



GOVERNMENT OF INDIA

A GUIDE TO PREPARE CHAPTER ON IRRIGATION PLANNING ASPECTS OF DETAILED PROJECT REPORT



CENTRAL WATER COMMISSION
IRRIGATION MANAGEMENT ORGANISATION
IRRIGATION PLANNING (SOUTH) DIRECTORATE
SEPTEMBER 2018

**A GUIDE TO
PREPARE CHAPTER ON
IRRIGATION PLANNING ASPECTS OF
DETAILED PROJECT REPORT**



**CENTRAL WATER COMMISSION
IRRIGATION MANAGEMENT ORGANISATION**

September 2018

सैयद मसूद हुसैन

अध्यक्ष

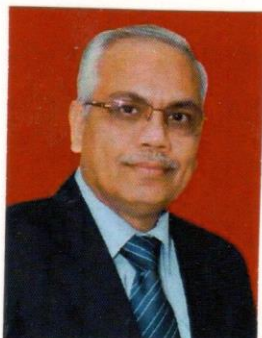
तथा पदेन सचिव, भारत सरकार

S. MASOOD HUSAIN
CHAIRMAN

& ex-officio Secretary
to the Government of India



भारत सरकार
जल संसाधन, नदी विकास
और गंगा संरक्षण मंत्रालय,
केन्द्रीय जल आयोग
Government of India
Ministry of Water Resources,
River Development and
Ganga Rejuvenation,
Central Water Commission



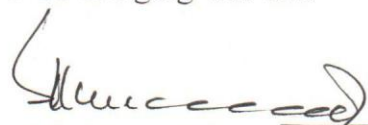
Foreword

The Ministry of Water Resources, GoI has brought out the publication titled “*Guidelines for Preparation of Detailed Project Report of Irrigation & Multipurpose Projects*” in the year 2010 covering various aspects of water resources project. The irrigation planning aspects are integral part of Detailed Project Report (DPR) and have been included in the guidelines. Irrigation Management Organisation (IMO) of CWC has been entrusted the task of techno-economic appraisal of irrigation planning aspects of major and multipurpose water resources projects including ERM schemes received from the State Governments.

During the appraisal process, it has been observed that at times, the chapter on irrigation planning in the DPR received from the State Governments lacks in details / information of irrigation parameters of the project as per the guidelines. Therefore, these details are required to be sought from the States during the appraisal process leading to delay in appraisal of water resources projects. Need of a comprehensive guide for preparing the chapter on irrigation planning aspects of DPR for the benefit of all concerned stakeholders was accordingly felt.

It gives me immense pleasure that Irrigation Management Organisation (IMO) of CWC has brought out “**A Guide to Prepare Chapter on Irrigation Planning Aspects**” considering the various key aspects of irrigation planning parameters needed in a DPR to help not only the State Governments but also in-house organisations of CWC involved in preparation of DPR of water resources projects. I sincerely hope that this publication will be very useful to the Irrigation / Water Resources Departments of State Governments, implementing authorities and all concerned regarding various key aspects of irrigation planning parameters needed in preparation of DPR.

I wish to put on record my appreciation for the sincere efforts put in by the officials of Irrigation Management Organisation (IMO), CWC under the guidance of Shri Navin Kumar, Chief Engineer (Irrigation Management Organisation), CWC in bringing out this publication.


(S. Masood Husain) / 3.9.18

Y.K.Sharma
Member (River Management
and Water Planning &
Projects)
& ex-officio Addl. Secretary
to the Govt. of India
Ministry of Water Resources



Government of India
Ministry of Water Resources,
River Development and
Ganga Rejuvenation,
Central Water Commission



Preface

Irrigation Management Organisation (IMO) under Water Planning and Projects (WP&P) Wing of CWC has been entrusted with one of its functions as techno-economic appraisal of Irrigation Planning Aspects of Detailed Project Reports (DPRs) of major and multipurpose water resources projects including ERM schemes received from the State Governments. The irrigation planning chapter of these DPRs are prepared by the State Governments as per the "Guidelines for Preparation of Detailed Project Report of Irrigation & Multipurpose Projects, 2010", a publication brought out by the Ministry of Water Resources, Gol. As irrigation planning aspect is one of the key components of any water resources project, details required to be incorporated in the DPR were indicated in the guidelines for preparation of DPRs.

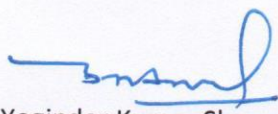
The DPR, as per the guidelines shall contain a detailed chapter on Irrigation Planning with following details:

- Details of gross command area (GCA), culturable command area (CCA)
- Rainfall details: During Monsoon (Max., Min. & Average), During non- Monsoon (Max., Min. & Average)
- Water Availability from surface and ground water for crop water planning:
 - Surface water: Yield series (net) at project site for 20-40 years or so for storage scheme and 10-20 years or so for diversion schemes.
 - Ground water draft available in the command for future use
- Existing cropping pattern, Area under each crop (Kharif, Rabi, Perennial, Hot weather crops etc.), Area irrigated (fully /partial) under existing irrigation facilities (canals, rivers, lifts, tanks, tube wells etc.), Quantity of water utilised / to be utilised, etc. Extent of stabilization required for existing irrigation facilities in the proposed command area etc.
- Existing Area under rainfed cultivation, Area under each crop, Rainfed (Kharif, Rabi, Perennial, Hot weather crops)
- Proposed cropping pattern; based on available data in respect of:
 - existing cropping pattern
 - soil
 - water and other inputs like seeds, fertilisers, pesticides etc.

- irrigated area in the adjoining area
- attitude of farmers towards irrigated / modern irrigated agricultural practices
- Area proposed for irrigation under each crop (Kharif, Rabi, Perennial, Hot weather crops), crop calendar etc.
- Proposed Intensity of irrigation (% of CCA) on the basis of water availability
- Extent of stabilisation to the existing irrigation facilities, proposed if any
- Estimation of crop water requirement for proposed cropping pattern as per Modified Penman's method
- Estimation of Net Irrigation Requirement (NIR) after deducting rainfall contribution from the estimated crop water requirement
- Computation of Field Irrigation Requirement (FIR) considering appropriate value of Field application efficiency depending upon nature of soil, water application methods (conventional methods / adoption of modern technology viz. drip/sprinkler etc.)
- Estimation of Gross Irrigation Requirement (GIR) using appropriate value of Conveyance efficiency depending upon whether canal network is lined / partially lined / type of lining / unlined/piped system etc.
- Conjunctive use planning of surface and ground water
- Reservoir operation / Simulation / Working Tables to match the water demands under the project vis-à-vis availability of water to assess the success rate of the project with respect to irrigation (acceptable success rate for irrigation: 75%)
- Provisions in the estimates for Field Channels & Water Courses, Drainage requirements etc.
- Power requirements and its availability in case of lift schemes
- Water management issues like proposal for Participatory Irrigation Management (PIM) including formation of Water Users Associations (WUAs), scope of introduction of modern technology like sprinklers, drip irrigation etc.

However, during appraisal process of DPRs received from the State Governments, it was felt that at times, DPRs lack details / information in respect of irrigation planning parameters as desired for appraisal of the DPRs. To overcome these, the Irrigation Planning (South) Directorate under IMO, CWC has framed "**A Guide to Prepare Chapter on Irrigation Planning Aspects**" considering the various key aspects of irrigation planning parameters needed in a DPR. This guide has been framed as an aid to "*Guidelines for Preparation of Detailed Project Report of Irrigation & Multipurpose Projects, 2010*". I hope that this publication will be useful to all concerned stakeholders involved in preparation of DPRs.

I compliment Shri Navin Kumar, Chief Engineer (IMO), CWC for his immense effort put in preparation of this document and his team members namely Shri B. C. Vishwakarma, Director (Irrigation Planning-South), Shri Neeraj Kumar Sharma, Deputy Director (IP-S) and Shri Ashish Kumar, Deputy Director (IP-S) who were involved right from the beginning of preparation of this document.


 (Yoginder Kumar Sharma)

CONTENTS

Foreword	i
Preface	ii
1. Introduction	1
2. Gross Command Area (GCA) & Culturable Command Area (CCA)	1
3. Water Availability	1
3.1 Surface Water	2
3.2 Ground Water	2
4. Soil Survey	2
5. Cropping Pattern	3
6. Crop Water Requirements	3
6.1 Definition of terms	4
6.2 Methods for estimation of Crop Water Requirements	7
7. Methodology for estimation of Crop Water Requirements by Modified Penman Method	8
8. Irrigation Demand Table	13
9. Other Water Demands (Drinking, Industrial etc.)	14
10. Canal Capacity	14
11. Reservoir Operation/Working Tables	14
12. Field Channels/Water Courses	17
13. Drainage	17
14. Water Management Practices	17
15. Annexure-I	18-51

IRRIGATION PLANNING ASPECTS

1.0 INTRODUCTION

This section may give brief details of existing conditions of the command viz., river(s) system, rain fall and other general climatic conditions, cropping pattern, existing irrigation facilities available in the command (major, medium and minor irrigation schemes) and then briefly elaborate the need of the project with brief description of project proposal along with the objectives and benefits to be accrued from the project viz. increase in irrigated area and thereby increase in crop productivity and farmers' income, improvement in socio-economic condition of the region, area / districts and population to be benefited category wise, provision for domestic and industrial water needs etc. This section may also provide a clear index map of the project. The Index map may show the details of river(s) system, site location of dam/diversion structures on river(s), main canals & distribution system, command area proposed for irrigation, command area falling under existing irrigation facilities, district(s) & other important locations, any other relevant details as required.

2.0 GROSS COMMAND AREA (GCA) & CULTURABLE COMMAND AREA (CCA)

The Gross Command Area (GCA) is the total geographical area which can normally be commanded or serviced from an irrigation project without consideration of water supplies available for irrigation. The Culturable Command Area (CCA) is the gross commanded area less the non-culturable land. The GCA and CCA of the project should be carefully assessed on the basis of authentic revenue / village records or any other agency manning the same. The area to be covered under Micro Irrigation should be clearly spelt out.

3.0 WATER AVAILABILITY

Major and medium irrigation projects are schemes basically envisaging use of surface water. However for optimum utilisation of water resources for various uses like domestic water supply, irrigation etc., it is better to go in for integrated development of surface and ground waters for the project. Depending upon the quantum, as well as quality of ground water available locally, it should be planned in conjunction with surface water. Thus, water availability for project may be discussed under two sub-heads namely (i) Surface water and (ii) Ground water.

3.1 Surface Water

It is necessary to have long term data of rainfall, gauge and discharge at or nearby the project location, water utilisation of existing, under-going and proposed projects in the river basin/sub-basin etc. for assessment of surface water availability of a project. These data are required in the form of 10 - daily / monthly basis depending upon the nature of schemes viz. diversion / storage structures to arrive at the 10 - daily / monthly net yield / flow series required for irrigation planning. The net yield / flow series arrived so may have to be got approved by Hydrology Directorate of CWC. As per the “Guidelines for Preparation of Detailed Project Reports of Irrigation and Multipurpose Projects, 2010”, the yield series are required for 20 - 40 years for storage projects on monthly basis and for 20 years or so on 10 - daily basis for diversion schemes for assessing the success rate of the project.

3.2 Ground Water

The details of ground water potential, quality, rising/falling trend in ground water level, present ground water draft etc. in the project command may be obtained from the State/Central Ground Water Board to assess the net ground water potential / draft available for future irrigation and other purposes in the project command. The available potential / draft of ground water may accordingly be used in conjunction with surface water for optimal use of water resources as well as to maintain the water balance in the project command. It needs to be stated whether the State Government is planning to execute Micro Irrigation (MI) scheme from ground water sources in the near future and those should be suitably accounted.

4.0 SOIL SURVEY

The detailed soil survey / investigation are essential for land and irrigability classification of the command. The soil survey / investigation therefore have to be carried out and report may be prepared. This will help in identifying suitability of soil for irrigation and to know their likely behaviour under irrigation, in deciding the appropriate cropping pattern, drainage requirements etc. Further, it will help in avoiding the problems of waterlogging, soil salinity / alkalinity etc. after introduction of irrigation.

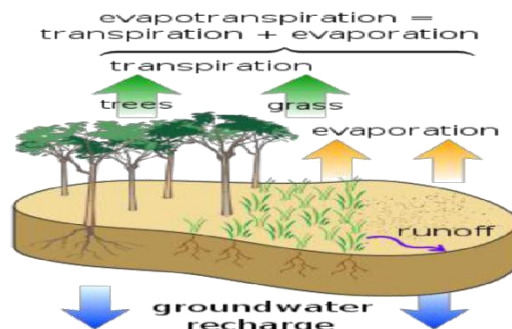
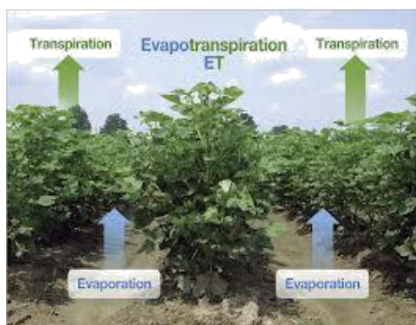
5.0 CROPPING PATTERN

The proposed cropping pattern in consultation with State Agriculture Department may be decided on the basis of findings of the soil survey report, present/existing cropping pattern, cropping pattern of the neighbouring projects, attitude of farmers towards irrigated / modern irrigated agricultural practices, quantity of water available, nearby agro based industries etc. in case of cash crops etc. The basic point to be considered here is that in shallow and sandy soil, high water consuming crops like paddy and sugarcane should be discouraged. Thus this section may give the details of cropping pattern under two sub-heads namely (i) Present / Existing cropping pattern and (ii) Proposed cropping pattern. The present / existing and cropping pattern proposed after the project may be got approved from the Director, State Agriculture Department.

6.0 CROP WATER REQUIREMENTS

In plant metabolism, soluble nutrition & salts are transported by water from roots to body of plant and upto leaves where the photosynthesis takes place. The water is lost by evaporation from stomata in plant leaves and the process is called **transpiration**, an element of water consumption required for growth of plants and vegetation. The water requirement of crop / vegetation is sum of transpiration and inevitable evaporation losses from soils in vicinity, collectively called crop **evapotranspiration**. In true sense, water used by plant in building up plant tissues also contributes to consumptive use. However, it is insignificant as compared to evapotranspiration component. Therefore, the consumptive use is practically considered same as crop evapotranspiration. Consumptive use is usually expressed in term of depth of water and reflects quantum of water required by plant to meet its evapo-transpiration needs for its full growth. Thus, the Crop Water Requirements may be defined as under:

“The depth of water needed to meet the water loss through evapotranspiration (ET Crop) of a disease-free crop, growing in large fields under non-restricting soil conditions including soil water and fertility and achieving full production potential under the given growing environment”.



6.1 Definition of terms

Some of the terms related to estimation of crop water requirements are defined as under.

6.1.1 Consumptive use

Consumptive use, commonly known as evapotranspiration, is the amount of water used by growing plant in transpiration and building of plant tissues and that evaporated from adjacent soil or from intercepted precipitation on the plant foliage in any specified time. Consumptive use is usually expressed in metre cube per hectare or centimetres per hectare or in depth in millimetres or centimetres.

6.1.2 Consumptive Water Requirement

The amount of water potentially required to meet the evapo-transpiration needs of the plant so that the plant does not suffer in its growth through short supply of water.

6.1.3 Consumptive Irrigation Requirement

The depth of irrigation water, **exclusive** of precipitation, stored soil moisture, or ground water (capillary) contribution that is required to meet evapotranspiration and other physiological need of plants during crop production.

6.1.4 Net Irrigation Requirement

The depth of irrigation water, exclusive of precipitation, stored soil moisture, or ground water (capillary) contribution that is required consumptively for crop production and for other purposes such as leaching and percolation losses inevitable in case of some crops. In other words, in normal soils (without leaching requirement) and for crops other than paddy (where standing water results in percolation loss), it is the amount or the depth of water required to bring the soil moisture level in the effective root zone to field capacity from the soil moisture content before applying irrigation water.

6.1.5 Field Irrigation Requirement

The field irrigation requirement (FIR) is net irrigation requirement plus losses in water application. The losses in water application depend on type of soils, extent of lining in field channels and water courses, grade of the field, method of irrigation etc.

6.1.6 Gross Irrigation Requirement

The gross irrigation requirement (GIR) is net irrigation requirement plus water application losses plus losses in the conveyance system due to seepage, evaporation, etc. This can be determined at outlet head or canal head depending on the purpose of determination.

6.1.7 Effective Rainfall

It is that portion of the rainfall falling during the growing period of the crop which is available to meet the consumptive water need or the evapotranspiration requirement of the crop. It does not include precipitation lost through deep percolation below the root zone or through surface runoff.

6.1.8 Reference Evapotranspiration

The reference evapotranspiration is defined as the rate of evapotranspiration from an extensive surface of 8 to 15 centimetres tall, green grass cover of uniform height, actively grown, completely shading the ground and not short of water.

6.1.9 Crop Coefficient

The crop coefficient (K_c) related reference evapotranspiration to crop evapotranspiration or consumptive use. It accounts for the effect of crop characteristics and crop water requirements. Crop coefficient value takes into account the sowing time, crop development stages, crop characteristics and climate.

Single K_c coefficient takes into account crop characteristics & averaged effects of evaporation from the soil. It is obvious that for normal irrigation planning purposes, basic irrigation schedule development, and for most hydrologic water balance studies, average crop coefficients are relevant and more convenient than the K_c computed on a daily time step using a separate crop and soil coefficient. But, the dual crop coefficient approach is more accurate and computationally more intensive than the single crop coefficient approach (K_c) as it is based on a daily basis. And for sure, is intended for applications using computers. It is suggested from basin irrigation planning point of view that the approach may be followed when improved estimates for K_c are warranted for smaller watersheds on a daily basis. For this, SIMDual K_c software is available to support irrigation advising.

6.1.10 Irrigation Efficiency

The irrigation efficiency is the percentage of applied irrigation water stored in the soil and available for consumptive use by the crop. When the applied water is measured at the field, it is known as field irrigation efficiency and when measured at the point of diversion, it is termed as project efficiency (E_p). The project efficiency (E_p) is normally divided into three stages as under.

- (a) *Conveyance Efficiency (E_c)*: Ratio between water received at inlet to a block of fields and that released at the project head works.
- (b) *Field Canal Efficiency (E_b)*: Ratio between water received at the field inlet and that received at the inlet of the block of fields.

- (c) *Field Application Efficiency (Ea)*: Ratio between water directly available to the crop and that received at the field inlet.

$$(E_p = E_a \cdot E_b \cdot E_c)$$

The conveyance and field canal efficiency are sometimes combined as distribution efficiency (E_d), where $E_d = E_c \cdot E_b$; field canal and application efficiency are sometimes combined as farm efficiency where $E_f = E_b \cdot E_a$.

6.2 Methods for estimation of Crop Water Requirements

There are various methods for estimation of the crop water requirements viz. Blaney-Criddle formula, Christiansen formula, Thornthwaite method, Modified Penman Method, FAO Penman-Monteith equation etc. Given the limited data input to the equation for computing evapo-transpiration, Blaney-Criddle and Thornthwaite methods can be regarded as only broadly accurate rather than a precise measure of evapo-transpiration. The inaccuracy of the equation is exacerbated by extreme variants of weather. Pan Evaporation method (Christiansen formula) was used earlier before adoption of Modified Penman method and is useful where either the Class A evaporation data is available or accurate climatic data is available. Modified Penman method is useful where accurate climatic data is available. The modified Penman method is considered to offer the best results with minimum possible error in relation to a living grass reference crop. However, as per FAO, it overestimates E_{t0} , especially for low evaporative conditions.

Due to the fact that the radiation-based equation methods reveal the closest agreement with Class A pan evaporation measurements for semi-arid/arid regions, and for its many input requirements (if available), this equation to be most appropriate in the global application. It could be said that all the methods produce significantly different evapotranspiration estimates than the FAO-56 Penman-Monteith method, which is physically based, and explicitly incorporates both physiological and aerodynamic parameters by closely approximating grass E_{t0} at the location evaluated. More commonly used nowadays are the more physically-oriented approaches (i.e. Penman-Monteith equations as compared to Modified Penman method introduced by Doorenbos and Pruitt in FAO's Irrigation and Drainage Paper 24), which give a much better explanation of the evaporation process and selected by FAO as the reference. This

can be done using Eto calculator software developed by the Land and Water Division of FAO if data are available in the smaller watersheds. The software is user friendly and calculates reference evapotranspiration (Eto) according to FAO standards. The Eto calculator assesses Eto from meteorological data by means of the FAO Penman-Monteith equation. This method has been selected by FAO as the reference.

7.0 METHODOLOGY FOR ESTIMATION OF CROP WATER REQUIREMENTS BY MODIFIED PENMAN METHOD

The Water Management Division of erstwhile Ministry of Irrigation, Govt. of India brought out a publication available on CWC website titled “*Technical Series-2: A Guide for Estimating Irrigation Water Requirements, May 1984*” wherein various methods and parameters for estimating the water requirements for various crops are given. The methodology given in the above publication for estimation of crop water requirements by Modified Penman Method is in practice with due consideration to all factors i.e. evapotranspiration (E_{t0}), crop coefficient (K_c), crop evapotranspiration (E_{tc}), effective rainfall, percolation losses, type and stage of crop etc. and method of water application, type of conveyance system etc. for adoption of irrigation efficiency. The methodology in brief is given below.

(i) Estimation of Reference Evapotranspiration (E_{t0})

The estimation of reference evapotranspiration (E_{t0} in mm/day) is made by Modified Penman method as given in the above mentioned publication. The values of E_{t0} can be obtained by using FAO software “CROPWAT 8.0” with climatological data of selected station near to the project location also.

(ii) Crop co-efficient (K_c)

The selection criteria for appropriate values of K_c takes into account the crop characteristics, time of planting or sowing, stages of crop development and general climatic condition. The K_c values should be adopted from the research station of ICAR / Agricultural Universities in the project locality. However, in the absence of such data, K_c may be judiciously taken from the above mentioned publication (adopted from FAO’s Publication 33) for different crop development stages.

(iii) Consumptive Use (C_u)

The consumptive use (C_u), also called sometimes as crop evapotranspiration ($Et_{c/crop}$) is obtained as: C_u or $Et_{c/crop} = K_c$ (crop factor) $\times$ Et_0 (reference crop evapotranspiration)

(iv) Effective Rainfall

The relationship between average monthly consumptive use (C_u) and normal monthly rainfall (R_t) and percent chance of average annual rainfall occurrence to arrive at the values of effective rainfall (R_e) are illustrated in the above mentioned publication.

(v) Percolation Losses

The percolation losses are considered for ponded crops. The rate of percolation losses will depend upon the types of soil in the command area. The percolation losses vary from 2 mm/day in case of clay soil to 6 mm/day in case of sandy soils. The percolation losses may be considered accordingly.

(vi) Net Irrigation Requirement (NIR)

The relation to compute the Net Irrigation Requirement (NIR) for a crop is as under:

$$\text{NIR (mm)} = Et_{c/crop} \text{ (crop evapotranspiration)} + \text{Percolation Losses (for ponded crops)} - R_e \text{ (effective rainfall)}$$

In addition to above, water requirements for nursery and transplantation for paddy and pre-sowing water requirements for other crops exclusive of effective rainfall are also considered appropriately.

(vii) Field Irrigation Requirement (FIR)

The Field Irrigation Requirement (FIR) computed from the NIR by considering the appropriate value of field application efficiency is as under.

$$\text{FIR (mm)} = \text{NIR (mm)} / \text{field application efficiency}$$

The field application efficiency should be based on the type of irrigation practice to be followed in post project scenario.

In absence of any experimental / observed value of field application efficiency of similar command, following values of field application efficiency for ponded and other crops (non-ponded) may be considered for planning purposes.

- | | | |
|------------------------------|---|-----------|
| i) Ponded crops | : | 80 to 85% |
| ii) Other crops (non-ponded) | : | 65% |

(viii) Gross Irrigation Requirement (GIR)

The Gross Irrigation Requirement (GIR) computed from the FIR by considering the appropriate value of conveyance efficiency of the canals and its distribution system is as under:

$$\text{GIR (mm)} = \text{FIR (mm)} / \text{conveyance efficiency}$$

In absence of any experimental / observed value of conveyance efficiency of similar nature, following values of conveyance efficiency, depending upon the nature of canals and its distribution system may be considered for planning purposes.

- | | | |
|--------------------------------|---|-----------|
| i) For fully lined system | : | 70 to 75% |
| ii) For partially lined system | : | 65 to 70% |
| iii) For unlined canal system | : | 55 to 60% |

(ix) *Sample Calculation of NIR, FIR and GIR*

Typical examples to compute the NIR, FIR and GIR for different crops are given below.

Crop Water Requirement								Crop Stages		
								Ini- Initial Stage		
								Dev.- Development Stage		
					CROP - WHEAT			Mid- Mid Season		
								Late- Late Season		
								Har- Harvest Season		
Crop Period	Stage	ETO	K _c	ET Crop	Total	P	Re	NIR	FIR	GIR
		m m /day	Crop	m m /day	ET Crop	Percolatio n	Effective	(m m)	(m m)	(m m)
			Coeff.		(m m)	(m m)	Rainfall	(ETC+P-Re)	=NIR/0.65	=FIR/0.6
							(m m)			
Nov. (1-10)				Presowing				38.00	58.46	97.44
(11-20)				Presowing				37.00	56.92	94.87
(21-30)	Ini.	3.52	0.35	1.232	12.32	0.00	1.13	11.19	17.21	28.68
Dec. (1-10)	Ini.	2.64	0.35	0.924	9.24	0.00	1.40	7.84	12.06	20.10
(11-20)	Ini.	2.64	0.70	1.848	18.48	0.00	1.40	17.08	26.28	43.79
(21-31)	Dev.	2.64	0.70	1.848	20.33	0.00	1.40	18.93	29.12	48.53
Jan. (1-10)	Dev.	2.80	0.70	1.960	19.60	0.00	3.10	16.50	25.38	42.31
(11-20)	Dev.	2.80	0.70	1.960	19.60	0.00	3.10	16.50	25.38	42.31
(21-31)	Mid.	2.80	0.90	2.520	27.72	0.00	3.10	24.62	37.88	63.13
Feb. (1-10)	Mid.	4.50	0.90	4.050	40.50	0.00	3.93	36.57	56.26	93.76
(11-20)	Mid.	4.50	0.90	4.050	40.50	0.00	3.93	36.57	56.26	93.76
(21-28)	Late	4.50	0.65	2.925	23.40	0.00	3.93	19.47	29.95	49.91
Mar. (1-10)	Late	6.94	0.65	4.510	45.10	0.00	1.60	43.50	66.93	111.55
(11-20)	Har	6.94	0.28	1.943	19.43	0.00	1.60	17.83	27.43	45.72
(21-31)	Har	6.94	0.28	1.943	21.37	0.00	1.60	19.77	30.42	50.70
Apr. (1-4)	Har	9.26	0.28	2.593	10.37	0.00	0.48	9.89	15.22	25.36

Crop Water Requirement								Crop Stages		
								Ini- Initial Stage		
								Dev.- Development Stage		
					<u>CROP - OIL SEEDS</u>			Mid- Mid Season		
								Late- Late Season		
								Har- Harvest Season		
Crop Period	Stage	ETO	K _c	ET Crop	Total	P	Re	NIR	FIR	GIR
		m m /day	Crop	m m /day	ET Crop	Percolation	Effective	(m m)	(m m)	(m m)
			Coeff.		(m m)	(m m)	Rainfall	(ETC+P-Re)	=NIR/0.65	=FIR/0.6
							(m m)			
				<i>Presowing</i>				75.00	115.38	192.31
Nov. (1-10)	Ini.	3.52	0.40	1.408	14.08	0.00	1.13	12.95	19.92	33.20
(11-20)	Ini.	3.52	0.40	1.408	14.08	0.00	1.13	12.95	19.92	33.20
(21-30)	Ini.	3.52	0.40	1.408	14.08	0.00	1.13	12.95	19.92	33.20
Dec. (1-10)	Dev.	2.64	0.70	1.848	18.48	0.00	1.40	17.08	26.28	43.79
(11-20)	Dev.	2.64	0.70	1.848	18.48	0.00	1.40	17.08	26.28	43.79
(21-31)	Mid.	2.64	0.90	2.376	26.14	0.00	1.40	24.74	38.06	63.43
Jan. (1-10)	Mid.	2.80	0.90	2.520	25.20	0.00	3.10	22.10	34.00	56.67
(11-20)	Late	2.80	0.65	1.820	18.20	0.00	3.10	15.10	23.23	38.72
(21-31)	Har.	2.80	0.40	1.120	12.32	0.00	3.10	9.22	14.18	23.64

Crop Water Requirement								Crop Stages		
								Ini- Initial Stage		
								Dev.- Development Stage		
					<u>CROP -GRAM</u>			Mid- Mid Season		
								Late- Late Season		
								Har- Harvest Season		
Crop Period	Stage	ETO	K _c	ET Crop	Total	P	Re	NIR	FIR	GIR
		m m /day	Crop	m m /day	ET Crop	Percolatio	Effective	(m m)	(m m)	(m m)
			Coeff.		(m m)	n	Rainfall	(ETC+P-Re)	=NIR/0.65	=FIR/0.6
						(m m)	(m m)			
				<i>Presowing</i>				75.00	115.38	192.31
Dec. (1-10)										
(11-20)	Ini.	2.64	0.35	0.924	9.24	0.00	1.40	7.84	12.06	20.10
(21-31)	Ini.	2.64	0.35	0.924	10.16	0.00	1.40	8.76	13.48	22.47
Jan. (1-10)	Ini.	2.80	0.70	1.960	19.60	0.00	3.10	16.50	25.38	42.31
(11-20)	Dev.	2.80	0.70	1.960	19.60	0.00	3.10	16.50	25.38	42.31
(21-31)	Dev.	2.80	0.70	1.960	21.56	0.00	3.10	18.46	28.40	47.33
Feb. (1-10)	Dev.	4.50	0.70	3.150	31.50	0.00	3.93	27.57	42.41	70.68
(11-20)	Mid.	4.50	0.90	4.050	40.50	0.00	3.93	36.57	56.26	93.76
(21-28)	Mid.	4.50	0.90	4.050	32.40	0.00	3.93	28.47	43.79	72.99
Mar. (1-10)	Mid.	6.94	0.90	6.246	62.46	0.00	1.60	60.86	93.63	156.05
(11-20)	Late	6.94	0.65	4.511	45.11	0.00	1.60	43.51	66.94	111.56
(21-31)	Har	6.94	0.65	4.511	49.62	0.00	1.60	48.02	73.88	123.13

The calculation of Crop Water Requirement for **micro irrigation portion** should be done separately as the amount of water for micro irrigation will be less as compared to conventional irrigation.

8.0 IRRIGATION DEMAND TABLE

After working out the Gross Irrigation Requirements (GIR) of crops, the irrigation demand table for all the 12 months of the year is prepared for the project. The irrigation demand table will show the monthly (for storage project) and ten daily (for diversion projects) demand of water at canal head. A typical example to prepare the irrigation demand table based on the sample calculation under Para 7.0 (ix) above is given below.

Demand Table for command									
Month ↓		Crops →	Oilseeds		Wheat		Gram		Total water demand
		Area → in Lakh ha	0.38		0.28		0.25		0.91
			(mm)	(ham)	(mm)	(ham)	(mm)	(ham)	(ham)
nov	I		225.50	8569.16	97.44	2728.21	0.00	0.00	11297.37
	II		33.20	1261.47	94.87	2656.41	0.00	0.00	3917.88
	III		33.20	1261.47	28.68	803.15	0.00	0.00	2064.62
dec	I		43.79	1664.21	20.10	562.87	192.31	4807.69	2227.08
	II		43.79	1664.21	43.79	1226.26	20.10	502.56	2890.46
	III		63.43	2410.17	48.53	1358.93	22.47	561.79	3769.11
jan	I		56.67	2153.33	42.31	1184.62	42.31	1057.69	3337.95
	II		38.72	1471.28	42.31	1184.62	42.31	1057.69	2655.90
	III		23.64	898.36	63.13	1767.59	47.33	1183.33	2665.95
feb	I		0.00	0.00	93.76	2625.30	70.68	1767.09	2625.30
	II		0.00	0.00	93.76	2625.30	93.76	2344.02	2625.30
	III		0.00	0.00	49.91	1397.61	72.99	1824.79	1397.61
mar	I		0.00	0.00	111.55	3123.33	156.05	3901.28	3123.33
	II		0.00	0.00	45.72	1280.05	111.56	2789.10	1280.05
	III		0.00	0.00	50.70	1419.54	123.13	3078.27	1419.54
apr	I		0.00	0.00	25.36	710.14	0.00	0.00	710.14
	II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	III		0.00	0.00	0.00	0.00	0.00	0.00	0.00
may	I		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	II		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	III		0.00	0.00	0.00	0.00	0.00	0.00	0.00

9.0 OTHER WATER DEMANDS (DRINKING, INDUSTRIAL ETC.)

The drinking water requirement on 10-daily / monthly basis is estimated for the likely population in the command after 25 years or so considering the per capita daily water requirement as per the prevailing norms of Public Health Engineering Department (PHED) of that area. Similarly, the industrial water demands and other demands, if any proposed to be met with the project are also estimated on 10-daily / monthly basis.

10.0 CANAL CAPACITY

The canal capacity at canal head is worked out on the basis of peak irrigation demand of the irrigation demand table with a provision of 10% extra capacity to take care of rush irrigation and the water demands for drinking and industrial water supply. A typical example to find out the canal capacity is given below.

1	Peak 10-daily irrigation demand (Max. 10-daily demand value from demand table)	112.97 MCM
2	Plus 10% extra for rush irrigation	11.30 MCM
3	Drinking water demand (100 litres per capita per day for population of 2,00,000 in the command) – $[2,00,000 \times (100 \times 10 / 1000) / 1000000]$	0.20 MCM
4	Peak 10-daily demand (1+2+3)	124.47 MCM
5	Canal Capacity – $[(124.47 \times 1000000) / (10 \times 24 \times 3600)]$	144.06 m ³ /s

11.0 RESERVOIR OPERATION / WORKING TABLES

The success of a project is checked by means of matching the availability of water with the demand with the reservoir operation / working tables. Any allocation of water for domestic needs, industry, releases for hydropower, evaporation losses etc. beside irrigation demand to be properly taken into account for preparation of the reservoir operation / working tables. For storage projects, these are prepared for a period of 20 to 40 years on monthly basis and that for the diversion projects; these are prepared for a period of 20 years on 10 - daily basis to assess the desired success rate of the project.

It is suggested that the Working tables be prepared taking the revised area- capacity curve say after 15-25 year or else there should be a provision to create equivalent amount of on-farm storages to supplement the storage lost in reservoir due to siltation.

As per the guidelines, the desired success rate for domestic water supply and meeting the irrigation demand on monthly / 10-daily basis as the case may be is 100% and 75% respectively.

A pro-forma to prepare the working tables is given below.

Year -----

Sl. No.	Month	Storage at the beginning of the month		Inflow in to reservoir	Water Proposed to be released			Eva- poration losses	Spill	Storage at the end of the month	
		Storage (MCM)	El. – M.		Irrigation	DW & I	Other, if any			Storage (MCM)	El. – M.
1	June										
2	July										
3	Aug.										
4	Sept.										
5	Oct.										
6	Nov.										
7	Dec.										
8	Jan.										
9	Feb.										
10	March										
11	Apr.										
12	May										

The working tables prepared on ten daily basis 22 years (from 1990-91 to 2011-12) for meeting the irrigation and domestic water demands with the approved yield series of Sonai Irrigation Project, Assam are enclosed at **Annexure-I** for ready reference.

The abstract of the working tables for the project shows that the proposed water demand for irrigation meets in all the years and accordingly, the success rate of the project for meeting irrigation demand comes out as 100% [Success rate = {(Success years) / (Total no. of years)}*100].

S.N.	Year			Inflow (MCM)	Water Demand Met (MCM)	S/F	Evaporation (MCM)	Spills (MCM)
1	1990	-	1991	3904.25	94.477	S	10.552	3772.525
2	1991	-	1992	2243.28	94.477	S	10.56	2129.97
3	1992	-	1993	2295.10	94.477	S	10.52	2181.82
4	1993	-	1994	3401.30	94.477	S	10.59	3287.95
5	1994	-	1995	1593.68	94.477	S	10.28	1480.65
6	1995	-	1996	2233.18	94.477	S	10.74	2119.68
7	1996	-	1997	1632.16	94.477	S	10.62	1518.79
8	1997	-	1998	2269.95	94.477	S	10.72	2156.47
9	1998	-	1999	1562.27	94.477	S	10.12	1449.39
10	1999	-	2000	2855.72	94.477	S	10.80	2742.16
11	2000	-	2001	2904.17	94.477	S	10.73	2790.69
12	2001	-	2002	2721.39	94.477	S	10.70	2607.93
13	2002	-	2003	1961.12	94.477	S	10.51	1847.85
14	2003	-	2004	2431.34	94.477	S	10.44	2318.14
15	2004	-	2005	2564.02	94.477	S	10.72	2450.55
16	2005	-	2006	1415.81	94.477	S	10.02	1303.04
17	2006	-	2007	2090.44	94.477	S	10.42	1977.26
18	2007	-	2008	2655.70	94.477	S	10.16	2542.78
19	2008	-	2009	1791.01	94.477	S	10.11	1678.15
20	2009	-	2010	1463.83	94.477	S	10.52	1350.56
21	2010	-	2011	2737.33	94.477	S	10.28	2624.30
22	2011	-	2012	2074.62	94.477	S	10.43	1961.43

12.0 FIELD CHANNELS / WATER COURSES

The provision for field channels / water courses serving upto 5 to 8 ha block of the block of about 40 ha may be indicated on the basis of rates per ha of CCA. The rates per ha shall be arrived at on the basis of a sub-estimate of a representative sample area surveyed to cover about 10% of CCA.

13.0 DRAINAGE

The provision for drainage in the command area may also be indicated on the basis of rates per ha of CCA. The rates per ha shall be arrived at on the basis of a sub-estimate of a representative sample area surveyed to cover about 10% of CCA.

14.0 WATER MANAGEMENT PRACTICES

The following points and additional points, if any as relevant to the project shall be discussed in detail.

- (i) Proposal of conjunctive use of surface and ground water.
- (ii) Scope of introduction of modern technology like drip, sprinkler irrigation.
- (iii) Participatory Irrigation Management (PIM) including formation of Water Users Association (WUAs).
- (iv) Facilities for training the operation and maintenance, personnel at different levels of management & farmers.
- (v) The practices being followed for checking evapotranspiration in the command may be elaborated. The possibility of using plasticulture in the command could be explored.
- (vi) Any other relevant points.

Working Tables (1990-91 to 2011-12)

Year	1990	-	1991															
						Level		Capacity										
				FRL		30	m	55.961	MCM									
				MDDL		22.5	m	5.589	MCM									
Year	Mon th	Starting			Inflow	Total water available (5+6)- storage at (5.589 MCM)	Drinking Water Demand (MCM)	Drinkin g demand Met (MCM)	36 S/F	Irrigatio n Deman d (MCM)	Irrigatio n Demand met (MCM)	36 S/F	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capaci ty											Capacity	Area	Level	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1990	Jun	28.00	7.816	37.545	14.77	46.73	0.23	0.23	S	0.546	0.546	S	35	0.274	51.2652	9.295	29.500	0
1990		29.50	9.295	51.265	186.62	232.30	0.23	0.23	S	0.984	0.984	S	35	0.325	55.9609	10.000	30.000	180.3853
1990		30.00	10.000	55.961	190.08	240.45	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	187.34
1990	Jul	30.00	10.000	55.961	180.23	230.60	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	176.458
1990		30.00	10.000	55.961	156.47	206.84	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	153.423
1990		30.00	10.000	55.961	148.74	199.11	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	145.585
1990	Aug	30.00	10.000	55.961	352.68	403.05	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	351.053
1990		30.00	10.000	55.961	469.93	520.30	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	468.303
1990		30.00	10.000	55.961	141.99	192.36	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	140.334
1990	Sep	30.00	10.000	55.961	64.54	114.91	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	62.105
1990		30.00	10.000	55.961	130.55	180.92	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	128.195
1990		30.00	10.000	55.961	153.1	203.47	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	150.826

1990	Oct	30.00	10.000	55.961	175.05	225.42	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	172.685
1990		30.00	10.000	55.961	121.91	172.28	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	119.545
1990		30.00	10.000	55.961	66.43	116.80	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	65.04
1990	Nov	30.00	10.000	55.961	65.92	116.29	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	61.766
1990		30.00	10.000	55.961	56.25	106.62	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	55.207
1990		30.00	10.000	55.961	31.1	81.47	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	29.94
1990	Dec	30.00	10.000	55.961	20.48	70.85	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	19.438
1990		30.00	10.000	55.961	21.51	71.88	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	20.329
1990		30.00	10.000	55.961	47.52	97.89	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	46.056
1991	Jan	30.00	10.000	55.961	14.69	65.06	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	12.988
1991		30.00	10.000	55.961	10.71	61.08	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	7.484
1991		30.00	10.000	55.961	8.65	59.02	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	5.4
1991	Feb	30.00	10.000	55.961	11.92	62.29	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	9.766
1991		30.00	10.000	55.961	8.29	58.66	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	5.09
1991		30.00	10.000	55.961	3.73	54.10	0.23	0.23	S	10.910	10.910	S	25	0.250	48.3009	8.859	29.100	0
1991	Mar	29.10	8.859	48.301	4.84	47.55	0.23	0.23	S	8.486	8.486	S	30	0.266	44.1589	8.480	28.700	0
1991		28.70	8.480	44.159	7.43	46.00	0.23	0.23	S	5.292	5.292	S	30	0.254	45.8129	8.660	28.900	0
1991		28.90	8.660	45.813	8.74	48.96	0.23	0.23	S	6.108	6.108	S	30	0.260	47.9549	8.859	29.100	0
1991	Apr	29.10	8.859	47.955	71.8	114.17	0.23	0.23	S	3.593	3.593	S	50	0.443	55.9609	10.000	30.000	59.528
1991		30.00	10.000	55.961	54	104.37	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	48.671
1991		30.00	10.000	55.961	42.94	93.31	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	37.593
1991	May	30.00	10.000	55.961	367.29	417.66	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	364.293
1991		30.00	10.000	55.961	318.38	368.75	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	315.359
1991		30.00	10.000	55.961	174.97	225.34	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	172.34
					3904.25		8.28	8.28	S	94.477	94.477	S	1083	10.552				3772.525

Year	1991 - 1992							Level		Capacity								
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water availabl e	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigati on Deman d (MCM)	Irrigation Demand met (MCM)	36	Evaporatio n (mm)	Evaporatio n (MCM)	Ending			Spills
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level	
1991	Jun	30.00	10.000	55.961	172.8	223.17	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	171.674
1991		30.00	10.000	55.961	160.27	210.64	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	158.706
1991		30.00	10.000	55.961	113.62	163.99	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	110.88
1991	Jul	30.00	10.000	55.961	61.52	111.89	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	57.748
1991		30.00	10.000	55.961	48.64	99.01	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	45.593
1991		30.00	10.000	55.961	46.95	97.32	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	43.795
1991	Aug	30.00	10.000	55.961	49.25	99.62	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	47.623
1991		30.00	10.000	55.961	325.73	376.10	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	324.103
1991		30.00	10.000	55.961	161.85	212.22	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	160.194
1991	Sep	30.00	10.000	55.961	89.25	139.62	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	86.815
1991		30.00	10.000	55.961	211.94	262.31	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	209.585
1991		30.00	10.000	55.961	170.12	220.49	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	167.846
1991	Oct	30.00	10.000	55.961	98.58	148.95	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	96.215
1991		30.00	10.000	55.961	87.26	137.63	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	84.895
1991		30.00	10.000	55.961	40.2	90.57	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	38.81
1991	Nov	30.00	10.000	55.961	135.65	186.02	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	131.496
1991		30.00	10.000	55.961	28.6	78.97	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	27.557
1991		30.00	10.000	55.961	16.85	67.22	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	15.69
1991	Dec	30.00	10.000	55.961	10.89	61.26	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	9.848
1991		30.00	10.000	55.961	9.07	59.44	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	7.889
1991		30.00	10.000	55.961	20.72	71.09	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	19.256
1992	Jan	30.00	10.000	55.961	15.12	65.49	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	13.418
1992		30.00	10.000	55.961	8.9	59.27	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	5.674
1992		30.00	10.000	55.961	9.6	59.97	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	6.35
1992	Feb	30.00	10.000	55.961	12.27	62.64	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	10.116
1992		30.00	10.000	55.961	5.96	56.33	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	2.76
1992		30.00	10.000	55.961	5.25	55.62	0.23	0.23	S	10.910	10.910	S	25	0.250	49.8209	9.077	29.300	0

1992	Mar	29.30	9.077	49.821	5.7	49.93	0.23	0.23	S	8.486	8.486	S	30	0.272	46.5329	8.660	28.900	0
1992		28.90	8.660	46.533	4.58	45.52	0.23	0.23	S	5.292	5.292	S	30	0.260	45.3309	8.570	28.800	0
1992		28.80	8.570	45.331	5.8	45.54	0.23	0.23	S	6.108	6.108	S	30	0.257	44.5359	8.480	28.700	0
1992	Apr	28.70	8.480	44.536	8.04	46.99	0.23	0.23	S	3.593	3.593	S	50	0.424	48.3289	8.859	29.100	0
1992		29.10	8.859	48.329	9.16	51.90	0.23	0.23	S	4.599	4.599	S	50	0.443	52.2169	9.436	29.600	0
1992		29.60	9.436	52.217	13.39	60.02	0.23	0.23	S	4.617	4.617	S	50	0.472	55.9609	10.000	30.000	4.327
1992	May	30.00	10.000	55.961	16.33	66.70	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	13.333
1992		30.00	10.000	55.961	38.71	89.08	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	35.689
1992		30.00	10.000	55.961	24.71	75.08	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	22.08
					2243.28		8.28	8.28	S	94.477	94.477	S	1083	10.558				2129.965

Year	1992 - 1993						Level		Capacity									
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water availabl e	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evaporati on (mm)	Evaporati on (MCM)	Ending			Spills
		Level	Area	Capac ity					S/F			S/F			Capacity	Area	Level	
1992	Jun	30.00	10.000	55.961	22.29	72.66	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	21.164
1992		30.00	10.000	55.961	26.09	76.46	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	24.526
1992		30.00	10.000	55.961	88.82	139.19	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	86.08
1992	Jul	30.00	10.000	55.961	85.71	136.08	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	81.938
1992		30.00	10.000	55.961	90.2	140.57	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	87.153
1992		30.00	10.000	55.961	50.75	101.12	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	47.595
1992	Aug	30.00	10.000	55.961	132.11	182.48	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	130.483
1992		30.00	10.000	55.961	110.33	160.70	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	108.703
1992		30.00	10.000	55.961	162.33	212.70	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	160.674

1992	Sep	30.00	10.000	55.961	289.18	339.55	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	286.745
1992		30.00	10.000	55.961	252.46	302.83	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	250.105
1992		30.00	10.000	55.961	151.98	202.35	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	149.706
1992	Oct	30.00	10.000	55.961	122.08	172.45	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	119.715
1992		30.00	10.000	55.961	193.02	243.39	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	190.655
1992		30.00	10.000	55.961	67.38	117.75	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	65.99
1992	Nov	30.00	10.000	55.961	25.75	76.12	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	21.596
1992		30.00	10.000	55.961	17.45	67.82	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	16.407
1992		30.00	10.000	55.961	12.01	62.38	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	10.85
1992	Dec	30.00	10.000	55.961	10.97	61.34	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	9.928
1992		30.00	10.000	55.961	9.68	60.05	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	8.499
1992		30.00	10.000	55.961	8.65	59.02	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	7.186
1993	Jan	30.00	10.000	55.961	6.57	56.94	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.868
1993		30.00	10.000	55.961	6.83	57.20	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	3.604
1993		30.00	10.000	55.961	5.89	56.26	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.64
1993	Feb	30.00	10.000	55.961	4.41	54.78	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	2.256
1993		30.00	10.000	55.961	8.21	58.58	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	5.01
1993		30.00	10.000	55.961	7.26	57.63	0.23	0.23	S	10.910	10.910	S	25	0.250	51.8309	9.295	29.500	0
1993	Mar	29.50	9.295	51.831	6.13	52.37	0.23	0.23	S	8.486	8.486	S	30	0.279	48.9659	8.968	29.200	0
1993		29.20	8.968	48.966	3.97	47.35	0.23	0.23	S	5.292	5.292	S	30	0.269	47.1449	8.750	29.000	0
1993		29.00	8.750	47.145	4.37	45.93	0.23	0.23	S	6.108	6.108	S	30	0.263	44.9139	8.480	28.700	0
1993	Apr	28.70	8.480	44.914	3.72	43.05	0.23	0.23	S	3.593	3.593	S	50	0.424	44.3869	8.480	28.700	0
1993		28.70	8.480	44.387	6.91	45.71	0.23	0.23	S	4.599	4.599	S	50	0.424	46.0439	8.660	28.900	0
1993		28.90	8.660	46.044	17.02	57.48	0.23	0.23	S	4.617	4.617	S	50	0.433	55.9609	10.000	30.000	1.823
1993	May	30.00	10.000	55.961	131.76	182.13	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	128.763
1993		30.00	10.000	55.961	89.42	139.79	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	86.399
1993		30.00	10.000	55.961	63.39	113.76	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	60.76
					2295.10		8.28	8.28	S	94.477	94.477	S	1083	10.522				2181.82
																		1

Year	1993	-	1994					Level		Capacity								
				FRL		30		m	55.961		MCM							
				MDDL		22.5		m	5.589		MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evaporat ion (mm)	Evapor ation (MCM)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
1993	Jun	30.00	10.000	55.961	278.99	329.36	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	277.864
1993		30.00	10.000	55.961	319.94	370.31	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	318.376
1993		30.00	10.000	55.961	492.48	542.85	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	489.74
1993	Jul	30.00	10.000	55.961	158.54	208.91	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	154.768
1993		30.00	10.000	55.961	184.64	235.01	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	181.593
1993		30.00	10.000	55.961	568.91	619.28	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	565.755
1993	Aug	30.00	10.000	55.961	189.65	240.02	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	188.023
1993		30.00	10.000	55.961	232.42	282.79	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	230.793
1993		30.00	10.000	55.961	126.12	176.49	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	124.464
1993	Sep	30.00	10.000	55.961	187.49	237.86	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	185.055
1993		30.00	10.000	55.961	124.76	175.13	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	122.405
1993		30.00	10.000	55.961	148.18	198.55	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	145.906
1993	Oct	30.00	10.000	55.961	82.77	133.14	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	80.405
1993		30.00	10.000	55.961	62.21	112.58	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	59.845
1993		30.00	10.000	55.961	41.72	92.09	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	40.33
1993	Nov	30.00	10.000	55.961	22.72	73.09	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	18.566
1993		30.00	10.000	55.961	15.64	66.01	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	14.597
1993		30.00	10.000	55.961	11.23	61.60	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	10.07
1993	Dec	30.00	10.000	55.961	9.85	60.22	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	8.808
1993		30.00	10.000	55.961	7.69	58.06	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	6.509
1993		30.00	10.000	55.961	7.03	57.40	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	5.566

1994	Jan	30.00	10.000	55.961	6.05	56.42	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.348
1994		30.00	10.000	55.961	5.79	56.16	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.564
1994		30.00	10.000	55.961	5.32	55.69	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.07
1994	Feb	30.00	10.000	55.961	4.49	54.86	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	2.336
1994		30.00	10.000	55.961	3.72	54.09	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.52
1994		30.00	10.000	55.961	3.73	54.10	0.23	0.23	S	10.910	10.910	S	25	0.250	48.3009	8.859	29.100	0
1994	Mar	29.10	8.859	48.301	3.02	45.73	0.23	0.23	S	8.486	8.486	S	30	0.266	42.3389	8.219	28.400	0
1994		28.40	8.219	42.339	2.94	39.69	0.23	0.23	S	5.292	5.292	S	30	0.247	39.5099	7.976	28.100	0
1994		28.10	7.976	39.510	9.03	42.95	0.23	0.23	S	6.108	6.108	S	30	0.239	41.9629	8.219	28.400	0
1994	Apr	28.40	8.219	41.963	36.46	72.83	0.23	0.23	S	3.593	3.593	S	50	0.411	55.9609	10.000	30.000	18.228
1994		30.00	10.000	55.961	8.99	59.36	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	3.661
1994		30.00	10.000	55.961	12.44	62.81	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	7.093
1994	May	30.00	10.000	55.961	8.81	59.18	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	5.813
1994		30.00	10.000	55.961	9.07	59.44	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	6.049
1994		30.00	10.000	55.961	8.46	58.83	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	5.83
					3401.30		8.28	8.28	S	94.477	94.477	S	1083	10.593				3287.95

Year	1994 - 1995					Level		Capacity										
					FRL	30	m	55.961	MCM									
					MDDL	22.5	m	5.589	MCM									
Year	Month	Starting			Inflow	total water availabl e	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evapor ation (mm)	Evapor ation (MCM)	Ending			Spills
		Level	Area	Capacity					S/ F			S/ F			Capacity	Area	Level	
1994	Jun	30.00	10.000	55.961	36.12	86.49	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	34.994
1994		30.00	10.000	55.961	34.82	85.19	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	33.256
1994		30.00	10.000	55.961	110.51	160.88	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	107.77
1994	Jul	30.00	10.000	55.961	80.18	130.55	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	76.408
1994		30.00	10.000	55.961	100.83	151.20	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	97.783
1994		30.00	10.000	55.961	161.47	211.84	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	158.315

1994	Aug	30.00	10.000	55.961	183.34	233.71	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	181.713
1994		30.00	10.000	55.961	106.62	156.99	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	104.993
1994		30.00	10.000	55.961	119.09	169.46	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	117.434
1994	Sep	30.00	10.000	55.961	57.28	107.65	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	54.845
1994		30.00	10.000	55.961	246.15	296.52	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	243.795
1994		30.00	10.000	55.961	66.61	116.98	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	64.336
1994	Oct	30.00	10.000	55.961	44.93	95.30	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	42.565
1994		30.00	10.000	55.961	34.65	85.02	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	32.285
1994		30.00	10.000	55.961	20.53	70.90	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	19.14
1994	Nov	30.00	10.000	55.961	13.22	63.59	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	9.066
1994		30.00	10.000	55.961	10.45	60.82	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	9.407
1994		30.00	10.000	55.961	9.68	60.05	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	8.52
1994	Dec	30.00	10.000	55.961	7.95	58.32	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	6.908
1994		30.00	10.000	55.961	6.57	56.94	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	5.389
1994		30.00	10.000	55.961	5.32	55.69	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	3.856
1995	Jan	30.00	10.000	55.961	4.32	54.69	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	2.618
1995		30.00	10.000	55.961	4.32	54.69	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	1.094
1995		30.00	10.000	55.961	4.37	54.74	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	1.12
1995	Feb	30.00	10.000	55.961	3.37	53.74	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.216
1995		30.00	10.000	55.961	3.02	53.39	0.23	0.23	S	2.720	2.720	S	25	0.250	55.7809	9.859	29.900	0
1995		29.90	9.859	55.781	3.59	53.78	0.23	0.23	S	10.910	10.910	S	25	0.246	47.9849	8.859	29.100	0
1995	Mar	29.10	8.859	47.985	4.06	46.46	0.23	0.23	S	8.486	8.486	S	30	0.266	43.0629	8.300	28.500	0
1995		28.50	8.300	43.063	2.51	39.98	0.23	0.23	S	5.292	5.292	S	30	0.249	39.8019	7.976	28.100	0
1995		28.10	7.976	39.802	3.99	38.20	0.23	0.23	S	6.108	6.108	S	30	0.239	37.2149	7.737	27.800	0
1995	Apr	27.80	7.737	37.215	10.02	41.65	0.23	0.23	S	3.593	3.593	S	50	0.387	43.0249	8.300	28.500	0
1995		28.50	8.300	43.025	7	44.44	0.23	0.23	S	4.599	4.599	S	50	0.415	44.7809	8.480	28.700	0
1995		28.70	8.480	44.781	3.37	42.56	0.23	0.23	S	4.617	4.617	S	50	0.424	42.8799	8.300	28.500	0
1995	May	28.50	8.300	42.880	4.75	42.04	0.23	0.23	S	2.367	2.367	S	40	0.332	44.7009	8.480	28.700	0
1995		28.70	8.480	44.701	63.94	103.05	0.23	0.23	S	2.391	2.391	S	40	0.339	55.9609	10.000	30.000	49.72
1995		30.00	10.000	55.961	14.73	65.10	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	12.1
					1593.68		8.28	8.28	S	94.477	94.477	S	1083	10.277				1480.64
																		6

Year	1995	-	1996															
				Level		Capacity												
				FRL	30	m	55.961	MCM										
				MDDL	22.5	m	5.589	MCM										
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 F/S	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 F/S	Evaporation (mm)	Evaporation (MC M)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
1995	Jun	30.00	10.000	55.961	23.24	73.61	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	22.114
1995		30.00	10.000	55.961	117.24	167.61	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	115.676
1995		30.00	10.000	55.961	150.16	200.53	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	147.42
1995	Jul	30.00	10.000	55.961	60.31	110.68	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	56.538
1995		30.00	10.000	55.961	63.24	113.61	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	60.193
1995		30.00	10.000	55.961	66.72	117.09	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	63.565
1995	Aug	30.00	10.000	55.961	103.77	154.14	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	102.143
1995		30.00	10.000	55.961	180.32	230.69	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	178.693
1995		30.00	10.000	55.961	231.8	282.17	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	230.144
1995	Sep	30.00	10.000	55.961	140.83	191.20	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	138.395
1995		30.00	10.000	55.961	113.01	163.38	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	110.655
1995		30.00	10.000	55.961	92.79	143.16	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	90.516
1995	Oct	30.00	10.000	55.961	120.61	170.98	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	118.245
1995		30.00	10.000	55.961	86.57	136.94	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	84.205
1995		30.00	10.000	55.961	34.4	84.77	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	33.01
1995	Nov	30.00	10.000	55.961	67.91	118.28	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	63.756
1995		30.00	10.000	55.961	37.76	88.13	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	36.717
1995		30.00	10.000	55.961	83.64	134.01	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	82.48
1995	Dec	30.00	10.000	55.961	30.59	80.96	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	29.548
1995		30.00	10.000	55.961	16.59	66.96	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	15.409
1995		30.00	10.000	55.961	13.21	63.58	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	11.746
1996	Jan	30.00	10.000	55.961	9.42	59.79	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	7.718
1996		30.00	10.000	55.961	7.78	58.15	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	4.554
1996		30.00	10.000	55.961	8.08	58.45	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	4.83

1996	Feb	30.00	10.000	55.961	6.57	56.94	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	4.416
1996		30.00	10.000	55.961	5.01	55.38	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	1.81
1996		30.00	10.000	55.961	8.23	58.60	0.23	0.23	S	10.910	10.910	S	25	0.250	52.8009	9.436	29.600	0
1996	Mar	29.60	9.436	52.801	4.58	51.79	0.23	0.23	S	8.486	8.486	S	30	0.283	48.3819	8.859	29.100	0
1996		29.10	8.859	48.382	3.89	46.68	0.23	0.23	S	5.292	5.292	S	30	0.266	46.4839	8.660	28.900	0
1996		28.90	8.660	46.484	93.61	134.51	0.23	0.23	S	6.108	6.108	S	30	0.260	55.9609	10.000	30.000	77.535
1996	Apr	30.00	10.000	55.961	60.74	111.11	0.23	0.23	S	3.593	3.593	S	50	0.500	55.9609	10.000	30.000	56.417
1996		30.00	10.000	55.961	9.94	60.31	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	4.611
1996		30.00	10.000	55.961	16.07	66.44	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	10.723
1996	May	30.00	10.000	55.961	10.11	60.48	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	7.113
1996		30.00	10.000	55.961	119.66	170.03	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	116.639
1996		30.00	10.000	55.961	34.78	85.15	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	32.15
					2233.18		8.28	8.28	S	94.477	94.477	S	1083	10.739				2119.684

Year	1996 - 1997							Level		Capacity								
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/ F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/ F	Evapor ation (mm)	Evap oratio n (MC M)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
1996	Jun	30.00	10.000	55.961	75.77	126.14	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	74.644
1996		30.00	10.000	55.961	79.32	129.69	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	77.756
1996		30.00	10.000	55.961	52.7	103.07	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	49.96
1996	Jul	30.00	10.000	55.961	120.44	170.81	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	116.668
1996		30.00	10.000	55.961	70.07	120.44	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	67.023
1996		30.00	10.000	55.961	116.42	166.79	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	113.265

1996	Aug	30.00	10.000	55.961	113.1	163.47	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	111.473
1996		30.00	10.000	55.961	196.47	246.84	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	194.843
1996		30.00	10.000	55.961	98.37	148.74	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	96.714
1996	Sep	30.00	10.000	55.961	66.96	117.33	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	64.525
1996		30.00	10.000	55.961	58.32	108.69	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	55.965
1996		30.00	10.000	55.961	181.87	232.24	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	179.596
1996	Oct	30.00	10.000	55.961	129.08	179.45	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	126.715
1996		30.00	10.000	55.961	34.13	84.50	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	31.765
1996		30.00	10.000	55.961	26.61	76.98	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	25.22
1996	Nov	30.00	10.000	55.961	24.8	75.17	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	20.646
1996		30.00	10.000	55.961	13.05	63.42	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	12.007
1996		30.00	10.000	55.961	9.42	59.79	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	8.26
1996	Dec	30.00	10.000	55.961	8.29	58.66	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	7.248
1996		30.00	10.000	55.961	6.83	57.20	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	5.649
1996		30.00	10.000	55.961	6.18	56.55	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	4.716
1997	Jan	30.00	10.000	55.961	4.84	55.21	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	3.138
1997		30.00	10.000	55.961	3.89	54.26	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	0.664
1997		30.00	10.000	55.961	4.37	54.74	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	1.12
1997	Feb	30.00	10.000	55.961	3.72	54.09	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.566
1997		30.00	10.000	55.961	3.28	53.65	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.08
1997		30.00	10.000	55.961	2.63	53.00	0.23	0.23	S	10.910	10.910	S	25	0.250	47.2009	8.750	29.000	0
1997	Mar	29.00	8.750	47.201	2.59	44.20	0.23	0.23	S	8.486	8.486	S	30	0.263	40.8119	8.138	28.300	0
1997		28.30	8.138	40.812	7.08	42.30	0.23	0.23	S	5.292	5.292	S	30	0.244	42.1259	8.219	28.400	0
1997		28.40	8.219	42.126	13.02	49.56	0.23	0.23	S	6.108	6.108	S	30	0.247	48.5609	8.968	29.200	0
1997	Apr	29.20	8.968	48.561	10.45	53.42	0.23	0.23	S	3.593	3.593	S	50	0.448	54.7399	9.718	29.800	0
1997		29.80	9.718	54.740	12.36	61.51	0.23	0.23	S	4.599	4.599	S	50	0.486	55.9609	10.000	30.000	5.824
1997		30.00	10.000	55.961	6.48	56.85	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	1.133
1997	May	30.00	10.000	55.961	5.44	55.81	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	2.443
1997		30.00	10.000	55.961	10.11	60.48	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	7.089
1997		30.00	10.000	55.961	53.7	104.07	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	51.07
					1632.16		8.28	8.28	S	94.477	94.477	S	1083	10.618				1518.78

Year	1997 - 1998							Level		Capacity								
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evap oration (mm)	Evap oratio n (MC M)	Ending			Spills
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level	
1997	Jun	30.00	10.000	55.961	56.59	106.96	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	55.464
1997		30.00	10.000	55.961	23.85	74.22	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	22.286
1997		30.00	10.000	55.961	64.2	114.57	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	61.46
1997	Jul	30.00	10.000	55.961	28.08	78.45	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	24.308
1997		30.00	10.000	55.961	382.23	432.60	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	379.183
1997		30.00	10.000	55.961	259.46	309.83	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	256.305
1997	Aug	30.00	10.000	55.961	70.85	121.22	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	69.223
1997		30.00	10.000	55.961	93.4	143.77	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	91.773
1997		30.00	10.000	55.961	95.42	145.79	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	93.764
1997	Sep	30.00	10.000	55.961	242.7	293.07	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	240.265
1997		30.00	10.000	55.961	100.05	150.42	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	97.695
1997		30.00	10.000	55.961	243.04	293.41	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	240.766
1997	Oct	30.00	10.000	55.961	140.57	190.94	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	138.205
1997		30.00	10.000	55.961	43.2	93.57	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	40.835
1997		30.00	10.000	55.961	19.86	70.23	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	18.47
1997	Nov	30.00	10.000	55.961	13.91	64.28	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	9.756
1997		30.00	10.000	55.961	13.05	63.42	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	12.007
1997		30.00	10.000	55.961	9.42	59.79	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	8.26
1997	Dec	30.00	10.000	55.961	8.04	58.41	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	6.998
1997		30.00	10.000	55.961	12.87	63.24	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	11.689
1997		30.00	10.000	55.961	9.31	59.68	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	7.846
1998	Jan	30.00	10.000	55.961	6.65	57.02	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.948
1998		30.00	10.000	55.961	5.53	55.90	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.304
1998		30.00	10.000	55.961	8.55	58.92	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	5.3

1998	Feb	30.00	10.000	55.961	5.62	55.99	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	3.466
1998		30.00	10.000	55.961	4.92	55.29	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	1.72
1998		30.00	10.000	55.961	4.84	55.21	0.23	0.23	S	10.910	10.910	S	25	0.250	49.4109	9.077	29.300	0
1998	Mar	29.30	9.077	49.411	5.96	49.78	0.23	0.23	S	8.486	8.486	S	30	0.272	46.3829	8.660	28.900	0
1998		28.90	8.660	46.383	4.84	45.63	0.23	0.23	S	5.292	5.292	S	30	0.260	45.4409	8.570	28.800	0
1998		28.80	8.570	45.441	38.68	78.53	0.23	0.23	S	6.108	6.108	S	30	0.257	55.9609	10.000	30.000	21.565
1998	Apr	30.00	10.000	55.961	7.95	58.32	0.23	0.23	S	3.593	3.593	S	50	0.500	55.9609	10.000	30.000	3.627
1998		30.00	10.000	55.961	9.76	60.13	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	4.431
1998		30.00	10.000	55.961	37.67	88.04	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	32.323
1998	May	30.00	10.000	55.961	13.56	63.93	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	10.563
1998		30.00	10.000	55.961	8.55	58.92	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	5.529
1998		30.00	10.000	55.961	176.77	227.14	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	174.14
					2269.95		8.28	8.28	S	94.477	94.477	S	1083	10.719				2156.47

Year	1998 - 1999					Level		Capacity										
						FRL	30	m	55.961	MCM								
						MDDL	22.5	m	5.589	MCM								
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level	
1998	Jun	30.00	10.000	55.961	92.97	143.34	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	91.844
1998		30.00	10.000	55.961	54.95	105.32	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	53.386
1998		30.00	10.000	55.961	72.06	122.43	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	69.32
1998	Jul	30.00	10.000	55.961	145.67	196.04	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	141.898
1998		30.00	10.000	55.961	52.44	102.81	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	49.393
1998		30.00	10.000	55.961	114.43	164.80	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	111.275

1998	Aug	30.00	10.000	55.961	212.63	263.00	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	211.003
1998		30.00	10.000	55.961	152.93	203.30	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	151.303
1998		30.00	10.000	55.961	124.98	175.35	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	123.324
1998	Sep	30.00	10.000	55.961	43.37	93.74	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	40.935
1998		30.00	10.000	55.961	92.79	143.16	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	90.435
1998		30.00	10.000	55.961	83.72	134.09	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	81.446
1998	Oct	30.00	10.000	55.961	41.56	91.93	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	39.195
1998		30.00	10.000	55.961	33.52	83.89	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	31.155
1998		30.00	10.000	55.961	24.43	74.80	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	23.04
1998	Nov	30.00	10.000	55.961	14.6	64.97	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	10.446
1998		30.00	10.000	55.961	8.12	58.49	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	7.077
1998		30.00	10.000	55.961	11.58	61.95	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	10.42
1998	Dec	30.00	10.000	55.961	8.81	59.18	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	7.768
1998		30.00	10.000	55.961	7	57.37	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	5.819
1998		30.00	10.000	55.961	6.56	56.93	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	5.096
1999	Jan	30.00	10.000	55.961	4.75	55.12	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	3.048
1999		30.00	10.000	55.961	4.23	54.60	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	1.004
1999		30.00	10.000	55.961	4.28	54.65	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	1.03
1999	Feb	30.00	10.000	55.961	3.46	53.83	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.306
1999		30.00	10.000	55.961	2.76	53.13	0.23	0.23	S	2.720	2.720	S	25	0.250	55.5209	9.859	29.900	0
1999		29.90	9.859	55.521	1.94	51.87	0.23	0.23	S	10.910	10.910	S	25	0.246	46.0749	8.660	28.900	0
1999	Mar	28.90	8.660	46.075	2.25	42.74	0.23	0.23	S	8.486	8.486	S	30	0.260	39.3489	7.976	28.100	0
1999		28.10	7.976	39.349	2.16	35.92	0.23	0.23	S	5.292	5.292	S	30	0.239	35.7479	7.579	27.600	0
1999		27.60	7.579	35.748	8.27	38.43	0.23	0.23	S	6.108	6.108	S	30	0.227	37.4529	7.737	27.800	0
1999	Apr	27.80	7.737	37.453	3.72	35.58	0.23	0.23	S	3.593	3.593	S	50	0.387	36.9629	7.737	27.800	0
1999		27.80	7.737	36.963	2.68	34.05	0.23	0.23	S	4.599	4.599	S	50	0.387	34.4269	7.420	27.400	0
1999		27.40	7.420	34.427	2.16	31.00	0.23	0.23	S	4.617	4.617	S	50	0.371	31.3689	7.100	27.000	0
1999	May	27.00	7.100	31.369	16.85	42.63	0.23	0.23	S	2.367	2.367	S	40	0.284	45.3379	8.570	28.800	0
1999		28.80	8.570	45.338	21.43	61.18	0.23	0.23	S	2.391	2.391	S	40	0.343	55.9609	10.000	30.000	7.843
1999		30.00	10.000	55.961	82.21	132.58	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	79.58
					1562.27		8.28	8.28	S	94.477	94.477	S	1083	10.124				1449.389

Year	1999 - 2000							Level		Capacity								
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evapor ation (mm)	Evap oratio n (MC M)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
1999	Jun	30.00	10.000	55.961	86.66	137.03	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	85.534
1999		30.00	10.000	55.961	62.21	112.58	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	60.646
1999		30.00	10.000	55.961	85.54	135.91	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	82.8
1999	Jul	30.00	10.000	55.961	72.32	122.69	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	68.548
1999		30.00	10.000	55.961	222.91	273.28	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	219.863
1999		30.00	10.000	55.961	193.41	243.78	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	190.255
1999	Aug	30.00	10.000	55.961	177.55	227.92	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	175.923
1999		30.00	10.000	55.961	144.81	195.18	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	143.183
1999		30.00	10.000	55.961	157.39	207.76	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	155.734
1999	Sep	30.00	10.000	55.961	219.11	269.48	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	216.675
1999		30.00	10.000	55.961	156.12	206.49	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	153.765
1999		30.00	10.000	55.961	165.89	216.26	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	163.616
1999	Oct	30.00	10.000	55.961	151.63	202.00	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	149.265
1999		30.00	10.000	55.961	107.31	157.68	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	104.945
1999		30.00	10.000	55.961	121.18	171.55	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	119.79
1999	Nov	30.00	10.000	55.961	54	104.37	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	49.846
1999		30.00	10.000	55.961	32.75	83.12	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	31.707
1999		30.00	10.000	55.961	21	71.37	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	19.84
1999	Dec	30.00	10.000	55.961	13.13	63.50	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	12.088
1999		30.00	10.000	55.961	13.13	63.50	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	11.949
1999		30.00	10.000	55.961	11.4	61.77	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	9.936
2000	Jan	30.00	10.000	55.961	8.47	58.84	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	6.768
2000		30.00	10.000	55.961	7.08	57.45	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	3.854
2000		30.00	10.000	55.961	7.89	58.26	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	4.64

2000	Feb	30.00	10.000	55.961	8.73	59.10	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	6.576
2000		30.00	10.000	55.961	6.83	57.20	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	3.63
2000		30.00	10.000	55.961	4.35	54.72	0.23	0.23	S	10.910	10.910	S	25	0.250	48.9209	8.968	29.200	0
2000	Mar	29.20	8.968	48.921	22.55	65.88	0.23	0.23	S	8.486	8.486	S	30	0.269	55.9609	10.000	30.000	6.525
2000		30.00	10.000	55.961	29.46	79.83	0.23	0.23	S	5.292	5.292	S	30	0.300	55.9609	10.000	30.000	23.638
2000		30.00	10.000	55.961	8.74	59.11	0.23	0.23	S	6.108	6.108	S	30	0.300	55.9609	10.000	30.000	2.102
2000	Apr	30.00	10.000	55.961	4.49	54.86	0.23	0.23	S	3.593	3.593	S	50	0.500	55.9609	10.000	30.000	0.167
2000		30.00	10.000	55.961	5.62	55.99	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	0.291
2000		30.00	10.000	55.961	53.05	103.42	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	47.703
2000	May	30.00	10.000	55.961	118.2	168.57	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	115.203
2000		30.00	10.000	55.961	21.77	72.14	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	18.749
2000		30.00	10.000	55.961	279.04	329.41	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	276.41
					2855.72		8.28	8.28	S	94.477	94.477	S	1083	10.799				2742.16

Year	2000 - 2001					Level		Capacity										
					FRL	30	m	55.961	MCM									
					MDDL	22.5	m	5.589	MCM									
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evapor ation (mm)	Evap oratio n (MC M)	Ending			Spills
		Level	Are a	Capa city					S/F			S/F			Capacity	Are a	Level	
2000	Jun	30.00	10.000	55.961	130.12	180.49	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	128.994
2000		30.00	10.000	55.961	100.31	150.68	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	98.746
2000		30.00	10.000	55.961	144.03	194.40	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	141.29

2000	Jul	30.00	10.000	55.961	149.47	199.84	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	145.698
2000		30.00	10.000	55.961	113.79	164.16	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	110.743
2000		30.00	10.000	55.961	78.12	128.49	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	74.965
2000	Aug	30.00	10.000	55.961	131.41	181.78	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	129.783
2000		30.00	10.000	55.961	221.01	271.38	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	219.383
2000		30.00	10.000	55.961	415.23	465.60	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	413.574
2000	Sep	30.00	10.000	55.961	445.05	495.42	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	442.615
2000		30.00	10.000	55.961	215.91	266.28	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	213.555
2000		30.00	10.000	55.961	101.95	152.32	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	99.676
2000	Oct	30.00	10.000	55.961	301.8	352.17	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	299.435
2000		30.00	10.000	55.961	55.3	105.67	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	52.935
2000		30.00	10.000	55.961	34.5	84.87	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	33.11
2000	Nov	30.00	10.000	55.961	21.69	72.06	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	17.536
2000		30.00	10.000	55.961	13.31	63.68	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	12.267
2000		30.00	10.000	55.961	12.18	62.55	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	11.02
2000	Dec	30.00	10.000	55.961	11.4	61.77	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	10.358
2000		30.00	10.000	55.961	9.07	59.44	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	7.889
2000		30.00	10.000	55.961	8.84	59.21	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	7.376
2001	Jan	30.00	10.000	55.961	6.83	57.20	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	5.128
2001		30.00	10.000	55.961	10.28	60.65	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	7.054
2001		30.00	10.000	55.961	10.17	60.54	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	6.92
2001	Feb	30.00	10.000	55.961	4.75	55.12	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	2.596
2001		30.00	10.000	55.961	4.15	54.52	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.95
2001		30.00	10.000	55.961	5.6	55.97	0.23	0.23	S	10.910	10.910	S	25	0.250	50.1709	9.077	29.300	0
2001	Mar	29.30	9.077	50.171	9.94	54.52	0.23	0.23	S	8.486	8.486	S	30	0.272	51.1229	9.186	29.400	0
2001		29.40	9.186	51.123	5.79	51.32	0.23	0.23	S	5.292	5.292	S	30	0.276	51.1149	9.186	29.400	0
2001		29.40	9.186	51.115	7.98	53.51	0.23	0.23	S	6.108	6.108	S	30	0.276	52.4809	9.436	29.600	0
2001	Apr	29.60	9.436	52.481	7.86	54.75	0.23	0.23	S	3.593	3.593	S	50	0.472	55.9609	10.000	30.000	0.085
2001		30.00	10.000	55.961	8.55	58.92	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	3.221
2001		30.00	10.000	55.961	7.17	57.54	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	1.823
2001	May	30.00	10.000	55.961	19.96	70.33	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	16.963
2001		30.00	10.000	55.961	59.36	109.73	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	56.339
2001		30.00	10.000	55.961	21.29	71.66	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	18.66
					2904.17		8.28	8.28	S	94.477	94.477	S	1083	10.72 6				2790.68

Year	2001	-	2002					Level		Capacity								
				FRL		30	m	55.961		MCM								
				MDDL		22.5	m	5.589		MCM								
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evaporation (mm)	Evaporation (MC M)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
2001	Jun	30.00	10.000	55.961	161.57	211.94	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	160.444
2001		30.00	10.000	55.961	153.79	204.16	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	152.226
2001		30.00	10.000	55.961	151.72	202.09	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	148.98
2001	Jul	30.00	10.000	55.961	160.19	210.56	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	156.418
2001		30.00	10.000	55.961	202.61	252.98	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	199.563
2001		30.00	10.000	55.961	120.51	170.88	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	117.355
2001	Aug	30.00	10.000	55.961	87.35	137.72	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	85.723
2001		30.00	10.000	55.961	109.64	160.01	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	108.013
2001		30.00	10.000	55.961	155.96	206.33	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	154.304
2001	Sep	30.00	10.000	55.961	100.4	150.77	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	97.965
2001		30.00	10.000	55.961	172.63	223.00	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	170.275
2001		30.00	10.000	55.961	147.92	198.29	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	145.646
2001	Oct	30.00	10.000	55.961	238.12	288.49	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	235.755
2001		30.00	10.000	55.961	166.06	216.43	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	163.695
2001		30.00	10.000	55.961	112.72	163.09	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	111.33
2001	Nov	30.00	10.000	55.961	86.57	136.94	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	82.416
2001		30.00	10.000	55.961	79.83	130.20	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	78.787
2001		30.00	10.000	55.961	26.18	76.55	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	25.02
2001	Dec	30.00	10.000	55.961	18.58	68.95	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	17.538
2001		30.00	10.000	55.961	14.08	64.45	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	12.899
2001		30.00	10.000	55.961	12.26	62.63	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	10.796

2002	Jan	30.00	10.000	55.961	8.81	59.18	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	7.108
2002		30.00	10.000	55.961	6.22	56.59	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.994
2002		30.00	10.000	55.961	6.46	56.83	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	3.21
2002	Feb	30.00	10.000	55.961	5.27	55.64	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	3.116
2002		30.00	10.000	55.961	4.67	55.04	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	1.47
2002		30.00	10.000	55.961	4.15	54.52	0.23	0.23	S	10.910	10.910	S	25	0.250	48.7209	8.968	29.200	0
2002	Mar	29.20	8.968	48.721	4.06	47.19	0.23	0.23	S	8.486	8.486	S	30	0.269	43.7959	8.390	28.600	0
2002		28.60	8.390	43.796	7	45.21	0.23	0.23	S	5.292	5.292	S	30	0.252	45.0219	8.570	28.800	0
2002		28.80	8.570	45.022	16.63	56.06	0.23	0.23	S	6.108	6.108	S	30	0.257	55.0569	9.859	29.900	0
2002	Apr	29.90	9.859	55.057	6.65	56.12	0.23	0.23	S	3.593	3.593	S	50	0.493	55.9609	10.000	30.000	1.43
2002		30.00	10.000	55.961	6.57	56.94	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	1.241
2002		30.00	10.000	55.961	6.91	57.28	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	1.563
2002	May	30.00	10.000	55.961	40.18	90.55	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	37.183
2002		30.00	10.000	55.961	45.27	95.64	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	42.249
2002		30.00	10.000	55.961	73.85	124.22	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	71.22
					2721.39		8.28	8.28	S	94.477	94.477	S	1083	10.701				2607.93

Year	2002 - 2003							Level		Capacity									
								FRL	30	m	55.961	MCM							
								MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evap oratio n (mm)	Evapor ation (MCM)	Ending			Spills	
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level		
2002	Jun	30.00	10.000	55.961	60.31	110.68	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	59.184	
2002		30.00	10.000	55.961	74.39	124.76	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	72.826	
2002		30.00	10.000	55.961	96.08	146.45	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	93.34	

2002	Jul	30.00	10.000	55.961	60.05	110.42	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	56.278
2002		30.00	10.000	55.961	143.94	194.31	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	140.893
2002		30.00	10.000	55.961	166.32	216.69	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	163.165
2002	Aug	30.00	10.000	55.961	325.64	376.01	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	324.013
2002		30.00	10.000	55.961	249.09	299.46	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	247.463
2002		30.00	10.000	55.961	143.04	193.41	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	141.384
2002	Sep	30.00	10.000	55.961	102.3	152.67	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	99.865
2002		30.00	10.000	55.961	47.95	98.32	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	45.595
2002		30.00	10.000	55.961	58.84	109.21	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	56.566
2002	Oct	30.00	10.000	55.961	39.92	90.29	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	37.555
2002		30.00	10.000	55.961	30.5	80.87	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	28.135
2002		30.00	10.000	55.961	84.59	134.96	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	83.2
2002	Nov	30.00	10.000	55.961	31.02	81.39	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	26.866
2002		30.00	10.000	55.961	20.74	71.11	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	19.697
2002		30.00	10.000	55.961	12.44	62.81	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	11.28
2002	Dec	30.00	10.000	55.961	11.4	61.77	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	10.358
2002		30.00	10.000	55.961	8.99	59.36	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	7.809
2002		30.00	10.000	55.961	8.93	59.30	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	7.466
2003	Jan	30.00	10.000	55.961	7.17	57.54	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	5.468
2003		30.00	10.000	55.961	6.57	56.94	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	3.344
2003		30.00	10.000	55.961	5.7	56.07	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.45
2003	Feb	30.00	10.000	55.961	4.23	54.60	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	2.076
2003		30.00	10.000	55.961	4.15	54.52	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.95
2003		30.00	10.000	55.961	2.97	53.34	0.23	0.23	S	10.910	10.910	S	25	0.250	47.5409	8.859	29.100	0
2003	Mar	29.10	8.859	47.541	3.46	45.41	0.23	0.23	S	8.486	8.486	S	30	0.266	42.0189	8.219	28.400	0
2003		28.40	8.219	42.019	4.41	40.84	0.23	0.23	S	5.292	5.292	S	30	0.247	40.6599	8.057	28.200	0
2003		28.20	8.057	40.660	5.04	40.11	0.23	0.23	S	6.108	6.108	S	30	0.242	39.1199	7.895	28.000	0
2003	Apr	28.00	7.895	39.120	10.02	43.55	0.23	0.23	S	3.593	3.593	S	50	0.395	44.9219	8.570	28.800	0
2003		28.80	8.570	44.922	26.18	65.51	0.23	0.23	S	4.599	4.599	S	50	0.429	55.9609	10.000	30.000	9.883
2003		30.00	10.000	55.961	14.69	65.06	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	9.343
2003	May	30.00	10.000	55.961	40.95	91.32	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	37.953
2003		30.00	10.000	55.961	15.55	65.92	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	12.529
2003		30.00	10.000	55.961	33.55	83.92	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	30.92
					1961.12		8.28	8.28	S	94.477	94.477	S	1083	10.509				1847.85

Year	2003	-	2004					Level		Capacity								
				FRL		30	m	55.961		MCM								
				MDDL		22.5	m	5.589		MCM								
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
2003	Jun	30.00	10.000	55.961	112.15	162.52	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	111.024
2003		30.00	10.000	55.961	235.53	285.90	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	233.966
2003		30.00	10.000	55.961	138.34	188.71	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	135.6
2003	Jul	30.00	10.000	55.961	125.8	176.17	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	122.028
2003		30.00	10.000	55.961	167.62	217.99	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	164.573
2003		30.00	10.000	55.961	105.97	156.34	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	102.815
2003	Aug	30.00	10.000	55.961	105.24	155.61	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	103.613
2003		30.00	10.000	55.961	77.33	127.70	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	75.703
2003		30.00	10.000	55.961	250.15	300.52	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	248.494
2003	Sep	30.00	10.000	55.961	80.27	130.64	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	77.835
2003		30.00	10.000	55.961	163.73	214.10	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	161.375
2003		30.00	10.000	55.961	147.4	197.77	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	145.126
2003	Oct	30.00	10.000	55.961	81.56	131.93	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	79.195
2003		30.00	10.000	55.961	96.16	146.53	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	93.795
2003		30.00	10.000	55.961	44.48	94.85	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	43.09
2003	Nov	30.00	10.000	55.961	21.51	71.88	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	17.356
2003		30.00	10.000	55.961	19.09	69.46	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	18.047
2003		30.00	10.000	55.961	14.52	64.89	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	13.36
2003	Dec	30.00	10.000	55.961	8.29	58.66	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	7.248
2003		30.00	10.000	55.961	8.29	58.66	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	7.109
2003		30.00	10.000	55.961	11.69	62.06	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	10.226

2004	Jan	30.00	10.000	55.961	7.17	57.54	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	5.468
2004		30.00	10.000	55.961	5.36	55.73	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.134
2004		30.00	10.000	55.961	5.04	55.41	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	1.79
2004	Feb	30.00	10.000	55.961	3.89	54.26	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.736
2004		30.00	10.000	55.961	3.28	53.65	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.08
2004		30.00	10.000	55.961	2.35	52.72	0.23	0.23	S	10.910	10.910	S	25	0.250	46.9209	8.750	29.000	0
2004	Mar	29.00	8.750	46.921	2.68	44.01	0.23	0.23	S	8.486	8.486	S	30	0.263	40.6219	8.057	28.200	0
2004		28.20	8.057	40.622	2.94	37.97	0.23	0.23	S	5.292	5.292	S	30	0.242	37.7979	7.816	27.900	0
2004		27.90	7.816	37.798	3.14	35.35	0.23	0.23	S	6.108	6.108	S	30	0.234	34.3659	7.420	27.400	0
2004	Apr	27.40	7.420	34.366	8.99	37.77	0.23	0.23	S	3.593	3.593	S	50	0.371	39.1619	7.976	28.100	0
2004		28.10	7.976	39.162	152.84	186.41	0.23	0.23	S	4.599	4.599	S	50	0.399	55.9609	10.000	30.000	130.813
2004		30.00	10.000	55.961	57.37	107.74	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	52.023
2004	May	30.00	10.000	55.961	15.38	65.75	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	12.383
2004		30.00	10.000	55.961	17.11	67.48	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	14.089
2004		30.00	10.000	55.961	128.68	179.05	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	126.05
					2431.34		8.28	8.28	S	94.477	94.477	S	1083	10.439				2318.14

Year	2004 - 2005								Level		Capacity							
					FRL		30 m		55.961 MCM									
					MDDL		22.5 m		5.589 MCM									
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evap oratio n (mm)	Evapor ation (MCM)	Ending			Spills
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level	
2004	Jun	30.00	10.000	55.961	28.51	78.88	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	27.384
2004		30.00	10.000	55.961	70.5	120.87	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	68.936
2004		30.00	10.000	55.961	248.4	298.77	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	245.66

2004	Jul	30.00	10.000	55.961	112.41	162.78	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	108.638
2004		30.00	10.000	55.961	319.25	369.62	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	316.203
2004		30.00	10.000	55.961	353.74	404.11	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	350.585
2004	Aug	30.00	10.000	55.961	147.48	197.85	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	145.853
2004		30.00	10.000	55.961	153.88	204.25	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	152.253
2004		30.00	10.000	55.961	169.27	219.64	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	167.614
2004	Sep	30.00	10.000	55.961	139.88	190.25	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	137.445
2004		30.00	10.000	55.961	117.33	167.70	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	114.975
2004		30.00	10.000	55.961	161.22	211.59	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	158.946
2004	Oct	30.00	10.000	55.961	71.02	121.39	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	68.655
2004		30.00	10.000	55.961	95.39	145.76	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	93.025
2004		30.00	10.000	55.961	50.66	101.03	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	49.27
2004	Nov	30.00	10.000	55.961	23.16	73.53	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	19.006
2004		30.00	10.000	55.961	17.8	68.17	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	16.757
2004		30.00	10.000	55.961	14.17	64.54	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	13.01
2004	Dec	30.00	10.000	55.961	10.02	60.39	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	8.978
2004		30.00	10.000	55.961	8.38	58.75	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	7.199
2004		30.00	10.000	55.961	7.7	58.07	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	6.236
2005	Jan	30.00	10.000	55.961	6.48	56.85	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.778
2005		30.00	10.000	55.961	5.27	55.64	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.044
2005		30.00	10.000	55.961	5.32	55.69	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.07
2005	Feb	30.00	10.000	55.961	4.15	54.52	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.996
2005		30.00	10.000	55.961	6.22	56.59	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	3.02
2005		30.00	10.000	55.961	3.25	53.62	0.23	0.23	S	10.910	10.910	S	25	0.250	47.8209	8.859	29.100	0
2005	Mar	29.10	8.859	47.821	7.26	49.49	0.23	0.23	S	8.486	8.486	S	30	0.266	46.0989	8.660	28.900	0
2005		28.90	8.660	46.099	5.53	46.04	0.23	0.23	S	5.292	5.292	S	30	0.260	45.8469	8.660	28.900	0
2005		28.90	8.660	45.847	17.11	57.37	0.23	0.23	S	6.108	6.108	S	30	0.260	55.9609	10.000	30.000	0.398
2005	Apr	30.00	10.000	55.961	5.62	55.99	0.23	0.23	S	3.593	3.593	S	50	0.500	55.9609	10.000	30.000	1.297
2005		30.00	10.000	55.961	7.69	58.06	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	2.361
2005		30.00	10.000	55.961	13.56	63.93	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	8.213
2005	May	30.00	10.000	55.961	22.2	72.57	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	19.203
2005		30.00	10.000	55.961	51.41	101.78	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	48.389
2005		30.00	10.000	55.961	82.78	133.15	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	80.15
					2564.02		8.28	8.28	S	94.477	94.477	S	1083	10.716				2450.547

Year	2005 - 2006						Level		Capacity									
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evap oratio n (mm)	Evapor ation (MCM)	Ending			Spills
		Level	Area	Capacity					S/ F			S/ F			Capacity	Area	Level	
2005	Jun	30.00	10.000	55.961	23.67	74.04	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	22.544
2005		30.00	10.000	55.961	34.21	84.58	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	32.646
2005		30.00	10.000	55.961	46.22	96.59	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	43.48
2005	Jul	30.00	10.000	55.961	162.78	213.15	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	159.008
2005		30.00	10.000	55.961	62.9	113.27	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	59.853
2005		30.00	10.000	55.961	130.87	181.24	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	127.715
2005	Aug	30.00	10.000	55.961	120.53	170.90	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	118.903
2005		30.00	10.000	55.961	133.06	183.43	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	131.433
2005		30.00	10.000	55.961	73.18	123.55	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	71.524
2005	Sep	30.00	10.000	55.961	67.13	117.50	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	64.695
2005		30.00	10.000	55.961	31.45	81.82	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	29.095
2005		30.00	10.000	55.961	90.98	141.35	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	88.706
2005	Oct	30.00	10.000	55.961	96.25	146.62	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	93.885
2005		30.00	10.000	55.961	48.82	99.19	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	46.455
2005		30.00	10.000	55.961	111.01	161.38	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	109.62
2005	Nov	30.00	10.000	55.961	37.76	88.13	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	33.606
2005		30.00	10.000	55.961	21.25	71.62	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	20.207
2005		30.00	10.000	55.961	12.36	62.73	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	11.2
2005	Dec	30.00	10.000	55.961	9.85	60.22	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	8.808
2005		30.00	10.000	55.961	8.38	58.75	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	7.199
2005		30.00	10.000	55.961	8.27	58.64	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	6.806
2006	Jan	30.00	10.000	55.961	6.39	56.76	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.688
2006		30.00	10.000	55.961	5.79	56.16	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.564
2006		30.00	10.000	55.961	5.32	55.69	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.07

2006	Feb	30.00	10.000	55.961	4.23	54.60	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	2.076
2006		30.00	10.000	55.961	4.15	54.52	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.95
2006		30.00	10.000	55.961	3.25	53.62	0.23	0.23	S	10.910	10.910	S	25	0.250	47.8209	8.859	29.100	0
2006	Mar	29.10	8.859	47.821	3.46	45.69	0.23	0.23	S	8.486	8.486	S	30	0.266	42.2989	8.219	28.400	0
2006		28.40	8.219	42.299	2.59	39.30	0.23	0.23	S	5.292	5.292	S	30	0.247	39.1199	7.895	28.000	0
2006		28.00	7.895	39.120	2.28	35.81	0.23	0.23	S	6.108	6.108	S	30	0.237	34.8249	7.500	27.500	0
2006	Apr	27.50	7.500	34.825	3.89	33.13	0.23	0.23	S	3.593	3.593	S	50	0.375	34.5169	7.500	27.500	0
2006		27.50	7.500	34.517	4.49	33.42	0.23	0.23	S	4.599	4.599	S	50	0.375	33.8029	7.420	27.400	0
2006		27.40	7.420	33.803	3.11	31.32	0.23	0.23	S	4.617	4.617	S	50	0.371	31.6949	7.180	27.100	0
2006	May	27.10	7.180	31.695	6.05	32.16	0.23	0.23	S	2.367	2.367	S	40	0.287	34.8609	7.500	27.500	0
2006		27.50	7.500	34.861	10.11	39.38	0.23	0.23	S	2.391	2.391	S	40	0.300	42.0499	8.219	28.400	0
2006		28.40	8.219	42.050	19.77	56.23	0.23	0.23	S	2.000	2.000	S	40	0.329	55.9609	10.000	30.000	3.3
					1415.81		8.28	8.28	S	94.477	94.477	S	1083	10.017				1303.036

Year	2006 - 2007					Level		Capacity										
						FRL	30 m	55.961	MCM									
						MDDL	22.5 m	5.589	MCM									
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level	
2006	Jun	30.00	10.000	55.961	192.76	243.13	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	191.634
2006		30.00	10.000	55.961	181.96	232.33	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	180.396
2006		30.00	10.000	55.961	214.53	264.90	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	211.79
2006	Jul	30.00	10.000	55.961	141.44	191.81	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	137.668
2006		30.00	10.000	55.961	124.16	174.53	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	121.113
2006		30.00	10.000	55.961	171.93	222.30	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	168.775

2006	Aug	30.00	10.000	55.961	120.79	171.16	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	119.163
2006		30.00	10.000	55.961	75.6	125.97	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	73.973
2006		30.00	10.000	55.961	91.9	142.27	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	90.244
2006	Sep	30.00	10.000	55.961	65.4	115.77	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	62.965
2006		30.00	10.000	55.961	76.2	126.57	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	73.845
2006		30.00	10.000	55.961	94.87	145.24	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	92.596
2006	Oct	30.00	10.000	55.961	73.53	123.90	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	71.165
2006		30.00	10.000	55.961	64.8	115.17	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	62.435
2006		30.00	10.000	55.961	30.41	80.78	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	29.02
2006	Nov	30.00	10.000	55.961	17.71	68.08	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	13.556
2006		30.00	10.000	55.961	13.91	64.28	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	12.867
2006		30.00	10.000	55.961	9.76	60.13	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	8.6
2006	Dec	30.00	10.000	55.961	8.12	58.49	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	7.078
2006		30.00	10.000	55.961	7.34	57.71	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	6.159
2006		30.00	10.000	55.961	7.6	57.97	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	6.136
2007	Jan	30.00	10.000	55.961	4.67	55.04	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	2.968
2007		30.00	10.000	55.961	4.23	54.60	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	1.004
2007		30.00	10.000	55.961	4.28	54.65	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	1.03
2007	Feb	30.00	10.000	55.961	7.26	57.63	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	5.106
2007		30.00	10.000	55.961	7.52	57.89	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	4.32
2007		30.00	10.000	55.961	4.84	55.21	0.23	0.23	S	10.910	10.910	S	25	0.250	49.4109	9.077	29.300	0
2007	Mar	29.30	9.077	49.411	3.8	47.62	0.23	0.23	S	8.486	8.486	S	30	0.272	44.2229	8.480	28.700	0
2007		28.70	8.480	44.223	2.85	41.48	0.23	0.23	S	5.292	5.292	S	30	0.254	41.2969	8.138	28.300	0
2007		28.30	8.138	41.297	3.9	39.61	0.23	0.23	S	6.108	6.108	S	30	0.244	38.6149	7.895	28.000	0
2007	Apr	28.00	7.895	38.615	4.32	37.35	0.23	0.23	S	3.593	3.593	S	50	0.395	38.7169	7.895	28.000	0
2007		28.00	7.895	38.717	12.1	45.23	0.23	0.23	S	4.599	4.599	S	50	0.395	45.5929	8.570	28.800	0
2007		28.80	8.570	45.593	48.38	88.38	0.23	0.23	S	4.617	4.617	S	50	0.429	55.9609	10.000	30.000	32.736
2007	May	30.00	10.000	55.961	13.22	63.59	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	10.223
2007		30.00	10.000	55.961	70.59	120.96	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	67.569
2007		30.00	10.000	55.961	113.76	164.13	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	111.13
					2090.44		8.28	8.28	S	94.477	94.477	S	1083	10.419				1977.26 4

Year	2007	-	2008															
				Level		Capacity												
				FRL	30 m	55.961	MCM											
				MDDL	22.5 m	5.589	MCM											
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
2007	Jun	30.00	10.000	55.961	21.6	71.97	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	20.474
2007		30.00	10.000	55.961	212.11	262.48	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	210.546
2007		30.00	10.000	55.961	169.95	220.32	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	167.21
2007	Jul	30.00	10.000	55.961	139.28	189.65	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	135.508
2007		30.00	10.000	55.961	79.75	130.12	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	76.703
2007		30.00	10.000	55.961	122.22	172.59	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	119.065
2007	Aug	30.00	10.000	55.961	93.57	143.94	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	91.943
2007		30.00	10.000	55.961	81.13	131.50	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	79.503
2007		30.00	10.000	55.961	371.7	422.07	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	370.044
2007	Sep	30.00	10.000	55.961	388.89	439.26	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	386.455
2007		30.00	10.000	55.961	378.17	428.54	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	375.815
2007		30.00	10.000	55.961	96.08	146.45	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	93.806
2007	Oct	30.00	10.000	55.961	117.42	167.79	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	115.055
2007		30.00	10.000	55.961	82.94	133.31	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	80.575
2007		30.00	10.000	55.961	56.55	106.92	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	55.16
2007	Nov	30.00	10.000	55.961	28.34	78.71	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	24.186
2007		30.00	10.000	55.961	45.01	95.38	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	43.967
2007		30.00	10.000	55.961	26.87	77.24	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	25.71
2007	Dec	30.00	10.000	55.961	19.44	69.81	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	18.398
2007		30.00	10.000	55.961	14.77	65.14	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	13.589
2007		30.00	10.000	55.961	13.88	64.25	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	12.416
2008	Jan	30.00	10.000	55.961	8.9	59.27	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	7.198
2008		30.00	10.000	55.961	7.6	57.97	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	4.374
2008		30.00	10.000	55.961	10.55	60.92	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	7.3

2008	Feb	30.00	10.000	55.961	7.43	57.80	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	5.276
2008		30.00	10.000	55.961	5.53	55.90	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	2.33
2008		30.00	10.000	55.961	3.87	54.24	0.23	0.23	S	10.910	10.910	S	25	0.250	48.4409	8.968	29.200	0
2008	Mar	29.20	8.968	48.441	4.23	47.08	0.23	0.23	S	8.486	8.486	S	30	0.269	43.6859	8.390	28.600	0
2008		28.60	8.390	43.686	3.89	41.99	0.23	0.23	S	5.292	5.292	S	30	0.252	41.8019	8.219	28.400	0
2008		28.40	8.219	41.802	5.23	41.44	0.23	0.23	S	6.108	6.108	S	30	0.247	40.4469	8.057	28.200	0
2008	Apr	28.20	8.057	40.447	3.97	38.83	0.23	0.23	S	3.593	3.593	S	50	0.403	40.1909	8.057	28.200	0
2008		28.20	8.057	40.191	3.97	38.57	0.23	0.23	S	4.599	4.599	S	50	0.403	38.9289	7.895	28.000	0
2008		28.00	7.895	38.929	3.46	36.80	0.23	0.23	S	4.617	4.617	S	50	0.395	37.1469	7.737	27.800	0
2008	May	27.80	7.737	37.147	4.67	36.23	0.23	0.23	S	2.367	2.367	S	40	0.309	38.9109	7.895	28.000	0
2008		28.00	7.895	38.911	8.38	41.70	0.23	0.23	S	2.391	2.391	S	40	0.316	44.3539	8.480	28.700	0
2008		28.70	8.480	44.354	14.35	53.12	0.23	0.23	S	2.000	2.000	S	40	0.339	55.9609	10.000	30.000	0.174
					2655.70		8.28	8.28	S	94.477	94.477	S	1083	10.163				2542.78

Year	2008 - 2009					Level		Capacity										
						FRL	30 m	55.961	MCM									
						MDDL	22.5 m	5.589	MCM									
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
2008	Jun	30.00	10.000	55.961	18.92	69.29	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	17.794
2008		30.00	10.000	55.961	19.7	70.07	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	18.136
2008		30.00	10.000	55.961	65.23	115.60	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	62.49
2008	Jul	30.00	10.000	55.961	81.82	132.19	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	78.048
2008		30.00	10.000	55.961	93.14	143.51	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	90.093
2008		30.00	10.000	55.961	75.46	125.83	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	72.305

2008	Aug	30.00	10.000	55.961	241.14	291.51	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	239.513
2008		30.00	10.000	55.961	102.21	152.58	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	100.583
2008		30.00	10.000	55.961	296.14	346.51	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	294.484
2008	Sep	30.00	10.000	55.961	103.51	153.88	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	101.075
2008		30.00	10.000	55.961	105.41	155.78	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	103.055
2008		30.00	10.000	55.961	204.6	254.97	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	202.326
2008	Oct	30.00	10.000	55.961	122.34	172.71	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	119.975
2008		30.00	10.000	55.961	48.9	99.27	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	46.535
2008		30.00	10.000	55.961	44.67	95.04	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	43.28
2008	Nov	30.00	10.000	55.961	27.82	78.19	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	23.666
2008		30.00	10.000	55.961	16.33	66.70	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	15.287
2008		30.00	10.000	55.961	11.84	62.21	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	10.68
2008	Dec	30.00	10.000	55.961	10.11	60.48	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	9.068
2008		30.00	10.000	55.961	8.04	58.41	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	6.859
2008		30.00	10.000	55.961	7.79	58.16	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	6.326
2009	Jan	30.00	10.000	55.961	6.22	56.59	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.518
2009		30.00	10.000	55.961	5.44	55.81	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	2.214
2009		30.00	10.000	55.961	5.04	55.41	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	1.79
2009	Feb	30.00	10.000	55.961	3.97	54.34	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.816
2009		30.00	10.000	55.961	3.46	53.83	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.26
2009		30.00	10.000	55.961	2.49	52.86	0.23	0.23	S	10.910	10.910	S	25	0.250	47.0609	8.750	29.000	0
2009	Mar	29.00	8.750	47.061	3.02	44.49	0.23	0.23	S	8.486	8.486	S	30	0.263	41.1019	8.138	28.300	0
2009		28.30	8.138	41.102	1.81	37.32	0.23	0.23	S	5.292	5.292	S	30	0.244	37.1459	7.737	27.800	0
2009		27.80	7.737	37.146	2.47	34.03	0.23	0.23	S	6.108	6.108	S	30	0.232	33.0459	7.340	27.300	0
2009	Apr	27.30	7.340	33.046	5.44	32.90	0.23	0.23	S	3.593	3.593	S	50	0.367	34.2959	7.420	27.400	0
2009		27.40	7.420	34.296	4.84	33.55	0.23	0.23	S	4.599	4.599	S	50	0.371	33.9359	7.420	27.400	0
2009		27.40	7.420	33.936	13.91	42.26	0.23	0.23	S	4.617	4.617	S	50	0.371	42.6279	8.300	28.500	0
2009	May	28.50	8.300	42.628	3.11	40.15	0.23	0.23	S	2.367	2.367	S	40	0.332	42.8089	8.300	28.500	0
2009		28.50	8.300	42.809	9.94	47.16	0.23	0.23	S	2.391	2.391	S	40	0.332	49.7959	9.077	29.300	0
2009		29.30	9.077	49.796	14.73	58.94	0.23	0.23	S	2.000	2.000	S	40	0.363	55.9609	10.000	30.000	5.972
					1791.01		8.28	8.28	S	94.477	94.477	S	1083	10.105				1678.14

Year	2009	-	2010															
				Level		Capacity												
				FRL	30 m	55.961	MCM											
				MDDL	22.5 m	5.589	MCM											
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36 S/F	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36 S/F	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity											Capacity	Area	Level	
2009	Jun	30.00	10.000	55.961	45.71	96.08	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	44.584
2009		30.00	10.000	55.961	21.25	71.62	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	19.686
2009		30.00	10.000	55.961	34.56	84.93	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	31.82
2009	Jul	30.00	10.000	55.961	39.23	89.60	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	35.458
2009		30.00	10.000	55.961	33.96	84.33	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	30.913
2009		30.00	10.000	55.961	60.92	111.29	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	57.765
2009	Aug	30.00	10.000	55.961	143.16	193.53	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	141.533
2009		30.00	10.000	55.961	136.6	186.97	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	134.973
2009		30.00	10.000	55.961	123.84	174.21	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	122.184
2009	Sep	30.00	10.000	55.961	111.11	161.48	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	108.675
2009		30.00	10.000	55.961	68.52	118.89	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	66.165
2009		30.00	10.000	55.961	95.64	146.01	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	93.366
2009	Oct	30.00	10.000	55.961	33.87	84.24	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	31.505
2009		30.00	10.000	55.961	44.15	94.52	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	41.785
2009		30.00	10.000	55.961	26.14	76.51	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	24.75
2009	Nov	30.00	10.000	55.961	16.68	67.05	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	12.526
2009		30.00	10.000	55.961	14.17	64.54	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	13.127
2009		30.00	10.000	55.961	12.53	62.90	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	11.37
2009	Dec	30.00	10.000	55.961	9.76	60.13	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	8.718
2009		30.00	10.000	55.961	6.65	57.02	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	5.469
2009		30.00	10.000	55.961	5.32	55.69	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	3.856
2010	Jan	30.00	10.000	55.961	4.15	54.52	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	2.448
2010		30.00	10.000	55.961	3.54	53.91	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	0.314
2010		30.00	10.000	55.961	3.42	53.79	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	0.17

2010	Feb	30.00	10.000	55.961	2.68	53.05	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	0.526
2010		30.00	10.000	55.961	2.42	52.79	0.23	0.23	S	2.720	2.720	S	25	0.250	55.1809	9.859	29.900	0
2010		29.90	9.859	55.181	1.87	51.46	0.23	0.23	S	10.910	10.910	S	25	0.246	45.6649	8.570	28.800	0
2010	Mar	28.80	8.570	45.665	2.51	42.59	0.23	0.23	S	8.486	8.486	S	30	0.257	39.2019	7.976	28.100	0
2010		28.10	7.976	39.202	2.07	35.68	0.23	0.23	S	5.292	5.292	S	30	0.239	35.5109	7.579	27.600	0
2010		27.60	7.579	35.511	4.28	34.20	0.23	0.23	S	6.108	6.108	S	30	0.227	33.2259	7.340	27.300	0
2010	Apr	27.30	7.340	33.226	52.96	80.60	0.23	0.23	S	3.593	3.593	S	50	0.367	55.9609	10.000	30.000	26.035
2010		30.00	10.000	55.961	12.01	62.38	0.23	0.23	S	4.599	4.599	S	50	0.500	55.9609	10.000	30.000	6.681
2010		30.00	10.000	55.961	80.01	130.38	0.23	0.23	S	4.617	4.617	S	50	0.500	55.9609	10.000	30.000	74.663
2010	May	30.00	10.000	55.961	25.23	75.60	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	22.233
2010		30.00	10.000	55.961	39.4	89.77	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	36.379
2010		30.00	10.000	55.961	143.51	193.88	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	140.88
					1463.83		8.28	8.28	S	94.477	94.477	S	1083	10.516				1350.557

Year	2010 - 2011					Level		Capacity										
						FRL	30 m	55.961	MCM									
						MDDL	22.5 m	5.589	MCM									
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evaporation (mm)	Evaporation (MCM)	Ending			Spills
		Level	Area	Capacity					S/F			S/F			Capacity	Area	Level	
2010	Jun	30.00	10.000	55.961	218.16	268.53	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	217.034
2010		30.00	10.000	55.961	215.74	266.11	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	214.176
2010		30.00	10.000	55.961	90.63	141.00	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	87.89
2010	Jul	30.00	10.000	55.961	66.44	116.81	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	62.668
2010		30.00	10.000	55.961	93.74	144.11	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	90.693
2010		30.00	10.000	55.961	142.85	193.22	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	139.695

2010	Aug	30.00	10.000	55.961	149.82	200.19	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	148.193
2010		30.00	10.000	55.961	203.82	254.19	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	202.193
2010		30.00	10.000	55.961	200.25	250.62	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	198.594
2010	Sep	30.00	10.000	55.961	230	280.37	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	227.565
2010		30.00	10.000	55.961	325.73	376.10	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	323.375
2010		30.00	10.000	55.961	264.64	315.01	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	262.366
2010	Oct	30.00	10.000	55.961	129.95	180.32	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	127.585
2010		30.00	10.000	55.961	101.26	151.63	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	98.895
2010		30.00	10.000	55.961	54.27	104.64	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	52.88
2010	Nov	30.00	10.000	55.961	25.66	76.03	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	21.506
2010		30.00	10.000	55.961	17.11	67.48	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	16.067
2010		30.00	10.000	55.961	14.6	64.97	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	13.44
2010	Dec	30.00	10.000	55.961	13.56	63.93	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	12.518
2010		30.00	10.000	55.961	17.8	68.17	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	16.619
2010		30.00	10.000	55.961	9.41	59.78	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	7.946
2011	Jan	30.00	10.000	55.961	7.17	57.54	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	5.468
2011		30.00	10.000	55.961	6.48	56.85	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	3.254
2011		30.00	10.000	55.961	5.99	56.36	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.74
2011	Feb	30.00	10.000	55.961	5.18	55.55	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	3.026
2011		30.00	10.000	55.961	4.67	55.04	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	1.47
2011		30.00	10.000	55.961	3.32	53.69	0.23	0.23	S	10.910	10.910	S	25	0.250	47.8909	8.859	29.100	0
2011	Mar	29.10	8.859	47.891	3.63	45.93	0.23	0.23	S	8.486	8.486	S	30	0.266	42.5389	8.300	28.500	0
2011		28.50	8.300	42.539	3.11	40.06	0.23	0.23	S	5.292	5.292	S	30	0.249	39.8779	7.976	28.100	0
2011		28.10	7.976	39.878	4.18	38.47	0.23	0.23	S	6.108	6.108	S	30	0.239	37.4809	7.737	27.800	0
2011	Apr	27.80	7.737	37.481	7.95	39.84	0.23	0.23	S	3.593	3.593	S	50	0.387	41.2209	8.138	28.300	0
2011		28.30	8.138	41.221	4.67	40.30	0.23	0.23	S	4.599	4.599	S	50	0.407	40.6549	8.057	28.200	0
2011		28.20	8.057	40.655	5.44	40.51	0.23	0.23	S	4.617	4.617	S	50	0.403	40.8449	8.138	28.300	0
2011	May	28.30	8.138	40.845	14.43	49.69	0.23	0.23	S	2.367	2.367	S	40	0.326	52.3519	9.436	29.600	0
2011		29.60	9.436	52.352	6.48	53.24	0.23	0.23	S	2.391	2.391	S	40	0.377	55.8339	9.859	29.900	0
2011		29.90	9.859	55.834	69.19	119.44	0.23	0.23	S	2.000	2.000	S	40	0.394	55.9609	10.000	30.000	66.439
					2737.33		8.28	8.28	S	94.477	94.477	S	1083	10.278				2624.29 5

Year	2011 - 2012							Level		Capacity								
							FRL	30	m	55.961	MCM							
							MDDL	22.5	m	5.589	MCM							
Year	Month	Starting			Inflow	total water available	Drinking Water Demand (MCM)	Drinking demand Met (MCM)	36	Irrigation Demand (MCM)	Irrigation Demand met (MCM)	36	Evap oratio n (mm)	Evapor ation (MCM)	Ending			Spills
		Level	Are a	Capa city					S/F			S/F			Capac ity	Are a	Level	
2011	Jun	30.00	10.000	55.961	74.04	124.41	0.23	0.23	S	0.546	0.546	S	35	0.350	55.9609	10.000	30.000	72.914
2011		30.00	10.000	55.961	117.33	167.70	0.23	0.23	S	0.984	0.984	S	35	0.350	55.9609	10.000	30.000	115.766
2011		30.00	10.000	55.961	87.35	137.72	0.23	0.23	S	2.160	2.160	S	35	0.350	55.9609	10.000	30.000	84.61
2011	Jul	30.00	10.000	55.961	109.9	160.27	0.23	0.23	S	3.142	3.142	S	40	0.400	55.9609	10.000	30.000	106.128
2011		30.00	10.000	55.961	166.32	216.69	0.23	0.23	S	2.417	2.417	S	40	0.400	55.9609	10.000	30.000	163.273
2011		30.00	10.000	55.961	157.39	207.76	0.23	0.23	S	2.525	2.525	S	40	0.400	55.9609	10.000	30.000	154.235
2011	Aug	30.00	10.000	55.961	109.21	159.58	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	107.583
2011		30.00	10.000	55.961	146.71	197.08	0.23	0.23	S	1.067	1.067	S	33	0.330	55.9609	10.000	30.000	145.083
2011		30.00	10.000	55.961	326.75	377.12	0.23	0.23	S	1.096	1.096	S	33	0.330	55.9609	10.000	30.000	325.094
2011	Sep	30.00	10.000	55.961	159.06	209.43	0.23	0.23	S	1.905	1.905	S	30	0.300	55.9609	10.000	30.000	156.625
2011		30.00	10.000	55.961	93.14	143.51	0.23	0.23	S	1.825	1.825	S	30	0.300	55.9609	10.000	30.000	90.785
2011		30.00	10.000	55.961	136.94	187.31	0.23	0.23	S	1.744	1.744	S	30	0.300	55.9609	10.000	30.000	134.666
2011	Oct	30.00	10.000	55.961	86.83	137.20	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	84.465
2011		30.00	10.000	55.961	34.3	84.67	0.23	0.23	S	1.865	1.865	S	27	0.270	55.9609	10.000	30.000	31.935
2011		30.00	10.000	55.961	26.14	76.51	0.23	0.23	S	0.890	0.890	S	27	0.270	55.9609	10.000	30.000	24.75
2011	Nov	30.00	10.000	55.961	11.66	62.03	0.23	0.23	S	3.754	3.754	S	17	0.170	55.9609	10.000	30.000	7.506
2011		30.00	10.000	55.961	10.8	61.17	0.23	0.23	S	0.643	0.643	S	17	0.170	55.9609	10.000	30.000	9.757
2011		30.00	10.000	55.961	9.76	60.13	0.23	0.23	S	0.760	0.760	S	17	0.170	55.9609	10.000	30.000	8.6

2011	Dec	30.00	10.000	55.961	8.21	58.58	0.23	0.23	S	0.632	0.632	S	18	0.180	55.9609	10.000	30.000	7.168
2011		30.00	10.000	55.961	7.17	57.54	0.23	0.23	S	0.771	0.771	S	18	0.180	55.9609	10.000	30.000	5.989
2011		30.00	10.000	55.961	7.03	57.40	0.23	0.23	S	1.054	1.054	S	18	0.180	55.9609	10.000	30.000	5.566
2012	Jan	30.00	10.000	55.961	6.39	56.76	0.23	0.23	S	1.312	1.312	S	16	0.160	55.9609	10.000	30.000	4.688
2012		30.00	10.000	55.961	6.48	56.85	0.23	0.23	S	2.836	2.836	S	16	0.160	55.9609	10.000	30.000	3.254
2012		30.00	10.000	55.961	5.32	55.69	0.23	0.23	S	2.860	2.860	S	16	0.160	55.9609	10.000	30.000	2.07
2012	Feb	30.00	10.000	55.961	3.8	54.17	0.23	0.23	S	1.674	1.674	S	25	0.250	55.9609	10.000	30.000	1.646
2012		30.00	10.000	55.961	3.37	53.74	0.23	0.23	S	2.720	2.720	S	25	0.250	55.9609	10.000	30.000	0.17
2012		30.00	10.000	55.961	3.11	53.48	0.23	0.23	S	10.910	10.910	S	25	0.250	47.6809	8.859	29.100	0
2012	Mar	29.10	8.859	47.681	5.44	47.53	0.23	0.23	S	8.486	8.486	S	30	0.266	44.1389	8.480	28.700	0
2012		28.70	8.480	44.139	3.46	42.01	0.23	0.23	S	5.292	5.292	S	30	0.254	41.8229	8.219	28.400	0
2012		28.40	8.219	41.823	2.57	38.80	0.23	0.23	S	6.108	6.108	S	30	0.247	37.8079	7.816	27.900	0
2012	Apr	27.90	7.816	37.808	3.89	36.11	0.23	0.23	S	3.593	3.593	S	50	0.391	37.4839	7.737	27.800	0
2012		27.80	7.737	37.484	18.58	50.48	0.23	0.23	S	4.599	4.599	S	50	0.387	50.8479	9.186	29.400	0
2012		29.40	9.186	50.848	45.88	91.14	0.23	0.23	S	4.617	4.617	S	50	0.459	55.9609	10.000	30.000	35.461
2012	May	30.00	10.000	55.961	51.24	101.61	0.23	0.23	S	2.367	2.367	S	40	0.400	55.9609	10.000	30.000	48.243
2012		30.00	10.000	55.961	14.6	64.97	0.23	0.23	S	2.391	2.391	S	40	0.400	55.9609	10.000	30.000	11.579
2012		30.00	10.000	55.961	14.45	64.82	0.23	0.23	S	2.000	2.000	S	40	0.400	55.9609	10.000	30.000	11.82
					2074.62		8.28	8.28	S	94.477	94.477	S	1083	10.434				1961.42



CENTRAL WATER COMMISSION
IRRIGATION MANAGEMENT ORGANISATION
SEPTEMBER 2018