

Table H.1.6 Estimation of Water Requirement (DT)
(DT) Cropping Pattern to West Dhakaliya (feddan) -(DT)1/4-

Crop	Jan 1	Jan 2	Jan 3	Feb 1	Feb 2	Feb 3	Mar 1	Mar 2
1 wheat	95,032	95,032	95,032	95,032	95,032	95,032	95,032	95,032
2 horse beans	10,148	10,148	10,148	10,148	10,148	10,148	10,148	10,148
3 barley	712	712	712	712	712	712	712	712
4 fenugreek	0	0	0	0	0	0	0	0
5 lupins	0	0	0	0	0	0	0	0
6 chickpeas	0	0	0	0	0	0	0	0
7 lentins	162	162	162	162	162	162	162	162
8 clover c	72,193	72,193	72,193	72,193	72,193	72,193	72,193	72,193
9 clover f	89,023	89,023	89,023	89,023	89,023	89,023	89,023	89,023
10 flax	4,219	4,219	4,219	4,219	4,219	4,219	4,219	4,219
11 onion w	0	0	0	0	0	0	0	0
12 garlic w	420	420	420	420	420	420	420	420
13 vegetables w	12,237	12,237	12,237	12,237	12,237	12,237	12,237	0
14 others w	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044
15 potatoes w	0	0	0	0	0	0	0	0
16 medical pl w	0	0	0	0	0	0	0	0
17 trans crop w	0	0	0	0	0	0	0	0
18 sugar beat	0	0	0	0	0	0	0	0
19 cotton	0	0	0	0	0	0	72,193	72,193
20 rice	0	0	0	0	0	0	0	0
21 maize s	0	0	0	0	0	0	0	0
22 sorghum s	0	0	0	0	0	0	0	0
23 soya beans	0	0	0	0	0	0	0	0
24 sugar cane	251	251	251	251	251	251	251	251
25 sesame	0	0	0	0	0	0	0	0
26 ground nuts	0	0	0	0	0	0	0	0
27 onion s	0	0	0	0	0	0	0	0
28 vegetable s	0	0	0	0	0	0	0	0
29 others s	0	0	0	0	0	0	0	0
30 fodder s	0	0	0	0	0	0	0	0
31 trans crop s	0	0	0	0	0	0	0	0
32 potatoes s	0	0	0	0	0	0	0	0
33 sunflower s	0	0	0	0	0	0	0	0
34 medical pl s	0	0	0	0	0	0	0	0
35 darawa s	0	0	0	0	0	0	0	0
36 maize n	0	0	0	0	0	0	0	0
37 sorghum n	0	0	0	0	0	0	0	0
38 vegetables n	0	0	0	0	0	0	0	0
39 gardens n	12,312	12,312	12,312	12,312	12,312	12,312	12,312	12,312
40 potatoes n	0	0	0	0	0	0	0	0
41 darawa n	0	0	0	0	0	0	0	0
42 sprinkler	0	0	0	0	0	0	0	0
43 surface	0	0	0	0	0	0	0	0
44 soahel	0	0	0	0	0	0	0	0
Total	300,753	300,753	300,753	300,753	300,753	300,753	372,946	360,709

Table H.1.6 Estimation of Water Requirement (DT)
(DT) Cropping Pattern to West Dhakaliya (feddan) -(DT)1/4-

Crop	Jan 1	Jan 2	Jan 3	Feb 1	Feb 2	Feb 3	Mar 1	Mar 2
1 wheat	95,032	95,032	95,032	95,032	95,032	95,032	95,032	95,032
2 horse beans	10,148	10,148	10,148	10,148	10,148	10,148	10,148	10,148
3 barley	712	712	712	712	712	712	712	712
4 fenugreek	0	0	0	0	0	0	0	0
5 lupins	0	0	0	0	0	0	0	0
6 chickpeas	0	0	0	0	0	0	0	0
7 lentins	162	162	162	162	162	162	162	162
8 clover c	72,193	72,193	72,193	72,193	72,193	72,193	72,193	72,193
9 clover f	89,023	89,023	89,023	89,023	89,023	89,023	89,023	89,023
10 flax	4,219	4,219	4,219	4,219	4,219	4,219	4,219	4,219
11 onion w	0	0	0	0	0	0	0	0
12 garlic w	420	420	420	420	420	420	420	420
13 vegetables w	12,237	12,237	12,237	12,237	12,237	12,237	12,237	0
14 others w	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044
15 potatoes w	0	0	0	0	0	0	0	0
16 medical pl w	0	0	0	0	0	0	0	0
17 trans crop w	0	0	0	0	0	0	0	0
18 sugar beat	0	0	0	0	0	0	0	0
19 cotton	0	0	0	0	0	0	72,193	72,193
20 rice	0	0	0	0	0	0	0	0
21 maize s	0	0	0	0	0	0	0	0
22 sorghum s	0	0	0	0	0	0	0	0
23 soya beans	0	0	0	0	0	0	0	0
24 sugar cane	251	251	251	251	251	251	251	251
25 sesame	0	0	0	0	0	0	0	0
26 ground nuts	0	0	0	0	0	0	0	0
27 onion s	0	0	0	0	0	0	0	0
28 vegetalbe s	0	0	0	0	0	0	0	0
29 others s	0	0	0	0	0	0	0	0
30 fodder s	0	0	0	0	0	0	0	0
31 trans crop s	0	0	0	0	0	0	0	0
32 potatoes s	0	0	0	0	0	0	0	0
33 sunflower s	0	0	0	0	0	0	0	0
34 medical pl s	0	0	0	0	0	0	0	0
35 darawa s	0	0	0	0	0	0	0	0
36 maize n	0	0	0	0	0	0	0	0
37 sorghum n	0	0	0	0	0	0	0	0
38 vegetables n	0	0	0	0	0	0	0	0
39 gardens n	12,312	12,312	12,312	12,312	12,312	12,312	12,312	12,312
40 potatoes n	0	0	0	0	0	0	0	0
41 darawa n	0	0	0	0	0	0	0	0
42 sprinkler	0	0	0	0	0	0	0	0
43 surface	0	0	0	0	0	0	0	0
44 soahel	0	0	0	0	0	0	0	0
Total	300,753	300,753	300,753	300,753	300,753	300,753	372,946	360,709

-(DT)3/4-

Jul 1	Jul 2	Jul 3	Aug 1	Aug 2	Aug 3	Sep 1	Sep 2	Sep 3	Oct 1
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	72,193	72,193	72,193
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	12,237	12,237
0	0	0	0	0	0	0	0	0	4,044
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
72,193	72,193	72,193	72,193	72,193	72,193	72,193	72,193	72,193	0
139,755	139,755	139,755	139,755	139,755	139,755	139,755	139,755	139,755	139,755
50,963	50,963	50,963	50,963	50,963	50,963	50,963	50,963	50,963	50,963
0	0	0	0	0	0	0	0	0	0
3,918	3,918	3,918	3,918	3,918	3,918	3,918	3,918	3,918	0
251	251	251	251	251	251	251	251	251	251
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
23,903	23,903	23,903	23,903	23,903	23,903	23,903	23,903	23,903	23,903
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
12,312	12,312	12,312	12,312	12,312	12,312	12,312	12,312	12,312	12,312
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
303,295	303,295	303,295	303,295	303,295	303,295	303,295	375,488	387,725	375,658

H.2 Surge Flow Irrigation System

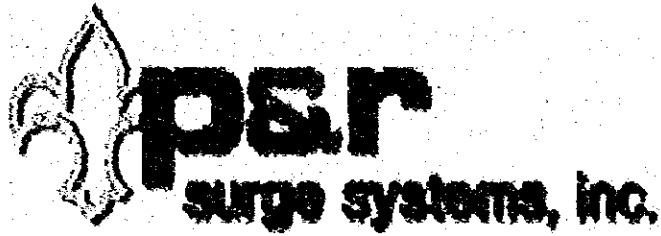
The Surge Flow Irrigation System (SFIS) is the most efficient surface irrigation method developed by U.S. researchers since 1986. SFIS has become the Defacto Standard for the surface irrigation because it saves water, labor and fertilizer while increasing yield.

A complete set of SFIS consists of one controller mounted on one valve as illustrated in Figure H.2.1. The controller has cast aluminium housing which contains microprocessor, a motor, rechargeable battery and solar panel. The program for the microprocessor automatically sets timed intervals to turn the butterfly valve. The entered one number figures how many cycles and how long each will run to get water across the field most efficient and uniformly.

SFIS is accomplished by surging the down the furrows on alternating irrigation sets at timed intervals until the water reaches the end of the furrow. The time interval is then cutback to shorter intervals to reduce runoff. SFIS has also been shown to reduce deep percolation because of more uniform application of irrigation water.

The most accepted SFIS theory is that the water continue to penetrate the soil even after the irrigation water is removed from it. This may result in some soil sealing and less penetration when the next surge of water is applied. Thus, the water may travel further down the furrow with less water applied than if the water has been applied continuously.

The vast improvement in water efficiency with reasonable cost has been realized by many irrigators ,and reportedly it comes up to 80-90% or a water saving of about 40% compared to previous method. It is easy to access to detailed SFIS informations through Web Page search engines. A couple of Web Pages with URL (Uniform Resource Locator) are cited for the sake of reference in the following pages.



P & R Surge Systems manufactures quality Surge Irrigation valves and controllers for worldwide applications.

Surge irrigation has become the defacto standard for efficient surface irrigation. Surge irrigation saves water, labor and fertilizer while increasing yield. Surge irrigation uniformity and efficiency rivals direct delivery systems at a fraction of the cost. Automatic fertigation features make it easy to apply fertilizer during surge irrigation.

- Products
- How Surge Irrigation Works
- Surge Irrigation Research Papers and Other Studies
- Email P & R Surge Systems for More Information

p&r en español



P & R Surge Systems, Inc.
327 E. 40th Street
Lubbock, TX 79404
USA
Phone: 806-747-0065
Fax: 806-744-3011

President: Patricia Bruno
Vice President: Robert Bruno
Service: Henry Martinez
Production: Freddy Martinez
Accounting: Travis Taylor

World Wide Web Home Page: <http://www.prsurge.com>
Internet Email Address: webmaster@prsurge.com

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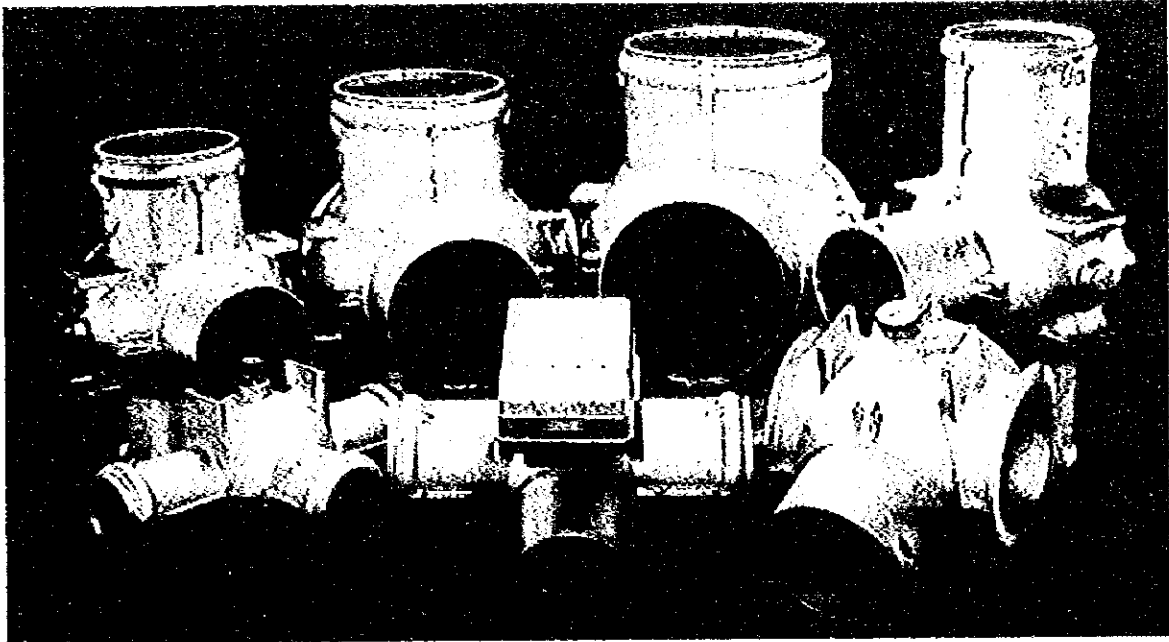
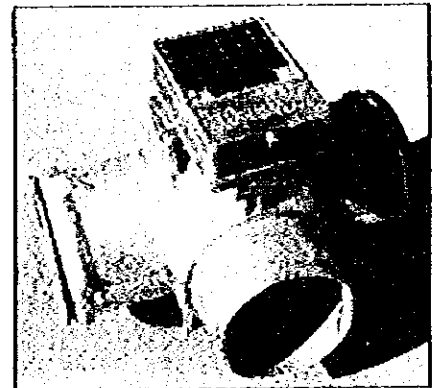


Figure H.2.1

A complete P & R Surge System consists of one controller mounted on one valve.



click image for enlargement

P & R CONTROLLERS

All controllers have cast aluminum housings. The housing contains a microprocessor, a motor, rechargeable battery and solar panel. The program automatically sets timed intervals to turn the butterfly valve. The controllers are energy self-sufficient.

All models feature ONE NUMBER EASY SETTING

- Enter one number to automatically set a program that figures how many cycles and how long each will run to get water across the field most efficiently and uniformly.
- The program automatically shortens cycle times for soaking without runoff once the water has advanced across the field.
- The number set can be changed mid-watering and will automatically correct all cycles to fine tune the program.
- Simple Off/On restarts the program held in memory.

How Surge Irrigation Works

When Utah State University researchers began studies of surge flow, they were looking for a way to automate surface irrigation by decreasing a furrow stream size from the big one needed to get water to the end of the furrow to one just large enough to keep the furrow wet while the root zone filled up. They conceived the idea of the cutback phase and discovered the advantages of the advance phase during field trials.

Surge Flow Irrigation: Automatic Surface Irrigation Demonstration for Summer Onion Tour , Hill and Stringham, Utah State University Cooperative Extension Service.

Surge irrigation is accomplished by "surging" the water down the furrows on alternating irrigation sets at timed intervals until the water reaches the end of the furrow. The time interval is then cut back to shorter intervals to reduce runoff. Surge irrigation has been shown to reduce the amount of runoff from fields thus reducing losses of sediment carrying nitrates and salts; and, as a result, improve the quality of downstream water in the system. Surge irrigation has also been shown to reduce deep percolation because of more uniform application of irrigation water.

Irrigation Water Management: Surge vs. Conventional Irrigation , Jim Valliant, Colorado State University Cooperative Extension

Several theories exist as to why surge irrigation works; the most accepted version is that the water may continue to penetrate the soil even after the irrigation water is removed from it; this may result in some soil "sealing" and less penetration when the next "surge" of water is applied. Thus, the water may travel further down the furrow with less water applied than if the water had been applied continuously. As a result, vastly improved irrigation efficiencies have been realized by many irrigators.

Report to the USDI, Bureau of Reclamation , Colorado State University Cooperative Extension.

Surge valves typically improve furrow irrigation efficiency an average of 10 to 40 percent. The application efficiency of furrow irrigation with surge is 80-90%, which gives surge the same application efficiency as a center pivot with low heads.

Opportunities to Maximize the Utilization of Water by Irrigators , Leon New, Texas Agricultural Extension Service.

In some field tests, uniformities of more than 90% have been achieved.

Surge Flow Irrigation: Automatic Surface Irrigation Demonstration for Summer Onion Tour , Hill and Stringham, Utah State University Cooperative Extension Service.

Irrigation efficiency was improved to 4.4 bushels per inch of water with surge from 3.8 bushels per inch on conventionally irrigated corn.

Surge Irrigation Saves Water with Top Yields , Jim Valliant, Colorado State University Cooperative Extension.

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Surge Irrigation Research Papers and Other Studies

Synopsis

- o How Surge Irrigation Works
- o Cost Savings with Surge Irrigation
- o Surge Irrigation on Various Crops
- o Surge Irrigation on Various Soils
- o Fertigation with Surge Irrigation

Reports

1996

- *Net Returns For Grain Sorghum And Corn Under Alternative Irrigation Systems In Western Kansas*

1995

- *Opportunities to Maximize the Utilitization of Water by Irrigators*
- *Surge: The Cutting Edge of Irrigation Technology*
- *Quick and Easy Installation*
- *Olathe Farmers Adopt Environmentally Safe Practices*

1994

- *Surge Irrigation - Fertigation*
- *Surge Flow Irrigation - Summer Onion Tour*
- *Surge Irrigation Saves Water With Top Yields*
- *Furrow Irrigated Rice / Producer Eliminates Legwork*
- *Surging With Flexible Tubing*
- *Irrigation Efficiency Surges West*

1993

- *Report to the United States Department of the Interior, Bureau of Reclamation*
- *The Economics of Efficient Irrigation Systems*
- *Surge Offers Hope For Surface Irrigation Efficiency*
- *The Benefits of Surge*

1992

- *Surge Evaluations*
- *Fertigation Through Surge Valves*
- *Surge Irrigation Saves Water*

1986 - 1991

- *Surge Irrigation of Bliss Spring Wheat - 1991*
- *Daily Furrow Irrigation in Orchards - 1990*
- *Surge vs. Continuous-Flow Irrigation - 1987*
- *Surge Flow Irrigation - 1986*

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Cost Savings with Surge Irrigation

Surge irrigation is inexpensive to adopt in relation to the benefits of more uniform water distribution, reduced deep percolation, reduced to no tailwater, and less total irrigation. Some growers have cut irrigation amounts by 50 percent.

Opportunities to Maximize the Utilization of Water by Irrigators , Leon New, Texas Agricultural Extension Service.

The Calls estimate a water savings of about 40 percent compared to previous methods.

Surge Flow Irrigation: Automatic Surface Irrigation Demonstration for Summer Onion Tour , Hill and Stringham, Utah State University Cooperative Extension Service.

In 1992 surge irrigation saved 12.1 and 23.8 percent irrigation water when compared to conventional furrow irrigation on Colorado corn.

Surge Irrigation Saves Water with Top Yields , Jim Valliant, Colorado State University Cooperative Extension.

Six irrigation systems were evaluated using a variety of factors to establish a net investment per acre. Surge was on the low end with \$48.83 per acre and LEPA was the high end with \$238.72 per acre.

The Economics of Efficient Irrigation Systems , Stephen H. Amosson, Texas A&M University.

Surge irrigation used 15, 30, and 40 percent less water than conventional irrigation in 1992 on three corn irrigation demonstration sites.

Surge Irrigation Saves Water , Jim Valliant, Colorado State University Cooperative Extension Service.

Furrow irrigation is used on more than half the irrigated acres in Nebraska. Some farmers are switching from furrow to center pivot irrigation to reduce labor and improve irrigation performance. Surge irrigation allows furrow irrigators to gain these same advantages without investing in major equipment. Getting over the field during the first irrigation in half or three quarters of the time it normally takes may more than pay for a valve in a single year. By realizing a water savings, pumping costs can be reduced. For each inch of water saved, pumping cost savings may exceed \$150 for a quarter section field.

Fundamentals of Surge Irrigation , Yonts, Eisenhauer, and Cahoon, Cooperative Extension, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln.

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Surge Irrigation on Various Crops

Seventeen acres of corn in Utah irrigated with surge in 1985 produced 210 bushels of grain per acre, three bushels less than the state's all-time record. Eighteen acres in the same field were irrigated with siphon tubes, producing 148 bushels to the acre.

Surge flow Irrigation: Automatic Surface Irrigation Demonstration for Summer Onion Tour , Hill and Stringham, Utah State University Cooperative Extension Service.

In 1992 surge was used to irrigate crops of corn, alfalfa, beans, vegetables, pasture, and tree fruit crops in orchards in Colorado. All of the growers expressed satisfaction on the results they saw in their fields in terms of better irrigation coverage and crop yields.

Report to the United States Department of the Interior Bureau of Reclamation , Alam and Antonio, Colorado State University Cooperative Extension Service.

Bliss spring wheat yields were equivalent under conventional and surge irrigation, with less than half of the water use under surge irrigation (12.9 acre/inch) compared to conventional surface irrigation (28.2 acres/inch).

Surge Irrigation of Bliss Spring Wheat , 1991, Miller, Shock, Stieber, and Saunders, Oregon State University.

One benefit the Eastmans have found is that on their sloped field with long runs, surge has given their pecan trees more vigorous, uniform growth and production. "I think our trees know the difference," George Eastman said. "They look a lot better than they used to. And we're getting a lot more even yield and growth."

Irrigation Efficiency Surges West , Don Dale, Western Grower and Shipper.

Texas cotton grower Tommie Wages, who uses surge with flexible tubing, noted a 100 to 150 lb. increase in lint yields when he changed from siphon tubes to surge.

Surging with Flexible Tubing , Texas Farmer-Stockman Irrigation Extra.

Furrow-irrigated rice is the latest innovation in Mississippi, and grower Michael Carr is the first to irrigate row rice with surge.

Producer Eliminates Legwork , Elton Robinson, Delta Farm Press.

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Table H.3.1 MPWWR Training Program 1998/1999

Notes: (1) CA: Computer Application
(2) RI: Related with Irrigation Improvement Project

Note	No.	Date		Course	Trainees	Place of the Course
		from	to			
	1	4.7.98	9.7.98	Construction Tests and Controlling Quality	Technicians	Esna Branch
	2	4.7.98	16.7.98	Feasibility Study for the Projects	Civil Engineers	Training Center
	3	4.7.98	16.7.98	Following up Irrigation and Drainage Project Implementation	Technicians	Menia Branch
CA	4	4.7.98	16.7.98	Auto Cad	Engineers/Technicians	Training Center
	5	4.7.98	16.7.98	Operating and Maintenance Systems for Pump Stations	Technicians MR	Training Center
RI	6	4.7.98	16.7.98	Project Management	First Second Degree Engineers	Training Center
	7	25.7.98	6.8.98	The Codes and Concrete Standards Description	Civil Engineers	Training Center
CA	8	25.7.98	6.8.98	3D Studio	Engineers/University Graduates/Technicians	Training Center
	9	26.7.98	6.8.98	Systems of Promoting Resolutions	First Second Degree Engineers	Training Center
RI	10	25.7.98	6.8.98	Following up Irrigation and Drainage Project Implementation	Technicians	Training Center
	11	25.7.98	6.8.98	Laws of the Ministry of Public Works & Water Resources	Engineers	Training Center
	12	25.7.98	6.8.98	Modern Geometric Theories and Geometric Devices	Technicians	Training Center
CA	13	15.8.98	20.8.98	Windows	Engineers/University Graduates/Diplomats	Esna Branch
	14	15.8.98	20.8.98	Practical Applications on Financial Affairs	Diplomats	Training Center
RI	15	15.8.98	27.8.98	Controlling Quality and Repairing Establishments	Civil Engineers	Training Center
	16	15.8.98	27.8.98	Technical Inspection on Electrical Equipment	Civil & Electrical Engineers	Training Center
RI	17	22.8.98	27.8.98	Flow in the Open Channels and Measuring Behaviours	Technicians	Training Center
RI	18	22.8.98	27.8.98	Hydraulic	Civil Engineers	Training Center
RI	19	22.8.98	3.9.98	On-Farm Irrigation Management System and Decreasing Water Consumption	Technicians	Menia Branch
CA	20	22.8.98	3.9.98	Access	University Graduates/ Diplomats	Training Center
	21	27.8.98	3.9.98	Media & Public Relations	Engineers/University Graduates	Training Center
CA	22	29.8.98	3.9.98	Power House	Electrical and Civil Engineers	Training Center
	23	29.8.98	10.9.98	Soil Mechanism and Structure Engineering	Civil Engineers	Training Center
RI	24	29.8.98	10.9.98	Irrigation Advisory	Civil Engineers	Training Center
	25	5.9.98	10.9.98	Practical Applications in Storage Field	University Graduates/ Diplomats	Training Center
CA	26	5.9.98	10.9.98	Introduction + DOS	Engineers/University Graduates/Diplomats	Training Center
	27	5.9.98	17.9.98	Operating & Maintenance Systems for Pump Stations	Electrical and Civil Engineers	Training Center
RI	28	12.9.98	17.9.98	Construction Tests and Controlling Quality	Technicians	Training Center
CA	29	12.9.98	24.9.98	Primavera	Civil Engineers	Training Center
RI	30	12.9.98	24.9.98	On Farm Irrigation System Management and Decreasing Water Consumption	Technicians	Kafr El Sheikh Branch
	31	19.9.98	24.9.98	Practical Applications on Fuel Consumption and Using Government Cars	University Graduates/ Diplomats	Training Center
RI	32	19.9.98	24.9.98	Writing Technical Reports	Engineers	Training Center
RI	33	19.9.98	1.10.98	Controlling Quality and Repairing Establishments	Civil Engineers	Esna Branch

Note	No.	Date		Course	Trainees	Place of the Course
		from	to			
CA	34	26/9/98	8/10/98	Arc Info	Engineers Geometric Diplomats	Training Center
CA	35	10/10/98	15/10/98	Windows	Engineers University Graduates Diplomats	Training Center
	36	10/10/98	22/10/98	Technical Inspection on Mechanical Equipment	Electrical and Civil Engineers	Training Center
	37	10/10/98	22/10/98	International Law of Water	First Second Degree Engineers	Training Center
RI	38	10/10/98	22/10/98	Controlling Quality and Repairing Establishments	Civil Engineers	Training Center
	39	10/10/98	22/10/98	Developing Under-ground Water Resources	Engineers	Training Center
RI	40	10/10/98	22/10/98	Management Basis	Engineers University Graduates First and Second Degree	Training Center
CA	41	17/10/98	22/10/98	Introduction + DOS	University Graduates' Diplomats	Esna Branch
RI	42	17/10/98	29/10/98	Following up the Implementation of Drainage and Irrigation Projects	Technicians	Kafr El Sheikh Branch
CA	43	17/10/98	29/10/98	Sap 90	Civil Engineers	Training Center
	44	24/10/98	29/10/98	Practical Applications in Employees Affairs Field	University Graduates' Diplomats	Training Center
RI	45	24/10/98	29/10/98	Construction Tests and Controlling Quality	Technicians	Menia Branch
	46	24/10/98	5/11/98	Geometric Modern Theories and Geometric Devices	Technicians	Training Center
	47	24/10/98	5/11/98	Drainage (Design-Implementation-Operation)	Civil Engineers	Training Center
CA	48	31/10/98	12/11/98	Aut Cad	Engineers/Technicians	Training Center
	49	31/10/98	12/11/98	Water-grass and Resisting Them	Civil Engineers	Training Center
	50	7/11/98	12/11/98	Practical Applications in Storage Field	University Graduates' Diplomats	Training Center
	51	7/11/98	19/11/98		Civil Engineers	Training Center
	52	7/11/98	19/11/98	Soil Mechanics and Structure Engineering	Civil Engineers	Training Center
RI	53	7/11/98	19/11/98	Project Management	Engineers	Training Center
	54	7/11/98	19/11/98	Dams	Civil Engineers	Esna Branch
CA	55	14/11/98	26/11/98	Visual Basic	University Graduates' Diplomats	Training Center
	56	21/11/98	26/11/98	Representatives of the	University Graduates' Diplomats	Training Center
RI	57	21/11/98	26/11/98	Codes and Concrete Standards Description	Civil Engineers	Training Center
	58	28/11/98	3/12/98	Inspection and Engineering Writers	Diplomats	Training Center
CA	59	28/11/98	3/12/98	MS Word	University Graduates' Diplomats	Training Center
	60	28/11/98	17/12/98	Technical Preparation to Fill the Position of Assistant Work Manager	Civil Engineers	Training Center
	61	5/12/98	1/12/98	Soil Mechanics and Structure	Technicians	Menia Branch
CA	62	5/12/98	10/12/98	Windows	University Graduates' Diplomats	Esna Branch
	63	5/12/98	17/12/98	Technical Preparation for Electrical Engineers	Civil and Electrical Engineers	Training Center
	64	12/12/98	17/12/98	Practical Applications in Financial Affairs	University Graduates' Diplomats	Training Center
	65	12/12/98	17/12/98	Construction Designing for Pump Station	Civil Engineers	Training Center
	66	30/1/99	4/2/99	Duties, Responsibilities and Activities of the Ministry	Engineers University Graduates	Training Center
	67	30/1/99	4/2/99	Practical Application in Fuel Consumption and Using Government Cars	University Graduates' Diplomats	Training Center
	68	6/2/99	11/2/99	Duties, Responsibilities and Activities of the Ministry	Engineers University Graduates	Training Center
	69	6/2/99	18/2/99	Floods	Civil Engineers	Menia Branch

Note	No.	Date		Course	Trainees	Place of the Course
		from	to			
CA	70	6.2.99	18.2.99	Auto Cad	Engineers/Technicians	Training Center
RI	71	6.2.99	18.2.99	Following up the Implementation of Drainage and Irrigation Projects	Technicians	Esnā Branch
	72	6.2.99	25.2.99	Technical Preparation to Fill the Job of Work Manager	Civil Engineers	Training Center
RI	73	13.2.99	25.2.99	Crisis Management	Engineers First Second Degree	Training Center
CA	74	20.2.99	4.3.99	Visual Basic	Engineers University Graduates/Diplomats	Training Center
	75	20.2.99	4.3.99	Operation and Maintenance Systems of Pump Stations	Electrical and Civil Technicians	Training Center
RI	76	20.2.99	4.3.99	Flow in Open Channels and Measuring Behaviour	Civil Engineers	Training Center
	77	20.2.99	4.3.99	Administration Basis	Engineers University Graduates First Second Degree	Training Center
	78	27.2.99	4.3.99	Practical Application in Employees Affairs	University Graduates/ Diplomats	Training Center
CA	79	27.2.99	4.3.99	Introduction + DOS	Engineers/University Graduates/Diplomats	Esnā Branch
	80	27.2.99	18.3.99	Technical Preparation to Fill the Job of Inspector	Civil Engineers	Training Center
	81	6.3.99	11.3.99	Using Laser in Agricultural Land Levelling and Drainage & Irrigation Projects	Civil/Agricultural Engineers	Training Center
	82	6.3.99	18.3.99	Infrastructure	Engineers	Training Center
	83	6.3.99	18.3.99	Designing Irrigation and Drainage Establishments	Engineers	Training Center
	84	6.3.99	18.3.99	Stores Wages Employees Affairs by Computer	University Graduates/ Diplomats	Training Center
CA	85	3.4.99	8.4.99	Introduction + DOS	Engineers/University Graduates/Diplomats	Training Center
	86	3.4.99	15.4.99	Preserving Coasts	Civil Engineers	Training Center
	87	3.4.99	15.4.99	Operation and Maintenance Systems of Pump Stations	Electrical and Civil Engineers	Training Center
	88	3.4.99	15.4.99	Designing Modern Gates	Civil Engineers	Training Center
RI	89	3.4.99	15.4.99	Night Storage of Water	Agricultural Civil Engineers	Kafr El Sheikh Branch
	90	3.4.99	15.4.99	Geometric Modern Theories and Developing Geometric Devices	Civil Engineers	Training Center
	91	3.4.99	15.4.99	Soil Mechanism and Structure Engineering	Civil Engineers	Esnā Branch
CA	92	10.4.99	15.4.99	Excel	University Graduates/ Diplomats	Training Center
RI	93	21.5.99	17.6.99	On Farm Irrigation Systems Management and Decreasing Water Consumption	Agriculture/Civil Engineers	Kafr El Sheikh Branch
CA	94	8.5.99	13.5.99	Windows	University Graduates/ Diplomats	Training Center
	95	8.5.99	13.5.99	Inspection and Engineering Writers	Diplomats	Training Center
	96	8.5.99	13.5.99	Soil Mechanics Basis	Technicians	Esnā Branch
RI	97	8.5.99	13.5.99	Flow of Open Channels and Measuring Behaviours	Technicians	Training Center
	98	8.5.99	20.5.99	Water Canals Lining	Civil Engineers	Training Center
	99	8.5.99	20.5.99	Operation and Maintenance Systems of Pump Stations	Technicians	Training Center
CA	100	15.5.99	27.5.99	Auto Cad	Engineers/Technicians	Training Center
	101	22.5.99	27.5.99	Soil Mechanics Basis	Technicians	Training Center
	102	22.5.99	3.6.99	Designing Modern Bridges	Civil Engineers	Training Center
CA	103	29.5.99	3.6.99	MS Word	Engineers/University Graduates/Diplomats	Training Center

Table H.4.1 (1) Discharge through Zifta Barrage in 1996

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	4.50	3.00	4.50	5.50	6.65	8.30	9.90	7.00	7.00	3.50	4.70	4.30	69.85	5.82
2	4.85	4.20	4.50	5.50	6.65	8.35	8.10	6.50	7.00	3.30	4.70	2.30	67.95	5.66
3	4.85	4.20	4.50	7.10	6.65	8.35	6.10	6.50	7.00	3.30	3.70	2.30	67.55	5.63
4	4.50	3.90	4.50	5.90	6.65	8.35	8.10	6.50	7.00	3.10	4.90	2.30	69.7	5.81
5	4.50	4.20	4.50	5.50	6.65	8.35	9.10	7.00	6.75	2.90	4.90	2.30	71.65	5.97
6	4.50	3.90	4.50	5.10	6.65	8.35	9.30	7.80	6.50	2.90	4.90	2.30	72.7	6.06
7	4.50	4.85	4.50	5.10	6.65	8.35	9.00	7.80	6.50	3.10	4.90	1.50	73.75	6.15
8	4.50	7.90	4.50	5.10	6.65	8.80	9.00	7.50	6.50	3.10	4.90	1.50	77.95	6.50
9	4.50	5.90	4.80	5.10	6.65	8.80	9.00	8.10	6.50	4.10	4.90	1.90	79.25	6.60
10	4.50	5.90	5.90	5.10	6.65	8.80	9.00	8.10	6.50	4.10	4.90	2.90	82.35	6.86
11	4.50	6.30	5.90	5.10	5.90	9.30	9.00	8.10	6.50	4.90	4.90	2.90	84.3	7.03
12	4.50	5.90	5.90	5.10	5.90	9.30	9.00	8.10	6.50	4.90	4.90	2.90	84.9	7.08
13	4.50	5.90	4.80	5.10	5.90	9.30	8.10	8.10	6.50	4.50	4.90	3.50	84.1	7.01
14	8.35	5.90	4.80	5.10	5.90	9.30	8.10	7.50	6.50	3.10	5.50	3.50	87.55	7.30
15	5.10	5.10	4.80	5.10	5.90	9.30	8.10	7.50	6.50	3.50	5.90	3.50	85.3	7.11
16	11.45	5.50	4.80	5.10	5.90	9.30	8.10	7.50	7.50	3.70	5.90	3.50	94.25	7.85
17	7.90	5.50	4.80	5.10	5.10	9.30	8.10	7.50	7.50	4.30	5.90	3.50	91.5	7.63
18	7.90	5.10	5.10	5.10	5.10	9.30	8.10	7.50	7.50	4.30	5.90	3.50	92.4	7.70
19	10.20	5.10	5.50	5.90	5.10	9.30	7.80	7.50	7.00	4.90	5.90	3.50	96.7	8.06
20	10.70	5.10	5.90	4.80	5.10	9.30	7.80	7.25	7.00	4.90	5.50	2.90	96.25	8.02
21	12.80	5.10	5.90	4.80	5.10	9.30	7.80	7.25	6.75	5.90	5.50	2.90	100.1	8.34
22	12.30	5.10	5.90	4.80	5.10	9.30	7.80	7.25	7.25	5.90	5.50	2.90	101.1	8.43
23	12.30	5.10	6.65	4.80	5.10	9.30	7.80	7.25	5.70	6.75	5.50	2.90	102.15	8.51
24	12.30	5.10	7.10	4.80	5.50	9.00	7.80	7.00	5.70	5.50	5.50	2.90	102.2	8.52
25	3.05	5.10	6.65	4.80	5.90	9.00	7.80	7.00	5.10	5.30	5.50	2.50	92.7	7.73
26	3.05	5.10	6.65	4.80	5.90	9.00	7.80	7.00	5.50	5.30	5.50	2.50	94.1	7.84
27	3.05	5.10	4.80	5.10	6.70	9.60	7.80	7.00	5.50	5.30	5.50	2.50	94.95	7.91
28	7.90	4.50	4.80	5.50	7.90	9.00	7.80	7.00	5.50	4.90	5.10	2.50	100.4	8.37
29	0.50	4.50	2.80	6.65	7.90	9.00	7.80	7.00	5.90	3.90	4.90	2.90	92.75	7.73
30	0.50	-	4.80	6.65	7.90	9.90	7.80	7.00	5.90	4.30	4.90	2.90	92.55	7.71
31	0.30	-	7.50	-	7.90	-	7.25	7.00	-	4.70	-	2.90	68.55	5.71
Total	188.85	148.05	162.55	159.20	193.20	270.20	254.05	227.10	195.05	134.15	156.00	87.10	2671.50	222.63
Mean	6.09	5.11	5.24	5.31	6.23	9.01	8.20	7.33	6.50	4.33	5.20	2.81	86.18	7.18

Table H.4.1 (2) Discharge through Zifta Barrage in 1997

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	2.50	3.00	3.50	4.50	6.30	7.80	11.40	8.40	7.25	3.10	4.10	5.50	68.35	5.70
2	3.50	3.10	3.10	4.90	6.30	7.80	11.40	8.40	7.00	3.10	4.10	5.50	70.2	5.85
3	3.50	3.10	3.90	4.50	5.70	7.80	11.40	8.40	7.00	3.10	4.10	3.50	69	5.75
4	3.50	3.50	10.50	4.50	4.70	7.80	11.40	8.40	6.75	3.10	4.10	3.50	75.75	6.31
5	3.50	3.10	8.40	5.10	4.70	8.10	11.40	8.10	6.50	3.10	4.10	3.50	74.6	6.22
6	3.50	3.60	9.30	5.70	5.10	9.00	11.40	7.50	6.50	3.10	4.30	2.50	77.5	6.46
7	5.50	3.10	10.20	5.30	5.10	9.30	10.65	7.50	6.50	3.10	4.30	2.50	80.05	6.67
8	4.50	3.50	9.30	5.30	5.50	10.30	10.65	7.50	6.50	3.10	4.30	2.50	80.95	6.75
9	5.10	2.70	6.50	5.30	5.90	10.30	10.30	7.00	6.30	3.70	5.10	2.50	79.7	6.64
10	5.10	2.50	6.10	5.30	7.25	10.30	9.95	7.50	7.25	3.70	5.10	2.50	82.55	6.88
11	5.70	2.50	6.10	5.90	7.50	10.30	9.30	8.10	6.75	3.70	5.10	2.50	84.45	7.04
12	7.00	3.50	6.10	5.90	7.50	10.30	9.30	8.70	7.25	3.70	5.10	2.50	88.85	7.40
13	5.70	2.50	6.10	5.30	6.10	10.30	9.30	8.40	7.25	3.90	5.10	2.50	85.45	7.12
14	5.50	3.50	4.10	6.30	6.50	10.30	9.00	6.30	7.25	4.10	5.10	2.50	84.45	7.04
15	1.90	4.50	3.50	7.00	6.30	11.00	9.30	5.50	7.25	4.10	5.10	2.90	83.35	6.95
16	2.10	4.50	3.50	5.50	6.30	10.65	9.00	5.50	7.00	4.10	5.10	2.90	82.15	6.85
17	4.50	4.50	5.50	5.50	5.90	11.00	7.80	5.50	7.00	5.50	5.50	2.90	88.1	7.34
18	4.50	4.50	6.50	5.50	5.50	11.00	7.80	5.50	7.00	5.50	5.50	2.90	89.7	7.48
19	3.50	4.50	7.00	5.10	5.50	11.00	7.80	5.50	7.00	7.50	5.70	2.90	92	7.67
20	3.50	4.10	7.00	4.70	5.10	11.40	7.80	6.10	7.00	7.50	5.70	2.90	92.8	7.73
21	3.50	3.90	7.00	4.70	5.70	11.40	7.25	6.10	7.00	6.10	5.90	2.90	92.45	7.70
22	2.90	3.90	7.00	5.50	5.70	11.40	7.00	6.75	7.00	4.90	5.50	2.90	92.45	7.70
23	2.70	3.90	6.10	5.90	6.30	11.40	6.30	6.75	7.25	4.50	5.50	2.90	92.5	7.71
24	2.70	6.10	7.00	5.90	6.10	11.40	6.30	7.00	6.75	4.10	5.50	2.50	95.35	7.95
25	2.70	5.10	6.30	5.90	6.30	11.40	6.30	7.50	5.90	3.90	5.50	2.50	94.3	7.86
26	2.70	3.10	5.90	5.90	5.90	11.40	7.25	7.50	5.90	4.90	5.50	2.50	94.45	7.87
27	5.10	3.10	5.90	5.90	5.90	11.40	7.25	7.50	5.90	4.90	5.50	2.50	97.85	8.15
28	5.10	2.50	6.75	5.90	5.90	11.40	9.30	7.50	5.30	4.30	5.50	2.90	100.35	8.36
29	5.10	-	6.50	5.50	7.00	11.40	9.30	7.80	4.50	4.30	5.50	2.90	98.8	8.23
30	5.10	-	5.50	6.10	7.80	11.40	9.30	7.50	3.50	4.40	5.50	2.90	99	8.25
31	4.10	-	5.10	-	7.80	-	9.00	7.50	-	4.30	-	2.90	71.7	5.98
Total	125.80	101.40	195.25	164.30	189.15	309.75	280.90	223.20	197.30	132.40	152.00	91.70	2659.15	221.60
Mean	4.06	3.62	6.30	5.48	6.10	10.33	9.06	7.20	6.58	4.27	5.07	2.96	85.78	7.15

Table H.4.1 (3) Discharge through Zifta Barrage in 1998

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	1.90	3.10	4.90	5.10	6.75	6.50	10.65	7.25	7.50	16.00	14.00		84.65	7.6955
2	1.50	3.10	5.10	4.50	6.75	6.50	10.65	7.25	7.50	16.00	14.00		84.85	7.7136
3	0.90	3.70	4.10	4.50	6.75	7.80	10.65	7.00	7.50	16.00	14.00		85.9	7.8091
4	0.90	4.50	3.50	4.70	6.75	8.10	10.65	7.00	7.50	16.00	14.00		87.6	7.9636
5	1.70	4.70	2.50	5.10	6.75	8.40	10.65	7.00	7.00	16.00	14.00		88.8	8.0727
6	2.10	5.30	3.50	5.10	6.75	9.00	10.65	7.00	7.00	16.00	14.00		92.4	8.4
7	3.10	5.70	3.50	5.10	6.75	9.30	10.65	7.00	7.00	16.00	14.00		95.1	8.6455
8	3.90	5.50	4.10	5.10	6.75	10.30	10.65	7.00	7.00	16.00			84.3	8.43
9	7.80	5.30	4.10	5.10	6.75	10.30	10.65	7.00	7.00	16.00			89	8.9
10	6.50	5.10	4.98	5.30	6.75	10.30	10.65	7.00	7.00	16.00			89.58	8.958
11	4.50	4.70	5.30	5.50	7.50	10.30	10.65	7.50	7.00	16.00			89.95	8.995
12	5.70	4.10	5.30	5.90	7.50	10.30	9.95	7.50	7.00	16.00			91.25	9.125
13	5.90	3.50	5.10	5.90	7.50	10.30	9.95	7.50	7.00	16.00			91.65	9.165
14	6.10	3.30	5.10	5.90	7.50	10.30	9.95	7.50	10.30	16.00			95.95	9.595
15	5.50	2.90	5.10	5.90	7.50	10.30	9.95	7.50	14.60	16.00			100.25	10.025
16	4.50	3.10	5.10	6.30	7.50	11.00	9.95	7.50	15.00	16.00			101.95	10.195
17	4.30	3.10	5.10	6.30	7.50	11.40	9.95	7.50	15.00	16.00			103.15	10.315
18	3.30	2.90	5.10	6.30	7.50	11.40	9.95	7.50	15.00	16.00			102.95	10.295
19	1.50	2.70	5.10	6.30	7.50	11.40	9.30	7.50	15.00	16.00			101.3	10.13
20	1.50	2.70	7.50	6.30	7.50	11.40	9.30	7.50	15.00	16.00			104.7	10.47
21	3.90	3.10	10.30	6.30	7.50	11.40	8.70	7.50	15.00	16.00			110.7	11.07
22	4.10	3.30	6.75	6.30	7.25	10.65	8.10	7.50	15.80	16.00			107.75	10.775
23	5.10	5.30	5.10	6.30	6.75	10.65	7.00	7.50	16.60	16.00			109.3	10.93
24	2.50	6.30	5.50	6.30	6.75	10.65	6.30	7.50	15.40	16.00			107.2	10.72
25	3.10	7.80	5.50	6.30	7.00	10.65	6.30	7.50	15.80	15.00			109.95	10.995
26	3.50	7.50	5.50	6.30	7.50	10.65	6.30	7.50	16.20	14.00			110.95	11.095
27	3.50	7.00	5.10	6.30	7.50	10.65	6.30	7.50	16.60	14.00			111.45	11.145
28	4.10	7.00	6.11	6.75	7.50	10.65	6.30	7.50	16.80	14.00			114.71	11.471
29	10.30	-	6.30	6.75	7.50	10.65	6.30	7.50	17.00	14.00			115.3	11.53
30	10.30	-	6.50	6.75	7.25	10.65	7.25	7.50	17.00	14.00			117.2	11.72
31	10.50	-	5.70	-	6.75	-	7.25	7.50	-	14.00	-		82.7	8.27
Total	134.00	126.30	162.44	174.55	221.75	301.85	281.50	228.00	355.10	463.00	98.00		3062.49	300.62
Mean	4.32	4.51	5.24	5.82	7.15	10.06	9.08	7.35	11.84	15.58	14.00		98.79	9.70

Table H.4.2 (1) Intake Amount to Meet Yazied in 1996

Day	(Unit:MCM/day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	2.70	3.50	2.90	3.60	2.80	4.80	7.70	6.90	6.80	2.70	2.60	3.40	51.40	4.28
2	2.90	3.00	2.90	4.10	2.80	4.80	7.70	6.90	6.40	2.70	2.40	3.40	52.00	4.33
3	2.90	3.30	2.50	4.50	3.10	5.10	7.70	6.90	6.10	2.70	2.40	3.00	53.20	4.43
4	2.90	3.50	2.30	4.50	3.60	5.80	7.70	6.90	6.00	2.90	2.80	2.80	55.70	4.64
5	2.90	3.30	2.30	4.50	3.80	5.80	7.70	6.90	5.70	2.90	2.80	2.40	56.00	4.67
6	2.90	3.00	2.30	4.30	4.10	5.80	7.70	6.90	5.20	2.20	2.60	2.20	55.20	4.60
7	2.90	3.00	2.30	3.30	4.25	5.80	7.70	6.90	5.20	2.20	2.60	2.20	55.35	4.61
8	2.70	3.30	2.30	3.30	4.40	6.30	7.70	6.90	5.60	2.70	2.80	1.90	57.90	4.83
9	2.40	3.30	2.45	3.30	4.40	6.60	7.70	6.50	5.60	2.20	3.00	2.20	58.65	4.89
10	1.90	3.30	2.45	3.30	4.40	7.40	7.70	6.50	5.40	2.00	3.20	2.30	59.85	4.99
11	1.40	3.30	2.45	3.30	4.40	7.40	7.70	6.30	5.40	2.20	3.20	2.30	60.35	5.03
12	1.00	3.30	2.45	3.10	4.40	7.60	7.70	6.30	5.30	2.20	3.20	2.10	60.65	5.05
13	0.70	3.30	2.65	2.90	4.50	7.60	7.70	6.30	5.20	2.20	3.50	2.10	61.65	5.14
14	0.40	3.30	2.65	2.90	4.70	7.55	7.70	6.30	5.20	2.20	3.80	2.10	62.80	5.23
15	-	3.10	2.65	2.90	4.70	7.55	7.70	6.40	5.10	2.50	3.80	1.90	63.30	5.75
16	-	3.10	2.65	2.90	4.50	7.70	7.70	6.80	4.50	2.70	3.80	1.90	64.25	5.84
17	-	2.90	2.75	2.90	4.50	7.70	7.70	6.80	4.70	2.70	3.80	2.10	65.55	5.96
18	-	2.90	2.75	2.90	4.30	7.80	7.70	6.80	4.50	2.70	4.20	2.30	66.85	6.08
19	-	2.90	3.00	2.90	4.30	7.80	7.70	6.80	4.50	2.70	4.20	2.30	68.10	6.19
20	-	2.90	3.00	2.80	4.30	7.80	7.70	7.00	4.90	2.70	4.00	2.50	69.60	6.33
21	-	2.90	3.30	2.80	4.30	7.80	7.30	7.00	4.90	2.90	4.00	2.30	70.50	6.41
22	-	2.90	3.30	2.80	4.30	7.60	7.30	7.00	4.70	2.90	3.80	2.10	70.70	6.43
23	-	2.90	3.30	2.80	4.30	7.60	7.30	7.00	4.50	2.70	3.60	2.10	71.10	6.46
24	-	2.90	3.30	2.80	4.30	7.60	7.30	7.00	4.30	2.40	3.60	2.10	71.60	6.51
25	-	2.90	3.30	2.80	4.30	7.60	7.30	7.00	4.30	2.60	3.80	2.10	73.00	6.64
26	-	2.90	3.30	2.80	4.50	7.60	7.30	7.00	4.10	2.60	4.00	2.10	74.20	6.75
27	-	2.90	3.30	2.80	4.40	7.70	7.30	7.00	3.50	2.50	4.00	2.10	74.50	6.77
28	-	2.90	3.30	2.80	4.40	7.70	7.30	7.00	3.30	2.60	3.60	2.20	75.10	6.83
29	-	2.90	3.30	2.80	4.50	7.70	7.30	7.00	2.90	2.60	3.60	2.60	76.20	6.93
30	-	-	3.30	2.80	4.80	7.70	7.10	7.00	2.90	2.50	3.40	3.00	74.50	6.77
31	-	-	3.30	-	4.80	-	6.90	7.00	-	2.50	-	3.20	58.70	5.34
Total	30.60	89.60	83.00	96.20	131.15	211.30	233.70	211.00	146.70	78.80	102.10	73.30	1,988.45	174.70
Mean	2.19	3.09	2.84	3.21	4.23	7.04	7.54	6.81	4.89	2.54	3.40	2.36	64.14	5.64

Table H.4.2 (2) Intake Amount to Meet Yazied in 1997

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	3.50	3.00	2.20	4.60	3.00	5.10	7.60	7.70	6.70	2.80	2.80	3.50	53.5	4.46
2	3.70	3.00	2.20	4.60	3.00	5.10	7.60	7.70	6.70	2.50	2.50	3.10	53.8	4.48
3	3.70	3.00	2.00	4.60	3.00	5.10	7.60	7.70	6.70	2.30	2.30	3.10	54.4	4.53
4	3.50	3.00	2.40	4.60	3.00	5.30	7.70	7.80	6.50	2.30	2.30	3.00	55.9	4.66
5	3.50	3.00	2.60	4.40	3.00	5.70	7.70	7.80	6.30	2.30	2.30	2.80	56.9	4.74
6	3.20	3.00	2.60	4.40	3.00	5.30	7.70	7.70	6.30	2.30	2.30	2.80	57.1	4.76
7	3.20	2.00	2.60	4.80	3.00	6.30	7.70	7.70	6.30	2.30	2.30	2.80	58.3	4.86
8	2.80	2.00	2.40	3.70	3.40	7.00	7.70	7.70	6.10	2.30	2.30	2.80	58.5	4.88
9	2.30	2.00	2.20	3.50	3.70	7.30	7.70	7.70	5.90	2.30	2.30	2.80	59	4.92
10	2.50	2.00	2.17	3.50	3.70	7.30	7.70	7.40	5.70	2.30	2.30	2.60	59.87	4.99
11	1.00	2.00	2.30	3.50	3.70	7.50	7.70	7.40	5.50	2.30	2.30	2.40	59.5	4.96
12	0.50	2.20	2.50	3.50	3.70	7.50	7.50	7.60	5.30	2.60	2.60	2.20	60.1	5.01
13	0.50	2.70	2.50	3.50	4.20	7.50	7.50	7.70	4.90	2.60	2.60	2.20	61.8	5.15
14	-	2.90	2.50	3.50	4.60	7.60	7.70	7.70	4.50	2.60	2.60	2.20	62.8	5.23
15	-	2.90	2.50	3.30	4.60	7.60	7.70	7.70	4.50	2.60	2.60	2.20	64	5.33
16	-	2.90	2.50	3.30	4.80	7.60	7.70	7.70	4.50	2.60	2.60	2.50	65.9	5.49
17	-	3.10	2.50	3.20	4.80	7.60	7.70	7.70	4.30	2.50	2.50	2.70	67.1	5.59
18	-	3.10	2.50	3.20	4.80	7.60	7.70	7.50	4.10	2.50	2.50	2.70	67.7	5.64
19	-	3.10	2.50	3.20	4.80	7.60	7.70	7.30	4.10	2.50	2.50	2.70	68.3	5.69
20	-	3.10	2.50	3.10	4.80	7.60	7.70	7.10	4.10	2.50	2.50	2.70	69	5.75
21	-	3.30	2.50	3.50	4.80	7.60	7.70	7.10	4.10	2.50	2.50	2.70	70.6	5.88
22	-	3.30	2.50	3.70	4.60	7.60	7.70	7.10	4.10	2.50	2.50	2.70	71.4	5.95
23	-	2.80	3.00	3.50	4.90	7.60	7.70	7.10	4.10	2.50	2.50	2.70	72.5	6.04
24	-	2.40	3.50	3.00	4.90	7.60	7.70	6.90	3.80	2.70	2.70	2.50	72.6	6.05
25	-	2.20	3.70	3.00	4.90	7.60	7.70	6.90	3.20	2.70	2.70	2.80	73.3	6.11
26	-	2.20	4.10	3.00	4.90	7.60	7.70	6.90	3.20	2.80	2.80	2.50	74.8	6.23
27	-	2.20	4.30	3.00	4.90	7.60	7.70	6.90	3.20	2.90	2.90	2.50	76.3	6.36
28	0.50	2.20	4.30	3.00	4.90	7.60	7.70	6.90	3.20	3.00	3.00	2.44	77.84	6.49
29	0.50	-	4.30	3.00	5.10	7.60	7.70	6.90	3.20	3.20	3.20	3.24	77.84	6.49
30	0.50	-	4.30	3.00	5.30	7.60	7.70	6.90	3.20	3.00	3.00	3.04	78.44	6.54
31	1.00	-	4.60	-	5.30	-	7.70	6.70	-	3.00	3.00	3.04	62.34	5.20
Total	36.40	74.60	89.27	107.70	131.10	211.20	238.00	228.60	144.30	79.80	100.50	83.96	2021.43	168.45
Mean	2.14	2.66	2.88	3.59	4.23	7.04	7.68	7.37	4.81	2.57	3.35	2.71	65.21	5.43

Table H.4.2 (3) Intake Amount to Meet Yazied in 1998

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	2.80	3.10	2.60	3.40	3.60	5.73	7.50	10.10	6.40	6.19			52.42	5.24
2	2.80	3.30	2.60	3.40	3.60	5.77	7.50	9.50	6.40	5.80			52.67	5.27
3	2.80	3.30	3.00	3.40	3.60	5.80	7.50	7.40	5.40	5.10			50.3	5.03
4	3.00	3.30	3.00	3.30	3.60	5.80	7.50	6.45	5.74	4.22			49.91	4.99
5	3.00	3.30	3.00	3.40	3.60	7.00	8.10	7.60	5.42	4.30			53.72	5.37
6	3.00	3.50	2.80	3.60	3.60	7.00	7.70	9.70	5.30	4.30			56.5	5.65
7	2.80	3.50	2.60	3.80	3.60	6.70	7.60	6.78	5.10	4.20			53.68	5.37
8	2.20	4.20	2.60	3.90	3.60	6.87	7.60	6.83	5.00	4.60			55.4	5.54
9	1.50	4.20	2.60	4.00	3.60	6.93	7.60	6.20	4.82	4.00			54.45	5.45
10	1.50	4.20	2.60	3.75	3.60	7.34	7.50	6.20	5.10	3.70			55.49	5.55
11	1.00	3.10	2.60	3.55	3.80	7.70	7.50	6.80	4.20	3.90			55.15	5.52
12	1.00	3.10	2.60	3.45	4.00	7.70	7.60	6.90	4.20	3.50			56.05	5.61
13	0.50	3.30	2.60	3.68	4.40	7.70	7.60	6.85	4.00	3.30			56.93	5.69
14	0.50	3.10	2.60	3.50	4.40	7.70	7.60	6.85	4.52	3.20			57.97	5.80
15	0.50	2.80	2.60	3.30	4.20	7.70	7.60	7.00	4.20	2.90			57.8	5.78
16	0.50	2.80	2.60	3.50	4.20	7.70	7.60	6.97	4.32	4.20			60.39	6.04
17	0.50	2.80	2.60	3.55	4.00	7.70	7.60	6.97	4.60	4.75			62.07	6.21
18	0.50	2.40	2.80	3.20	4.00	7.50	7.60	7.60	4.70	4.70			63	6.30
19	0.50	2.40	3.00	3.50	4.00	7.70	7.60	7.37	4.70	4.50			64.27	6.43
20	0.50	2.40	3.10	3.00	4.00	7.70	7.60	6.30	4.50	3.80			62.9	6.29
21	0.50	2.40	3.10	3.20	4.00	7.70	7.60	6.70	4.30	3.50			64	6.40
22	0.50	2.40	3.20	3.20	4.20	7.70	7.60	6.43	4.30	3.30			64.83	6.48
23	0.50	2.40	3.20	3.20	4.40	8.20	7.60	6.20	3.80	4.00			66.5	6.65
24	0.50	2.40	3.40	3.20	4.40	7.70	7.60	6.30	3.90	4.30			67.7	6.77
25	0.50	2.40	3.40	3.20	4.40	7.70	7.60	6.20	3.80	4.40			68.6	6.86
26	0.50	2.40	3.40	3.20	4.40	7.70	7.60	6.10	4.10	4.41			69.81	6.98
27	1.50	2.40	3.40	3.40	4.90	7.70	7.60	6.20	4.10	4.60			72.8	7.28
28	2.10	2.40	3.60	3.60	5.30	7.70	7.60	6.50	4.10	4.60			75.5	7.55
29	2.10	-	3.60	3.60	5.50	7.70	7.60	6.10	4.10	4.80			74.1	7.41
30	2.10	-	3.60	3.60	5.50	7.70	7.60	5.30	4.30	4.80			74.5	7.45
31	2.70	-	3.60	-	5.80	-	7.60	6.20	-	4.90			61.8	6.18
Total	44.90	83.30	92.00	103.58	129.80	219.24	235.60	214.60	139.42	132.77			1891.21	189.12
Mean	1.45	2.98	2.97	3.45	4.19	7.31	7.60	6.92	4.65	4.28	#DIV/0!	#DIV/0!	61.01	6.10

Table H.4.3 (1) Discharge through Beltag Regulator in 1996

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	1.95	1.80	2.18	3.10	2.50	4.53	6.14	5.58	5.66	2.60	2.77	2.50	42.31	3.53
2	2.25	1.80	2.18	3.20	2.50	4.53	6.14	5.58	5.58	2.48	2.77	2.50	43.51	3.63
3	2.25	2.25	2.18	3.28	2.50	4.25	6.14	5.58	5.42	2.40	2.33	2.76	44.34	3.70
4	2.25	2.25	2.18	3.28	2.94	4.25	6.30	5.38	5.42	2.56	2.35	2.76	45.92	3.83
5	2.25	2.40	2.18	3.28	3.12	4.53	6.30	5.46	5.18	2.56	2.15	2.46	46.87	3.91
6	2.25	2.70	2.18	3.28	3.12	5.21	6.30	5.34	4.86	2.16	2.30	2.31	48.01	4.00
7	2.25	2.85	2.18	3.28	3.59	5.21	6.10	5.34	4.86	2.16	2.30	2.31	49.43	4.12
8	2.25	2.80	2.18	3.00	3.79	5.52	6.18	5.34	4.48	2.52	2.54	1.86	50.46	4.21
9	2.25	2.80	2.18	2.60	3.79	5.02	6.22	5.34	4.98	2.44	2.54	2.46	51.62	4.30
10	1.50	2.80	2.18	2.80	3.79	6.38	6.23	5.34	4.50	1.90	2.54	2.10	52.055	4.34
11	1.50	2.80	2.18	3.00	3.79	6.54	6.23	5.34	4.30	1.76	2.85	1.70	52.986	4.42
12	0.90	2.80	2.33	2.65	3.59	6.37	6.23	5.63	4.30	1.76	2.85	1.93	53.34	4.45
13	0.50	2.80	2.33	2.65	3.79	6.37	6.35	5.63	4.30	1.90	3.15	1.93	54.7	4.56
14	-	2.80	2.33	2.65	3.84	6.60	6.41	5.63	4.30	1.90	3.15	1.93	55.54	5.05
15	-	2.50	2.33	2.25	3.84	6.56	6.41	5.63	4.30	2.10	3.15	1.93	56	5.09
16	-	2.20	2.33	2.25	3.84	6.21	6.41	5.80	4.30	2.10	3.15	1.93	56.52	5.14
17	-	2.20	2.18	2.25	3.84	6.00	6.33	5.80	4.30	2.07	3.45	1.78	57.2	5.20
18	-	2.20	2.18	2.25	3.68	6.30	6.42	5.80	3.90	2.07	3.27	1.63	57.7	5.25
19	-	2.20	2.45	2.45	3.80	6.30	6.31	5.50	3.78	2.07	3.27	1.71	58.84	5.35
20	-	2.20	2.18	2.45	3.80	6.30	6.34	5.58	3.78	2.37	3.27	1.83	60.1	5.46
21	-	2.50	2.18	2.45	3.68	6.30	6.34	5.58	3.78	2.52	3.27	1.95	61.55	5.60
22	-	2.20	2.48	2.45	3.68	6.30	6.02	5.58	3.78	2.52	3.27	1.95	62.23	5.66
23	-	2.20	2.48	2.45	3.58	6.30	6.02	5.58	3.70	2.44	3.27	1.95	62.97	5.72
24	-	2.20	2.90	2.45	3.58	6.34	6.01	5.70	3.62	2.44	3.27	1.80	64.31	5.85
25	-	2.20	2.90	2.45	3.58	6.34	6.02	5.70	3.50	2.50	3.27	1.80	65.26	5.93
26	-	2.50	3.00	2.45	3.86	6.26	6.02	5.66	3.60	2.50	3.27	1.89	67.01	6.09
27	-	2.50	2.90	2.45	3.86	6.26	6.02	6.71	3.20	2.50	3.27	1.95	68.62	6.24
28	-	2.50	2.90	2.45	4.14	6.26	5.94	5.71	3.20	2.37	3.17	2.05	68.69	6.24
29	-	2.50	3.10	2.45	4.14	6.14	5.94	5.83	2.80	2.37	2.96	2.05	69.28	6.30
30	-	-	3.10	2.45	4.32	6.14	5.66	5.83	2.68	2.17	2.96	2.50	67.81	6.16
31	-	-	3.10	-	4.52	-	5.58	5.83	-	2.17	-	2.62	54.82	4.98
Total	24.35	70.45	75.66	80.45	112.39	175.61	191.06	174.33	126.36	70.38	88.13	64.83	1,750.00	154.28
Mean	1.87	2.43	2.44	2.68	3.63	5.85	6.16	5.62	4.21	2.27	2.94	2.09	56.45	4.98

Table H.4.3 (2) Discharge through Beltag Regulator in 1997

Day	(Unit:MCM/day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	2.92	1.02	1.68	3.97	2.76	4.72	5.74	6.14	5.38	2.30	2.68	2.93	43.24	3.60
2	2.92	1.02	1.68	3.97	2.76	4.72	5.74	6.26	5.38	2.09	2.68	2.73	43.95	3.66
3	2.92	1.72	1.68	3.97	2.76	4.62	5.74	5.71	5.38	2.09	2.31	2.53	44.43	3.70
4	2.92	2.32	1.68	3.97	2.76	4.82	5.86	6.26	5.38	2.09	2.31	2.59	46.96	3.91
5	2.92	2.32	1.68	3.86	2.76	4.94	5.94	6.26	5.38	1.90	2.31	2.59	47.86	3.99
6	2.62	2.32	1.68	3.86	2.76	4.73	6.07	6.26	5.26	2.09	2.55	2.59	48.79	4.07
7	2.52	1.73	2.00	3.65	3.06	4.93	6.07	6.26	5.02	2.09	2.35	2.59	49.27	4.11
8	2.52	1.73	2.00	3.65	3.36	5.13	6.07	6.26	5.02	2.09	2.35	2.23	50.41	4.20
9	2.20	1.90	2.08	3.50	3.36	5.33	6.07	6.26	4.52	2.09	2.37	2.03	50.71	4.23
10	2.00	1.90	2.08	3.50	3.56	5.53	6.07	5.96	4.30	2.09	2.37	1.95	51.31	4.28
11	1.00	1.90	2.08	3.50	3.56	5.53	6.16	5.84	4.20	2.09	2.45	2.00	51.31	4.28
12	0.50	2.10	2.08	3.24	3.56	5.82	6.08	6.14	4.05	2.09	2.45	2.10	52.21	4.35
13	0.30	2.16	0.00	3.10	3.80	6.13	5.87	6.14	3.98	2.27	2.77	2.10	51.62	4.30
14	-	2.16	1.87	2.95	4.06	6.37	5.87	6.14	3.98	2.27	2.77	2.10	54.54	4.55
15	-	2.31	1.87	2.95	4.06	6.37	5.87	6.14	3.98	2.27	2.77	2.10	55.69	4.64
16	-	2.46	1.87	2.82	4.06	6.37	6.13	6.14	3.98	2.27	2.77	2.02	56.89	4.74
17	-	2.46	1.87	2.82	4.06	6.37	6.13	6.14	3.98	2.27	2.77	2.30	58.17	4.85
18	-	2.40	1.87	2.82	4.06	6.03	6.13	6.14	3.98	2.27	3.22	2.30	59.22	4.94
19	-	2.40	2.02	2.82	4.06	6.03	6.13	6.14	3.98	2.16	3.22	2.30	60.26	5.02
20	-	2.40	2.32	2.97	4.06	6.03	6.13	5.42	3.98	2.16	3.22	2.30	60.99	5.08
21	-	2.25	2.32	3.12	4.06	6.03	6.13	5.42	3.72	2.16	3.22	1.80	61.23	5.10
22	-	2.25	2.32	3.12	4.06	6.03	6.12	5.42	3.72	2.16	3.22	1.80	62.22	5.19
23	-	2.10	2.25	3.01	4.06	6.03	6.12	5.42	3.72	2.16	3.22	1.80	62.89	5.24
24	-	2.10	2.25	2.86	4.19	6.03	6.12	5.42	3.52	2.16	2.80	2.07	63.52	5.29
25	-	1.74	2.83	2.71	4.19	6.26	6.12	5.52	3.10	2.16	2.80	2.07	64.5	5.38
26	-	1.74	2.98	2.71	4.19	6.26	6.12	5.52	3.00	2.47	2.80	2.07	65.86	5.49
27	-	1.74	2.98	2.71	4.19	6.26	6.12	5.52	2.97	2.47	2.80	2.07	66.83	5.57
28	-	1.74	3.41	2.71	4.19	6.26	6.12	5.52	2.97	2.47	2.80	2.07	68.26	5.69
29	-	-	3.21	2.71	4.19	6.26	6.12	5.52	2.81	2.47	2.97	2.87	68.13	5.68
30	-	-	3.41	2.71	4.19	5.50	6.12	5.52	2.70	2.47	2.97	2.87	68.46	5.71
31	-	-	3.60	-	4.19	-	6.12	5.52	-	2.48	-	2.87	55.778	4.65
Total	28.26	56.39	67.65	96.26	114.94	171.44	187.20	182.33	123.34	68.67	82.29	70.74	1745.51	145.46
Mean	2.17	2.01	2.18	3.21	3.71	5.71	6.04	5.88	4.11	2.22	2.74	2.28	56.31	4.69

Table H.4.3 (3) Discharge through Beltag Regulator in 1998

(Unit:MCM/day)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	1.93	2.48	2.35	2.92	2.94	4.40	6.35	6.02	5.09	3.76			39.24	3.92
2	2.13	2.56	2.35	2.72	2.94	5.08	6.35	6.09	5.09	3.76			41.07	4.11
3	1.93	2.76	2.35	2.72	2.94	5.16	6.35	6.09	5.29	3.76			42.35	4.24
4	2.33	2.76	2.35	2.72	2.94	5.16	6.35	6.01	5.29	3.51			43.42	4.34
5	2.33	2.76	2.35	2.92	2.82	5.16	6.40	6.09	5.29	3.51			44.63	4.46
6	2.73	2.36	2.35	3.25	2.94	5.37	6.40	6.11	5.29	3.51			46.31	4.63
7	2.73	2.76	2.06	3.75	3.32	6.16	6.55	6.11	4.69	3.51			48.64	4.86
8	2.81	2.88	1.85	3.75	3.12	6.05	6.55	6.11	4.69	3.51			49.32	4.93
9	1.85	2.88	1.85	3.75	3.12	6.36	6.55	6.03	4.69	3.51			49.59	4.96
10	1.45	2.88	1.85	3.55	3.12	6.05	6.55	5.51	4.29	3.51			48.76	4.88
11	0.50	2.76	1.85	3.30	3.57	6.09	6.55	5.53	4.18	3.73			49.06	4.91
12	0.50	2.76	2.32	3.25	3.57	6.09	6.65	5.85	3.62	3.73			50.34	5.03
13	0.50	2.56	2.32	3.25	3.92	6.12	6.65	5.53	3.62	3.73			51.20	5.12
14	0.50	2.12	2.32	3.25	3.92	6.12	6.65	5.53	3.74	3.73			51.88	5.19
15	0.50	2.34	2.32	3.25	3.92	6.24	6.65	5.93	3.78	3.73			53.66	5.37
16	0.50	2.34	2.32	2.92	3.92	6.44	6.65	5.93	3.68	3.93			54.63	5.46
17	0.50	2.06	2.32	2.92	3.92	6.56	6.65	5.93	3.68	4.53			56.07	5.61
18	0.50	2.06	2.32	2.80	3.92	6.44	6.65	5.73	3.68	4.46			56.56	5.66
19	0.50	2.06	2.32	2.80	3.92	6.44	6.73	5.64	3.25	3.86			56.52	5.65
20	0.50	2.06	2.50	2.80	3.92	6.44	5.99	5.64	3.25	3.86			56.96	5.70
21	0.50	2.06	2.50	2.64	3.85	6.44	5.94	5.84	3.40	3.86			58.03	5.80
22	0.50	2.06	2.70	2.73	3.93	6.44	5.72	5.72	3.40	3.86			59.06	5.91
23	0.50	1.67	2.70	2.64	3.93	6.44	5.98	5.72	3.40	3.46			59.44	5.94
24	0.50	1.67	2.70	2.64	3.93	6.14	6.18	5.72	3.50	4.26			61.24	6.12
25	0.50	1.67	2.70	2.60	3.93	6.14	6.18	5.72	3.56	4.09			62.09	6.21
26	0.50	1.67	2.70	2.60	4.20	6.14	6.18	5.89	3.62	4.17			63.67	6.37
27	0.50	1.60	2.70	2.60	4.20	6.14	6.18	5.70	3.48	4.37			64.47	6.45
28	1.50	1.60	2.70	2.70	4.00	6.35	6.18	5.86	3.35	4.37			66.61	6.66
29	1.70	-	2.70	2.73	4.20	6.35	6.18	5.86	3.35	4.37			66.44	6.64
30	1.70	-	2.70	2.73	4.40	6.35	6.02	5.78	3.35	4.42			67.45	6.75
31	1.70	-	2.70	-	4.40	-	6.02	5.78	-	4.77			56.37	5.64
Total	37.32	64.20	74.12	89.20	113.67	180.86	196.98	181.00	120.59	121.14			1675.08	167.51
Mean	1.20	2.29	2.39	2.97	3.67	6.03	6.35	5.84	4.02	3.91	#DIV/O!	#DIV/O!	54.03	5.40

Table H.4.4 (1) Intake Amount to Mallah Main Canal in 1996

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.70	0.00	1.00	1.10	0.80	0.90	1.40	1.50	1.50	0.60	0.60	0.90	12.00	1.00
2	0.70	0.00	1.00	1.10	0.80	0.90	1.40	1.50	1.40	0.60	0.60	0.90	12.90	1.08
3	0.70	0.00	0.90	1.10	0.90	0.90	1.40	1.40	1.40	0.60	0.60	0.80	13.70	1.14
4	0.90	0.90	0.90	0.90	0.90	1.00	1.40	1.30	1.40	0.60	0.60	0.80	15.60	1.30
5	0.90	1.10	0.90	0.90	1.20	1.00	1.40	1.30	1.40	0.60	0.60	0.70	17.00	1.42
6	0.90	1.00	0.90	0.90	1.10	1.00	1.40	1.30	1.40	0.60	0.60	0.70	17.80	1.48
7	0.90	1.20	0.90	0.90	1.10	1.20	1.30	1.30	1.40	0.60	0.60	0.70	19.10	1.59
8	0.90	1.20	0.90	0.80	1.10	1.20	1.30	1.30	1.40	0.60	0.60	0.60	19.90	1.66
9	0.90	1.00	0.90	0.80	1.20	1.20	1.30	1.30	1.20	0.60	0.60	0.60	20.60	1.72
10	0.45	0.70	0.90	0.80	1.20	1.50	1.30	1.30	1.20	0.60	0.60	0.60	21.25	1.77
11	0.35	0.70	0.90	0.80	1.00	1.60	1.20	1.30	1.20	0.60	0.60	0.60	21.95	1.83
12	0.25	1.00	0.90	0.80	1.00	1.80	1.20	1.30	1.20	0.60	0.60	0.60	23.35	1.95
13	0.25	1.00	0.90	0.80	0.80	1.80	1.20	1.30	1.20	0.60	0.60	0.60	24.15	2.01
14	0.10	1.00	0.90	0.80	0.80	1.80	1.20	1.30	1.20	0.60	0.60	0.60	25.10	2.09
15	-	1.00	0.90	0.70	1.10	1.80	1.20	1.40	1.20	0.60	0.60	0.60	26.20	2.38
16	-	0.70	0.90	0.70	1.10	1.80	1.20	1.40	1.20	0.60	0.60	0.50	26.90	2.44
17	-	0.80	0.90	0.70	1.10	1.70	1.20	1.40	1.20	0.60	0.60	0.50	27.80	2.53
18	-	0.70	0.90	0.70	1.10	1.60	1.20	1.70	1.20	0.60	0.60	0.50	28.90	2.63
19	-	0.90	0.90	0.70	1.10	1.60	1.20	1.70	1.20	0.60	0.60	0.50	30.10	2.74
20	-	0.90	0.90	0.60	1.10	1.60	1.20	1.50	1.20	0.60	0.60	0.50	30.90	2.81
21	-	0.90	0.90	0.60	1.10	1.80	1.40	1.60	1.20	0.60	0.60	0.50	32.40	2.95
22	-	0.90	0.90	0.60	1.00	1.80	1.50	1.60	1.20	0.60	0.60	0.50	33.30	3.03
23	-	0.90	1.10	0.80	1.00	1.80	1.50	1.50	1.20	0.60	0.60	0.50	34.60	3.15
24	-	0.90	1.10	0.80	0.90	1.80	1.50	1.50	1.20	0.60	0.60	0.50	35.50	3.23
25	-	0.90	1.10	0.80	0.90	1.80	1.50	1.50	1.20	0.60	0.60	0.50	36.60	3.33
26	-	0.90	1.10	0.80	0.90	1.80	1.50	1.50	1.20	0.60	0.60	0.50	37.60	3.42
27	-	0.90	1.10	0.80	0.90	1.80	1.50	1.70	1.20	0.60	0.60	0.50	38.80	3.53
28	-	1.00	1.10	0.80	0.90	1.60	1.60	1.70	1.20	0.60	0.60	0.50	39.80	3.62
29	-	1.00	1.10	0.80	0.90	1.60	1.60	1.60	1.00	0.60	0.60	0.60	40.60	3.69
30	-	-	1.10	0.80	0.90	1.40	1.60	1.60	0.60	0.60	0.60	0.70	40.10	3.65
31	-	-	1.10	-	0.90	-	1.60	1.60	-	0.60	0.60	0.70	37.50	3.41
Total	8.90	24.10	29.90	24.20	30.80	45.10	42.40	45.20	36.90	18.60	21.00	18.80	841.90	74.53
Mean	0.64	0.83	0.96	0.81	0.99	1.50	1.37	1.46	1.23	0.60	0.70	0.61	2.41	2.41

Table H.4.4 (2) Intake Amount to Mailah Main Canal in 1997

Day	(Unit: MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.70	0.70	0.50	1.30	0.80	1.30	1.80	1.70	1.60	0.70	0.60	0.90	13.60	1.13
2	0.70	0.70	0.50	1.30	0.80	1.30	1.80	1.80	1.60	0.60	0.60	0.90	14.60	1.22
3	0.70	0.70	0.50	1.30	0.80	1.30	1.80	1.90	1.60	0.60	0.60	0.90	15.70	1.31
4	0.70	0.60	0.50	1.30	0.80	1.30	1.80	1.90	1.60	0.60	0.60	0.80	16.50	1.38
5	0.70	0.60	0.70	1.30	0.80	1.50	1.80	1.90	1.50	0.60	0.60	0.80	17.80	1.48
6	0.70	0.50	0.60	1.10	0.60	1.70	1.70	1.90	1.50	0.60	0.60	0.80	18.50	1.54
7	0.70	0.50	0.60	1.60	0.80	1.70	1.70	1.90	1.50	0.60	0.60	0.80	20.00	1.67
8	0.50	0.50	0.40	1.60	1.00	1.80	1.70	1.90	1.40	0.60	0.60	0.70	20.70	1.73
9	0.40	0.50	0.60	1.60	1.00	1.80	1.70	1.70	1.40	0.60	0.60	0.60	21.50	1.79
10	-	0.50	0.80	1.60	1.00	1.80	1.70	1.70	1.40	0.60	0.60	0.60	22.40	2.04
11	-	0.50	0.80	0.90	1.00	1.90	1.60	1.60	1.20	0.60	0.60	0.60	22.50	2.05
12	-	0.50	0.80	0.90	1.20	1.90	1.60	1.60	1.20	0.60	0.60	0.50	23.60	2.15
13	-	0.70	0.80	0.90	1.20	1.90	1.60	1.60	1.00	0.60	0.60	0.50	24.60	2.24
14	-	0.70	0.80	0.90	1.30	2.00	1.60	1.60	1.00	0.60	0.60	0.50	25.80	2.35
15	-	0.80	0.80	0.90	1.30	2.00	1.60	1.56	1.00	0.60	0.60	0.50	26.96	2.45
16	-	0.80	0.80	0.90	1.30	2.00	1.60	1.60	1.00	0.60	0.60	0.50	28.00	2.55
17	-	0.80	0.80	0.80	1.30	2.00	1.60	1.60	1.00	0.60	1.00	0.60	29.10	2.65
18	-	0.80	0.80	0.80	1.40	1.90	1.60	1.60	1.00	0.60	1.00	0.60	30.10	2.74
19	-	0.80	0.80	0.80	1.20	1.90	1.60	1.60	1.00	0.60	1.00	0.60	30.90	2.81
20	-	0.80	0.80	0.80	1.00	1.80	1.60	1.60	1.00	0.60	1.00	0.60	31.60	2.87
21	-	0.80	0.80	1.00	1.00	1.80	1.60	1.60	1.00	0.60	1.00	0.60	32.80	2.98
22	-	0.80	0.80	1.00	1.00	1.80	1.60	1.60	1.00	0.60	1.00	0.60	33.80	3.07
23	-	0.70	0.80	0.80	1.00	1.80	1.60	1.60	1.00	0.60	0.90	0.60	34.40	3.13
24	-	0.60	1.00	0.80	1.20	1.80	1.60	1.60	1.00	0.60	0.90	0.50	35.60	3.24
25	-	0.60	1.00	0.80	1.20	1.80	1.60	1.60	1.00	0.60	0.90	0.50	36.60	3.33
26	-	0.50	1.00	0.80	1.20	1.80	1.70	1.60	1.00	0.60	0.80	0.60	37.60	3.42
27	-	0.50	1.20	0.80	1.20	1.80	1.70	1.60	1.00	0.60	0.80	0.60	38.80	3.53
28	-	0.50	1.20	0.80	1.20	1.80	1.70	1.60	1.00	0.50	0.90	0.60	39.90	3.63
29	-	-	1.20	0.80	1.30	1.80	1.70	1.60	1.00	0.60	0.90	0.60	40.50	3.68
30	-	-	1.20	0.80	1.30	1.80	1.70	1.60	0.80	0.60	0.90	0.60	41.30	3.75
31	-	-	1.40	-	1.30	-	1.70	1.60	-	0.60	-	0.60	38.20	3.47
Total	5.8	18.00	25.30	31.00	33.70	52.80	51.70	51.86	35.30	18.70	24.10	19.70	863.96	77.34
Mean	0.64	0.64	0.82	1.03	1.09	1.76	1.67	1.67	1.18	-0.60	0.80	0.64	2.52	2.52

Table H.4.4 (3) Intake Amount to Mailah Main Canal in 1998

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.60	0.40	0.70	1.00	0.70	1.40	2.00	1.70	1.60	1.40			12.50	1.25
2	0.60	0.60	0.70	0.80	0.70	1.40	1.90	1.70	1.60	1.40			13.40	1.34
3	0.60	0.90	0.70	0.80	0.70	1.60	1.90	1.70	1.60	1.10			14.60	1.46
4	0.70	0.90	0.70	0.80	0.70	1.60	1.90	1.70	1.60	1.10			15.70	1.57
5	0.70	0.90	0.70	0.80	0.70	1.70	1.90	1.70	1.60	1.10			16.80	1.68
6	0.80	0.90	0.70	0.80	0.70	1.80	1.90	1.70	1.60	1.10			18.00	1.80
7	0.80	0.90	0.70	0.80	0.70	1.90	1.90	1.70	1.60	1.10			19.10	1.91
8	0.80	0.90	0.70	0.80	0.70	1.90	1.90	1.70	1.60	0.90			19.90	1.99
9	0.60	0.90	0.70	0.80	0.70	1.90	1.90	1.70	1.60	0.70			20.50	2.05
10	0.20	0.90	0.70	0.80	0.70	1.90	1.90	1.60	1.40	0.70			20.80	2.08
11	-	0.70	0.70	0.80	0.70	1.90	1.80	1.60	1.40	0.70			21.30	2.37
12	-	0.70	0.70	0.80	1.00	2.00	1.80	1.60	1.40	0.70			22.70	2.52
13	-	0.70	0.70	0.80	1.00	2.00	1.90	1.60	1.30	0.70			23.70	2.63
14	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	0.70			24.60	2.73
15	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.00			25.90	2.88
16	-	0.70	0.70	0.60	1.00	2.00	1.90	1.60	1.30	0.90			26.70	2.97
17	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.10			28.00	3.11
18	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.10			29.00	3.22
19	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.10			30.00	3.33
20	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.10			31.00	3.44
21	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.10			32.00	3.56
22	-	0.70	0.70	0.70	1.00	2.00	1.90	1.60	1.30	1.10			33.00	3.67
23	-	0.70	0.70	0.70	1.20	2.00	1.90	1.70	1.30	0.90			34.10	3.79
24	-	0.70	0.70	0.70	1.20	2.00	1.90	1.70	1.30	0.90			35.10	3.90
25	-	0.70	0.70	0.70	1.20	2.00	1.90	1.60	1.30	0.90			36.00	4.00
26	-	0.70	0.70	0.70	1.20	2.00	1.90	1.60	1.30	1.00			37.10	4.12
27	0.55	0.70	0.70	0.70	1.20	2.00	1.90	1.60	1.30	1.00			38.65	3.87
28	0.50	0.70	0.70	0.70	1.20	2.00	1.90	1.60	1.30	1.00			39.60	3.96
29	0.40	-	0.70	0.70	1.40	2.00	1.90	1.60	1.30	1.00			40.00	4.00
30	0.40	-	0.70	0.70	1.40	2.00	1.70	1.60	1.20	1.00			40.70	4.07
31	0.40	-	0.70	-	1.40	-	1.70	1.60	-	1.00			37.80	3.78
Total	8.65	20.80	21.70	22.40	30.10	57.00	58.40	50.70	41.90	30.60	#DIV/0!	#DIV/0!	838.25	89.05
Mean	0.58	0.74	0.70	0.75	0.97	1.90	1.88	1.64	1.40	0.99	#DIV/0!	#DIV/0!	27.04	2.87

Table H.4.5 (1) Intake Amount to El-Sahel Main Canal in 1996

Day	(Unit:MCM/day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	0.55	1.00	0.00	1.10	0.40	1.00	1.08	1.20	0.90	0.50	0.51	0.50	9.74	0.81
2	0.75	0.60	0.20	1.00	0.50	1.00	1.08	1.20	0.90	0.50	0.51	0.50	10.74	0.90
3	0.75	0.60	0.30	1.00	0.50	1.00	1.18	1.20	1.05	0.50	0.51	0.50	12.19	1.02
4	0.75	1.00	0.30	1.00	0.60	1.00	1.18	1.30	1.05	0.40	0.51	0.40	13.49	1.12
5	0.75	0.90	0.50	1.00	0.90	1.00	1.28	1.30	1.05	0.40	0.51	0.40	14.99	1.25
6	0.65	0.80	0.60	1.00	0.70	1.00	1.28	1.30	1.05	0.40	0.51	0.40	15.69	1.31
7	0.65	0.80	0.60	0.80	0.90	1.00	1.18	1.30	1.05	0.40	0.51	0.40	16.59	1.38
8	0.65	0.80	0.55	0.80	0.70	1.00	1.18	1.30	0.90	0.48	0.51	0.40	17.27	1.44
9	0.65	0.80	0.55	0.80	0.70	1.20	1.18	1.30	0.50	0.60	0.51	0.50	18.29	1.52
10	0.70	0.60	0.60	0.80	0.70	1.20	1.23	1.30	0.70	0.60	0.62	0.50	19.55	1.63
11	0.45	0.70	0.90	0.70	0.70	1.20	1.23	1.10	0.70	0.60	0.62	0.60	20.50	1.71
12	0.45	0.70	0.90	0.70	0.70	1.30	1.23	1.10	0.70	0.60	0.62	0.60	21.60	1.80
13	0.35	0.70	0.90	0.60	0.70	1.30	1.23	1.10	0.70	0.60	0.70	0.60	22.48	1.87
14	-	0.80	0.90	0.60	0.89	1.30	1.23	1.10	0.70	0.60	0.60	0.60	23.32	2.12
15	-	0.00	0.90	0.50	0.73	1.40	1.38	1.10	0.80	0.60	0.50	0.60	23.51	2.14
16	-	0.60	0.90	0.50	0.73	1.40	1.28	1.10	0.90	0.40	0.50	0.40	24.71	2.25
17	-	0.50	0.90	0.50	0.73	1.40	1.28	1.10	0.90	0.40	0.50	0.40	25.61	2.33
18	-	0.70	0.40	0.50	0.00	1.40	1.28	0.90	0.70	0.40	0.50	0.40	25.18	2.29
19	-	0.80	0.40	0.50	0.00	1.40	1.28	0.90	0.70	0.45	0.50	0.40	26.33	2.39
20	-	0.80	0.40	0.50	0.00	1.20	1.08	0.90	0.70	0.50	0.50	0.40	26.98	2.45
21	-	0.80	0.20	0.50	0.00	1.20	0.98	0.90	0.70	0.50	0.50	0.40	27.68	2.52
22	-	-	0.20	0.30	1.00	1.20	1.18	1.00	0.70	0.50	0.50	0.40	28.98	2.63
23	-	-	-	0.30	0.90	1.20	1.23	1.10	0.90	0.50	0.50	0.40	30.03	2.73
24	-	-	-	0.50	1.00	1.20	1.23	1.10	0.90	0.50	0.50	0.40	31.33	2.85
25	-	-	-	0.50	1.00	1.28	1.38	1.10	0.90	0.50	0.80	0.70	33.16	3.01
26	-	-	-	0.50	1.20	1.28	1.38	1.10	0.75	0.58	0.80	0.70	34.29	3.12
27	-	-	-	0.60	1.10	1.28	1.38	1.00	0.40	0.58	0.80	0.70	34.84	3.17
28	-	0.60	-	0.60	1.10	1.28	1.38	1.00	0.40	0.58	0.80	0.70	36.44	3.31
29	-	0.60	0.80	0.60	1.10	1.08	1.20	1.00	0.40	0.41	0.50	0.70	37.39	3.40
30	-	-	0.60	0.60	1.10	1.08	1.20	1.00	0.50	0.41	0.50	0.70	37.69	3.43
31	-	-	0.60	-	1.10	-	1.20	1.00	-	0.41	-	0.70	36.01	3.27
Total	8.10	16.20	14.10	19.90	22.38	35.78	38.09	34.40	23.20	15.40	16.95	16.10	756.60	67.17
Mean	0.62	0.70	0.56	0.66	0.72	1.19	1.23	1.11	0.77	0.50	0.57	0.52	24.41	2.17

Table H.4.5 (2) Intake Amount to El-Sahel Main Canal in 1997

Day	(Unit:MCM/day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	1.00	0.80	0.50	1.00	0.50	0.95	1.10	1.20	0.90	0.50	0.90	0.90	11.25	0.94
2	1.00	0.80	0.50	1.00	0.50	0.95	1.10	1.20	0.90	0.50	0.90	0.90	12.25	1.02
3	0.90	0.80	0.50	0.80	0.50	0.95	1.10	1.20	0.90	0.50	0.90	0.90	12.95	1.08
4	0.90	0.80	0.50	0.80	0.50	1.05	0.90	1.20	0.80	0.00	0.90	0.80	13.15	1.10
5	0.90	0.80	0.50	0.80	0.50	1.05	1.00	1.20	0.80	0.00	0.90	0.80	14.25	1.19
6	0.90	0.80	0.50	0.80	0.50	1.05	1.00	1.20	0.80	0.00	0.90	0.80	15.25	1.27
7	0.90	0.50	0.50	0.80	0.50	1.05	1.10	1.20	0.80	0.00	0.90	0.80	16.05	1.34
8	0.80	0.60	0.50	0.80	0.70	1.15	1.10	1.20	0.80	0.00	0.90	0.80	17.35	1.45
9	0.80	0.60	0.50	0.80	0.70	1.15	1.00	1.20	0.80	0.00	0.90	0.80	18.25	1.52
10	0.50	0.60	0.50	0.80	0.70	1.25	1.10	1.20	0.90	0.90	0.90	0.80	20.15	1.68
11	0.50	0.60	0.50	0.75	0.70	1.25	1.10	1.20	0.90	0.90	0.90	0.70	21.00	1.75
12	-	0.60	0.50	0.75	0.70	1.25	1.10	1.20	0.80	1.00	0.80	0.70	21.40	1.95
13	-	0.60	0.50	0.75	0.70	1.25	1.10	1.20	0.70	1.00	0.90	0.70	22.30	2.03
14	-	0.50	0.50	0.75	0.70	1.25	1.10	1.20	0.60	1.00	0.80	0.70	23.10	2.10
15	-	0.60	0.50	0.75	0.70	1.25	1.10	1.10	0.60	0.90	0.80	0.80	24.10	2.19
16	-	0.60	0.50	0.75	0.00	1.35	1.10	1.10	0.60	0.80	0.80	0.90	24.50	2.23
17	-	0.60	0.50	0.65	0.00	1.35	1.10	1.10	0.60	0.70	0.80	0.90	25.30	2.30
18	-	0.60	0.50	0.60	0.00	1.35	1.10	1.20	0.60	0.70	0.90	0.75	26.30	2.39
19	-	0.60	0.50	0.60	0.60	1.35	1.10	1.10	0.80	0.70	0.90	0.75	28.00	2.55
20	-	0.60	0.50	0.60	0.60	1.35	1.20	1.20	0.80	0.70	0.90	0.75	29.20	2.65
21	-	0.60	0.50	0.75	0.60	1.35	1.20	1.10	0.80	0.70	0.90	0.75	30.25	2.75
22	-	0.60	0.50	0.85	0.60	1.15	1.20	1.20	0.90	0.80	0.90	0.75	31.45	2.86
23	-	0.60	0.50	0.70	0.60	1.15	1.20	1.20	0.90	0.80	0.70	0.75	32.10	2.92
24	-	0.60	0.50	0.60	0.70	1.15	1.10	1.00	0.70	0.80	0.70	0.70	32.55	2.96
25	-	0.60	-	0.60	0.70	1.15	1.10	1.46	0.60	0.90	0.70	0.70	33.51	3.05
26	-	0.60	-	0.55	0.70	1.15	1.10	1.10	0.60	0.90	0.70	0.70	34.10	3.10
27	-	0.60	-	0.55	0.70	1.15	1.10	1.10	0.60	0.90	0.70	0.80	35.20	3.20
28	0.50	0.60	-	0.60	0.70	1.15	1.10	1.10	0.60	0.90	0.70	0.80	36.75	3.06
29	0.50	-	-	0.60	0.70	1.15	1.10	1.10	0.80	0.90	0.70	0.90	37.45	3.12
30	0.60	-	1.00	0.55	0.70	1.15	1.10	1.20	0.80	0.90	0.70	0.90	39.60	3.30
31	0.60	-	1.00	-	0.70	-	1.10	1.20	-	0.90	-	0.90	37.40	3.12
Total	11.30	17.80	14.00	21.70	17.70	35.30	34.00	36.36	22.70	20.20	24.80	24.60	776.46	68.14
Mean	0.75	0.64	0.54	0.72	0.57	1.18	1.10	1.17	0.76	0.65	0.83	0.79	25.05	2.20

Table H.4.5 (3) Intake Amount to El-Sahel Main Canal in 1998

Day	(Unit:MCM/day)												Total	Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.60	0.50	0.70	0.00	0.70	0.90	1.10	1.10	0.90	1.20				8.70	0.87
2	0.60	0.50	0.70	0.00	0.80	0.90	1.10	1.10	0.90	1.20				9.80	0.98
3	0.60	0.50	0.70	0.00	0.85	1.00	1.10	1.10	0.90	1.20				10.95	1.10
4	0.60	0.50	0.70	0.00	0.85	1.00	1.10	0.90	0.70	1.20				11.55	1.16
5	0.60	0.50	0.70	0.00	0.85	1.00	0.80	0.90	0.70	1.20				12.25	1.23
6	0.60	0.55	0.70	0.90	1.00	1.00	0.80	0.90	0.70	1.20				14.35	1.44
7	0.60	0.60	0.70	1.00	1.00	1.00	0.80	0.90	0.70	1.00				15.30	1.53
8	0.60	0.70	0.70	0.90	1.00	1.00	0.90	0.90	1.10	1.00				16.80	1.68
9	0.60	0.75	0.75	0.70	1.00	1.00	0.90	1.10	1.10	0.90				17.80	1.78
10	0.60	0.75	0.75	0.70	1.00	1.00	1.10	1.10	1.10	0.90				19.00	1.90
11	0.60	0.75	0.75	0.70	0.90	1.20	1.40	1.10	1.10	0.70				20.20	2.02
12	-	0.75	0.70	0.70	0.90	1.20	1.10	1.10	1.10	0.70				20.25	2.25
13	-	0.75	0.70	0.60	0.90	1.20	1.20	0.80	0.80	0.70				20.65	2.29
14	-	0.65	0.70	0.50	0.90	1.20	1.20	0.80	0.80	0.70				21.45	2.38
15	-	0.65	0.85	0.50	0.90	1.00	0.80	0.80	0.80	0.90				22.20	2.47
16	-	0.65	0.85	0.50	0.90	1.00	0.90	0.80	0.80	0.90				23.30	2.59
17	-	0.65	0.80	0.50	0.90	1.00	0.90	0.80	0.80	0.90				24.25	2.69
18	-	0.65	0.90	0.40	0.90	1.00	0.90	0.80	1.10	0.90				25.55	2.84
19	-	0.65	0.90	0.50	1.00	1.00	0.80	1.10	1.10	0.90				26.95	2.99
20	-	0.75	0.90	0.50	1.00	1.20	1.10	1.10	1.20	0.90				28.65	3.18
21	-	0.75	0.80	0.50	0.90	1.20	1.10	1.00	1.20	0.90				29.35	3.26
22	-	0.75	0.85	0.50	1.00	1.20	1.20	0.90	1.20	0.90				30.50	3.39
23	-	0.75	0.90	0.60	1.00	1.20	1.40	0.80	1.10	0.80				31.55	3.51
24	-	0.75	0.90	0.60	1.00	1.20	1.20	0.80	1.10	0.80				32.35	3.59
25	-	0.70	0.90	0.60	0.90	1.00	1.20	0.80	1.10	0.80				33.00	3.67
26	-	0.70	1.00	0.50	0.80	0.90	1.20	0.80	1.10	0.80				33.80	3.76
27	-	0.70	1.10	0.50	0.90	0.90	1.20	0.80	1.10	0.80				35.30	3.92
28	0.20	0.75	1.10	0.50	0.90	0.90	1.20	0.80	1.10	1.10				36.45	4.05
29	0.20	-	1.10	0.50	0.90	0.80	1.20	0.80	1.10	1.10				37.10	4.12
30	0.30	-	1.10	0.50	0.90	0.90	1.20	1.10	1.10	1.10				38.30	4.26
31	0.30	-	1.10	-	1.00	-	1.16	1.10	-	1.10				36.76	4.08
Total	7.60	18.60	26.00	14.90	28.45	31.20	33.16	29.20	29.60	29.70				744.41	80.97
Mean	0.51	0.66	0.84	0.50	0.92	1.04	1.07	0.94	0.99	0.96	#DIV/O!	#DIV/O!		24.01	2.61

Table H.4.6 (1) Discharge through Kafir El-Arab Regulator in 1996

Day	(Unit:MCM/day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	0.10	0.22	0.10	0.48	0.20	0.45	0.87	0.68	0.57	0.31	0.27	0.34	5.59	0.47
2	0.22	0.10	0.15	0.48	0.20	0.45	0.87	0.68	0.57	0.33	0.27	0.38	6.70	0.56
3	0.22	0.05	0.25	0.46	0.20	0.52	0.87	0.68	0.57	0.33	0.27	0.42	7.84	0.65
4	0.22	0.22	0.25	0.46	0.32	0.52	0.79	0.70	0.57	0.33	0.54	0.38	9.30	0.78
5	0.22	0.32	0.35	0.48	0.36	0.52	0.79	0.70	0.57	0.33	0.46	0.38	10.48	0.87
6	0.22	0.32	0.35	0.46	0.50	0.52	0.79	0.70	0.57	0.41	0.46	0.42	11.72	0.98
7	0.22	0.10	0.35	0.46	0.50	0.52	0.79	0.70	0.65	0.41	0.50	0.42	12.62	1.05
8	0.22	0.10	0.35	0.42	0.50	0.52	0.72	0.70	0.65	0.41	0.50	0.20	13.29	1.11
9	0.36	0.32	0.35	0.42	0.50	0.52	0.72	0.74	0.61	0.41	0.50	0.28	14.73	1.23
10	0.32	0.32	0.35	0.42	0.50	0.85	0.72	0.74	0.57	0.41	0.50	0.28	15.98	1.33
11	0.14	0.32	0.35	0.42	0.38	0.88	0.68	0.74	0.53	0.33	0.45	0.48	16.70	1.39
12	-	0.32	0.35	0.40	0.34	0.88	0.68	0.74	0.64	0.33	0.45	0.48	17.61	1.60
13	-	0.32	0.35	0.36	0.34	0.88	0.68	0.74	0.64	0.33	0.45	0.48	18.57	1.69
14	-	0.32	0.35	0.36	0.34	0.88	0.68	0.74	0.64	0.33	0.51	0.48	19.63	1.78
15	-	0.00	0.35	0.20	0.34	0.89	0.68	0.74	0.64	0.33	0.51	0.52	20.20	1.84
16	-	0.32	0.35	0.20	0.34	0.88	0.92	0.74	0.55	0.33	0.51	0.28	21.42	1.95
17	-	0.32	0.41	0.20	0.34	0.92	0.92	0.74	0.55	0.22	0.51	0.28	22.41	2.04
18	-	0.32	0.30	0.20	0.00	0.92	0.92	0.74	0.55	0.22	0.51	0.28	22.96	2.09
19	-	0.44	0.30	0.20	0.00	0.92	0.68	0.74	0.55	0.20	0.51	0.40	23.94	2.18
20	-	0.44	0.30	0.20	0.00	0.88	0.68	0.74	0.60	0.24	0.39	0.28	24.75	2.25
21	-	0.44	0.15	0.20	0.00	0.88	0.68	0.74	0.60	0.24	0.39	0.28	25.60	2.33
22	-	-	0.15	0.20	0.40	0.88	0.64	0.74	0.60	0.24	0.39	0.28	26.52	2.41
23	-	-	-	0.20	0.40	0.88	0.68	0.74	0.60	0.24	0.39	0.56	27.69	2.52
24	-	-	-	0.20	0.48	0.91	0.68	0.74	0.52	0.24	0.20	0.56	28.53	2.59
25	-	-	-	0.20	0.48	0.95	0.68	0.74	0.44	0.26	0.20	0.56	29.51	2.68
26	-	-	-	0.20	0.53	0.95	0.68	0.74	0.37	0.26	0.28	0.60	30.61	2.78
27	-	-	-	0.20	0.53	0.95	0.68	0.74	0.37	0.26	0.28	0.56	31.57	2.87
28	-	0.10	-	0.20	0.57	0.95	0.68	0.74	0.37	0.26	0.28	0.56	32.71	2.97
29	-	0.10	0.41	0.20	0.57	0.87	0.68	0.57	0.35	0.26	0.28	0.42	33.71	3.06
30	-	-	0.41	0.20	0.57	0.87	0.68	0.57	0.33	0.19	0.20	0.42	34.44	3.13
31	-	-	0.41	-	0.45	-	0.68	0.57	-	0.19	-	0.42	33.72	3.07
Total	2.46	5.83	7.79	9.28	11.18	23.41	22.89	22.05	16.34	9.18	11.96	12.68	651.05	58.24
Mean	0.22	0.25	0.31	0.31	0.36	0.78	0.74	0.71	0.54	0.30	0.40	0.41	21.00	1.88

Table H.4.6 (2) Discharge through Kafr El-Arab Regulator in 1997

Day	(Unit:MCM/day)												Total	Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.46	0.64	0.20	0.61	0.26	0.33	0.52	0.77	0.53	0.39	0.44	0.44	0.44	6.59	0.55
2	0.54	0.40	0.20	0.67	0.26	0.41	0.52	0.77	0.53	0.39	0.44	0.44	0.44	7.57	0.63
3	0.34	0.56	0.22	0.61	0.26	0.41	0.52	0.77	0.70	0.39	0.44	0.44	0.44	8.66	0.72
4	0.34	0.56	0.16	0.65	0.26	0.57	0.52	0.77	0.62	0.00	0.44	0.44	0.45	9.34	0.78
5	0.24	0.56	0.24	0.65	0.26	0.57	0.52	0.77	0.62	0.00	0.44	0.44	0.45	10.32	0.86
6	0.36	0.48	0.20	0.65	0.26	0.57	0.52	0.77	0.62	0.00	0.49	0.45	0.45	11.37	0.95
7	0.36	0.32	0.20	0.65	0.26	0.40	0.52	0.77	0.62	0.00	0.49	0.45	0.45	12.04	1.00
8	0.24	0.40	0.20	0.65	0.34	0.47	0.52	0.77	0.62	0.00	0.49	0.45	0.45	13.15	1.10
9	0.20	0.40	0.20	0.57	0.34	0.50	0.52	0.74	0.55	0.00	0.49	0.40	0.40	13.91	1.16
10	0.10	0.40	0.20	0.57	0.34	0.40	0.52	0.74	0.50	0.58	0.49	0.40	0.40	15.24	1.27
11	0.10	0.32	0.20	0.57	0.34	0.64	0.52	0.74	0.50	0.66	0.49	0.40	0.40	16.48	1.37
12	-	0.48	0.20	0.70	0.34	0.64	0.52	0.74	0.46	0.66	0.49	0.40	0.40	17.63	1.60
13	-	0.44	0.20	0.70	0.34	0.64	0.52	0.74	0.46	0.51	0.40	0.34	0.34	18.29	1.66
14	-	0.31	0.20	0.70	0.58	0.64	0.52	0.74	0.46	0.51	0.40	0.34	0.34	19.40	1.76
15	-	0.35	0.20	0.70	0.50	0.64	0.73	0.74	0.46	0.51	0.40	0.34	0.34	20.57	1.87
16	-	0.35	0.20	0.70	0.00	0.80	0.73	0.65	0.46	0.51	0.40	0.34	0.34	21.14	1.92
17	-	0.31	0.20	0.50	0.00	0.80	0.73	0.65	0.46	0.51	0.40	0.60	0.60	22.16	2.01
18	-	0.28	0.20	0.50	0.00	0.80	0.73	0.65	0.37	0.51	0.40	0.28	0.28	22.72	2.07
19	-	0.30	0.22	0.50	0.37	0.80	0.73	0.65	0.37	0.51	0.40	0.28	0.28	24.13	2.19
20	-	0.28	0.22	0.50	0.37	0.88	0.73	0.65	0.37	0.51	0.40	0.28	0.28	25.19	2.29
21	-	0.24	0.34	0.50	0.37	0.88	0.73	0.65	0.37	0.51	0.40	0.28	0.28	26.27	2.39
22	-	0.24	0.34	0.65	0.37	0.88	0.86	0.65	0.37	0.47	0.40	0.28	0.28	27.51	2.50
23	-	0.24	0.34	0.60	0.37	0.88	0.65	0.65	0.56	0.47	0.24	0.28	0.28	28.28	2.57
24	-	0.36	0.34	0.49	0.42	0.76	0.63	0.65	0.56	0.47	0.43	0.32	0.32	29.43	2.68
25	-	0.36	-	0.40	0.42	0.60	0.63	0.88	0.56	0.47	0.43	0.32	0.32	30.07	2.73
26	-	0.36	-	0.44	0.42	0.55	0.63	0.52	0.56	0.47	0.43	0.28	0.28	30.66	2.79
27	-	0.36	-	0.39	0.42	0.55	0.63	0.52	0.56	0.47	0.47	0.32	0.32	31.69	2.88
28	-	0.24	-	0.39	0.42	0.55	0.57	0.52	0.56	0.47	0.44	0.28	0.28	32.44	2.95
29	0.10	-	-	0.39	0.42	0.55	0.57	0.52	0.56	0.47	0.44	0.32	0.32	33.34	2.78
30	0.40	-	0.60	0.39	0.42	0.51	0.57	0.52	0.56	0.38	0.44	0.28	0.28	35.07	2.92
31	0.40	-	0.60	-	0.42	-	0.57	0.52	-	0.38	-	0.08	0.08	33.97	2.83
Total	4.18	10.54	6.62	16.99	10.15	18.62	18.70	21.19	15.50	12.18	12.95	11.01	11.01	654.63	57.79
Mean	0.30	0.38	0.25	0.57	0.33	0.62	0.60	0.68	0.52	0.39	0.43	0.36	0.36	21.12	1.86

Table H.4.6 (3) Discharge through Kafir El-Arab Regulator in 1998

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.24	0.27	0.17	-	0.34	0.50	0.66	0.63	0.63	0.41			4.85	0.49
2	0.24	0.35	0.17	-	0.34	0.50	0.66	0.63	0.63	0.39			5.91	0.59
3	0.24	0.29	0.17	-	0.34	0.77	0.66	0.63	0.33	0.49			6.92	0.69
4	0.24	0.29	0.10	-	0.34	0.77	0.66	0.63	0.25	0.25			7.53	0.75
5	0.24	0.29	0.10	-	0.34	0.77	0.66	0.63	0.25	0.45			8.73	0.87
6	0.24	0.29	0.10	0.31	0.34	0.65	0.66	0.39	0.25	0.45			9.68	0.97
7	0.24	0.29	0.10	0.55	0.34	0.73	0.66	0.78	0.25	0.45			11.39	1.14
8	0.24	0.29	0.10	0.55	0.34	0.73	0.60	0.78	0.25	0.25			12.13	1.21
9	0.24	0.29	0.10	0.55	0.34	0.73	0.60	0.78	0.25	0.25			13.13	1.31
10	0.24	0.29	0.10	0.55	0.50	0.73	0.60	0.57	0.25	0.25			14.08	1.41
11	0.24	0.29	0.10	0.55	0.50	0.80	0.60	0.57	0.25	0.25			15.15	1.52
12	-	0.29	0.10	0.55	0.50	0.80	0.60	0.57	0.25	0.25			15.91	1.77
13	-	0.29	0.10	0.39	0.50	0.88	0.60	0.57	0.25	0.25			16.83	1.87
14	-	0.29	0.10	0.39	0.50	0.88	0.60	0.57	0.25	0.25			17.83	1.98
15	-	0.29	0.10	0.39	0.50	0.88	0.60	0.57	0.25	0.25			18.83	2.09
16	-	0.29	0.35	0.44	0.50	0.70	0.60	0.57	0.25	0.25			19.95	2.22
17	-	0.17	0.35	0.44	0.50	0.66	0.60	0.68	0.25	0.25			20.90	2.32
18	-	0.17	0.35	0.44	0.50	0.66	0.60	0.72	0.40	0.53			22.37	2.49
19	-	0.17	0.35	0.44	0.50	0.66	0.60	0.64	0.46	0.53			23.35	2.59
20	-	0.17	0.35	0.44	0.50	0.66	0.71	0.64	0.25	0.53			24.25	2.69
21	-	0.17	0.35	0.44	0.50	0.66	0.71	0.64	0.25	0.53			25.25	2.81
22	-	0.27	0.35	0.44	0.50	0.66	0.71	0.63	0.25	0.53			26.34	2.93
23	-	0.27	0.35	0.44	0.46	0.78	0.71	0.63	0.25	0.45			27.34	3.04
24	-	0.27	0.35	0.44	0.46	0.80	0.71	0.63	0.25	0.38			28.29	3.14
25	-	0.27	0.35	0.44	0.46	0.66	0.71	0.63	0.25	0.38			29.15	3.24
26	-	0.27	0.35	0.44	0.46	0.64	0.71	0.63	0.25	0.37			30.12	3.35
27	-	0.27	0.35	0.44	0.46	0.66	0.71	0.63	0.25	0.53			31.30	3.48
28	0.10	0.27	0.35	0.44	0.51	0.66	0.71	0.63	0.25	0.53			32.45	3.25
29	0.10	-	0.35	0.44	0.51	0.66	0.71	0.63	0.39	0.59			33.38	3.34
30	0.24	-	0.35	0.44	0.51	0.66	0.63	0.63	0.39	0.59			34.44	3.44
31	0.24	-	0.35	-	0.51	-	0.63	0.63	-	0.59	-		33.95	3.40
Total	3.32	7.42	7.31	11.38	13.90	21.30	20.18	19.49	8.98	12.45	#DIV/0!	#DIV/0!	621.73	66.37
Mean	0.22	0.27	0.24	0.46	0.45	0.71	0.65	0.63	0.30	0.40	#DIV/0!	#DIV/0!	20.06	2.14

Table H.4.7 (1) Discharge through Rahbeen Regulator in 1996

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	4.45	2.25	3.44	7.15	5.30	9.15	12.93	11.45	11.07	4.68	4.65	6.28	83.80	6.98
2	4.45	2.25	3.44	7.15	5.30	9.12	12.93	11.45	10.93	4.28	4.65	6.56	84.51	7.04
3	4.45	3.00	3.44	6.90	5.80	9.30	12.93	11.45	10.63	4.28	4.65	6.78	86.61	7.22
4	4.45	3.00	3.44	6.90	6.55	9.86	12.93	11.45	10.63	4.28	4.65	6.03	88.17	7.35
5	4.45	3.85	3.44	6.90	7.22	10.06	12.93	11.45	10.22	4.28	4.65	5.75	90.20	7.52
6	4.45	3.85	3.44	6.90	7.82	10.65	12.93	11.45	9.66	4.10	4.65	4.75	90.65	7.55
7	4.45	3.85	3.44	6.90	7.53	10.65	12.93	11.45	9.66	4.10	4.65	4.75	91.36	7.61
8	5.20	3.35	3.44	6.40	7.90	11.25	12.93	11.45	9.00	4.40	5.40	4.00	92.72	7.73
9	4.95	3.85	3.44	6.40	7.90	11.32	12.93	11.45	8.40	4.15	5.40	4.00	93.19	7.77
10	4.45	3.85	3.44	6.40	7.90	12.10	12.93	11.45	8.10	4.15	5.20	3.10	93.07	7.76
11	3.45	3.85	3.44	6.15	7.90	12.85	12.93	11.45	8.10	3.60	5.35	2.54	92.61	7.72
12	3.45	3.85	4.18	5.90	7.81	12.85	12.93	11.18	8.38	3.60	5.35	2.70	94.18	7.85
13	2.45	3.85	4.18	5.40	7.81	12.85	12.93	11.04	8.38	3.74	5.35	2.95	93.93	7.83
14	-	3.85	4.18	5.40	7.81	13.32	12.60	11.04	8.38	4.09	5.50	2.95	93.12	7.76
15	-	3.85	4.18	5.15	7.81	12.32	12.93	11.04	8.38	4.35	5.50	2.95	93.46	7.79
16	-	3.85	4.18	5.15	7.81	12.84	12.93	11.04	8.38	4.35	5.50	2.60	94.63	7.89
17	-	3.85	4.18	5.15	7.81	13.00	12.93	11.04	8.38	4.20	5.20	3.66	96.40	8.03
18	-	3.85	4.65	5.15	7.81	13.00	12.80	11.04	8.38	4.20	5.20	3.66	97.74	8.15
19	-	3.85	4.90	4.75	7.81	13.14	12.80	11.04	8.08	4.46	6.00	3.50	99.33	8.28
20	-	3.85	4.90	4.90	7.81	13.07	12.80	11.04	8.12	4.42	6.15	3.21	100.27	8.36
21	-	3.85	4.90	4.65	7.81	13.07	12.23	11.04	8.12	4.67	6.65	3.21	101.20	8.43
22	-	3.85	5.60	5.30	7.51	13.07	11.90	11.04	7.62	4.92	6.65	3.21	102.67	8.56
23	-	3.85	5.60	5.30	7.51	13.07	11.90	11.04	7.37	4.77	6.65	3.21	103.27	8.61
24	-	3.85	5.60	5.30	7.51	12.93	11.90	10.90	7.12	4.42	7.04	3.29	103.86	8.66
25	-	3.85	6.10	5.30	7.51	12.93	11.90	10.83	7.47	4.42	7.04	3.29	105.64	8.80
26	-	3.85	6.60	5.30	7.94	12.93	11.90	10.83	7.13	4.42	7.04	3.29	107.23	8.94
27	-	3.85	6.60	5.30	7.94	12.93	12.29	10.83	6.13	4.42	7.30	3.58	108.17	9.01
28	-	3.85	6.35	5.30	8.54	12.93	11.93	10.83	6.13	4.42	7.30	3.38	108.96	9.08
29	-	3.85	6.60	5.30	8.54	12.93	11.80	10.70	5.48	4.79	7.30	4.48	110.77	9.23
30	-	-	6.60	5.30	9.15	12.93	11.80	10.70	4.68	4.79	7.04	5.00	107.99	9.00
31	-	-	6.60	-	9.15	-	11.45	10.70	-	4.79	-	5.16	78.85	6.57
Total	55.10	106.25	144.52	173.45	236.52	362.42	388.88	344.89	248.51	134.54	173.66	123.82	2,988.56	249.05
Mean	4.24	3.66	4.66	5.78	7.63	12.08	12.54	11.13	8.28	4.34	5.79	3.99	96.41	8.03

Table H.4.7 (2) Discharge through Rahbeen Regulator in 1997

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	5.66	5.00	3.97	7.50	6.33	9.60	12.79	13.20	10.70	4.86	4.97	6.00	91.58	7.63
2	5.66	4.57	3.97	7.50	6.33	9.82	12.79	13.35	10.70	4.26	4.97	5.50	91.42	7.62
3	5.31	4.07	3.97	7.50	6.33	10.10	12.79	13.35	10.70	4.26	5.20	5.00	91.58	7.63
4	5.31	4.07	3.97	7.50	6.83	10.38	12.79	13.48	10.35	4.26	5.20	5.09	93.23	7.77
5	5.32	4.07	3.97	7.25	6.83	10.60	12.79	13.48	10.35	4.18	5.20	5.09	94.13	7.84
6	5.31	3.57	4.20	6.75	6.83	10.90	12.79	13.00	10.35	4.18	5.12	5.09	94.09	7.84
7	5.34	3.07	4.20	6.75	7.55	11.21	13.07	12.65	9.80	4.18	5.02	5.09	94.93	7.91
8	5.34	3.07	4.33	7.25	7.88	12.31	13.07	12.30	9.80	4.18	4.87	4.60	97.00	8.08
9	5.19	3.32	4.33	7.25	7.88	12.31	13.07	11.34	8.50	4.18	4.97	4.10	95.44	7.95
10	4.50	3.32	4.33	6.50	7.88	12.31	13.07	11.34	7.78	3.81	5.30	4.20	94.34	7.86
11	2.70	3.32	4.33	7.03	8.04	12.31	13.07	11.32	7.63	3.76	6.07	3.70	94.28	7.86
12	0.30	3.35	4.33	7.03	8.04	12.31	13.07	11.32	7.53	3.91	6.07	3.20	92.46	7.71
13	0.30	3.85	4.58	7.03	8.04	12.66	13.07	11.32	7.28	4.22	6.27	2.95	94.57	7.88
14	-	4.10	4.58	7.03	8.04	12.66	13.07	11.32	7.25	4.22	6.27	2.95	95.49	7.96
15	-	4.60	5.44	6.50	8.04	12.66	13.07	10.69	7.25	4.22	6.27	2.70	96.44	8.04
16	-	4.75	5.44	6.00	8.04	12.66	13.07	10.69	7.25	4.22	6.35	2.90	97.37	8.11
17	-	5.00	5.44	6.00	8.04	12.66	13.07	10.69	7.25	4.22	6.75	2.90	99.02	8.25
18	-	5.00	4.30	6.00	8.04	12.66	13.07	10.69	7.25	4.22	7.10	2.90	99.23	8.27
19	-	5.00	4.30	6.00	8.04	13.10	13.07	10.69	7.25	1.90	7.25	2.90	98.50	8.21
20	-	5.00	4.30	5.58	8.04	13.10	12.70	10.69	7.49	4.22	7.25	2.94	101.31	8.44
21	-	4.75	4.30	5.58	8.18	13.10	12.70	10.69	7.49	4.22	7.60	2.90	102.51	8.54
22	-	4.75	4.30	5.58	8.18	13.10	12.74	10.92	7.49	4.22	7.25	2.90	103.43	8.62
23	-	4.25	4.30	5.58	8.18	13.10	12.70	10.92	7.49	1.95	7.63	2.90	102.00	8.50
24	-	3.60	4.30	5.80	8.82	13.10	12.70	10.92	7.49	4.22	7.20	2.90	105.05	8.75
25	-	3.25	4.30	5.65	8.82	12.66	12.40	10.92	6.53	2.06	7.20	2.90	101.69	8.47
26	-	3.00	4.80	5.65	8.82	12.66	12.40	10.92	5.98	4.26	7.20	2.75	104.44	8.70
27	-	3.00	5.30	5.65	8.82	12.66	12.44	10.92	5.78	4.26	7.20	3.55	106.58	8.88
28	1.00	3.63	6.04	5.65	8.82	12.66	12.44	10.92	5.78	4.26	7.20	3.55	109.95	9.16
29	4.00	-	6.04	5.65	8.82	12.66	12.44	10.92	5.53	4.51	7.20	4.00	110.77	9.23
30	4.50	-	6.04	7.65	9.54	-	12.44	10.92	5.03	4.65	6.83	4.50	102.10	8.51
31	4.75	-	7.04	-	9.75	-	12.44	10.70	-	4.86	-	5.50	86.04	7.17
Total	14.25	3.63	25.16	18.95	36.93	25.32	49.76	43.46	16.34	18.28	21.23	17.55	3,040.97	253.41
Mean	0.84	0.13	0.81	0.63	1.19	0.87	1.61	1.40	0.54	0.59	0.71	0.57	98.10	8.17

Table H.4.7 (3) Discharge through Ranbeen Regulator in 1998

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	5.23	4.75	3.37	5.80	6.93	10.50	13.30	11.00	10.06	5.39	4.65	6.28	88.26	7.36
2	5.48	5.30	3.37	5.55	7.50	10.40	13.30	10.58	10.06	5.39	4.65	6.56	90.14	7.51
3	5.48	5.55	3.37	5.55	7.33	11.50	13.30	11.60	10.06	5.39	4.65	6.78	93.56	7.80
4	5.48	5.71	3.23	5.55	7.33	11.50	13.30	12.00	10.06	4.89	4.65	6.03	93.73	7.81
5	5.48	5.71	3.73	5.86	7.83	11.50	13.30	11.70	10.18	4.89	4.65	5.75	95.58	7.97
6	5.00	5.71	3.74	6.10	7.83	11.02	13.60	12.00	10.18	4.89	4.65	4.75	95.47	7.96
7	4.50	5.71	3.74	6.10	8.10	12.30	13.60	12.00	9.90	4.89	4.65	4.75	97.24	8.10
8	4.50	5.85	4.24	6.10	7.95	12.80	13.60	12.00	9.48	5.89	5.40	4.00	99.81	8.32
9	3.50	5.75	4.86	6.10	7.95	13.10	13.60	11.50	9.48	5.89	5.40	4.00	100.13	8.34
10	3.00	5.85	4.86	6.40	7.95	12.80	13.40	12.00	8.58	6.89	5.20	3.10	100.03	8.34
11	2.00	5.60	4.30	6.40	7.95	12.60	13.40	12.00	7.60	6.89	5.35	2.54	97.63	8.14
12	1.50	5.60	4.30	6.40	7.95	12.60	13.40	11.60	6.75	6.37	5.35	2.70	96.52	8.04
13	1.00	4.50	4.82	6.40	8.14	12.60	13.80	11.60	7.55	6.35	5.35	2.95	98.06	8.17
14	1.00	4.50	4.82	6.40	8.14	12.60	13.76	11.60	7.55	6.35	5.50	2.95	99.17	8.26
15	2.00	4.50	4.55	6.40	7.93	12.50	13.76	11.60	7.52	6.35	5.50	2.95	100.56	8.38
16	2.00	4.50	4.65	5.86	7.93	12.50	13.76	11.60	7.52	6.35	5.50	2.60	100.77	8.40
17	2.00	3.63	4.65	6.00	7.93	12.50	13.50	11.20	7.52	6.85	5.20	3.66	101.64	8.47
18	2.00	3.37	4.79	6.00	7.93	12.80	13.50	10.70	7.10	6.85	5.20	3.66	101.90	8.49
19	2.00	3.37	5.64	6.00	7.93	12.80	13.50	10.70	7.10	6.85	6.00	3.50	104.39	8.70
20	2.00	3.00	5.39	6.00	7.77	12.40	13.80	10.50	7.34	6.85	6.15	3.21	104.41	8.70
21	2.00	3.00	5.14	5.37	7.77	12.70	13.20	10.90	7.40	5.90	6.65	3.21	104.24	8.69
22	2.00	2.96	5.14	5.37	7.77	12.70	13.30	10.90	7.40	6.40	6.65	3.21	105.80	8.82
23	2.00	3.06	5.14	5.37	8.37	12.70	13.40	10.80	7.40	6.40	6.65	3.21	107.50	8.96
24	2.00	2.96	5.54	5.37	8.37	13.30	12.80	10.90	7.22	6.40	7.04	3.29	109.19	9.10
25	2.00	3.00	5.54	5.37	8.38	13.40	12.80	10.90	6.46	6.40	7.04	3.29	109.58	9.13
26	2.00	3.00	6.19	5.37	8.47	13.30	12.80	10.80	6.53	6.49	7.04	3.29	111.28	9.27
27	2.70	3.75	6.19	5.62	11.00	13.30	12.80	10.80	6.50	7.50	7.30	3.58	118.04	9.84
28	3.95	3.75	6.19	5.87	12.10	13.60	12.80	10.40	5.20	7.25	7.30	3.38	119.79	9.98
29	3.90	-	6.19	6.38	12.10	13.00	11.90	10.40	2.70	8.00	7.30	4.48	115.35	9.61
30	3.90	-	6.19	6.03	12.10	13.00	10.60	10.40	4.90	8.00	7.04	5.00	117.16	9.76
31	3.90	-	6.19	-	12.10	-	10.60	10.40	-	8.00	-	5.16	87.35	7.28
Total	95.50	123.94	150.06	177.09	264.83	374.32	407.48	347.08	233.30	197.20	173.66	123.82	3,164.28	263.69
Mean	3.08	4.43	4.84	5.90	8.54	12.48	13.14	11.20	7.78	6.36	5.79	3.99	102.07	8.51

Table H.4.8 (1) Intake Amount to Tera Main Canal in 1996

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	1.28	1.00	1.00	2.53	1.80	3.27	4.37	4.00	3.69	1.74	2.00	2.40	30.08	2.51
2	1.36	1.00	1.00	2.41	1.80	3.27	4.37	4.00	3.69	1.61	2.00	2.40	30.91	2.58
3	1.36	1.00	1.00	2.41	2.25	3.19	4.37	4.00	3.69	1.61	2.00	2.40	32.28	2.69
4	1.36	1.00	1.00	2.32	2.25	3.19	4.37	4.00	3.60	1.61	2.00	2.40	33.10	2.76
5	1.36	1.15	1.00	2.32	2.90	4.00	4.37	4.00	3.60	1.61	2.00	2.25	35.56	2.96
6	1.36	1.26	1.00	2.32	2.90	4.00	4.37	4.00	3.60	1.46	2.00	1.65	35.92	2.99
7	1.36	1.56	1.00	2.32	2.90	4.00	4.37	4.00	3.60	1.46	1.75	1.45	36.77	3.06
8	1.36	1.56	1.00	2.02	2.90	4.60	4.58	4.00	3.69	1.31	1.75	1.31	38.08	3.17
9	1.36	1.56	1.00	2.76	2.90	4.40	4.43	4.00	3.54	1.31	1.75	1.31	39.32	3.28
10	1.12	1.56	1.00	2.76	2.90	3.83	4.43	4.00	3.39	1.31	1.75	1.31	39.36	3.28
11	0.91	1.56	1.00	2.76	2.90	4.00	4.43	4.00	3.39	1.16	1.75	1.46	40.32	3.36
12	0.91	1.56	1.30	2.76	2.90	4.18	4.43	4.00	3.39	1.16	1.75	1.31	41.65	3.47
13	0.91	1.56	1.30	2.76	2.90	4.18	4.43	3.85	3.39	1.16	1.75	1.46	42.65	3.55
14	0.46	1.56	1.30	2.76	2.70	4.18	4.43	3.85	3.39	1.31	1.95	1.46	43.35	3.61
15	-	1.56	1.30	2.46	2.70	4.18	4.43	3.85	3.39	1.46	1.95	1.19	43.47	3.95
16	-	1.56	1.30	2.46	2.70	4.21	4.43	3.85	3.39	1.46	1.95	1.19	44.50	4.05
17	-	1.56	1.30	2.46	2.70	4.39	4.43	3.85	3.39	1.46	1.95	1.19	45.68	4.15
18	-	1.56	1.30	2.46	2.61	4.39	4.43	4.00	3.39	1.47	1.40	1.19	46.20	4.20
19	-	1.56	1.45	2.16	2.61	4.39	4.43	4.00	3.09	1.77	2.40	1.04	47.90	4.35
20	-	1.56	1.45	2.00	2.61	4.39	4.37	3.85	3.07	1.77	2.40	0.83	48.30	4.39
21	-	1.56	1.45	2.00	2.61	4.39	4.37	4.30	3.07	2.07	2.47	0.83	50.12	4.56
22	-	1.56	2.00	2.00	2.61	4.39	4.15	4.15	2.92	2.07	2.47	0.80	51.12	4.65
23	-	1.56	2.00	1.80	2.53	4.45	4.20	4.09	2.92	2.01	2.47	0.80	51.83	4.71
24	-	1.56	2.00	1.80	2.53	4.45	4.20	4.09	2.77	1.77	2.47	0.80	52.44	4.77
25	-	1.56	2.40	1.80	2.53	4.45	4.20	4.03	2.71	1.77	2.47	0.80	53.72	4.88
26	-	1.56	2.55	1.80	3.71	4.45	4.20	4.03	2.71	1.84	2.60	0.80	56.25	5.11
27	-	1.56	2.40	1.80	3.27	4.45	4.20	3.91	2.56	2.00	2.60	0.93	56.68	5.15
28	-	1.56	2.40	1.80	3.27	4.37	4.14	3.91	2.40	2.00	2.60	0.93	57.38	5.22
29	-	1.56	2.40	1.80	3.27	4.37	4.20	3.69	1.95	2.00	2.60	1.20	58.04	5.28
30	-	-	2.40	1.80	3.27	4.37	4.14	3.69	1.80	2.00	2.60	1.50	57.57	5.23
31	-	-	2.40	-	3.27	-	4.14	3.69	-	2.00	-	1.60	48.10	4.37
Total	16.47	42.29	47.40	67.61	85.70	124.38	134.41	122.68	95.18	50.74	63.60	42.19	1388.65	122.31
Mean	1.18	1.46	1.53	2.25	2.76	4.15	4.34	3.96	3.17	1.64	2.12	1.36	44.80	3.95

Table H.4.8 (2) Intake Amount to Tera Main Canal in 1997

Day	(Unit:MCM/day)												Total	Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	1.80	1.66	1.12	2.00	1.44	3.29	4.41	4.37	3.28	1.65	1.93	2.06	30.01	2.50
2	1.80	1.66	1.12	2.00	1.59	3.94	4.41	4.37	3.28	1.50	1.93	1.91	31.51	2.63
3	1.80	1.00	1.12	2.30	1.89	3.94	4.41	4.37	3.28	1.50	2.08	1.76	32.45	2.70
4	1.80	1.00	1.12	2.30	1.89	3.94	4.41	4.37	3.28	1.50	2.14	1.72	33.47	2.79
5	1.81	1.00	1.12	2.30	1.89	3.73	4.41	4.37	3.28	1.28	2.14	1.72	34.05	2.84
6	1.65	1.00	1.12	2.30	1.89	3.88	4.41	4.37	3.00	1.28	1.99	1.72	34.61	2.88
7	1.65	1.00	1.12	2.30	2.19	3.94	4.54	4.37	3.00	1.28	1.87	1.72	35.98	3.00
8	1.65	0.55	1.12	2.81	2.80	4.18	4.54	3.86	2.71	1.28	1.72	1.57	36.79	3.07
9	1.50	0.55	1.12	2.81	2.80	4.18	4.54	3.77	2.56	1.22	1.87	1.42	37.34	3.11
10	1.50	0.85	1.12	2.81	2.80	4.18	4.54	3.77	2.50	1.22	1.87	1.27	38.43	3.20
11	1.50	1.15	1.12	2.81	2.80	4.43	4.39	3.77	2.35	1.22	2.23	1.12	39.89	3.32
12	0.30	1.15	1.09	2.81	2.80	4.43	4.39	3.77	2.20	1.22	2.14	1.12	39.42	3.29
13	0.30	1.13	1.20	2.81	2.80	4.43	4.39	3.77	2.17	1.22	1.97	1.12	40.31	3.36
14	-	1.13	1.20	2.35	2.80	4.43	4.39	4.39	2.17	1.22	1.97	1.12	41.17	3.74
15	-	1.05	1.31	2.35	2.80	4.43	4.39	3.98	2.17	1.22	1.97	1.04	41.71	3.79
16	-	1.05	1.61	1.75	2.80	4.43	4.39	3.98	2.17	1.22	1.97	1.04	42.41	3.86
17	-	1.35	1.61	1.50	3.76	4.43	4.39	3.98	2.17	1.39	1.97	0.89	44.44	4.04
18	-	1.65	1.61	1.50	3.76	4.43	4.39	3.98	2.17	1.39	1.97	1.05	45.90	4.17
19	-	1.65	1.61	1.50	3.76	4.43	4.38	3.98	2.17	1.39	2.15	1.05	47.07	4.28
20	-	1.65	1.61	1.50	3.76	4.43	4.39	3.98	2.17	1.39	2.15	1.05	48.08	4.37
21	-	1.65	1.61	1.80	3.28	4.43	4.60	3.83	2.17	1.48	2.15	1.05	49.05	4.46
22	-	1.56	1.61	2.08	3.28	4.43	4.60	3.30	2.17	1.48	2.15	1.05	49.71	4.52
23	-	1.56	1.61	2.08	3.28	4.43	4.41	3.30	2.17	1.48	2.46	1.05	50.83	4.62
24	-	1.38	1.91	2.08	3.28	4.73	4.41	3.14	2.23	1.48	2.34	1.01	51.99	4.73
25	-	1.20	1.91	1.80	3.28	4.73	4.41	3.14	1.98	1.58	2.35	1.07	52.45	4.77
26	-	1.20	1.91	1.80	3.13	4.73	4.41	3.14	1.98	1.58	2.35	1.13	53.36	4.85
27	-	1.20	1.91	1.77	3.13	4.73	4.51	3.14	1.80	1.58	2.35	1.13	54.25	4.93
28	0.80	1.20	1.91	1.77	3.13	4.73	4.52	3.14	1.80	1.58	2.35	1.13	56.06	4.67
29	2.26	1.54	2.20	2.07	3.13	4.43	4.40	3.14	1.74	1.58	2.35	1.13	58.97	4.91
30	2.26	-	2.20	1.77	3.13	4.43	4.40	3.30	1.60	1.82	2.40	1.43	58.74	4.90
31	2.26	-	2.50	-	3.13	-	4.40	3.30	-	2.03	-	1.74	50.36	4.20
Total	26.64	35.72	46.45	63.83	88.20	129.30	137.58	117.44	71.72	44.26	63.28	40.39	1360.81	118.50
Mean	1.57	1.23	1.50	2.13	2.85	4.31	4.44	3.79	2.39	1.43	2.11	1.30	43.90	3.82

Table H.4.8 (3) Intake Amount to Tera Main Canal in 1998

(Unit:MCM/day)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Mean
1	1.88	1.39	1.31	1.83	2.83	3.83	4.60	3.67	3.29	2.42			28.05	2.81
2	1.88	1.63	1.31	1.83	2.83	3.83	4.60	3.67	3.29	1.82			28.69	2.87
3	1.73	1.93	1.31	1.83	2.98	3.76	4.60	3.99	3.29	1.52			29.94	2.99
4	1.73	1.57	1.31	1.83	3.00	3.76	4.45	3.99	3.29	1.52			30.45	3.05
5	1.73	1.66	1.61	1.83	3.00	3.76	4.11	3.99	3.29	1.22			31.20	3.12
6	1.73	1.66	1.28	1.83	3.32	4.04	4.11	3.99	3.75	1.22			32.93	3.29
7	1.73	1.80	1.38	1.68	3.12	4.04	4.11	3.99	3.21	1.22			33.28	3.33
8	1.73	1.80	1.38	1.68	3.32	4.25	4.11	3.99	3.21	1.22			34.69	3.47
9	1.43	1.80	1.68	1.68	3.32	4.34	4.11	3.81	3.00	1.22			35.39	3.54
10	1.43	1.80	1.68	1.68	3.32	4.10	4.11	3.81	2.70	1.22			35.85	3.59
11	1.00	1.80	1.68	1.68	3.32	4.25	4.11	3.81	2.40	1.22			36.27	3.63
12	0.20	1.80	1.68	1.68	3.07	4.25	4.11	3.81	2.40	1.22			36.22	3.62
13	0.20	1.66	1.68	1.68	3.07	4.25	4.46	3.75	2.40	1.63			37.78	3.78
14	0.20	1.19	1.68	1.68	3.07	4.56	4.46	3.51	2.40	1.63			38.38	3.84
15	0.20	1.19	1.68	1.68	3.07	4.56	4.46	3.51	3.21	1.63			40.19	4.02
16	0.20	1.04	1.83	1.68	3.07	4.56	4.59	3.51	3.21	1.63			41.32	4.13
17	0.20	1.04	1.98	1.97	3.07	4.56	4.59	3.51	3.21	1.63			42.76	4.28
18	0.20	1.04	2.13	1.97	3.07	4.67	4.44	3.51	3.21	1.63			43.87	4.39
19	0.20	0.90	2.13	1.97	3.07	4.67	4.29	3.51	2.80	1.63			44.17	4.42
20	0.20	0.90	2.13	2.12	3.36	4.67	4.81	3.51	2.92	1.63			46.25	4.63
21	0.20	0.75	2.13	2.13	3.21	4.67	4.20	3.68	2.92	2.09			46.98	4.70
22	0.20	0.75	2.13	2.13	2.96	4.67	4.49	3.59	2.92	2.09			47.93	4.79
23	0.20	0.75	2.13	2.00	2.96	4.67	4.49	3.59	2.92	2.09			48.80	4.88
24	0.20	0.90	2.13	2.04	2.96	4.65	4.49	3.59	2.92	2.09			49.97	5.00
25	0.20	0.90	2.13	2.13	2.96	4.65	4.49	3.59	2.80	2.09			50.94	5.09
26	0.20	0.50	1.90	2.13	2.96	4.65	4.34	3.73	2.67	1.73			50.81	5.08
27	1.00	0.50	1.60	2.25	3.18	4.65	4.34	3.67	2.67	2.78			53.64	5.36
28	1.30	0.50	1.60	2.34	3.68	4.60	4.12	3.67	1.86	2.78			54.45	5.45
29	1.30	-	1.60	2.50	3.98	4.60	3.82	3.67	1.86	2.78			55.11	5.51
30	1.30	-	1.60	2.50	3.98	4.60	3.67	3.17	1.86	2.78			55.46	5.55
31	1.60	-	1.60	-	3.98	-	3.67	3.17	-	2.78			47.80	4.78
Total	27.50	35.15	53.40	57.96	99.09	131.12	153.35	113.96	85.88	56.16			1289.57	128.96
Mean	0.89	1.26	1.72	1.93	3.20	4.37	4.30	3.68	2.86	1.81	#DIV/0!	#DIV/0!	41.60	4.16