3.23	20	7.700.00	0	3		4	70. 43	40.47	•
	· 60	96.0	4.97	á	1.84	7,700.00	0.65	ŏ.	0	N . N	2		·
						VC 704 7	à	č	1.42	:			
	€7	40.4	3.05	3.45	40.44	0,724.70		5 4	1 0				
	٠	1.04	7.78	3.46	4.32	7,700.00	0.0	o O	2		•		
		0.15	7.65	0.50	7,15	7,700,00	41.0	8	0				
			7.	ç	7.84	7.700.00	91.0	o o	91.0				
	٠.	) :				700.00	01.0	0.00	0.54				
	^	2	0617	4	) :			4			0 6	8	•
	ی	0.45	2.64	2.19	6.45	7,700,000	00.0	Ġ.	0.0				
		•	36		. ac	2,236.94	0.36	0.00	0.49				
	1					000	4	Č	0.41				
	'n	0.40		4	•	2000	•	5					
	'n	0 7	7.29	0	6 6 6 7	20.00/*/	* *	3			-		
	•	0.13	7.17	0.4	0.74	7,700.00	0.12	8	0				
	. *		1.17					ŏ	o o			;	
	١ -		9					0.0	0	de d	3.29	80	4
	5												
Ces			6.31					8	0		-		
			40					ŏ	ò				
	n .							0.0	ó				
	S	ē	1					0.04	0.04				
	'n		200					5 6	Č				
	v		7.43				٠			7	74. 44	40.4	•

Table 5.5 Required Storage Capacity of Kalola Dam (11/13)

Tear wonco		,											
1070	,	8	1.17	0.0	1.34	7.700.00	10.0	90.0	0.03				
	n wn	100	11	6	1 d	7,700.00	0	0	8				
	**	0.36	1.56	1.20	0.36	7,700,00	0.33	0.04	0				
	•	0.36	1.47	1,20	0.27	7,700.00	0.33	0.0	0.37	÷			
	'n	0.76	7.64	2.53	-0.89	4,997.23	0.69	0.0	1.62			•	6
	•	9.10	1.43	0.0	-1.58	3,641.90	0.93	0.03	2 46	4.92	2.04	9 27	00.71
NOV.	*7	0.72	2.46	2.39	0.07	7,700.00	0.65	0.0	0.69				
:	w)	0.72	1.90	4	-0.43	6,239.77	0.65	0.04	1.15	. :			
	**	66.0	2.29	3.29	-1.00	5,356,73	8	0.0	8				
	, sų	66.0	2.76	3.29	-0.53	6,456.14	8	0.04	4				
	•	2.52	4.10	50.	-0.93	6,246,54	7.70	š	2.37		. !	;	
	*	4	3.07	5.03	-1, ·98.	4,677.29	1.38	80	3.40	11.03	1.22	18.61	*12.67
•	, ,	, ,			<b>V</b>		9	8	7.	-			
	•	7	X 4 4	à c		10. 44. 0	9	ð	, in				
	: :		2	, c		00000		8	7			i	
	: *?	1	in in	i d		0/3/0/1	N 6	3 6					
	·	40,4	0.7	21.5	0.0	7,700.00	, t	3 6					
	×'n	. 40	0.00	4.00	0	7,00,00			1	10.01	13.80	17.71	-18.40
	ø	1.40	7.77	80.00	2.18	7,700.00	70.4	5	7	45.01	***		
1000	•	8	0.13	7.46	5.66	7, 700, 00	0.94	ŏ	86.0				
- CBA				4	20	7 700.00	0.94	0.04	96.0		-		
• • •	ስ፥	3 6		2	44	7 700.00	0.24	0	0.28				
	'n					7 200.00	0.24	0	0,28				
.*	ທ່າ	0		0 0		200.00	0.80	0	0.84	.*			
	rh ·	98		7	10	7 700 00	90.0	Ö	0	4.37	2.89	-1.48	-19.88
	٥	0.98	2	10.0	•								
G.	٠	0.63	3.93	2.09	7.84	7,700.00	0.57	o o	3				
		69.0	3,32	2.09		7,700,00	0.57	8	9.0	:			
٠	: •	0.36	8	1.20	0.74	7,700,00	0.33	ò	0.37				
	, kr	96.0	1.34	1.20	0.14	7,700.00	0.33	ò o	, ,				
	s <b>s</b> c*	0.0	1.99	0.03	8	7,700.00	0	o o	0			1	16.00
:	t or	10.0	8	0.05	2.89	7.700.00	0	0.03	0	2.03	er O · A	,	•
			•	2 :				0	0.0				
Har.	•		2.0				٠.	0	90.0				
	•.	1	'n					0.0	8				
				;				0	9		٠		ī
	ń			3		7 700.00	10.0	0.0	50.0				
	<b>1</b>	0.0	7.4		10	200 00	0	0.05	90.0	0.29	0.22	7.93	-8.16
	·c	0.0	****	3	•								
32.6	•	0.23	3.0	0.76	3.17	7,700.00	0.21	o o	9		:	. :	
	6	0.23	14.12	0.76	13.36	7,700.00	0.21	Ö					
	•	6.63	14.43	00 A	12.34	7,700,00	0.5	Š	0.0				
	i is	0	16.25	000	90.0	7,700,00	0.57	0.0	10.0				
	٠.	0.70	10-71	7. 7.	8.38	7,700,00	0.0	o o	69.0		-	4	**
		0,10	10.84	2.33	8.51	7,700.00	0.63	o o	6	30.0	, , ,		
	•		;	•	77.70	4 400 00	6.0	0.04	0.62				
***	**	9	26.57	7	200	200000	9	0.0	0.62				
	'n	ì	11.36	n i	7	2000	-	0	e de la companya de l	. :			:
	•	44.1	40.6	8	r Q	2000	1	ó	\$				
	'n	7.55	8.	4.00	X .	00.007.7	•	5 6	40				
	so.	0.33	69.6	0.76	D	7 700 00				00.4	20.70	16.62	•

Table 5.5 Required Storage Capacity of Kalola Dam (12/13)

3		.".	é		•					•	:					,						1						2.5						-14.14					37.44	40.00					-54.30	
8				:	18.01					6	<b>5</b>					7.83						1.27						-3.54						-10.60						174.04	٠				*20.65	
£.					20.01					**	8					9.60						Ş	7					0.75		•				0.39					;	000					0.24	
04				•	н. 8					3	9					7							9					2.20						10.99		,				19.51					20.89	;
ģ	0.78	ਜ਼ •	3	0.12	0.12	0.97	0.97	0-70	6	0.57	0.77	0.19	61.0	0.15	0.15	5 ¢	<b>&gt;</b>	0.0	9.0	40.0	0.0	8	40.0	0.05	0.0	0.37	0	74	, i		10	2.72	200	3.0	5.26	4.00	3.93	\$.05	0.57	0.72	4.12	4	3.49	, .	3 -	i i i
8	88	3 6	ő	S O	0.0	80.0	0.0	4.04	0.0	0	0	9.0	8	8 6	3	8 8	ŝ	0.04	0.0	800	0.0	8	8	8	0.0	0	8	8 8		, 0 0	5 6	5 6	8	0.0	0.0	0.04	80.0	0.0	0.04	0.03	0.0	0.0	0.0	8 6		\ \ \ \
8	0.73	200	90.0	0.0	0.07	0.92	0.92	0.75	5.75	0.52	G	0.14	44.0	17.0	7.0	•					ě			0.0	10.0	0.33	e	9 6	2	0.6 6.6	5 6 6 6	9 6	75.0	0.57	1.52	1.52	1.46	1.46	0,52	0.63	1.19	1.19	8	8 2 6	80	2
ន	7.700.00	7,000.00	7,700.00	7,700,00	7.700.00	7,700,00	7,700,00	7,700.00	7,700,00	7,700,00	7.419.04	7,700,00	7,700.00	7,700,00	7,700.00		:							7,700.00	7,700,00	7,700,00	7,526,32	4,329,52	210010	4,267.67	4,207,07	2,748.50	A. 072.68	7,700.00	2.439.85	4.342.21	4,228,83	2,243.87	7,700.00	7,586.21	2,280,43	2,280.43	2,336,65	2,336,65	3,164.21	DT*0/0*C
ő	40.0	7.7	20.0	. 20	8.0	.62	1.40	4.45	7.08	8	-0.08	2,80	3.80	1.76	2.93									8t . t	1.14	1.18	-0.03	88	2	7.0	0		10.0	2	, B	2.66	-2.41	-3.79	3.34	0.0	10.6	10,0	-2.57	-2.57	7.	
8	2,69	5.0		3 6	0.27	3.39	3,39	2.76	2.76	1.93	4.5°	0.53	3	0.40	0.40								:	0.03	0.03	1.20	1.20	5,3	2.73	2.33	2	6 C		5 0	9	8		S	1.93	2	4.36	4.36	3.69	3.69	2.3	
ថ			) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	10.07	in s	5.01	4	7.21	20.0	2.29	2.2	3,33	4.41	2.16	3.33	4,84	2.50	10.00			3	1.77	1.51	1.21	1.17	2.38	1.17	1.29	7 H	1.29	1.29	ਰ: ਹੈ:	e e	2.80			3	\$	5.27	2.28	1.20	1.29	1.12	1.12	1.21	:
ន	0.82	8 6	0.00	6 6	8	1.02	1.02	0.83	0.83	90	0.00	0.16	0.16	0.12	0			٠	÷			J.		0	0	0.36	0.36	0.69	0.69	0.70	0.70	8	0			00.4	0 v	į :		95	-		11.1	1	0.68	***
ដ	÷	·	Ki 1		n vi		. •	N M	1 40	. <u></u>	•	٠	·	· er	•	. <del></del>	æ.	پ	h w	n 🕏		· w	'n		1 16	· •	1 10	•	•^	ń	<b>s</b> ò	<b>-</b>	10 i	^ ¥	•	n i	ስቁ		n #	n •0		is ₩	ني په	, <b>e</b> n	<u>.</u>	
Month	Jun.					1			•	•		, S. 14	•					į	, des					į	3					Š.					- •	1000		•					,			
Year	1980					٠																															!					1997				

Table 5.5 Required Storage Capacity of Kalola Dam (13/13)

	20.24 20.24 20.24 20.34	0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.000	4,300,75 4,300,75 7,700,00 7,700,00 7,700,00 7,700,00 7,700,00	00000 0000 0000 0000 0000 0000 0000	20000000000000000000000000000000000000	44440000000000000000000000000000000000	4 0 6 8 8 8	6 C	4.07	-58.36
**  **  **  **  **  **  **  **  **  **			7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00	00 00 00 00 00 00 00 00 00 00 00 00 00	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	44.000 000000 00 44.00000000000000000000	6.28	0.13	-4.07	
7. 26. 26. 26. 26. 26. 26. 26. 26. 26. 26			7,700.00 7,700.00 7,700.00 7,700.00 7,700.00 7,700.00	25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000	20000 00000 00000 20000 000000 000000000		4. 0. 0. 2. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	0,12	-4.07	-58.3
vanan nanuna nanuna oo oo			7,700.00	25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.000 25.0000 25.000	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	62.29	0 17	-4.07	-58.3
**************************************			7,730,18	0000 0000 238 0000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	84100 000000 00 84100 000000 00	6 64 64 64 64 64 64 64 64 64 64 64 64 64	27 C	4.07	-58.3
**** ******* *************************			7,130,13	717.000 00000000000000000000000000000000	48 888888	2000 0000 000 2000 0000 000 2000 0000 0	62.0 82.0	6,12	4.07	58.
**************************************			7,700,00	0.00 0.00 0.00 0.00 0.00	00 00000 0 00 00000 0 00 00000 0	20000000000000000000000000000000000000	6.19	0,12	4.07	58.
00 000000 44 00 00000 44 00 00000			7,700.00	0.00 0.01 0.03 0.28	0 000000 0 000000 0 000000 0 00000	0 00000 00	0.28	5		
u nanuna ananun g q q q q q q q g q q q q q q q q g q q q q			7,700.00	00 00 20 00 20 00 20 00	4999999	000000	0.28	ç	4 4	
**************************************			7,700.00	0.00 0.00 2.88 0.28	\$ \$ \$ \$ \$ \$ \$ \$ \$	00000000000000000000000000000000000000	0.28	r	4 4	
*******			7,700.00	0.00 10.00 28.00 28.00	00000 00000 00000 00000	90000 00 90000 00	0.28	· C	4	
			7,700.00	00 00 10 00 10 00 10 00	20000	0000 00 0000 00	0.28		64	
******			7,700.00	0.00 0.01 0.28 0.28	0000 0000 0000 0000	9000 00 9000 00 9000 00	0.28	r	64	
***********			7,700.00	0.01 0.01 0.28	9000	00000000000000000000000000000000000000	0.28	6	68.4	
			7,700.00	0.00	9000	000 00 000 000	0.28	r	6.83	
			7,700,00	00 00 22 00 00	0 0 0 0 0 0 0 0 0	00 00 00 00 00 00	0.28	-	CB. A	
*** **********************************			7,700,00	0.01 0.28 0.28	0.0 0.0	6 0 0 6 22 0	0.28	-		4.4
0 000000 0 00000 0 00000			7,700.00	0.28	9	0.32		> * * *	25.5	
********			7,700.00	0.28	9.0	, , ,				
* * * * * * * * * * * * * * * * * * *			700.00	0.28		0.73			-	
************		40	700,00	0 440	څ			٠.		
					<b>S</b>	Î				•
			7,700,00	0.67	40.0	7.7			٠	٠
			7,700,00	0.67	80.0	6			•	
Salar			00000		90.0	0,79				2
			2000			-	1.66	25.63	27.97	-29.57
, f	:	1	7,700,00	Ć.	0	, ,			٠.	
:	ť.				**	000				
•	1		7,700,00	4	200		:			
A STATE OF THE STA			700.00	0.44	Š	N 1				
	. :		7,700,00	0.52	Š	0.0				
			00 000	4.2	90.0	53		: .		
					2	ç				
			7,700,40	•	5 3			16.35	31.18	1.61
:		ŀ	7,700.00	7.02	60	, c	•			
7.49	6 t	-								
: -	76.0		7.700.00	0,70	9	7.0	:			
Jun. 5 0.22			-00.00	0.50	80.0	0.24				
		, . 		•	0.04	ŏ				
.:	-		20.00		3	0				
		-	7,700.00	3	•				-	
٠.		2	7.700.00	0.86	90.0	0.0	7	•	. 50	
ď			2	0.86	Š	8	7.7	0.5	•	

Table 6.1 General Peatures of the Alternative Plans (1/2)

De	scription	Proposed Plan	Alt. I	Alt. II
Irrigation Area (ha)		9,800	10,600	8,550
Projec	t Facilities			
- T	ila Intake Weir			
	a) General			
	- Catchment area (Km2)	379	379	379
	- Flood water level (m)	34.15	34.15	38.00
	- Intake water level (m)	30.30	30.30	35.20
-	- Design flood discharge	1.136	1,200	1,136
	(n <sup>3</sup> /s)			
	- Max. intake water dischar (a <sup>3</sup> /s)		16.50	14.64
	- Bed rock	Conglomerate	Conglomerate	Conglocerate
	b) Intake Weir			
	- Wair type	Masonry cascade	Coocrete gravity	Masonry cascade
:	- Crest evaluation (m)	39.39	35.20	39.39
	- Weir height (m)	8.30	17.20	8.30
	- Crest length (n)	70.0	141.0	70.0
٠	- Scouring sluice	6 bays	3 bays	6 bays
	- keir voluse		<u> </u>	
	Coocrete (m <sup>3</sup> ) Earth excent. (m <sup>3</sup> )	<del>-</del>	55,000 79,000	<u>-</u>
	Rasonry (a3)	36,200	******	36,200
	· Foundation treatment	•	Curtain grouting	*
	- Diversion sethod	Coupure rethod	Multiple stage method	Coopure method
445 -	rianal and		· ·	4.4
-	alola Das			
	(a) General		***	***
+;	- Catchrent area (Km2)	122	155	122 35.0
	- fotal storage capacity (10 <sup>6</sup> m³)	<b>43.</b> 0	44.0	
	- Available storage capaci (10 <sup>6</sup> m <sup>3</sup> )	ty 37.0	39.0	29.0
	- Dead water capacity (106	a <sup>3</sup> ) 6.0	6.0	6.0
	- Flood water level (m)	39.5	39.5	38.0
	- Kormal high water level	(m) 35.0	36.0	34.5
	- low water level (a)	35.0	30.0	39.0
	<ul> <li>fesign flood discharge f spillvay (m³/sec)</li> </ul>	or 800.0	800.0	830.0
	- Design flood discharge f diversion ( #3/sec)	or 485.0	455.0	495.0
	- Kax, intake water discha			
	- Bed rock	- Sands	toce and partly cong	locerate -
	(b) Data			
	- Type	- Zoned r	ockfill with central	earth core -
:	- Crest elevation (m)	42.5	42.5	41.0
	- Cas height (m)	30.5	30.5	29.0
:		230.0	230.0	210.0
	- Crest length (n)		291,000	233,000
	- Escariteent volume (n3)	277,000		ee e ja Tee
	- Foundation treatment	- Eustain g	routing with max. de	5-II UL 43 A *
	(c) Spillvay			
~	- zAte		-gated side overflo	
. :	- Crest elevation (m)	36.0	36.0	34.5
	- Crest length (m)	57.0	57.0	\$7.0
	and the second s	3.5	3.5	3.5

Table 6.1 General Features of the Alternative Plans (2/2)

		*.		<u> </u>
<u> </u>		Proposed Plan	Alt. I	A1t. 11
	Description			
. (	d) Diversion Tunnel			
	- Type	- Fressure ty	pe with 2 circular	Bections -
	- Length (m)	95 and 100	95 and 100	95 and 100
	- Diameter (m)	6.0	6.0	6.0
-	anal and Food System			
4	(a) Main Irrigation Canal		ta - tarnanidal	section -
	- Canal type	- Earth canal 1	with a traperoidal	22.4
	- Total length (Ka)	41.0	45.7 34.3	21.2
	teft main canal (Km)	30.5 10.5	11.4	1.2
	Right sain canal (Ka)	The second second	14.42	12.11
	<ul> <li>Max. design water discharge (a<sup>3</sup>/sec)</li> </ul>	10		
	+ length of lifed portion (Ka	) -	- 6	
	- Nos. of related structures			1
	Culvert	2	i	1
	Syphone Turnout with check structur		29	50
	Reasoring device	2	3	2 3
	Spillvay	5 50	5 29	31
•	Cross drain	3	6	<b>1</b>
	Drop structure	ranale		
	(b) Secondary and sub-secondary	Farth canal	with a trapezoidal	section -
	- Canal type		12	29
	- Nos. of canal	28		103.3
	- fotal length (Xa)	93.3	74.2	
:	- Secondary unit (ha)	1,900 - 80	1,900 - 80	1,900 - 60
	- Nos. of structures	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	-	•
	Culvert	6 3	12	1
	Sypbon Turnout with check structu	. <del>.</del>	69	65
	prop	8	22	12
	Cross drain	29	26 15	33 11
	Spillway	10	17	
	(c) Connecting canal			
	- Canal type	- Earth canal	vith a trasezoida	the state of the s
	- Canal length (a)	5.1	-	5.1
	- Kax, design water discharg	je 11.72	•	7.37
	- Bos. of structures			
	furnout with check structu	ire 3	<b>.</b>	
	Drop	3		3
	Resuring device	1		
	(d) Tertiory System			
٠	- fertiary block (ha)	less than 150	less than 150	less than 150
٠.	(e) Major Drainage Canal	4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
	- Canal type	- Earth can	al with a tragezol	dal section 2
	- Total length (a)	86.5	92.5	61.0
	- Sos. of structures			
	- Nos. of structures Grop	129	132	121
	Eriôse	S	7	
	Junction	17	18	16
	(f) Farm Road Network			
	- Type of road	and the second second		
	Construction road	- Asphalt p	aved road of 5.5	vide •
	- Length of construction re	a3 28.0	23.0	28.0
	- yos. of related structure		** 1	
				56

Table 6.2 Estimate of Crop Production Benefit for Alternative Plans

	HA	Proposed Plan		7	Alternative -	-4	7	Alcernative	i
Description	Without	with	Incre-	Without	with	Incre-	Without	With	ment
planted/Karvasted Atea (ha)								*.	
	007	o o	310	0.670	10,000	330	8,200	8,500	8
	065	9.800	9.210	609	10,000	9,400	270	8,500	7,990
Polowido grops	2,720	•	-2,720	2,770	J	-2,770	2,350	ſ	-2,350
Gross Production Value (x 106kp.)	6,518	19,600	13,082	6,641	20,000	13,389	5,633	17,000	11,367
Special sources and	5,637	9,800	4,163	5,744	10,000	4,256	4,871	8,500	3,629
	រា ព	9,800	9,465	341	10,000	659*6	8	8,500	8,210
Polowijo orops	546	1	-546	556	•	-556	472	•	473
notal Production Cost (x 100kp.)	2,499	5,872	3,373	2,546	5,992	3,446	2,160	5,093	2,933
200000000000000000000000000000000000000	2,131	2,886	755	2,171	2,945	774	1,841	2,503	662
	121	2,986	2,865	123	3,047	2,924	105	2,590	2,485
Polowijo crops	247	•	-247	252	•	-252	21.4	1	-214
Net Production Value (x 106Rp.)	4,019	13,728	602,6	4,095	14,008	9,913	3,473	11,907	8,434
Went message to the Colors	3,506	6,914	3,408	3,573	7,055	3,482	3,030	5,997	2,967
Oxy meason youddy	214	6,814	6,660	218	6,953	6,735	185	5.910	5,725
	299		-299	304	•	-304	258	•	-258

Remark: To be referred ANNEX-V.

Table 6.3 Work Quantity of Alternative Plans (1/7)

Work Item	1	Proposed Plan	Alt. I	Alt. II
Bila Intake Weir				
(1) Diversion & Closure Embankme	ent			
	13)	107,000	-	107,000
Excavation, Weathered rock (m	,3 <sub>)</sub> :	380,000	. <del>1</del>	380,000
Embankment (r	<sub>i</sub> 3 <sub>)</sub>	88,000	-	88,000
(2) Weir and Bridge				
(a) Intake Weir				
	3)		55,000	
	,3 <sub>}</sub>	36,200	33,000	36,200
- Reinforced concrete (m		500	1,000	500
	<sub>i</sub> 2)		20,000	-
- Form for reinforced				
concrete (r	<sub>i</sub> 2)	1,500	2,000	1,500
- Reinforcement iron bar (t	on)	60	60	60
- Bearing shoe (T-14) (n	ios.)	20	<u> </u>	20
(b) Earth Works				
- Stripping (m	, <sup>3</sup> )	-	12,600	
- Excavation, Common (m	a <sup>3</sup> )	<del>-</del>	37,800	<u>-</u>
- Excavation, Weathered rock (r	,3)		75,600	
- Excavation, Rock (E	,3)	<del>-</del>	25,200	<u> </u>
- Excavation, Gravel (m	23)	<del>-</del>	25,200	
- Backfill (r	3)	8,600		8,600
- Gravel metaling (m	<sub>1</sub> 3 <sub>)</sub>	630		630
(c) Scouring Sluice Gates (m	<sub>1</sub> 2)		18	
	<sub>1</sub> 2)	32		32
(e) Foundation Grouting (n			3,200	- -
	,3)	5,900	2,600	5,900

(to be cont'd.)

Table 6.3 Work Quantity of Alternative Plans (2/7)

	Work Item		Proposed Plan	Alt. I	Alt. II
(3) Pil	l Dam				
(a)	Earth Works				
	- Stripping	(m <sup>3</sup> )	_	8,300	-
	- Excavation, Common	$(m^3)$	<del>-</del>	10,800	· <del>-</del>
	- Excavation, Weathered rock	(m <sup>3</sup> )		10,800	-
	- Excavation, Rock	(m <sup>3</sup> )	-	3,600	_
	- Embankment, Core	$(m^2)$	: · _	68,000	· :
	- Embankment, Rock	(m <sup>3</sup> )	· · · · · ·	10,400	·
	- Gravel metaling	(m <sup>2</sup> )	_	2,000	-
(ъ)	Foundation Grouting				
	- Cap concrete	(m <sup>3</sup> )	: i	2,000	_
	- Grouting	(m)	- :	4,400	÷
(4) Int	ake Gate	i .			•
(a)	Earth Works				
	- Stripping	(m <sup>3</sup> )	600	800	600
	- Excavation, Common	(E <sub>3</sub> )	4,200	5,600	4,200
	- Excavation, Weathered rock	(m <sup>3</sup> )	1,200	1,600	1,200
	- Excavation, Rock	(ra <sup>3</sup> )	1,200	1,600	1,200
	- Backfill	(m <sup>3</sup> )	2,400	2,000	2,400
( <b>b</b> )	Concrete and Masonry Works				
100	- Plain concrete	(n <sup>3</sup> )	<del>-</del>	4,200	_
	- Wet stone masonry	(m <sup>3</sup> )	5,300	. · · —	5,300
	- Reinforced concrete	(m <sup>3</sup> )	250	3,800	250
	- Form	(m <sup>2</sup> )	650	8,000	650
	- Reinforcement iron bar	(ton)	18	304	18
(c	) Metal Works		;		
	Gate	(m <sup>2</sup> )	. —	28	-
	Rooden gate	$(m^2)$	35	_	35
	Screen	(ton)	-	4	-
				(to be	cont'd.)

(to be cont'd.)

Table 6.3 Work Quantity of Alternative Plans (4/7)

	Work Item		Proposed Plan	Alt. I	Alt. II
(3) Dam					
(a)	Earth Works				
	- Stripping	(m <sup>3</sup> )	36,000	36,000	36,000
	- Excavation, Common	(m <sup>3</sup> )	5,000	5,000	5,000
	- Excavation, Weathered rock	(m <sup>3</sup> )	15,000	15,000	15,000
	- Embankment, Core	(m <sup>3</sup> )	42,000	42,000	38,000
	- Embankment, Filter	(m <sup>3</sup> )	20,000	20,000	18,000
	- Embankment, Randam rock	(m3)	67,000	67,000	55,000
	- Embankment, Rock	(m <sup>3</sup> )	134,000	134,000	110,000
	- Embankment, Riprap	(m <sup>3</sup> )	9,000	9,000	7,000
	- Embankment, Drain gravel	$(^{1/3})$	5,000	5,000	5,000
<b>(b</b> )	Foundation Treatment	*			•
	- Blanket grouting	(m)	1,900	1,900	1,900
	- Curtain grouting	(m)	11,300	11,300	11,300
(4) Sp	i i Resau				
	) Earth Works		4		
	- Stripping	(m <sup>3</sup> )	30,000	30,000	30,000
	- Excavation, Common	(m <sup>3</sup> )	120,000	120,000	120,000
	- Excavation, Weathered rock	$(m^3)$	90,000	90,000	90,000
	- Excavation, Rock	(m <sup>3</sup> )	60,000	60,000	60,000
	- Backfill	(m <sup>3</sup> )	32,000	32,000	32,000
(b	) Concrete Works				
•	- Reinforced concrete	(m <sup>3</sup> )	24,200	24,200	24,200
	- Form	(m <sup>2</sup> )	12,200	12,200	12,200
	- Reinforcement iron bar	(ton)	380	380	380
	- Rock volt	(nos.)	2,200	2,200	2,200
		5	***		
(6	e) Other Works	r 3s	2 000	3,000	3,000
	- Gabion	(m <sup>3</sup> )	3,000	-	•
	- Grouting	(m)	1,020	1,020	1,020
				(to be o	cont'd.)

Table 6.3 Work Quantity of Alternative Plans (5/7)

Work Item	Ė	roposed Plan	Alt. I	Alt. II
(5) Intake Facility				
(a) Concrete Works				
- Reinforced concrete	(m <sup>3</sup> )	720	730	660
- Porm	(m2)	2,200	2,200	2,000
- Reinforcement iron bar	(ton)	43	. 43	39
(6) Haul Road	·			
(a) Earth Works				
- Stripping	(m <sup>3</sup> )	10,000	10,000	10,000
- Excavation, Common	(m <sup>3</sup> )	68,000	68,000	68,000
- Embankment	(m <sup>3</sup> )	8,000	8,000	8,000
(b) Pavement		: *		
- Asphalt pavement	(m <sup>2</sup> )	3,000	3,000	3,000
- Gravel metaling	(m <sup>2</sup> )	15,000	15,000	15,000
(7) Metal Works and Others			1 = 1 1	
(a) Metal Works		.*		
- Gate with accessory	(£)	12	12	12
- Jet flow gate \$1600	(nos.)	1	· <b>1</b>	1
- Slide gate \$1600	(nos.)	1	1	· · · · · · · · · · · · · · · · · · ·
- Other materials	(t)	5	5	5
(b) Others				
- Control center building	(m <sup>2</sup> )	3,000	3,000	3,000
Canal and Road System				
(1) Main Canal System				
(a) Canals				
- Excavation, Common	(£ <sup>3</sup> )	698,000	898,000	530,000
- Excavation, Rock	(m <sup>3</sup> )	127,000	282,000	118,000
- Embankment	(n3)	599,000	1,041,000	413,000
- Sod facing	(m²)	529,000	635,000	390,000
- Canal lining	(E2)	-	114,100	-
- Asphalt pavement	(w <sub>5</sub> )	138,500	136,100	82,600
- Stripping ( $t = 0.10$ )	(m3)	134,000	143,000	97,000
			(to be co	ont'd.)

Table 6.3 Work Quantity of Alternative Plans (6/7)

Work Item	i	Proposed Plan	Alt. I	Alt. II
(b) Related Structures				
- Reinforced concrete	(m <sup>3</sup> )	1,900	1,200	1,200
- Wet stone masonry	(m <sup>3</sup> )	26,800	18,900	15,700
- Porm	(m <sup>2</sup> )	6,400	4,000	3,900
- Reinforcement iron bar	(ton)	93	60	60
- Base concrete	(m <sup>3</sup> )	1	40	40
- Backfill	(m <sup>3</sup> )	76,000	67,000	52,000
- Gate	(ton)	6	5	2
(2) Secondary Canal System				
(a) Canals				
- Excavation	(m <sup>3</sup> )	350,000	135,000	284,000
- Embankment	(m <sup>3</sup> )	925,000	671,000	913,000
- Sod facing	(m <sup>2</sup> ) 1	,025,000	334,000	902,000
- Asphalt pavement	( <sub>12</sub> )	210,700	222,600	218,700
- Stripping	(m <sup>3</sup> )	204,000	149,000	200,000
(b) Related Structures				
- Reinforced concrete	(m <sup>3</sup> )	1,300	1,400	900
- Wet stone masonry	(m3)	15,800	17,400	14,800
- Form	(m2)	4,400	4,900	3,200
- Reinforcement iron bar	(ton)	55	60	4.
- Base concrete	(m <sup>3</sup> )	80	80	50
- Backfill	(m <sup>3</sup> )	39,400	44,700	32,300
- Gate	(ton)	12	12	1
(3) Tertiary Canal System	(ha)	9,800	10,000	8,50
(4) Drainage Canal System				
(a) Canals	:			
Excavation, Common	(m <sup>3</sup> )	1,026,000	1,087,000	971,00
Embankment	(m <sup>3</sup> )	217,000	227,000	199,00
Stripping	$(m^3)$	58,000	61,000	53,00
			4	. :

Table 6.3 Nork Quantity of Alternative Plans (7/7)

	Work Item			Proposed Plan	Alt. I	Alt. II
(	b) Related Structures					
	- Gabion		(m <sup>3</sup> )	12,800	13,000	9,500
	- Reinforced concrete		(m <sup>3</sup> )	40	60	40
	- Wet stone masonry	-	(m <sup>3</sup> )	580	820	580
	- Form		$(m^2)$	140	210	140
	- Reinforcement bar		(ton)	2	3	2
(5) F	arm Road System					
(	(a) Roads	-	*.			
	- Excavation, Common		(m <sup>3</sup> )	30,000	31,000	30,000
	- Embankment	-	(m <sup>3</sup> )	158,000	162,000	158,000
	- Sod facing		(m²)	71,000	73,000	71,000
: 1	- Asphalt pavement		(m <sup>2</sup> )	84,000	87,000	84,000
	- Stripping		(m3)	29,000	30,000	29,000
(	(b) Related Structures	4.1		. :		
	- Concrete pipe		(m)	450	470	450
	- Wet stone masonry		(m <sup>3</sup> )	130	140	130

Table 6.4 Construction Cost and Economic Cost of Alternative Plans

•		<del>la compresentationes de la compresentation </del>	Dean3		it: 10 <sup>6</sup> Rp.) st
:		Item	Proposed Plan	Alternative I	Alternative II
•	Civi	l Works			
	(1)	Preparatory works	1,718	1,872	1,532
	(2)	Bila intake weir	2,665	5,262	2,665
		Intake weir	1,123	4,396	1,123
		Intake structure	203	866	203
		Diversion channel	1,215	-	1,215
		Closure embankment	61	-	61
	ranger Sangar	Bridge	63	÷ ;	63
	(3)	Kalola dam	7,656	7,657	7,285
	;	Coffering	239	239	239
	•	River diversion	1,045	1.045	1,045
	* .	Dam embankment	2,283	2,283	1,925
		Foundation treatment	487	487	487
		Spillway	2,370	2,370	2,370
		Intake facility	145	146	132
		Haul road	79	79	. 79
		Ketal works	1,008	1,008	1,008
	(4)	Canal and road system	10,331	9,964	8,845
	. !	Main canal system	3,493	4,263	2,277
		Secondary canal system	4,715	3,480	4,565
		Drainage system	1,343	1,418	1,223
	:	Road system	780	803	780
	(5)	Tertiary system	4,485	4,578	3,892
	(6)	Office and quarters	640	<u>640</u>	<u>640</u>
	-	Total - 1	27,495	29,973	24 <u>.859</u>
2.	Lan	d Acquisition	2,370	2,400	2,102
3.	0.8	M Equipment	992	992	992
4.	ηδΑ	inistration Expenses	612	612	612
5.	2.00	ineering Services	4,889	4,980	4,290
6.		sical Contingency	5,454	5,844	4,929
7.		ce Contingency	26,011	26,542	23,614
		AND TOTAL	67,823	71,343	61,398
	Eco	onomic Construction cost (1+3+4+5) x 1.15 x 0.9	35,178	37,836	31,829

Table 7.1 Choice of Spillway Dimensions

		· i			
<del></del>			Case 1	Case 2	Case 3
ı.	Main Peatures				
٠:,	1. Main Dam				
	Crest EL. Crest Length	(m) (m)	42.0 220.0	42.5 230.0	43.0 240.0
	2. Spillway	٠.		The second of	
	Crest BL. Crest Length	(m) (m)	36.0 71.0	36.0 57.0	36.0 47.0
i.	Construction Materi	als			
4.3	1. Main Dam				
	Excavation Embankment	(m <sup>3</sup> )	55,000 268,000	56,000 277,000	56,000 289,000
	2. Spillway				
	Excavation Backfill R. Concrete	(m <sup>3</sup> )	312,000 34,000 26,400	300,000 32,000 24,200	284,000 31,000 23,400
Ι.	Construction Cost				
100	1. Main Dam	(10 <sup>6</sup> Rp.)	2,198	2,256	2,381
	2. Spillway	(10 <sup>6</sup> Rp.)	2,527	2,370	2,270
	3. Total	(10 <sup>6</sup> Rp.) (10 <sup>3</sup> US\$)	4,725 7,561	4,626 7,401	4,651 7,441

Table 7.2 Hydraulic Properties of Canals (1/7)

		NOTA HOO	•						ĺ			
Name of	H Y	0	>	<b>→</b>	ф	W 2	Neme of	H	Ö	>	Į	Ş
Canal		•	\		100	(E)	***************************************	(m)	(m3/sec)	c) (m/sec)	(m)	_
	Ê	(D)	(Deal /m)			2						
Chr. Tranca	sat Tunor Bita XIXI (811a teft Main Canal)	Left Mai	Canal)		:		SAL. INDOK BILA	A KIRL				
				_	:		<b>A</b>					
A (C.2)	440 50.0 1.5	12,107	0.10	0.000157	9.10	1.520 5.99	Ruas 1 (6,500)	449 50.0 1.5	1.5 10.73		0.000157 7.50 1.50	
COCTA TO SERVE				6,000,57	9.05 1.515	515 5.97	2 (6,494)	3 484 50.0 3.5	1.5 10.72	0,70	0.000157 7.50 1.56	6 4.81
2 (7,563)	- :		<b>.</b>			90	3 (6.468)	776	1.5 10.67	0-70	0.000157 7.50 1.55	5 4.83
3 (7,531)	977 50.0 1.5		0.70	6.00015/ %.05	60.7			0	25	0.70	0.000160 7.50 1.53	3.4.90
4 (7,375)	1,582 50.0 1.5	11.800	0.70	0.000160 8.95 1.494	8.95 1	494 5-99	(4C5.0) 4	1004			C) 1 02 1 2 00 1 C)	
\$ (7,302)	2,540 50.0 1.5	11.683	0.10	0,000161	8-90 1.487	487 5.98	\$ (6,289)					
6 (7,242)	2.234 50.0 1.5	11.587	0.70	0.000162	8.90 1.477	477 6-03	6 (6,239)	2,234			0.000162 7.50 1.54	٠.
(38, 77, 7			0.70	0.000163 8.85	8.85 1	1.473 6.01	7 (6,194)	1,606 50.0 1.5	1.5 10.22		0.000163 7.50 1.49	
Cond to the			0.70	0.000165 8.75		1.459 5.997	8 (6,078)	958 50.0 1.5	1.5 10.03	0.70	0.000165 7.50 1.48	
(7,00,7)		٠,	0.70	0.000207			9 (5,549)	1 1,042 47.5 1.5	1.5 9.16	0.70	0.000207 7.00 1.43	
(SETIC) 6			0.70	0.000209	6.25	1.391 4.49	10 (5,501)	769 47.5 1.5	1.5 9.08	0.70	0.000209 7.00 1.42	
(257.5)			,	0.000211	20		11 (5,440)	880 47.5 1.5	1.5 8.98	0.70	0.000211 6.50 1.47	7. 4.41
11 (5,018)	C.T. C. / B. / T.S. /			0,000	. 20		12 (5,401)	2,418 47.5 1.5	16.8 8.91	0.70	0.000212 6.50 1.46	5 4.44
12 (5,018)	12 (5,018) 2,379 47.5 1.5			*****					1.5 8.79	0.70	0.000215 6.50 1.45	5. 4.48
13 (4,905)	7,065 47.5 1.5		0.70	0.000215	C#10	10.000			. :		0.000216 6.50 1.44	4.50
14: (4,883)	14 (4,883) 1,140 47.5 1.5	5 7.813	0 40	0.000216	216 6.10 1	1.356 4.50	00000	0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
15 (4,766)	15 (4,766) 1,550 47.5 1.5	\$ 7.626	0.70	0.000220	6.05	1.336 4.52	15 (5, 228)	06671			A 000378 & 50 1 40	
16 (4,724)	631 47.5 1.5	5 7.558	0.70	0.000215	5.50	1,402 3.92	16 (5,102)	1				
17. (4.607)		5 7,371	0.10	0.000219 5.50	5.50 2	1.375 4.00	17 (5,100)	) 425 47.5 1.5			3	
(3000) 4			0.70	0.000272	1272 4.20 1.336	.336 3.14	18 (2,412)	450 45.0	1.5 3.98	0.65	0.000272 3.50 1.17	8.5
				-								
	AND MANAGE AND CASE (B.	ratio picht Main Canal)	Istn Can	î			SAL. INDUK BILA	A XANAN				
AND	TO STATE OF THE ST				4	\$ 000 000	ha (1 200)	338 45.0 7.5	1.98	09.0	0.000240 2.00 0.74	2.70
Ruas 1 (1,580) 2 (1,538)	338 45.0 1.5	5 2.528 5 2.461		0.55 0.000244 2.65 1.057 0.55 0.000244 2.65 1.057	2.65 1	1.057 2.51	xuda 1 (1,160)			-	0.000244 2.00 0.74	4 2.70

Table 7.2 Hydraulic Properties of Canals (2/7)

Canal (m)						
( <b>x</b> )	> ~	A B N B/h	Canal Canal	Ċ #	٧	8 h 8/h
-	(m3/sec) (m/sec)	(m) (m) (pi	(w) 10 mg	(m2/80C)	(m/sec)	(m) (w)
3. KALOLA CONNECTING CANAL			KALOLA CONNECTING CANAL			
man 1 (7,100) (Newly provided)	(\$e\$).		ha h.135 50.0 1.5	.\$ 11.72	0.70 0.000	0.000154 9.00 1.49 6.04
			2 (7,079)	.5 11.68		0.000154 9.00 1.49 6.04
3 (7,069)			3 (7,069) 1,352-50-0 1.5	.5 11.66	0.70 0.000	0.000154 9.00 1.48 6.07
4 (\$,100)			4 (5,100) 1,720 47.5 1.5	.5 8.42	0.70 0.000	0.000200 6.50 1.40 4.65
4. Sall, Sec. Pala Bulu			SAL. INDUX BILA KAMAN			
ha 1 (1,1157) 452 45,0 1.5	1.851 0.55	0.000295 2.30 0.916 2.51	mas 3 (889) 452 45.0 1.0	.0 1.47	00000 9500	0.000295 1.90 0.941 2.02
2 (1.037) 1.229 45.0 1.5			4 (773) 1,229 45.0 1.0	.0 1.28	0.55 0.000	0.000316 1.80 0.871 2.07
			\$ (729) 1,830 45.0 1.0	.0 1.20	0000 0000	0.000330 1.70 0.854 1.99
	Ι.,		6 (705) 671 45:0 1.0	91.1 0	0.55 0.000	0.000239 1.70 0.833 2.04
908 45.0 1.0	·		7 (648) 908 45-0 X-0	.0 1.07	0.55 0.000	0.000351 1.60 0.808 1.98
1.040 45.0 1.0			8 (551) 1,040 45,0 1.0	16.0 0.91	0.55 0.000	0.000404 1.50 0.739 2.03
	:		9 (477) 1,060 45.0 1.0	0 0 79	0.55 0.000	0.000428 1.40 0.688 2.04
			10 (375) 920 45.0 1.0	0 0.62	0.50 0.00	0.000400 1.30 0.639 2.03
-2	V	400	11 (264) 1,178 45.0 1.0	0 0.46	0.45 0.000	0.000361 0.90 0.636 1.41
S. SM. SEK. BILN BARAT			SAL. SEK BILA BARAT			
Rues 1 (282) 1,978 45.0 1.0	0.507 0.50	0.000479 1.15 0.585 1.97	Nuas 1 (185) 1,978 45.0 1.0	16.0 0.31	0.40 0.000	0.000479 0.80 0.567 1.41
6. Sal. Sek. Palae			SAL. SEK. PALVE			of the state of th
21 45.0 1.5 24 45.0 1.5	2.752 0.60	0.000286 2.70 1.067 2.53	Ruas 1 (441) 2,121 45-0 1.0 2 (365) 1,024-45.0 1.0	0 0.73	0.50 0.000	0.000295 1.30 0.624 2.08

rable 7.2 Hydraulic Properties of Canals (3/7)

SAL. SEK. F RUAB 3 (1, FRUAB 3 (1, 5)))))))))))))))))})  RUMB	Name of Canal Canal  SML. SEK. PALAE (C Ruas 3 (174) 1,
6. (1,090) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 8. (1,080) 1,002 45.0 1.5 1.5 1.024 0.55 0.000403 2.05 0.000403 2.25 0.893 2.52 8. (1,080) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 8. (1,080) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 8. (1,080) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 8. (1,080) 1,002 45.0 1.5 1.744 0.60 0.000403 2.05 0.829 2.53 8. (1,080) 1,002 45.0 1.5 1.744 0.60 0.000403 2.05 0.829 2.47 8 (1,080) 1,002 45.0 1.5 1.57 0.60 0.000403 2.05 0.829 2.53 8. (1,080) 1,002 45.0 1.5 1.57 0.60 0.000403 2.05 0.829 2.47 8 (1,080) 1,002 45.0 1.0 1.024 0.55 0.000400 1.55 0.766 2.02 8 (1,080) 1,203 45.0 1.0 0.976 0.55 0.000400 1.50 0.782 2.03 8 (1,080) 1,203 45.0 1.0 0.976 0.55 0.000400 1.50 0.642 2.02 8. (1,080) 1,304 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 (284) 1,314 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 (284) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 (284) 1,053 45.0 1.0 0.402 0.45 0.000414 0.90 0.596 1.51 3 (284) 1,053 45.0 1.0 0.402 0.45 0.000414 0.90 0.596 1.51 3 (284) 1,053 45.0 1.0 0.402 0.40 0.00033 0.90 0.587 1.45 808 1 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.45 808 1 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.45 808 1 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.45 808 1 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 (184) 824 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.45 0.00033 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.45 0.00033 0.90 0.806 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.45 0.400 0.90033 0.90 0.587 1.54 8 2 4 45.0 1.0 0.426 0.40 0.400033 0.90 0.806 0.90 0.806 0.54 8 2 4 45.0 1.0 0.426 0.40 0.400033 0.90 0.90033 0.90 0.806 0.54 8 2 4 45.0 1.0 0.426 0.40 0.400033 0.90 0.90032 0.90 0.80003 0.90003	Canal (m) (m3/sec) (m/sec) (m/
1,	(m) (m/sec) (n/sec) (n/sec) sar. sex. parae (Cont'd)  na ha (174) 1,422 45.0 1.0 0.29 0.35
SAL. SEK. PALLE (COMT'6)  3 (1,395) 1,422 45.0 1.5 2.232 0.60 0.000328 2.40 0.966 2.48 Rhas 3 (4,1318) 1.178 45.0 1.5 2.109 0.60 0.000341 2.35 0.936 2.51 4 5 (1,318) 1.178 45.0 1.5 2.109 0.60 0.000341 2.35 0.936 2.51 5 (1,202) 736 45.0 1.5 1.923 0.60 0.000341 2.35 0.936 2.51	SAL. SEK. PALAE (Cont'd)  A  A  A  A  A  A  A  A  A  A  A  A  A
3 (1,302) 1,422 45.0 1.5 2.232 0.60 0.000328 2.40 0.966 2.48 Nuas 3 (4, 4, 1,318) 1.178 45.0 1.5 2.109 0.60 0.000341 2.35 0.995 2.53 4 (1,1,318) 1.178 45.0 1.5 2.109 0.60 0.000341 2.35 0.995 2.53 5 (1,202) 736 45.0 1.5 1.923 0.60 0.000363 2.25 0.993 2.52 2.12 2.109 0.60 0.000363 2.25 0.993 2.52 2.12 2.109 0.60 0.000363 2.25 0.993 2.53 4 (1,1,10,1) 1.002 45.0 1.5 1.573 0.60 0.000363 2.05 0.849 2.53 4 (1,1,10,1) 1.002 45.0 1.5 1.637 0.60 0.000403 2.05 0.849 2.53 4 (1,1,1,1) 1.002 45.0 1.5 1.637 0.60 0.000403 2.05 0.849 2.53 5 (1,1,1,1,1) 1.002 45.0 1.0 1.047 0.55 0.000382 1.60 0.795 2.01 7 (1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	SAL. SEK. PALAE (Cont'd)  ha  1,422 45.0 1.0 0.29 0.35
3 (1,395) 1,422 45.0 1.5 2.232 0.60 0.000328 2.40 0.966 2.48 Ruas 3 (4, 1,318) 1.178 45.0 1.5 2.109 0.60 0.000341 2.35 0.936 2.51 4 5 (1,318) 1.178 45.0 1.5 1.923 0.60 0.000341 2.35 0.993 2.52 SAL. SER. N Ruas 3 (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	Nas 3 (174) 1,422 45.0 1.0 0.29 0.35
3 (1,395) 1,422 45.0 1.5 2.222 0.60 0.000361 2.35 0.936 2.51 4 4 (1,318) 1.178 45.0 1.5 2.109 0.60 0.000361 2.35 0.936 2.51 4 5 (1,202) 736 45.0 1.5 1.923 0.60 0.000367 2.25 0.893 2.52 5 7 (1,023) 837 45.0 1.5 1.744 0.60 0.000367 2.15 0.849 2.53 4 (1, 1, 1, 1) 4.0 1.50 0.000367 2.15 0.849 2.53 4 (1, 1, 1, 1) 4.0 1.50 0.000367 2.15 0.849 2.53 4 (1, 1, 1, 1) 4.0 1.50 0.000367 2.15 0.849 2.53 4 (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	RUBS 3 (274) 1,422 45.0 1.0 0.29 0.35
4 (1,318) 1,178 45.0 1.5 2.109 0.60 0.000341 2.35 0.995 2.53 5 (1,202) 736 45.0 1.5 1.923 0.60 0.000363 2.25 0.993 2.55 5 (1,022) 736 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 4 (1,023) 837 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 4 (1,023) 837 45.0 1.5 1.573 0.60 0.000413 2.00 0.914 2.46 6 (1,023) 819 45.0 1.0 1.024 0.55 0.000413 2.00 0.914 2.46 6 (1,023) 819 45.0 1.0 1.024 0.55 0.000413 1.00 0.975 2.01 7 0 0.65 0.000410 1.50 0.765 2.02 8 11 (599) 1,203 45.0 1.0 0.976 0.55 0.000410 1.30 0.642 2.02 8 9 11 (289) 1,314 45.0 1.0 0.976 0.50 0.000410 1.30 0.642 2.02 8 12 (284) 1,314 45.0 1.0 0.624 0.50 0.000410 0.90 0.587 1.96 2 11 (229) 9.03 45.0 1.0 0.401 0.45 0.000410 0.90 0.587 1.96 2 2 11 (229) 9.03 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 8148 1 2 (229) 9.03 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 8148 1 2 (229) 9.03 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 8148 1	
4 (1,318) 1.178 45.0 1.5 2.109 0.60 0.000363 2.25 0.893 2.52 SALL SERV. N	** (89) 1.178-45.0 1.0 0.18 0.00341, 0.50 0.509 0.98
\$ (1,202) 736 45.0 1.5 1.923 0.60 0.000363 2.25 0.893 2.52	•
6 (1,090) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 4 (2, 6, 1,023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (1, 6, 1,023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (1, 6, 1,023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.834 2.46 6 (1, 6, 1,023) 819 45.0 1.0 1.024 0.55 0.000403 1.60 0.795 2.01 7 (1, 6, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	
6 (1,090) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 4 (1,1023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (1,023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (1,023) 837 45.0 1.5 1.573 0.60 0.000403 2.00 0.814 2.46 6 (1,203) 67.1 45.0 1.0 1.047 0.55 0.000403 1.60 0.782 2.03 7 (1,023) 996 45.0 1.0 1.024 0.55 0.000400 1.55 0.766 2.02 8 (1,12) (1,203) 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 8 (1,12) (1,203) 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 804. 804. 85.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 (1,053) 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 8048 1 2 (1,053) 943 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 8048 1 2 (1,053) 824 45.0 1.0 0.426 0.45 0.000333 0.90 0.622 1.45 8048 1 2 (1,029) 943 45.0 1.0 0.426 0.45 0.000333 0.90 0.622 1.45 8048 1 2 (1,029) 943 45.0 1.0 0.426 0.45 0.000333 0.90 0.622 1.45 8048 1 2 (1,029) 943 45.0 1.0 0.426 0.45 0.000333 0.90 0.622 1.45 8048 1 2 (1,029) 943 45.0 1.0 0.426 0.45 0.000333 0.90 0.622 1.45 804 1.54 2 (1,040) 0.348 0.40 0.000333 0.90 0.622 1.45 804 1.54 2 (1,040) 0.426 0.40 0.000333 0.90 0.622 1.45 804 1.54 2 (1,040) 0.348 0.40 0.000333 0.90 0.686 1.54 2 (1,040) 0.348 0.40 0.000333 0.90 0.686 1.54 2 (1,040) 0.426 0.40 0.000333 0.90 0.686 1.54 2 (1,040) 0.426 0.40 0.000333 0.90 0.686 1.54 2 (1,040) 0.426 0.40 0.4000333 0.90 0.686 1.54 2 (1,040) 0.426 0.40 0.4000333 0.90 0.686 1.54 2 (1,040) 0.426 0.40 0.4000333 0.90 0.686 1.54 2 (1,040) 0.426 0.40 0.4000333 0.90 0.686 1.54 2 (1,040) 0.4000 0.40	SEX.
Ruam 3 (1, 090) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 4 (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	
6 (1,090) 1,002 45.0 1.5 1.744 0.60 0.000387 2.15 0.849 2.53 4 (1, 1, 1, 1) 23) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (1, 1, 1) 23) 837 45.0 1.5 1.573 0.60 0.000403 2.05 0.834 2.46 6 (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	ė
6 (1,090) 1,002 45.0 1.5 1.744 0.60 0.000403 7.13 0.000 7.13 0.000 0.014 2.47 5 (1,023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (1,023) 837 45.0 1.5 1.637 0.60 0.000413 2.00 0.014 2.46 6 (1,024) 819 45.0 1.0 1.047 0.55 0.000403 1.60 0.795 2.01 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(301.1)
7 (1,023) 837 45.0 1.5 1.637 0.60 0.000403 2.05 0.829 2.47 5 (2, 8 (983) 671 45.0 1.5 1.573 0.60 0.000413 2.00 0.814 2.46 6 (1, 9 (648) 819 45.0 1.0 1.047 0.55 0.000382 1.60 0.795 2.01 7 0 (632) 996 45.0 1.0 1.024 0.55 0.000388 1.60 0.795 2.01 7 0 (632) 996 45.0 1.0 0.976 0.55 0.000388 1.60 0.782 2.05 8 0 11 (599) 1,203 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
8 (983) 671 45.0 1.5 1.573 0.60 0.000413 2.00 0.814 2.46 6 (1.4 6.48) 819 45.0 1.0 1.047 0.55 0.000382 1.60 0.795 2.01 7 7 8 10 (632) 996 45.0 1.0 1.024 0.55 0.000388 1.60 0.795 2.02 8 11 (599) 1,203 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 8 12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1 13 (284) 1,314 45.0 1.0 0.610 0.50 0.000414 0.90 0.596 1.51 3 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 3 3 3 4 (216) 1,053 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Ruae 1 2 (229) 943 45.0 1.0 0.426 0.45 0.000336 0.90 0.682 1.45 Ruae 1 2 (184) 824 45.0 1.0 0.426 0.45 0.000333 0.90 0.686 1.54 2	S (1,100) 837 45.0 1.5 4.64 0.00
8 (983) 674 43.0 1.3 1.37 0.55 0.000382 1.60 0.795 2.01 7 10 (632) 996 45.0 1.0 1.024 0.55 0.000388 1.60 0.795 2.02 8 11 (599) 1,203 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 9 12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1 13 (284) 1,314 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3  SAL. SEK. UMBUL  15 (289) 943 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Ruae 1 2 (184) 824 45.0 1.0 0.426 0.45 0.000333 0.90 0.586 1.54 2	6 (1,060) 671 45.0 1.5 1.75 0.60
9 (648) 819 45.0 1.0 1.047 0.55 0.000384 1.00 0.773 7.03 8 10 (632) 996 45.0 1.0 1.024 0.55 0.000388 1.60 0.782 2.05 9 11 (599) 1,203 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 9 12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1 13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96 2 1.4 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 3 3 3 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Ruae 1 2 (184) 824 45.0 1.0 0.426 0.45 0.000333 0.90 0.686 1.54 2 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2	7 (580)
10 (632) 996 45.0 1.0 1.024 0.55 0.000388 1.60 0.782 2.05 8  11 (599) 1,203 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 9  12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1  13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96  14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3  5AL. SEK. UMBUL  15 (184) 824 45.0 1.0 0.426 0.45 0.000335 0.90 0.622 1.45 Ruae 1  2 (184) 824 45.0 1.0 0.426 0.45 0.000335 0.90 0.586 1.54 2	
11 (599) 1,203 45.0 1.0 0.976 0.55 0.000400 1.55 0.766 2.02 9  12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Numa 1  13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96  14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51  5AL. SEK. UMBUL  15 (229) 943 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Numa 1  2 (184) 824 45.0 1.0 0.426 0.45 0.000333 0.90 0.586 1.54 2	5012 044 044 066 (819) 8
SAL. SEK. I 12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae I 13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96 2  14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3  SAL. SEK. UMBUL  18 1 (229) 943 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Ruae I  2 (184) 824 45.0 1.0 0.426 0.45 0.000333 0.90 0.686 1.54 2	9 (526) 1,263 45.0 1.0 0.87 0.55 0.000400 1.40 0.737
SAL. SEK. I 12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1 13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96 2 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 SAL. SEK. UMBUL 15 1 (229) 943 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Ruae 1 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2	
12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1 13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96 2 1 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	SEX.
12 (360) 1,366 45.0 1.0 0.624 0.50 0.000418 1.30 0.642 2.02 Ruae 1 13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96 2 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
13 (284) 1,314 45.0 1.0 0.510 0.50 0.000477 1.15 0.587 1.96 2 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3  SAL. SEX. UMBUL  1 (229) 943 45.0 1.0 0.426 0.45 0.000336 0.90 0.622 1.45 Rues 1 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2	Ruas 1 (337) 1,366 45.0 1.0 0.56 0.50
13 (284) 1,314 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3 14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3  SAL. SEX. UMBUL  1 (229) 943 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 Rues 1 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2	Ċ
14 (216) 1,053 45.0 1.0 0.401 0.45 0.000414 0.90 0.596 1.51 3  SAL. SEX. UNBUL  A	
SAL. SEX. UMBUL  he 1 (229) 943 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 Rues 1 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2	0 (141) 1,000 400 0.1 (141) B
SAL. SEK. UMBUL.  ha  1. (229) 943 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 Ruam 1  2. (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2	
SAL. SEX. UNBOL.    ha	SEX.
1 (229) 943 45.0 1.0 0.426 0.45 0.000396 0.90 0.622 1.45 Ruas 1 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54	2
1 (229) 943 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54 2 2 (184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.586 1.54	Mas 1 (362) 943 45.0 1.0 0.60 0.50
(184) 824 45.0 1.0 0.348 0.40 0.000333 0.90 0.380 4.34	
	(4) 4 (4) 4 (4) (4) (4) (4) (4) (4) (4)
7127 1.113 45.0 1.0 0.269 0.35 0.000285 0.60 0.627 0.96 3	3 (233) 1,313 45.0 1.0 0.38 0.40

Table 7.2 Eydraulic Properties of Canals (4/7)

	And the second control of the second control					PROP	PROPOSIED PLAN	3	,	
Name of	و	DOI PLAN	,	4/0 R 0 4	Name of	£	à	*	e0 ~-1	a/8 4
Canal	(w)	(m <sup>2</sup> /sec) (m <sup>2</sup> /sec)	m/#6C)	(m) (m)		E)	(m3/sec)	(m/8¢c)	(w)	(m)
B. SAE.	8. SAL, SEK. LONDRA ha Russ 1 (126) 1,471 45.0 1.0	0.260	0 80 80	0.000278 0.60 0.613 0.98	SAL. SEK. XALOSI ha Ruas 10 (81) 1,471 45.0 1.0		0.16	0.35	0.000278 0.50 0.471 1.06	0 0.471 1.06
9. SAL.	1 (1,363) 1,892 45.0 1.5 2 (1,297) 1,294 45.0 1.5	2.181	0.60	0.000344 2.35 0.950 2.47 0.000354 2.25 0.934 2.41	SAL. SEX. XALOSI  Da  Ruam 1 (2,586) 1,892 45.0 1.5 2 (2,514) 1,294 45.0 1.5 SAL. SEX. WALAE	n n d d o o	4.27	0.65	0.000344 3.60 1.212 2.97	0 1.202 2.97
4 4 4 4 4	(781) 1,488 45.0 1.0 (718) 1,957 45.0 1.0 (494) 952 45.0 1.0 (448) 1,014 45.0 1.0	1,250	8.50 8.50 8.50 8.50	0.000357 1.65 0.868 1.90 0.000378 1.60 0.839 1.91 0.000315 1.50 0.788 1.90 0.000376 1.40 0.734 1.91	ને તે તે તે	1,488 45.0 1.0 1,957 45.0 1.0 952 45.0 1.0 1,014 45.0 1.0	0.82	0.55 0.55 0.45	0.00037 1.7 0.000378 1.6 0.000415 1.3 0.000376 1.3	0.000357 1.70 0.827 2.05 0.000378 1.60 0.802 1.99 0.000376 1.50 0.617 1.95 0.000401 1.00 0.647 1.54
10. SAL	SAL. SEK. LOPONG  1 (382) 797 45.0 1.0 2 (108) 1,888 45.0 1.0	0.657	0.50	0.000403 1.30 0.668 1.95 0.000300 0.60 0.569 1.05	SAL, SEK, LOPONG  Ruas 1 (397) 797 45.0-1.0  2 (108) 1,888 45.0 1.0	15.0 1.0	0.66	0.50		0.000300 0.50 0.509 0.98
11. SAL Nuat 1	Nums 1 (1,117) 1,029 45.0 1.5 1.787 2 (1,065) 735 45.0 1.5 1.704 3 (929) 1,208 45.0 1.0 1.487 4 (854) 1,161 45.0 1.0 1.367	1.787 1.704 1.487 1.367	0.60 0.60 0.55 0.55	0.60 0.000380 2.15 0.864 2.49 0.60 0.000392 2.10 0.844 2.49 0.55 0.000302 1.90 0.949 2.00 0.55 0.000319 1.80 0.915 1.97	Ruas 1 (997) 1,029 45-0 1.5 2 (948) 735-45-0 1.5 3 (796) 1,208 45-0 1.0	65.0 1.5 65.0 1.5 65.0 1.0 65.0 1.0	1.36	9 9 55 5		0.000380 2.10 0.824 2.55 0.000392 2.00 0.809 2.47 0.000302 1.80 0.887 2.03 0.000319 1.70 0.833 2.04

Table 7.2 Hydraulic Properties of Canals (5/7)

SNL. SEK. REBLAM (Cont'd)  5 (736) 1,678 45.0 1.0 1.178 0.55 0.000353 1.70 0.842 2.02  6 (496) 1,128 45.0 1.0 0.824 0.55 0.000447 1.40 0.710 1.97  7 (436) 1,270 45.0 1.0 0.731 0.50 0.000376 1.40 0.697 2.01  8 (229) 1,171 45.0 1.0 0.421 0.45 0.000400 0.90 0.617 1.46  9 (137) 766 45.0 1.0 0.277 0.35 0.000267 0.65 0.627 1.05  2 (1,973) 1,063 45.0 1.5 3.157 0.65 0.000267 0.65 0.622 1.05  2 (1,939) 790 45.0 1.5 3.157 0.65 0.000330 3.10 1.042 2.98  4 (1,533) 635 45.0 1.5 3.102 0.65 0.000244 2.65 1.048 2.53  4 (1,533) 635 45.0 1.5 2.453 0.55 0.000246 2.65 1.088 2.53  5 (1,608) 971 45.0 1.5 2.453 0.55 0.000246 2.65 1.088 2.55  7 (1,350) 1,529 45.0 1.5 2.150 0.55 0.000246 2.65 1.098 2.55  8 (1,082) 1,078 45.0 1.5 2.150 0.55 0.000246 2.00 0.890 2.4  8 (1,082) 1,078 45.0 1.5 2.160 0.55 0.000240 1.95 0.978 1.95  9 (895) 524 45.0 1.0 1.432 0.50 0.000243 1.95 0.966 2.0
1,172 45.0 1.0 1.013 857 45.0 1.0 0.971
(512) 1,301 45.0 1.0 0.848 0.50 0.000340 1.30 (413) 817 45.0 1.0 0.700 0.45 0.000293 1.45

Table 7.2 Hydraulic Properties of Canals (6/7)

	24.0 10								
	- No. 1 100	ļ	Name of	£	Ó	>	an H	n/a r	1.
Name of	> Or	Wa h a		,	1	(m/eac)	(E)	(m)	
Canal	(m)/mec) (m/mec)	(m) (m)		(E)	1956 / AE	1 5 B			
(m)									
CAST CITY L'ONCKONG			SAL, SEX.	CONCACING	-				
				ha ha 1 684 45.0 1.0	0.21	0.35	0.000261 0.50 0.564 0.89	0.564 0.8	
Rues 1 (143) 1,684 45.0 1.0	0.286 0.35	0.000261 0.65 0.636 1.02	e onx			:			
						٠			
	-					:			
14. SAL. SEN. COSC.			: ·		·			,	
ha 1.0.24 (188) 677 45.0 1.0	0.355 0.40	0.000328 0.90 0.594 1.51		(sal. Sek. Bolds as cardelady				*	
			KALOLA ST	KALOLA SECONDARY CANAL		·.			1.
15. KALOLA SECONDARI CALINE			•	ha	3.09	0.65	0.000330 3.00 1.04	0 1.04 2.88	8
exalota secondary canal is newly provided	y provided)			A 000 A 0 1 5		0.65	0.000330 3.00 1.03	0 1.03 2.91	7
			N	A . ( ) . () . () . () . () . () . () .	 	.0	0.000330 3.00 1.02	0 1.02 2.94	χ.
			<b>ო</b>	4		9	0.000300 2.80 1.07	10 1.07 2.61	ø
			•	(1,721) 900 45.0 1.5		3			v
			'n	(1,692) 400 45.0 L-5	2.79	Ş		-	i
			4	(1, 628) 500 45.0 1.5	2.69	9.0			۾ 'ٻ
	-		<b>&gt;</b> •		2.64	09.0	0.000300 2.60 1.05		2.46
						09.0	0,000300,2.50,3.02	٠.,	2.45
			<b>6</b>	(1,498) 1,050 45.U		07 4			2,57
			•	(1,450) 750 45.0 L.	5 2.39	3		ja e	् <u>१</u>
			10	(1,345) 650 45.0 1.5	5 2.22	09.0	: 1	7.15	•
			-	(1.244)	5 2.05	0.0			D.
				(1.224)	5 2.02	0.8		S	2
			4 4	1601	1	09.0			7.
			1		į	09-0	0.000370 2.10 0.87		2.41
			<b>7</b>	(a/a/d		1	- 1		2.47
		The second of th	A		٠.		1	£ .	2-48
			\$ 1	16 (1,035) 350 45,0 1.5	in the s		* -	1.1	2.47

Table 7.2 Hydraulic Properties of Canals (7/7)

			NATO TOO								PROPOSED PLAN	PLAN			
Name of	a	×	O E	>	-	a	n'a a	Name of Cenal		EX	ò	*	<b>4</b>	8 h 8/h	8
Cana	( <del>a</del> )		Des/cu)	m3/89C) (m/86C)	-	(m)	(m)			(w)	(m3/sec.	(m3/sec) (m/sec)		(m)	
						٠.		KALOLA SE	CONDAR	KALOLA SECONDARY CANAL (Cont'd)	3)	•:			
	· ·							Ruas 18	ha (847)	900 45.0 1.0	0 1.40	0,55	0.000310 1.80 0.93 1.93	80.0.93	
		:						61	(293)	300 45.0 I.O	0 1.26	0,55	0.000320 1.70 0.89 1.92	70 0.89	H
				:	:			20	(584)	(684) 1,200 45,0 1.0	2.13	0.55	0.000350 1.60 0.84	60.0.84	8
-								21	(440)	(440) 1,000 45.0 1.0	0 0.73	0.50	0.000360 1.40-0.69	40-0.69	2.0
								42	(403)	900 45.0 1.0	99.0	0.50	0.000390 1.30 0.67 1.94	30-0-67	4.9
								23	(338)	(338) 1,000 45.0 1.0	0.56	0.50	0.000430 1.20 0.62	20 0.62	1.95
					•			24	(262)	850 45.0 1.0	0.48	0.45	0.000350 1.00 0.65 1.54	20.00.65	2.5
			•	-				25	(279)	300-45.0 1.0	0.46	0.45	0.000550 1.00 0.63	300	1.59
			•					\$2	(221)	26 (221) 1,450-45.0 1.0 0.36	0.36	0.40	0.000330 0.90 0.60 1.50	8000	S)

## THE BILA IRRIGATION PROJECT

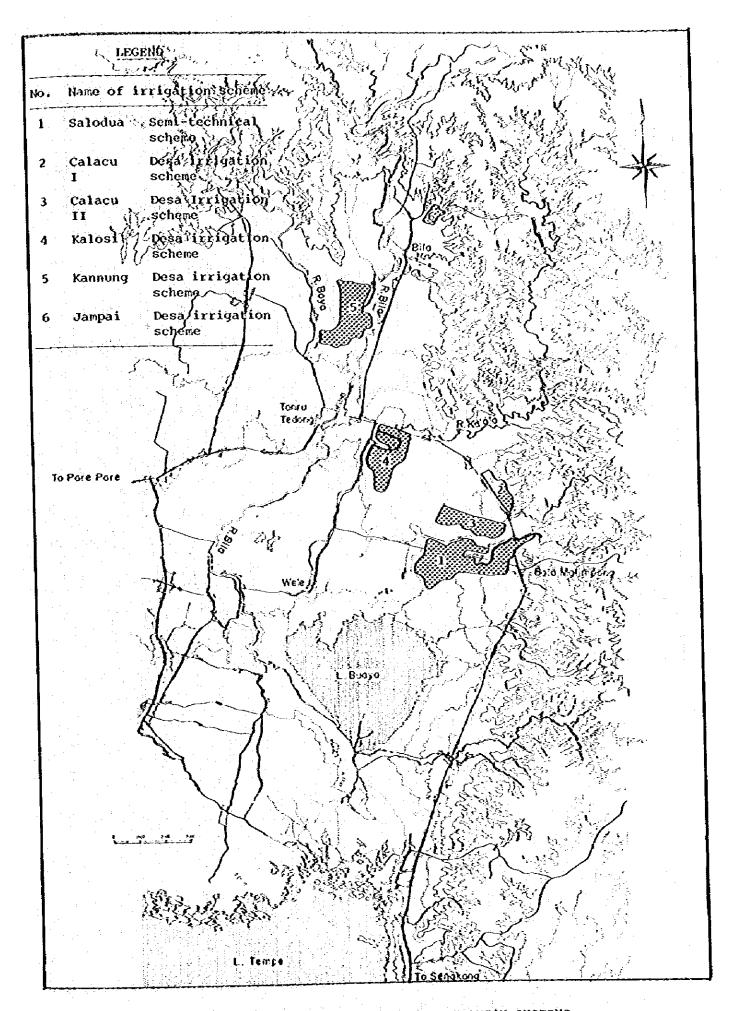
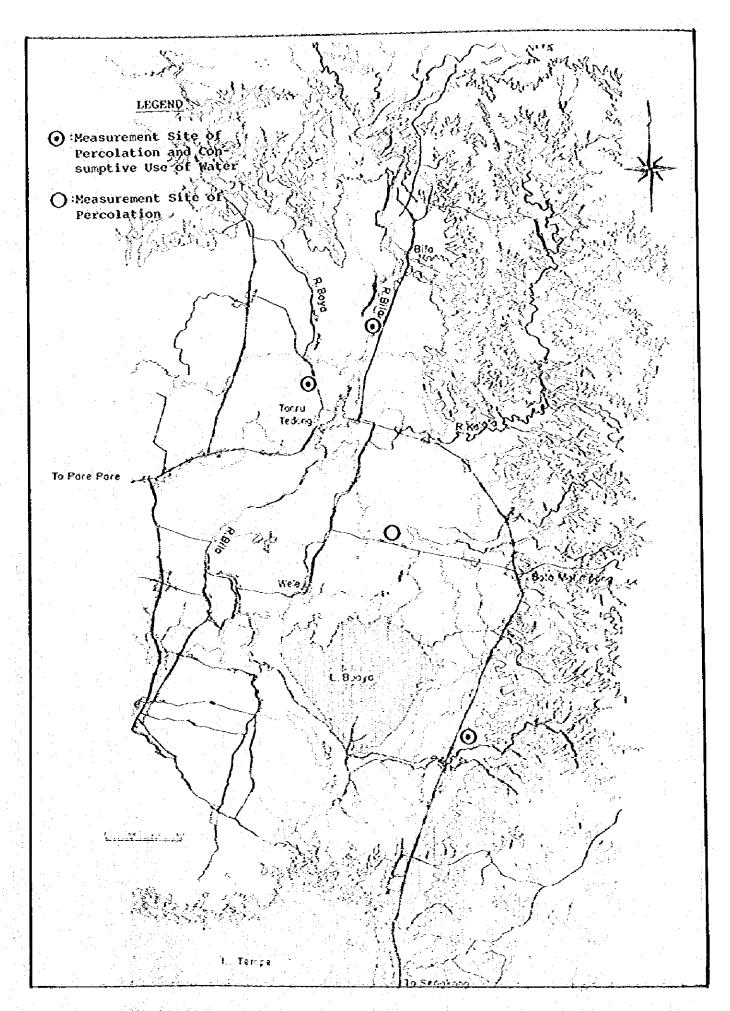
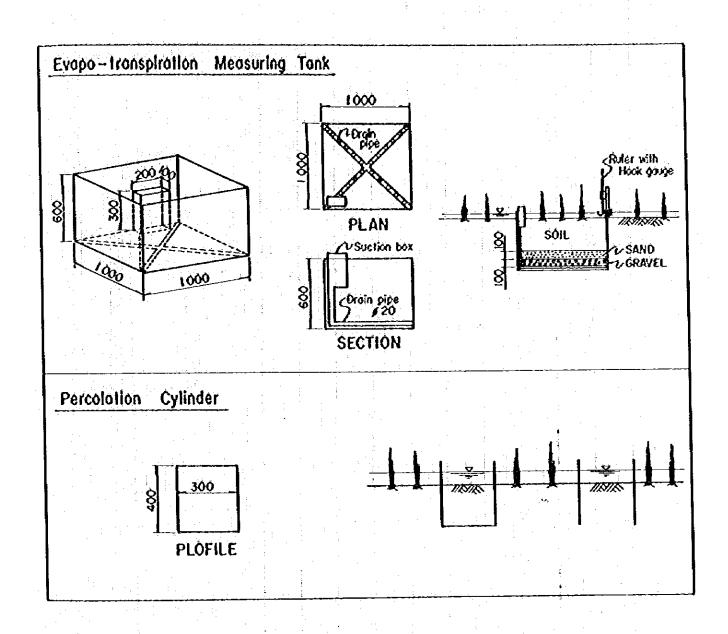


Fig. 1.1 LOCATION OF EXISTING IRRIGATION SYSTEMS



Pig. 2.1 LOCATION OF HEASUREMENT OF CONSUMPTIVE USE AND PERCOLATION



Pig. 2.2 MEASURING INSTRUMENTS OF CONSUMPTIVE USE AND PERCOLATION

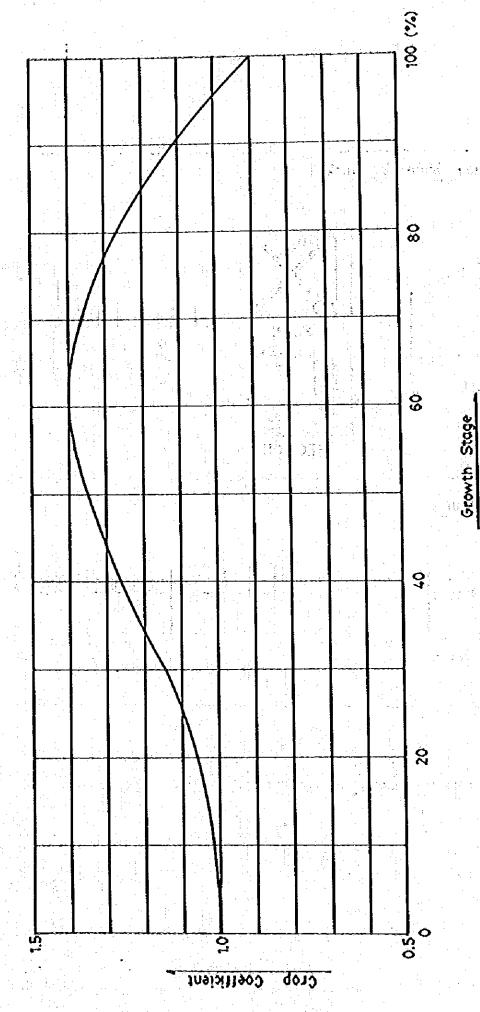


Fig. 2.3 CROP COEFFICIENT CURVE FOR PADDY

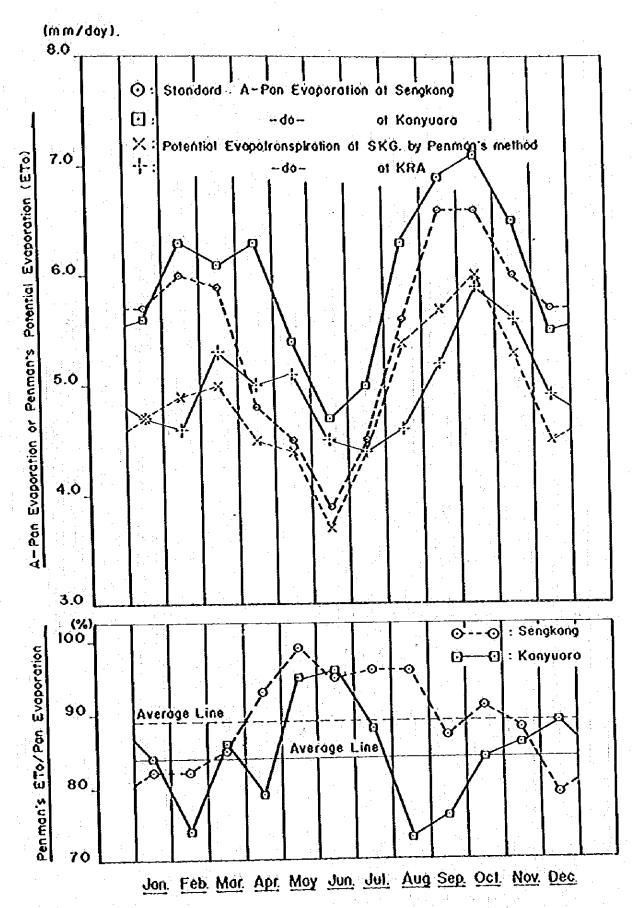
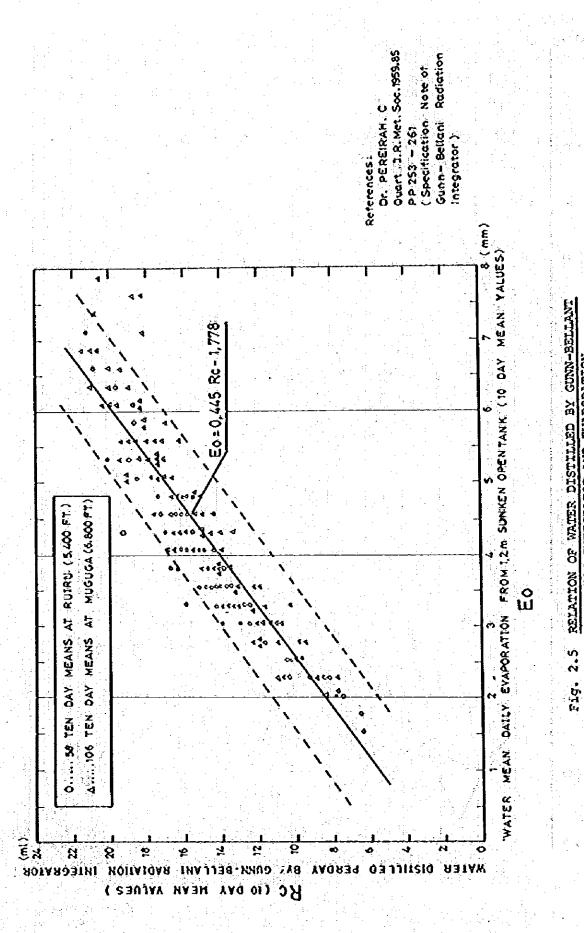


Fig. 2.4 COMPARISON OF POTENTIAL EVAPOTRANSPIRATION AND PAN EVAPORATION



VI - 134

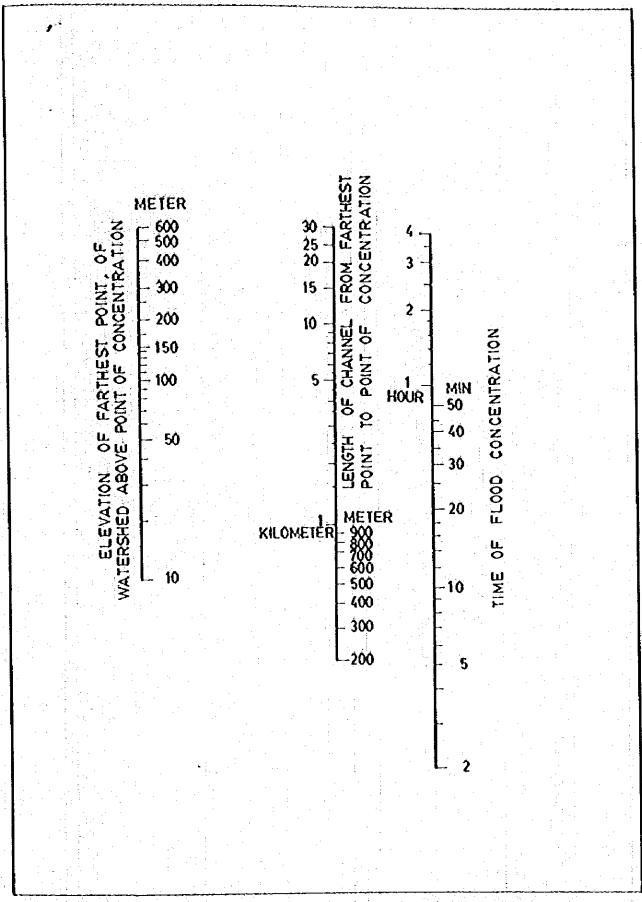
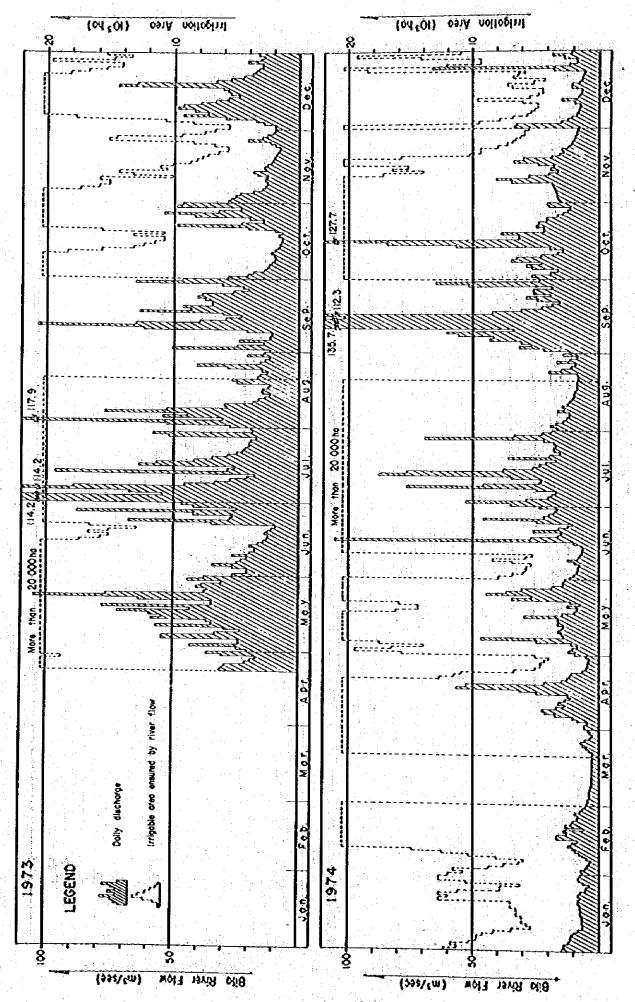
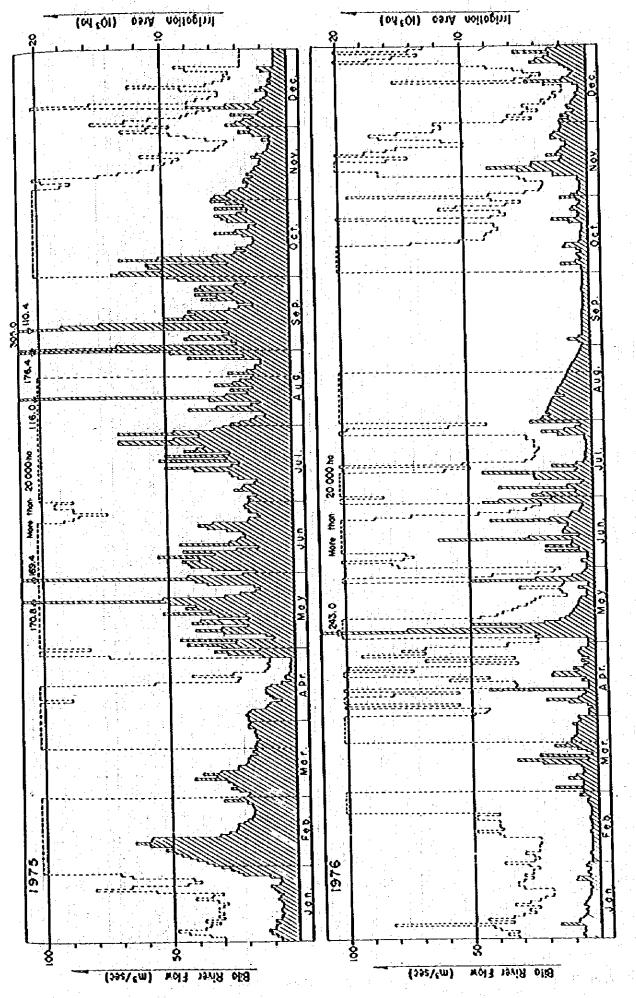
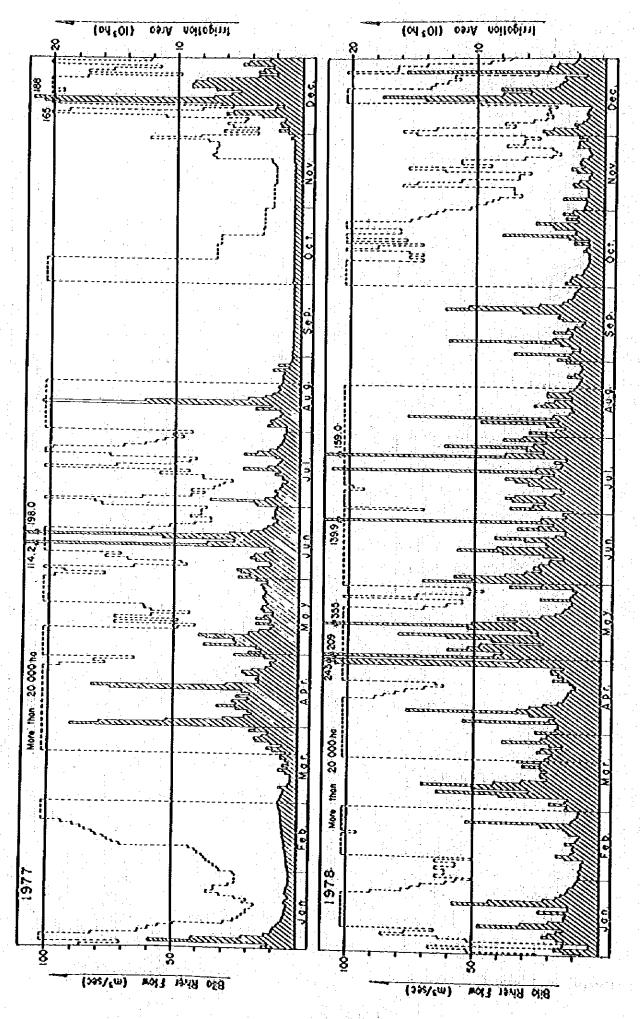


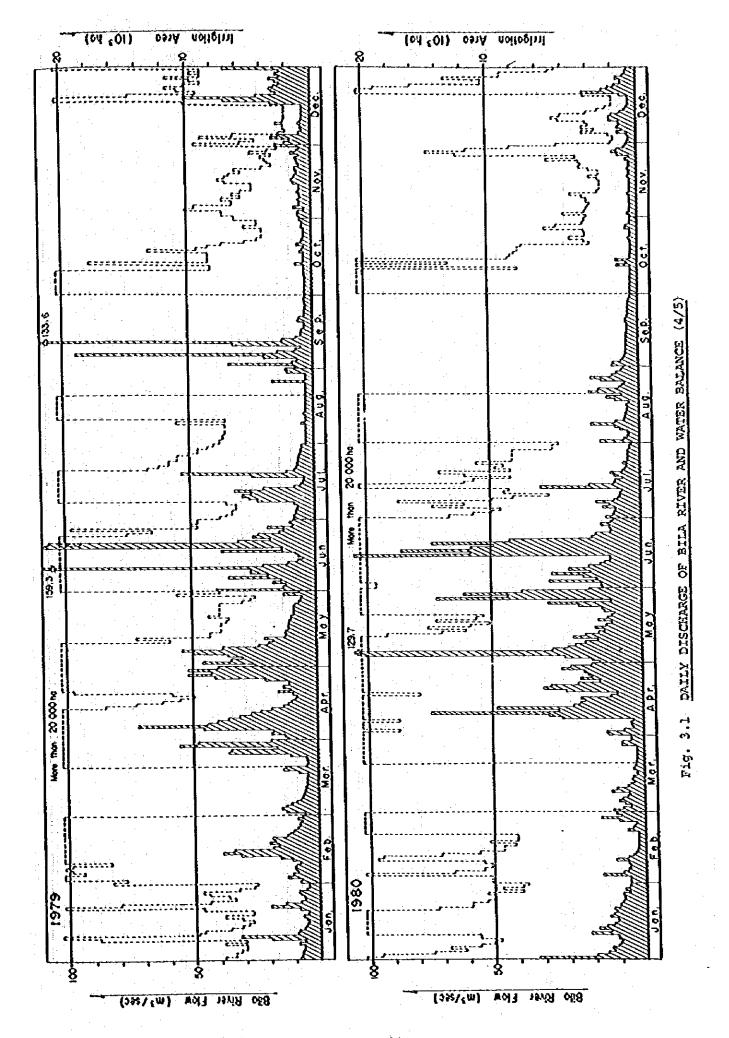
Fig. 2.6 NOMOGRAPH FOR ESTIMATING TIME OF FLOOD CONCENTRATION

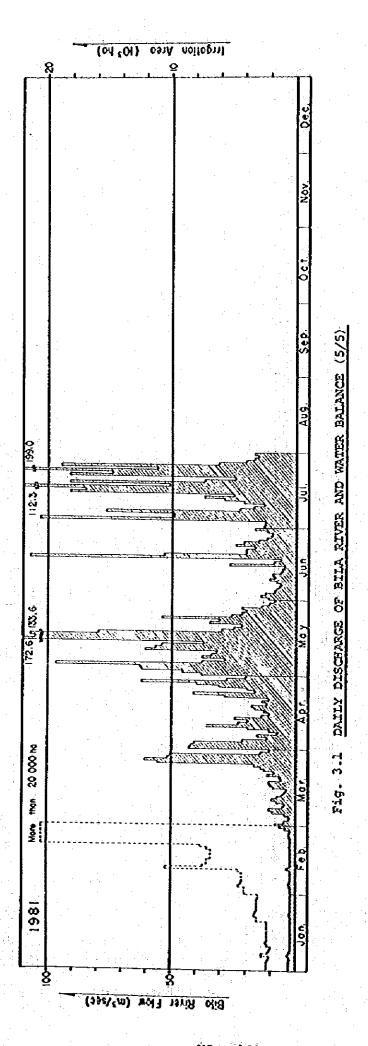


VI ~ 136









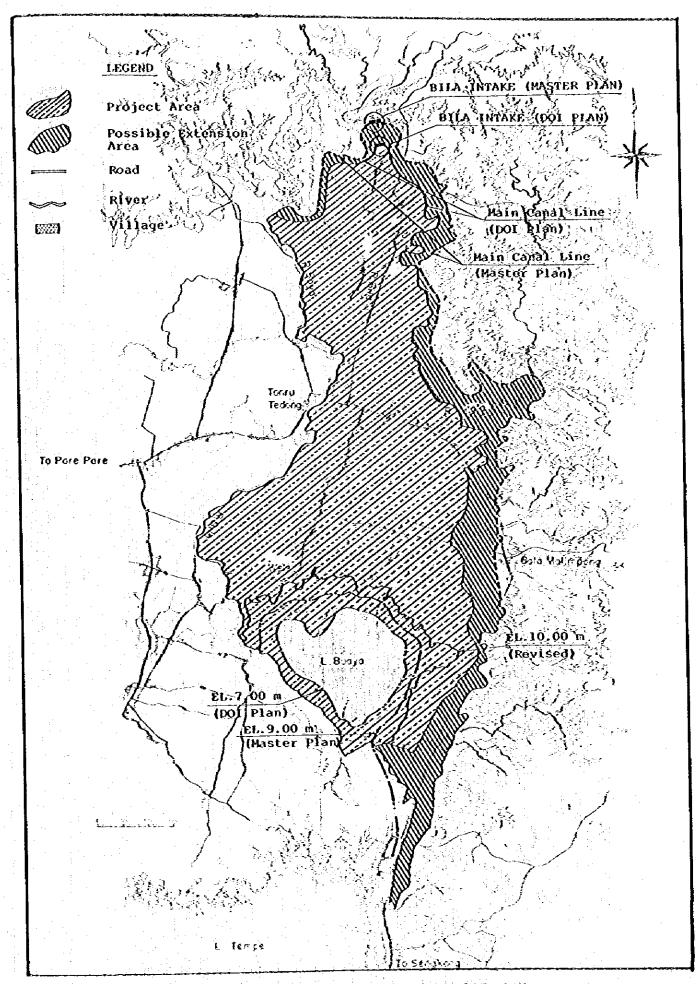
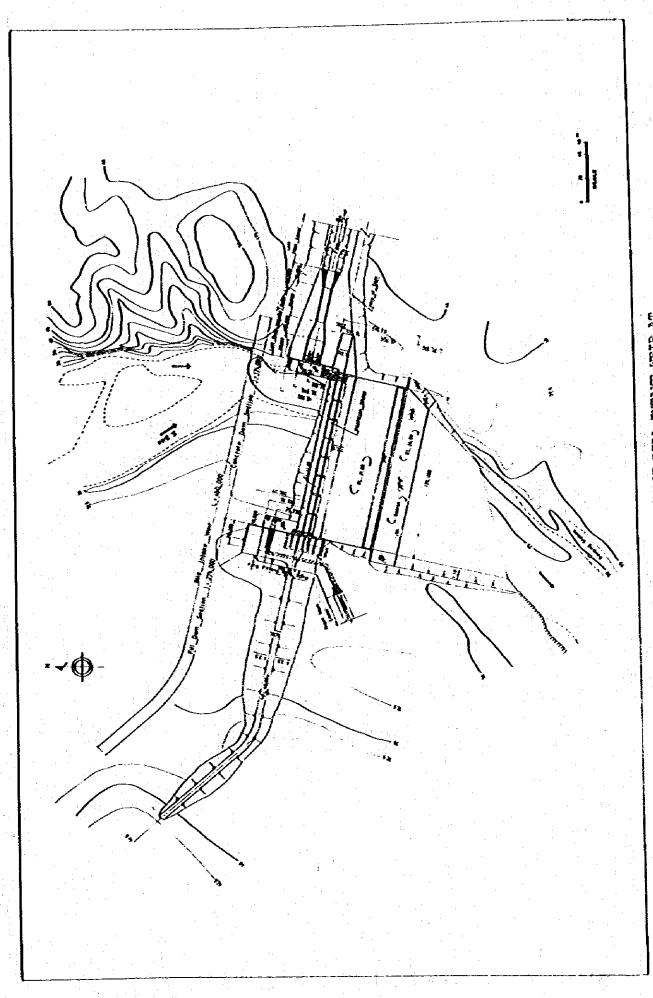
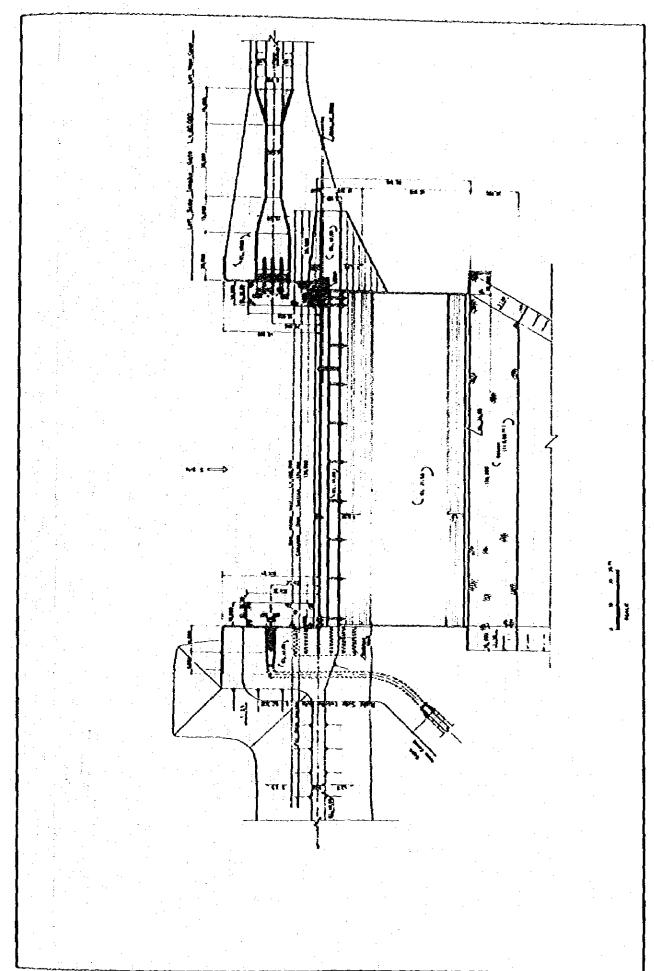
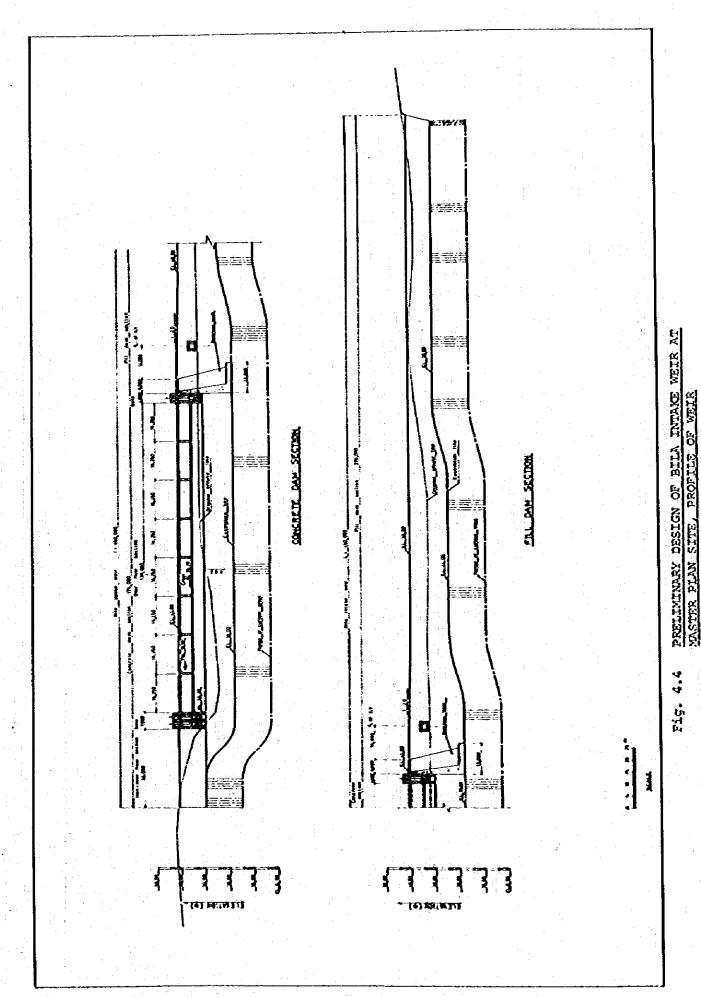


Fig. 4.1 GENERAL MAP OF MASTER PLAN AND DOL PLAN



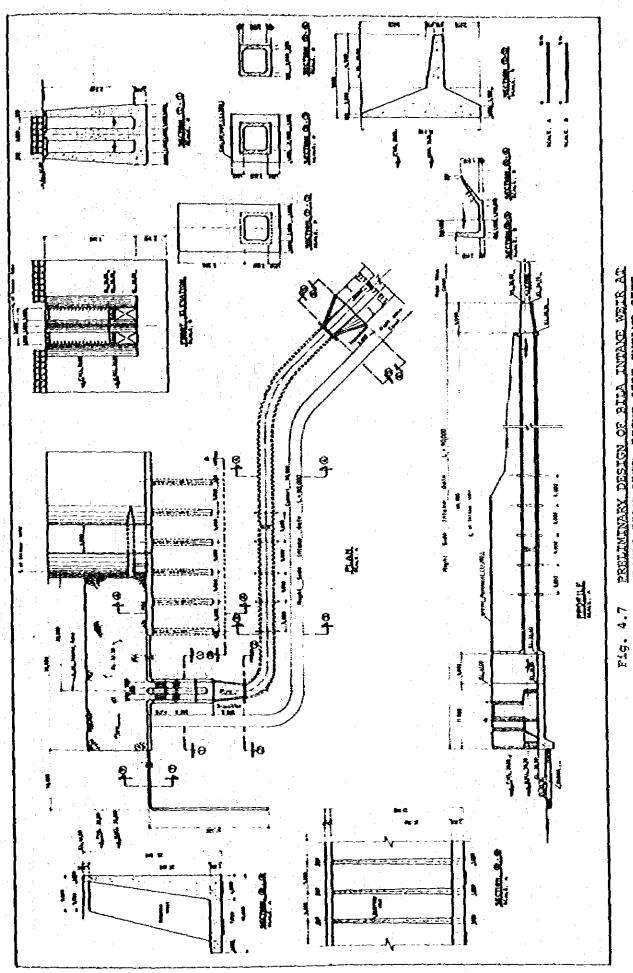




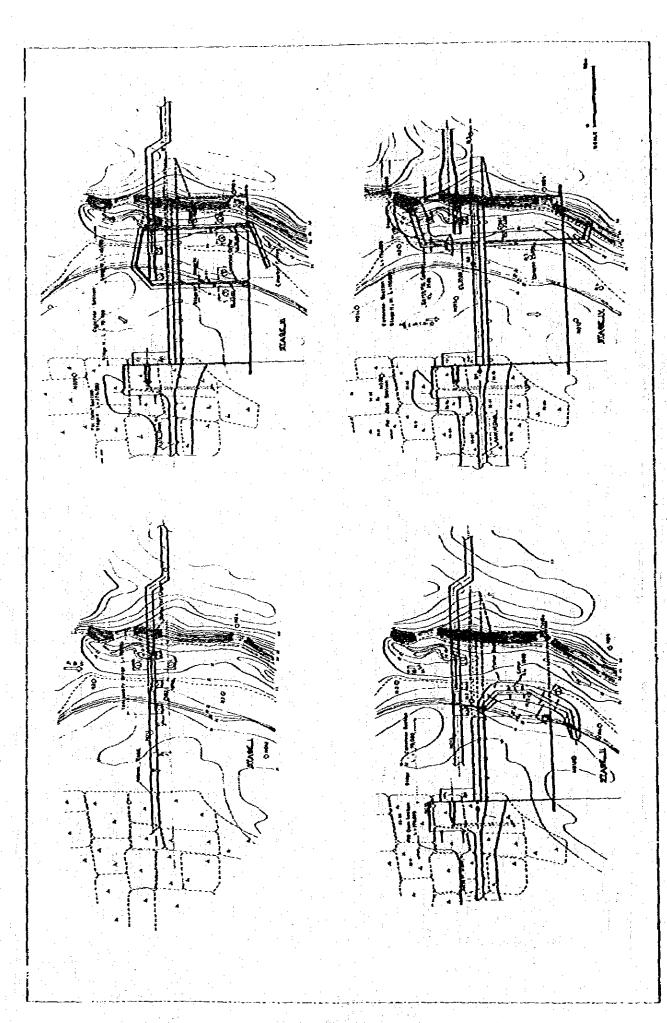
VI - 144

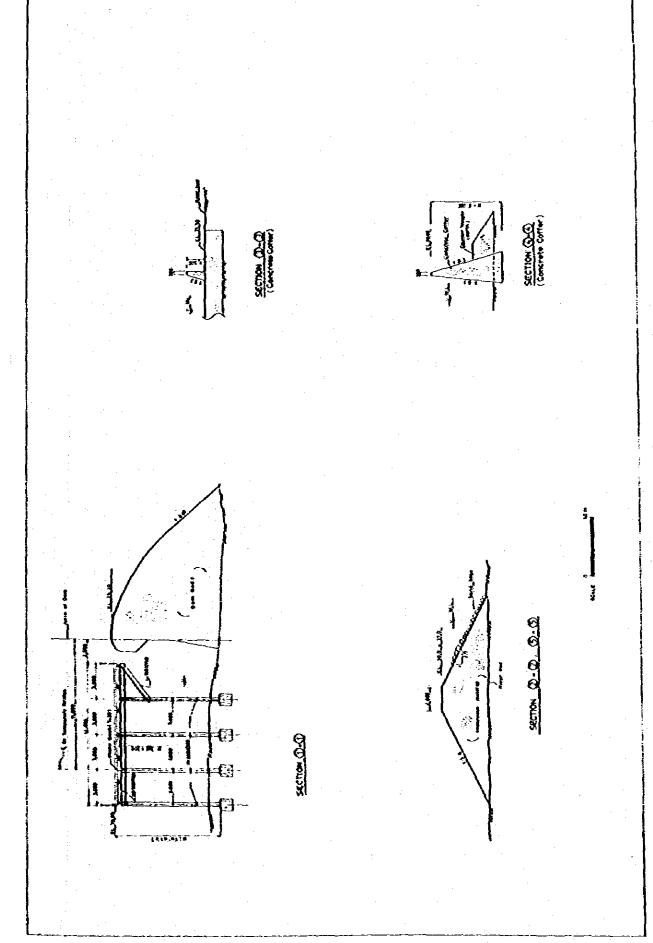
Fig. 4.5 PRELIMINARY DESIGN OF BILA INTAKE WEIR AT MASTER PLAN SITE, TYPICAL CROSS SECTION

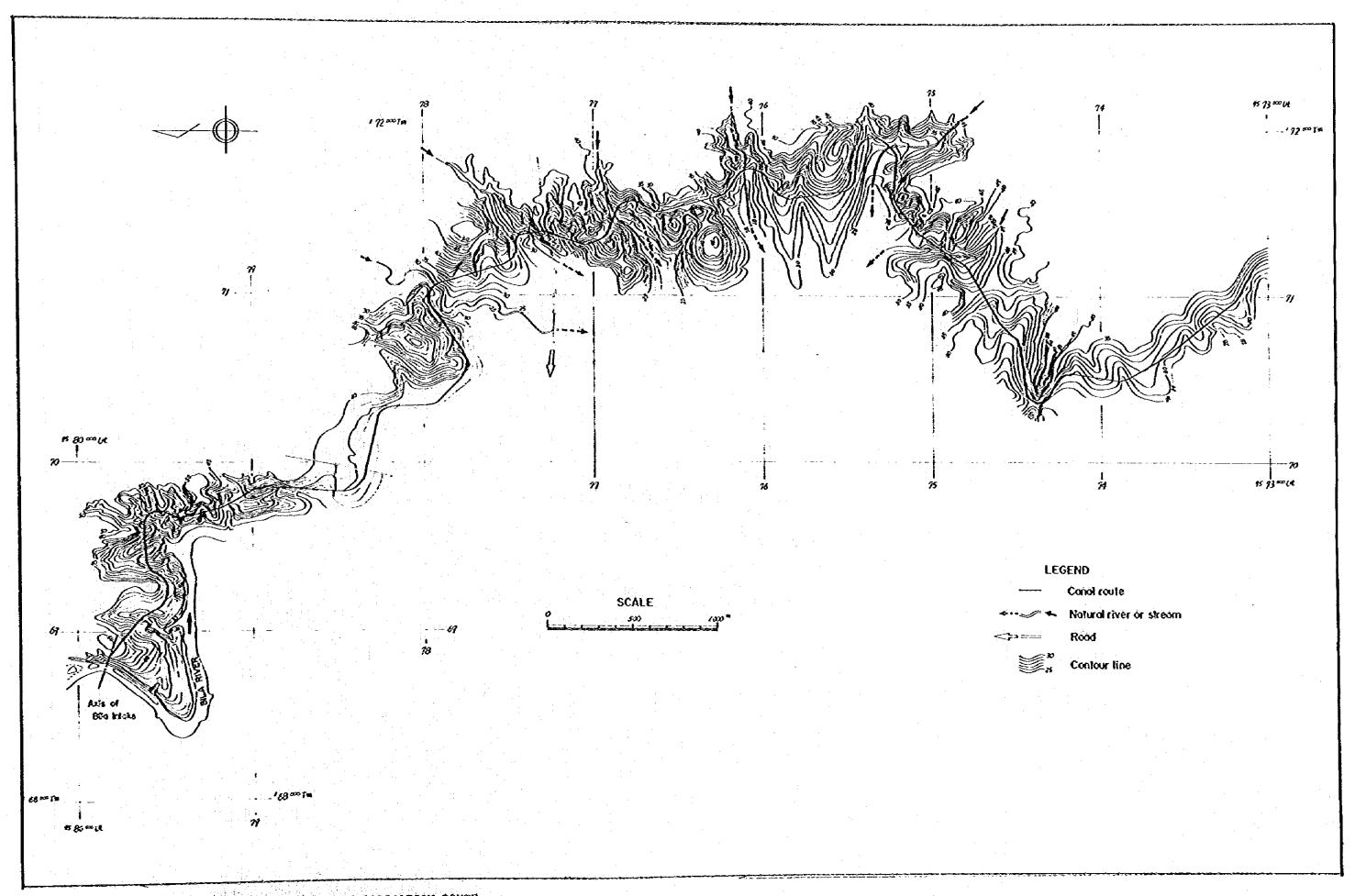
rig. 4.6 Preliminary Design of Bila intake Master Plan Site, Left Side intake



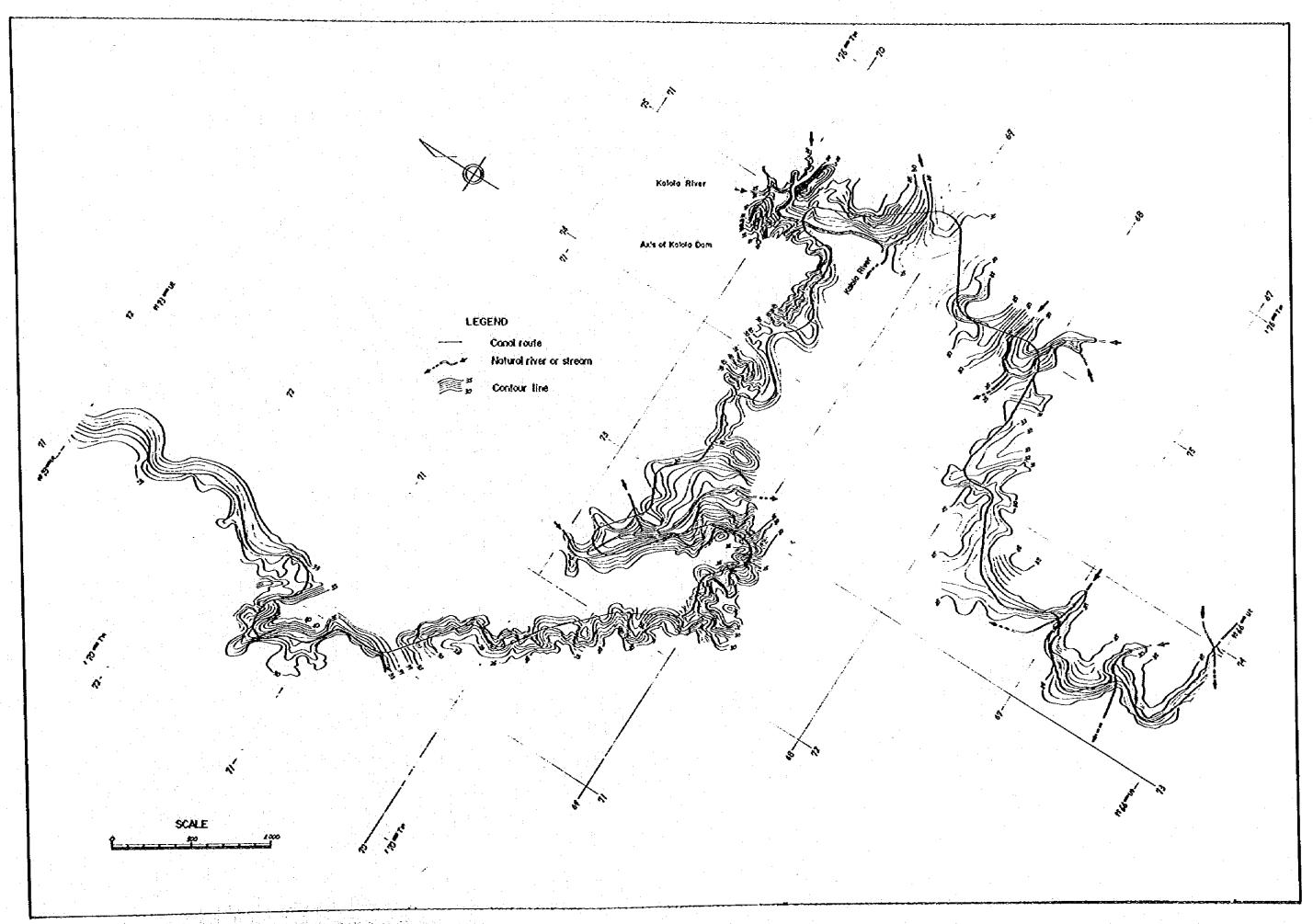
PRELIMINARY DESIGN OF BILA INTAKE WEIR AT MASTER PLAN SITE, RIGHT SIDE INTAKE SITE



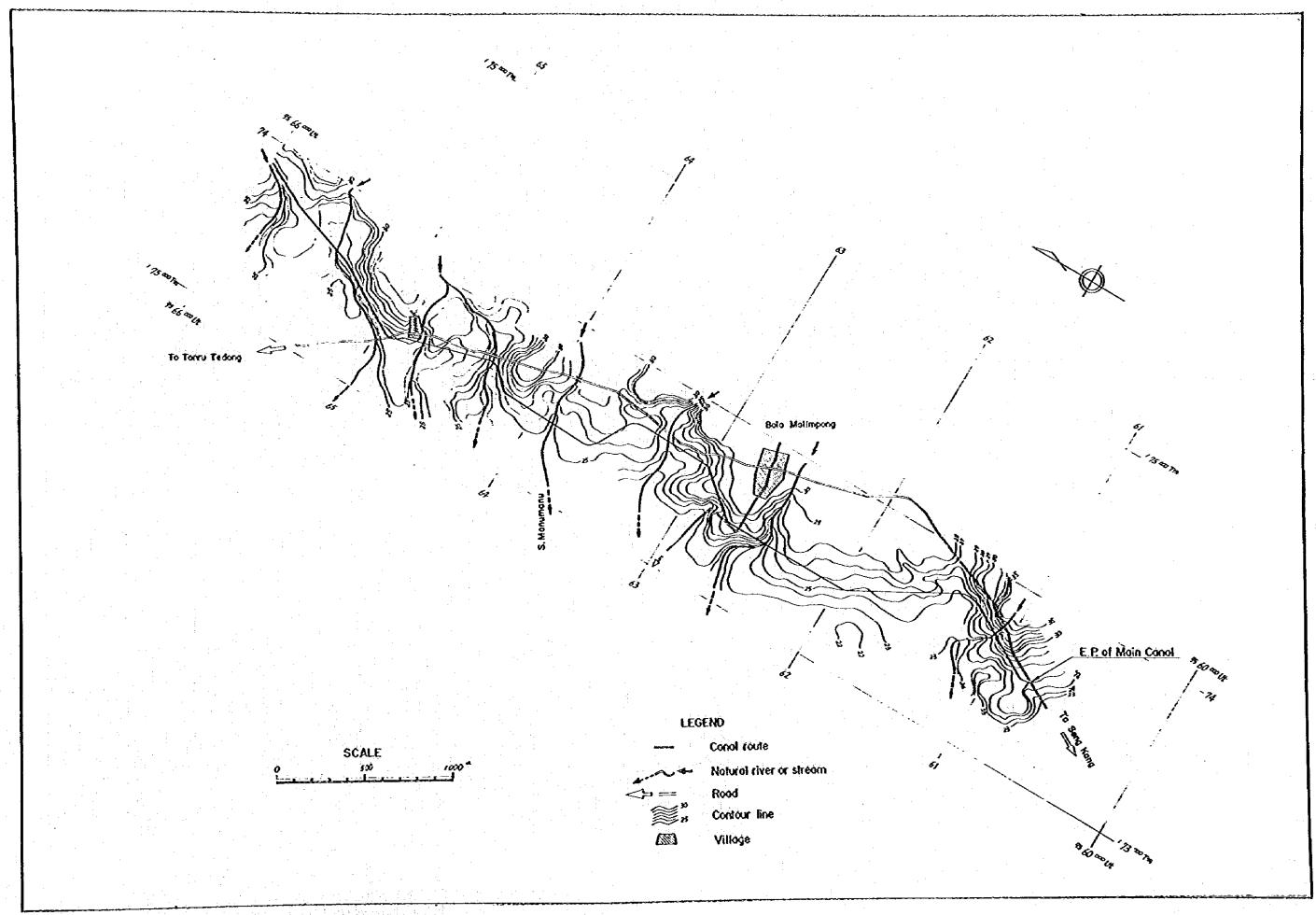




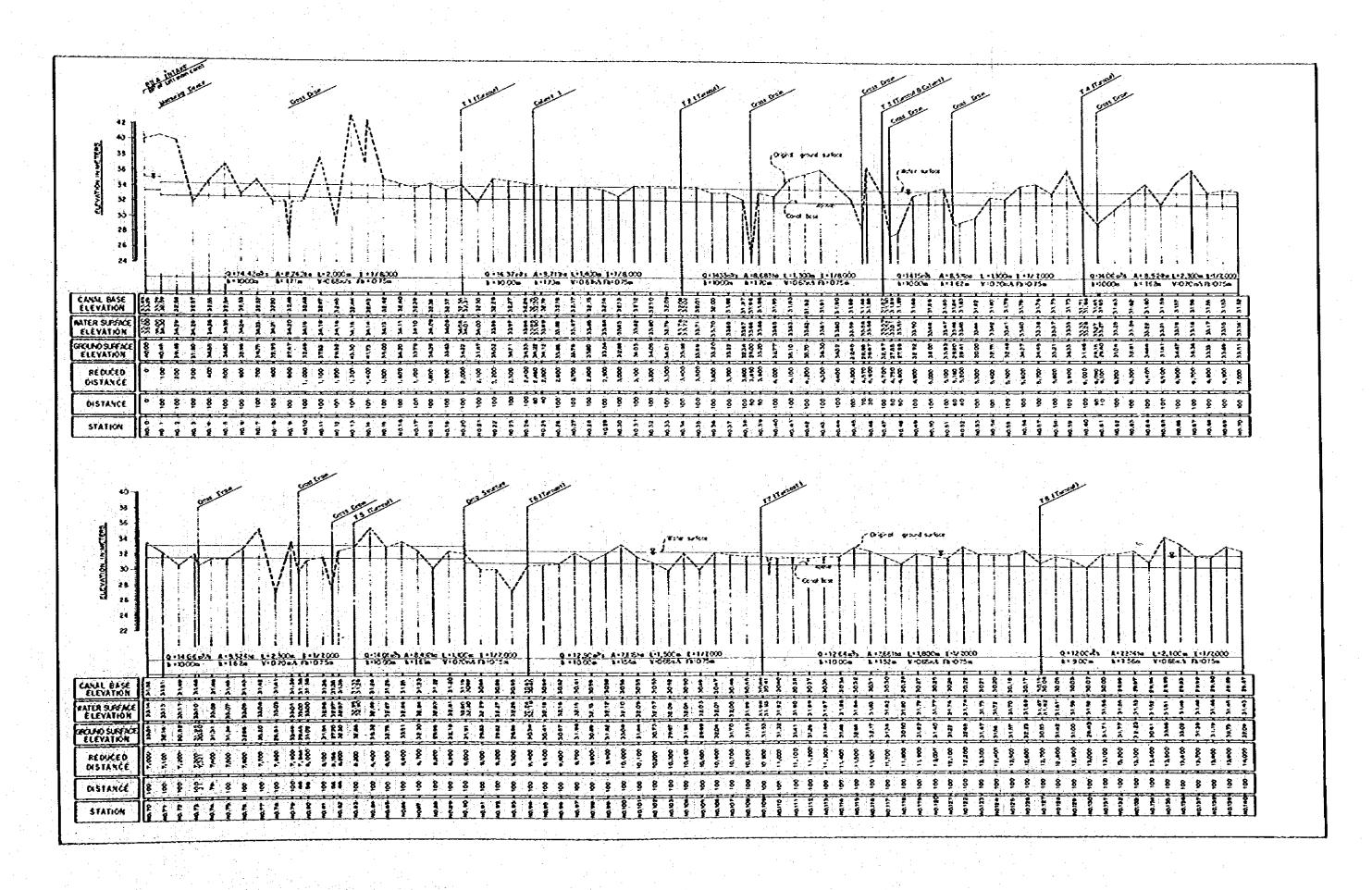
Pig. 4.9 TOPOGRAPHIC SURVEY AND MAIN IRRIGATION ROUTE
OF MASTER PLAN (1/3)



Pig. 4.9 TOPOGRAPHIC SURVEY AND MAIN IRRIGATION ROUTE
OF MASTER PLAN (2/3)



Pig. 4.9 TOPOGRAPHIC SURVEY AND MAIN IRRIGATION ROUTE
OF HASTER PLAN (3/3)



Pig. 4.10 LONGITUDINAL PROPILE OF MAIN IRRIGATION CANAL OF MASTER PLAN (1/3)

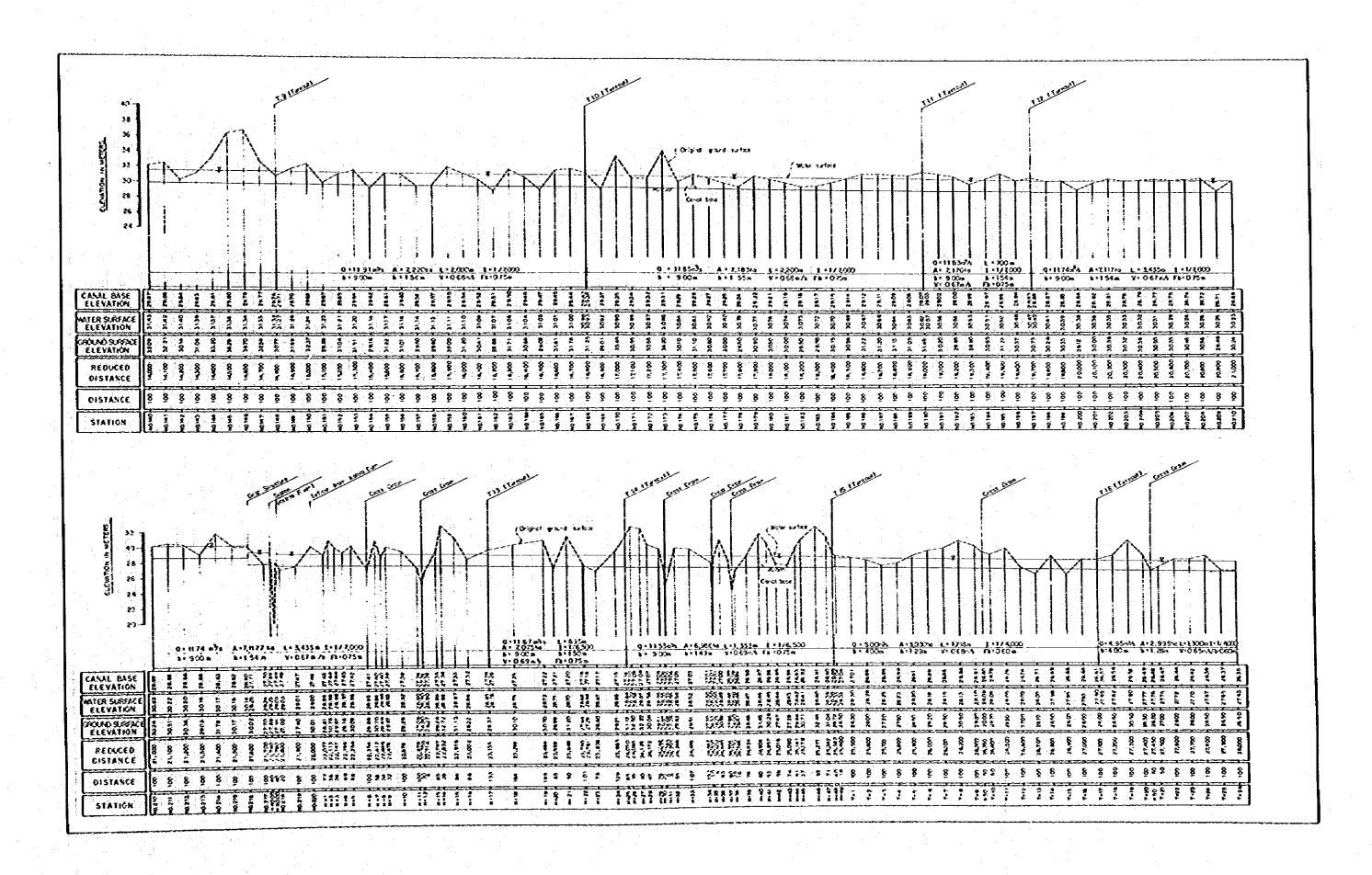
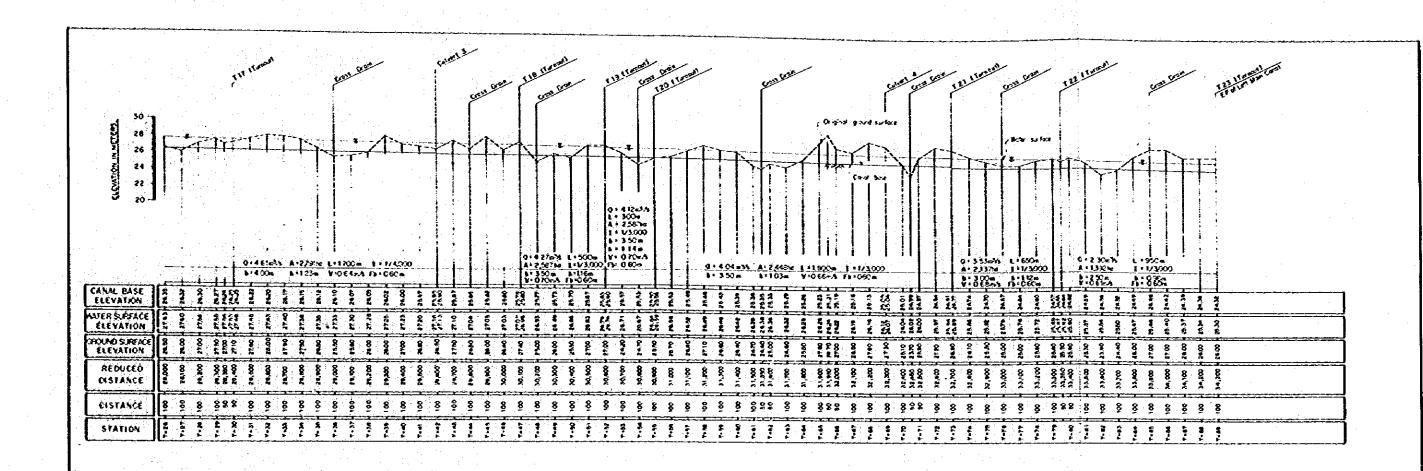
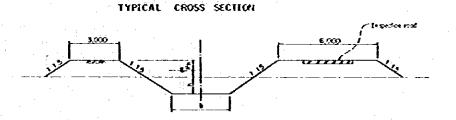
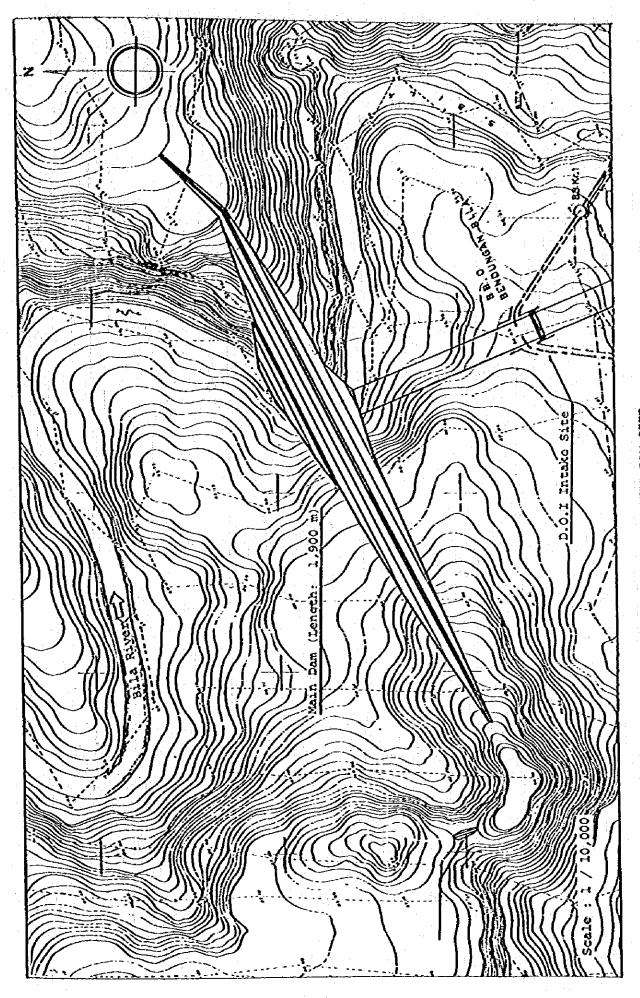


Fig. 4.10 LONGITUDINAL PROPILE OF MAIN IRRIGATION CANAL OF MASTER PLAN (2/3)







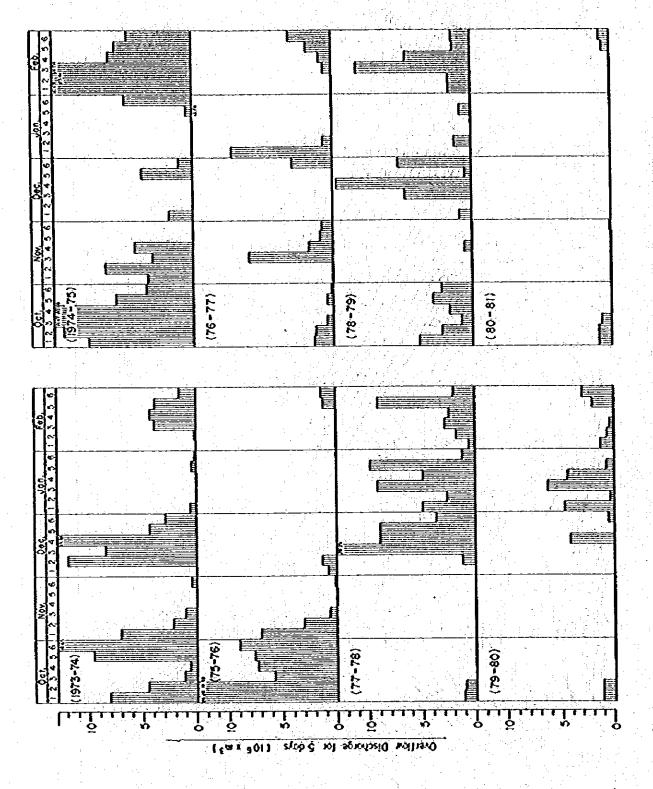


Fig. 5.2 OVERFILOW DISCHARGE IN GROWING PERIOD OF DRY SEASON PADDY (IN CASE OF INTAKE WEIR PLAN)

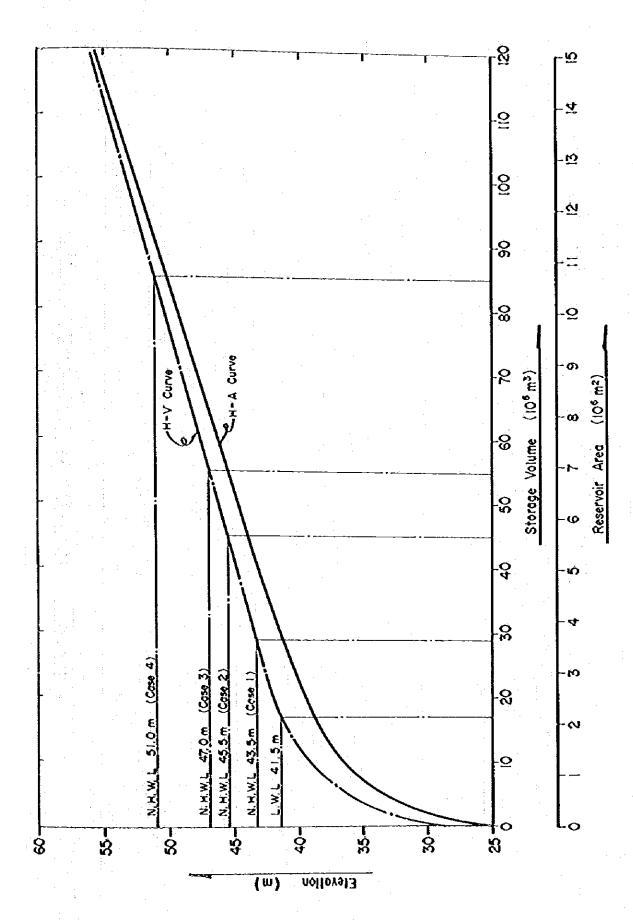


Fig. 5.3 STORAGE CAPACITY AND RESERVOIR AREA CURVE OF ALTERNATIVE BILA RESERVOIR

Fig. 5.4 TYPICAL CROSS SECTION AND PROFILE OF ALTERNATIVE BILA DAM