Chapter 10: STATE/ UT WATER BUDGET/ Balance (DASHBOARD)

The totals and grand totals of Chapter 9, (basin/sub-basin wise) need to be brought here (right table) and then accumulated in the State/UT Water Budget Table (left table)
Checks: Appropriate Water Balance Checks may be applied considering the Time Scale and the Spatial Scale/ System Boundary.

STATE/UT WATER BUDGET (comprising all Basins/Sub-basins)

Total Availability (MCM)	Utilizable Water (MCM)	Consumptive Use (MCM)	Outflows (MCM)
A1. Precipitation including Snowfall	B1. Directly Harvested Rain Water + Useful Soil Moisture	C1. Farm Sector Consumptive Use	D1. Inter basin transfers (Exports)
A1R. Runoff due to precipitation	B2. Utilizable portion of Springs, Nallahs	C2. Industry & Infrastructure Use	D2. Downstream Outflows (actual) vis-a-vis desirable flow downstream*
A2. Upstream Inflows	B3, B4, B5. Utilizable portion from Major, Medium and Minor Projects	C3. Establishments & Institutions Use	D3. Evapo-Transpiration from Forests, Natural Vegetation
A3. Inflow from Glacial Melts	B6, B7. Utilizable portion from Ponds, Tanks, Wetlands	C4. Domestic Use (Rural)	D4. Evaporation from all Surface Water Bodies
A4. Inflow from Springs, Nallahs	B8. Water from Desalination Plants/ Sea water	C5. Domestic Use (Urban)	
A5, A6, A7. Storage in Major, Medium & Minor Reservoirs as on 1st June	B9. Utilizable portion of Inter-Basin Transfers	C6. Forestry & Wildlife Consumptive Use	
A8 & A9. Storage in Ponds, Tanks, Wetlands as on 1st June	B10. Utilizable Ground Water		
A10. Water available from Desalination Plants	B11. Water available from Treated/ Recycled Waste Water		
A11. Inter Basin Transfer			
A12. Net Annual Ground Water Availability			

Basin/ Sub-basin A			
Total Availability (MCM)	**Utilizable Water (MCM)**	**Consumptive Use (MCM)**	**Outflows (MCM)**
A1. Precipitation including Snowfall	B1. Directly Harvested Rain Water + Useful Soil Moisture	C1. Farm Sector Consumptive Use	D1. Inter basin transfers (Exports)
A1R. Runoff due to precipitation	B2. Utilizable portion of Springs, Nallahs	C2. Industry & Infrastructure Use	D2. Downstream Outflows (actual) vis-a-vis desirable flow downstream*
A2. Upstream Inflows	B3, B4, B5. Utilizable portion from Major, Medium and Minor Projects	C3. Establishments & Institutions Use	D3. Evapo-Transpiration from Forests, Natural Vegetation
A3. Inflow from Glacial Melts	B6, B7. Utilizable portion from Ponds, Tanks, Wetlands	C4. Domestic Use (Rural)	D4. Evaporation from all Surface Water Bodies
A4. Inflow from Springs, Nallahs	B8. Water from Desalination Plants/ Sea water	C5. Domestic Use (Urban)	
A5, A6, A7. Storage in Major, Medium & Minor Reservoirs as on 1st June	B9. Utilizable portion of Inter-Basin Transfers	C6. Forestry & Wildlife Consumptive Use	
A8 & A9. Storage in Ponds, Tanks, Wetlands as on 1st June	B10. Utilizable Ground Water		
A10. Water available from Desalination Plants	B11. Water available from Treated/ Recycled Waste Water		
A11. Inter Basin Transfer			
A12. Net Annual Ground Water Availability			

*** Considering Existing Water Sharing Tribunal Award/Agreement (Inter State) for downstream Riparian State, International Treaty, Ecological flow, Navigation requirement etc.**

STATE/ UT WATER BUDGET (DASHBOARD)

Total Utilizable Water (MCM)			Previous Year/ Average Annual Supply (MCM)	REMARKS
Source	**Sub Source**	**Quantity**	**Supply (Withdrawal)**	
Rain Water	Directly Harvested Rain Water			
	Direct Soil Moisture (useful)			
Surface Water	Glaciers			
	Springs, Nallahs			
	Major Projects/ Reservoirs			
	Medium Projects/Reservoirs			
	Minor Projects/ Reservoirs			
	Wetlands			
	Ponds, Tanks			
	Desalinated Water/ Sea water			
	Inter Basin Transfer			
Ground Water	Dynamic			
	Static (Deep Aquifer)*			
Treated/Recycled Waste Water				
GRAND TOTAL		xxxx	xxxx	

**The quantum of ground water available for development is usually restricted to long term average recharge or Dynamic GW. For sustainable GW development, it is necessary to restrict development to the dynamic resources only. Static or in-storage ground water resources could be considered for development during exigencies that too for drinking water purposes. It is also recommended that no irrigation development schemes be based on static or in-storage ground water resources. In-storage computation is necessary not only for estimation of emergency storage available for utilization in case of natural extremities (like drought) but also for an assessment of storage depletion in over-exploited areas for sensitizing stakeholders about the damage done to the environment.*

SECTOR	Previous Year / Average Annual Demand (MCM)	Previous Year/ Average Annual Supply & Consumptive Use (MCM)		Demand for the Present Water Year (MCM)	Rain Water		Allocation of Utilizable Water for the Present Hydrological Year** (MCM)												
		Supply	Consumptive Use				Surface Water									Ground Water		**Treated/ Recycled Waste Water**	**TOTAL**
					Directly Harvested	Soil Moisture (Useful)	Glaciers	Springs, Nallahs	Major Projects	Medium Projects	Minor Projects	Wetland	Ponds, Tanks	Desalinated Water	Inter Basin Transfer	Dynamic	Static		
Farm Sector																			
Industry & Infrastructure																			
Establishments & Institutions																			
Domestic (Rural)																			
Domestic (Urban)																			
Forestry & Wildlife																			
GRAND TOTAL	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

*** * Considering Existing Water Sharing Tribunal Award/Agreement (Inter State) for downstream Riparian State, International Treaty, Ecological flow, Navigation requirement etc.**
Note. An illustrative example of Water Budget is given in the Annexure

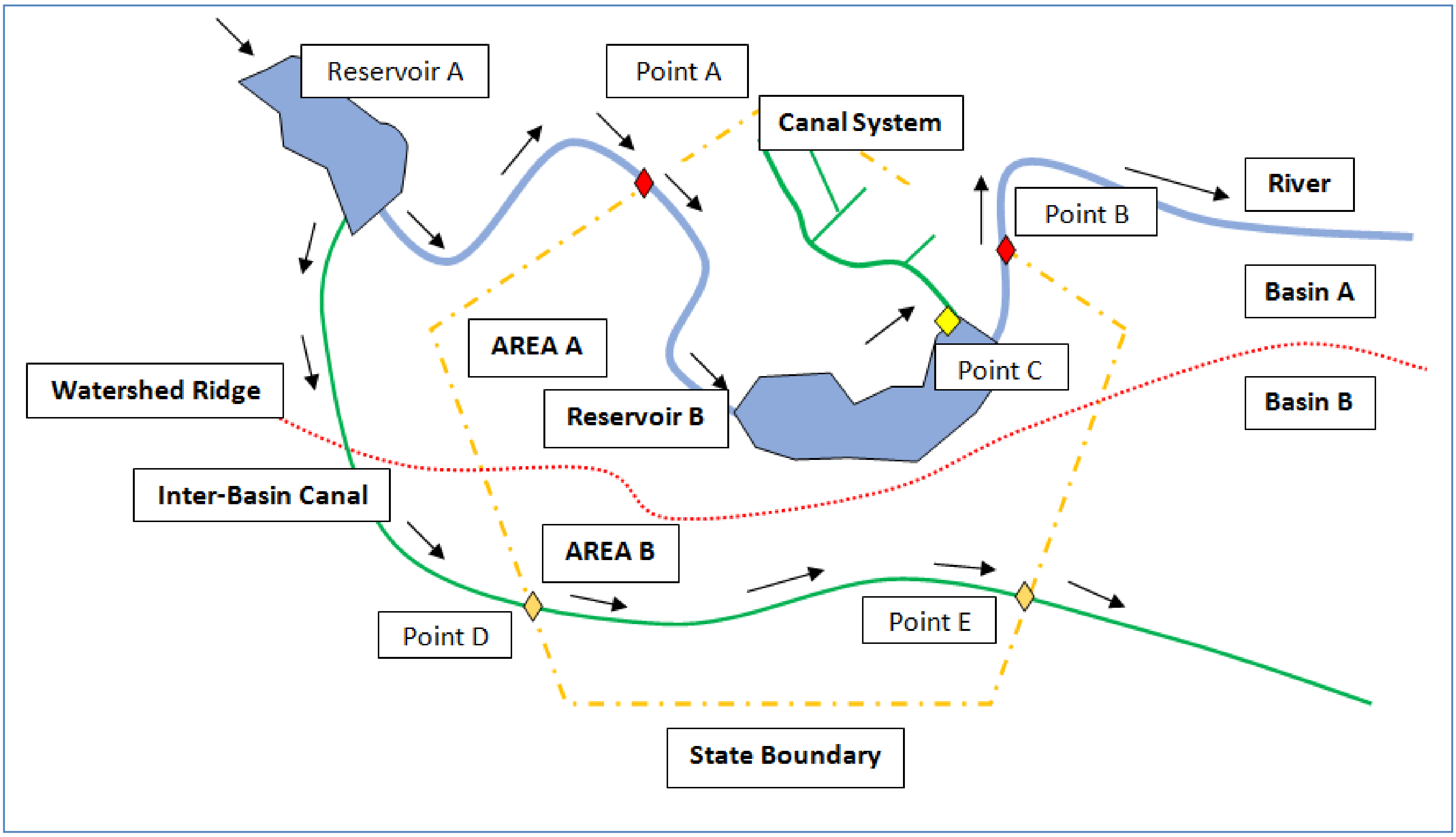

Figure 1. An Illustrative Example of Annual Water Budgeting for a State (hypothetical): Basin-wise

Legends and Assumptions:
• Area A (Intersecting Area between State Boundary and Basin A)
• Area B (Intersecting Area between State Boundary and Basin B)
• The River in Basin A is entering State Boundary at Point A and going out at Point B
• An Inter-Basin Canal is carrying water from Basin A to Basin B & is entering State Boundary at Point D and going out at Point E
• A Left Bank Canal System within the State Boundary is exiting the Reservoir B at Point C (Off take point)
• Assume, Area A1 from Point A to Point C (60000 Ha) is basically forest area which is nearly 60% of Area A and Area A2 from Point C to Point B (40000 Ha) is agricultural land which is nearly 40% of the Area A.
• Reservoir B elevation as on 1st of June = 224M i.e. 110MCM Live Storage (as per EAC Table below)
• Average GW Level in Area A1 as on 1st of June is 4.5 M below GL and equivalent GW Storage (dynamic) = 150 MCM say.
• Average GW Level in Area A2 as on 1st of June is 5.0 M below GL and equivalent GW Storage (dynamic) = 100 MCM say.
• Dynamic GW Storage Capacity is say 1000 MCM (at 1.5 M below GL) so that there is no Water Logging
• Depth of Soil in Area A1 & A2 = 2.0m; Field Capacity = 10% in area A1 & 15% in Area A2

Some more input data:

Elevation-Area-Capacity Curve of Reservoir B:

Area A (A1 + A2)		100000	Hectares (Ha)
Area B		50000	Hectares (Ha)
Average Uniform Rain in Area A	Annually	1000	mm
Average Uniform Rain in Area B	Annually	0	mm
Total Rain in Area A	Annually	**1000**	**MCM**
Total Rain in Area B	Annually	**0**	**MCM**

Reservoir B		**MCM**	**MCM**	**MCM**
Elevation	Area	Capacity	Dead Storage	Live Storage
220 (DSL)		110	**110**	0
221		125		15
222		145		35
223		175		65
224		220		110
225		290		180
226		370		260
227		470		360
228		600		490
229 (FRL)		**750**		**640**

BASIN A: (Refer to the table at the end)

- Say, the total inflow at Point A for the month of June is 200 MCM.
- Assume, Area A1 from Point A to Point C (60000 Ha) is basically Land Use - Land Cover (LULC) Type A which is nearly 60% of Area A and Area A2 from Point C to Point B (40000 Ha) is LULC Type B which is nearly 40% of the Area A.
- Assuming uniform distribution of total rainfall of 150 MCM in June, therefore, rainfall in Area A1 is 90 MCM and that in Area A2 is 60 MCM and corresponding interception losses (say, 10%) are 9 MCM and 6 MCM respectively.
- Therefore, actual effective rainfall is (90 - 9 =) 81 MCM and (60 - 6 =) 54 MCM respectively.
- Let the Directly harvested rainfall in Area A1 is 5 MCM in June, and in Area A2 it is 10 MCM in June.
- As a result of rainfall in Area A1, the runoff (the inflow to Reservoir B) is say, 45 MCM (Rainfall-Runoff Coefficient = 0.5 of total rainfall, say)
- As a result of rainfall in Area A2, the runoff at Point B (the outlet from the State) is say, 18 MCM (Rainfall-Runoff Coefficient = 0.3 of total rainfall, say)
- Assume the initial soil moisture (total) is 0 MCM in Area A1 and 0 MCM in Area A2 as on 1st June.

For Area A1 (June):

- The gain in soil moisture during June for Area A1 through infiltration = (Total Rainfall in June – Interception loss in June – Runoff from Area A1 during June – Directly harvested rain water in June) = 90 – 9 – 45 – 5 = 31 MCM.
- Similarly, the gain in soil moisture during June for Area A2 through infiltration = 60 – 6 – 18 – 10 = 26 MCM.
- Say, the actual evapo-transpiration (AET=PET in this case) from soil moisture for June is 10 MCM for Area A1. Therefore, residual soil moisture in Area A1 after June is = Initial Soil Moisture + Gain in soil moisture – ET = 0 + 31 – 10 = 21 MCM.
- Let us assume an average soil depth (unsaturated zone) as 2 M and field capacity is 10% for Area A1. That means total soil moisture holding capacity at field capacity = (60000*10^4)*2*(10/100)/10^6 = 120 MCM
- Now, when residual soil moisture is more than field capacity, then it will lead to ground water recharge. Accordingly, GW Recharge during June = 0 MCM (As, 21 MCM < 120 MCM)
- Say, initial GW storage as on 1st June for Area A1 is 150 MCM.
- Let actual ET (AET) from GW be 10 MCM during June from Area A1 and Base Flow is 10% of Ground Water Storage i.e. 10% of 150 = 15 MCM.
- Residual GW Storage at the end of June for Area A1 = Initial GW Storage + GW Recharge – ET from GW – Base Flow during June = 150 + 0 – 10 – 15 = 125 MCM
- Let initial Live Storage as on 1st June be 110 MCM in the Reservoir B.
- Evaporation loss during June= 5% of initial live storage = 5% of 110 = 5.5 MCM
- Abstraction from the Reservoir at Point C during June = 100 MCM.
- Therefore, Live Storage in Reservoir B at the end of June = Initial Live Storage + Inflow at Point A + Runoff from Point A to Point C + Base Flow – Evaporation Losses – Seepage losses (if any) – Abstraction during June = 110 + 200 + 45 + 15 – 5.5 – 0 – 100 = 264.5 MCM

- Say, Live Storage corresponding to FRL is 640 MCM, now since 264.5 < 640, therefore downstream spillage = 0 MCM.

For Area A1 (July):

- Say the total inflow at Point A for the month of July is 300 MCM.
- Total rainfall in the month of July in Area A1 is 150 MCM and that in Area A2 is 100 MCM and corresponding interception losses are 15 MCM and 10 MCM respectively.
- Therefore actual rainfall is (150 – 15 =) 135 MCM and (100 – 10 =) 90 MCM respectively.
- Directly harvested rainfall in Area A1 is 5 MCM in July, and in Area A2 it is 10 MCM in July.
- As a result of rainfall in Area A1, the runoff (the inflow to Reservoir B) is say, 75 MCM (=0.5*150)
- As a result of rainfall in Area A2, the runoff at Point B (the outlet from the State) is say, 30 MCM (=0.3*100)
- The initial soil moisture (total) for July is 21 MCM in Area A1 (i.e. residual soil moisture of June) as on 1st July.
- The gain in soil moisture during July for Area A1 through infiltration = (Total Rainfall in July – Interception loss in July – Runoff from Area A1 during July – Directly harvested rain water in July) = 150 – 15 – 75 – 5 = 55 MCM.
- Similarly, the gain in soil moisture during July for Area A2 through infiltration = 100 – 10 – 30 – 10 = 50 MCM.
- Say, the actual evapo-transpiration from soil moisture for July is 10 MCM for Area A1. Therefore, residual soil moisture in Area A1 after July is = Initial Soil Moisture + Gain in soil moisture – ET = 21 + 55 – 10 = 66 MCM.
- Now, if residual soil moisture is more than field capacity (120 MCM) then it will lead to ground water recharge. Accordingly, GW Recharge during July = 0 MCM (As, 66 MCM < 120 MCM)
- GW storage as on 1st July for Area A1 is 125 MCM i.e. residual GW Storage for June.
- Let actual ET from GW be 10 MCM during July from Area A1 and Base Flow is 10% of Ground Water Storage i.e. 10% of 125 = 12.5 MCM.
- Residual GW Storage at the end of June for Area A1 = Initial GW Storage + GW Recharge – ET from GW – Base Flow during June = 125 + 0 – 10 – 12.5 = 102.5 MCM
- Initial Live Storage as on 1st July is 215 MCM in the Reservoir B (residual live storage of June)
- Evaporation loss during July= 5% of initial live storage = 5% of 264.5 = 13.225 MCM
- Abstraction from the Reservoir at Point C during July = 150 MCM.
- Therefore Live Storage in Reservoir B at the end of July = Initial Live Storage + Inflow at Point A + Runoff from Point A to Point C + Base Flow – Evaporation Losses – Seepage losses (if any) – Abstraction during July = 264.5 + 300 + 75 + 12.5 – 13.225 – 150 = 488.775 MCM
- Live Storage at FRL is 640 MCM, therefore as 489 < 640, therefore downstream spillage = 0 MCM.

For Area A2 (June):

- The gain in soil moisture during June for Area A2 through infiltration = Total Rainfall in June – Interception loss in June – Runoff from Area A2 during June – Directly harvested rain water in June
- Therefore, the gain in soil moisture during June for Area A2 through infiltration = 60 – 6 – 18 – 10 = 26 MCM.
- Abstraction of Water during June is 100 MCM, in which irrigation water is generally 80% and the overall efficiency up to the farm is 50% (assumed). Therefore, increase in soil moisture due to irrigation water = 0.8*100*0.5= 40 MCM. (Loss of 50% is assumed to be due to evaporation 25% and seepage 25% in the distribution network)
- Evaporation Loss from Canal System = say, 25% of Irrigation Water Supplied = 0.25*0.8*100 = 20 MCM
- Seepage Loss from Canal System = say, 25% of Irrigation Water Supplied = 0.25*0.8*100 = 20 MCM which of course will add to GW Recharge in the area.
- Say, evapo-transpiration from soil moisture is 50 MCM from the Crops during June.
- Residual Soil Moisture for June = Initial Soil Moisture + Gain in Soil Moisture from Rain + Gain in Soil Moisture from Irrigation – ET (Crops) = 0 + 26 + 40 – 50 = 16 MCM
- Let us assume an average soil depth as 2 M and field capacity is 15% for Area A2. That means total soil moisture holding capacity at field capacity = (40000*10^4)*2*(15/100)/10^6 = 120 MCM
- Now, if residual soil moisture (RSM) is more than field capacity (FC =120 MCM) then only it will lead to ground water recharge. Accordingly, GW Recharge during June = 0 MCM (As, 16 MCM < 120 MCM)
- Effective GW Recharge = say, 80% of (RSM – FC) = 0 MCM; Return Flow from Irrigation = say, 20% of (RSM – FC) =0 MCM
- Initial GW storage as on 1st June for Area A2 is 100 MCM

- Let actual ET from GW be 0 MCM during June from Area A2 and Base Flow is 10% of initial Ground Water Storage i.e. 10% of 100 = 10 MCM. Therefore, return flow + base flow = 0 + 10 = 10 MCM.
- Residual GW Storage at the end of June for Area A2 = Initial GW Storage + GW Recharge – ET from GW – Base Flow during June = 100 + (0+20) – 0 – 10 = 110 MCM
- Outflow from Point B = Return Flow of Irrigation + Base Flow + 80% Return Flow of Other Uses (i.e. 20% of Abstraction for drinking/domestic uses) + Spillage from Reservoir at Point C + Runoff generated from Area A2
- Outflow from Point B during June = 0 + 10 + 0.8*0.2*100 + 0 + 18 = 44 MCM

For Area A2 (July):

- Runoff from Area A2 during July = 30 MCM
- The gain in soil moisture during July for Area A2 through infiltration = Total Rainfall in July – Interception loss in July – Runoff from Area A2 during July – Directly harvested rain water in July
- Therefore, the gain in soil moisture during July for Area A2 through infiltration = 100 – 10 – 30 – 10 = 50 MCM.
- Abstraction of Water during July is 150 MCM, in which irrigation water is generally 80% and the overall efficiency up to the farm is 50% (assumed). Therefore, increase in soil moisture due to irrigation water = 0.8*150*0.5= 60 MCM.
- Evaporation Loss from Canal System = 25% of Irrigation Water Supplied = 0.25*0.8*150 = 30 MCM
- Seepage Loss from Canal System = 25% of Irrigation Water Supplied = 0.25*0.8*150 = 30 MCM which of course add to GW Recharge in the area.
- Say, evapo-transpiration from soil moisture is 60 MCM from Crops during July.
- Gain in Soil Moisture from Rain = 50 MCM
- Residual Soil Moisture for July = Initial Soil Moisture (i.e. residual soil moisture from June) + Gain in Soil Moisture from Rain + Gain in Soil Moisture from Irrigation – ET (Crops) = 16 + 50 + 60 – 60 = 66 MCM
- Now, if residual soil moisture (RSM) is more than field capacity (FC =120 MCM) then it will lead to ground water recharge. Accordingly, GW Recharge during July = 0 MCM (As, 66 MCM < 120 MCM)
- Effective GW Recharge = 80% of (RSM – FC) = 0 MCM; Return Flow of Irrigation = 20% of (RSM – FC) = 0 MCM
- Initial GW storage as on 1st July for Area A2 is 110 MCM (i.e. residual GW Storage from June)
- Let actual ET from GW be 0 MCM during July from Area A2 and Base Flow as 10% of initial Ground Water Storage i.e. 10% of 110 = 11 MCM. Therefore, return flow + base flow = 0 + 11 = 11 MCM.
- Residual GW Storage at the end of July for Area A2 = Initial GW Storage + GW Recharge – ET from GW – Base Flow during July = 110 + (0+30) – 0 – 11 = 129 MCM
- Outflow from Point B = Return Flow of Irrigation + Base Flow + 80% Return Flow of Other Uses (i.e. 20% of Abstraction) + Spillage from Reservoir at Point C + Runoff generated from Area A2
- Outflow from Point B during July = 0 + 11 + 0.8*0.2*150 + 0 + 30 = 65 MCM

BASIN B:

- Let the monthly volume of water flowing through the IBT Canal into the State at Point D is 30 MCM.
- Let the withdrawal of water from this canal during the month of June be 10 MCM for domestic and industrial purpose and the return flow after use be 80%. Therefore, waste water generated is 8 MCM which is treated for reuse and put back into the canal.
- Therefore, the effective volume of water flowing out of the IBT Canal through Point E out of the State Boundary = 28 MCM. (30 – 10 + 8 = 28 MCM.)
- Now, if the designated share of water in the IBT Canal to downstream State be 20 MCM, then this 8 MCM (treated for reuse and put back into the canal) is utilizable for the present State (if such requirement is there in future).

MCM BASIN A	INFLOW AT POINT A	Rain in 60% Area A (Forest Area), A1	Interception Loss, say 10%	Directly Harvested Rain Water	Runoff generated from A to C	Initial Soil Moisture	Gain in Soil Moisture from Rain Water	Evapo Transpiration from Soil Moisture	Residual Soil Moisture (RSM)	If RSM > Field Capacity, then GW Recharge	Initial GW Storage	Evapo Transpiration from Ground Water	Base Flow, say 10% of Ground Water Storage	Residual GW Storage (incl. seepage loss from reservoir)	Initial Surface Water Storage (Live Storage at Start)	Spillage from Reservoir at Point C	Evaporation Loss from Reservoir, say 5% of Live Capacity at Start	Seepage loss from Reservoir = GW Recharge (say 0%)	Abstraction from the Reservoir at Point C
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**
Months											**A8**				**A5**				
Jun	200	90	9	5	45	**0**	31	10	21	0	**150**	10	15	125	**110**	0	6	0	100
Jul	300	150	15	5	75	21	55	10	66	0	125	10	13	103	215	0	11	0	150
Aug	350	210	21	5	105	66	79	10	135	15	103	10	10	97	441	0	22	0	250
Sept	250	120	12	5	60	135	43	10	168	48	97	10	10	126	634	123	32	0	150
Oct	100	30	3	5	15	168	7	10	165	45	126	10	13	148	640	0	32	0	100
Nov	50	0	0		0	165	0	10	155	35	148	10	15	158	636	0	32	0	100
Dec	50	0	0		0	155	0	10	145	25	158	10	16	157	569	0	28	0	150
Jan	50	0	0		0	145	0	10	135	15	157	10	16	147	456	0	23	0	150
Feb	50	0	0		0	135	0	10	125	5	147	10	15	127	349	0	17	0	200
Mar	50	0	0		0	125	0	10	115	0	127	10	13	104	196	0	10	0	100
April	50	0	0		0	115	0	10	105	0	104	10	10	84	149	0	7	0	0
May	50	0	0		0	105	0	10	**95**	0	84	10	8	**65**	202	0	10	0	0
Total	**1500**	**600**		**25**			**215**	**120**				**120**					**230**		**1450**
Tables	**A2**	**A1**		**B1**	**A1R**		**B1**	**D3**				**D3**		**B11**			**D4**		**B3**

MCM BASIN A	Residual Surface Water Storage (Live Storage at End)	Rain in 40% Area A (Agricultural Farm), A2	Interception Loss, say 10%	Directly Harvested Rain Water	Runoff generated from C to B	Initial Soil Moisture	Gain in Soil Moisture from Rain Water	Increase in Soil Moisture due to Irrigation Water	Evapo Transpiration from Soil Moisture	Residual Soil Moisture (RSM)	If RSM > Field Capacity, then GW Recharge	Effective GW Recharge (deducting return flow 20%)	Initial GW Storage	Evapo Transpiration from Ground Water	Return Flow 20% * (RSM - FC) + Base Flow 10% * initial GW Storage	Residual Ground Water (Considering recharge from SW)	Evaporation Loss from Canal System, say 25%	Seepage loss from Canal System = GW Recharge, say 25%	OUTFLOW FROM POINT B
	20	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**
Months													**A13**						
Jun	265	60	6	10	18	**0**	26	40	50	16	0	0	**100**	0	10	110	20	20	44
Jul	441	100	10	10	30	16	50	60	60	66	0	0	110	0	11	129	30	30	65
Aug	634	140	14	10	42	66	74	100	70	170	50	40	129	0	23	206	50	50	105
Sept	640	80	8	10	24	170	38	60	80	188	68	54	206	0	34	270	30	30	205
Oct	636	20	2	10	6	188	2	40	90	140	20	16	270	0	31	279	20	20	53
Nov	569	0	0		0	140	0	40	50	130	10	8	279	0	30	279	20	20	46
Dec	456	0	0		0	130	0	60	60	130	10	8	279	0	30	289	30	30	54
Jan	349	0	0		0	130	0	60	70	120	0	0	289	0	29	290	30	30	53
Feb	196	0	0		0	120	0	80	80	120	0	0	290	0	29	301	40	40	61
Mar	149	0	0		0	120	0	40	60	100	0	0	301	0	30	291	20	20	46
April	202	0	0		0	100	0	0	50	50	0	0	291	0	29	262	0	0	29
May	**250**	0	0		0	50	0	0	50	**0**	0	0	262	0	26	**236**	0	0	26
Total		**400**		**50**			**190**		**770**								**290**		**787**
Tables	**B3**	**A1**		**B1**	**A1R**		**B1**		**C1**							**B11**	**D4**		**D2**

BASIN B	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	**Total**	**Tables**
IBT Canal Inflow (Import)	30	30	30	30	30	30	30	30	30	30	30	30	**360**	**A12**
Withdrawal for Use	10	10	10	10	10	10	10	10	10	10	10	10	**120**	**C2**
Outflow (Export)	28	28	28	28	28	28	28	28	28	28	28	28	**336**	**D1**
Return Flow	8	8	8	8	8	8	8	8	8	8	8	8		