



WRMIS User Manual

WATER LOSSES

**DEVELOPMENT OF WATER RESOURCES
MANAGEMENT INFORMATION SYSTEM (WRMIS)
AND DECISION SUPPORT SYSTEM (DSS)**

NESPAK

Version 1.0

August 23, 2016



Revision History

Version	Date	By	Summary of Changes
1.0	23-Aug-16	NESPAK	Initial Draft



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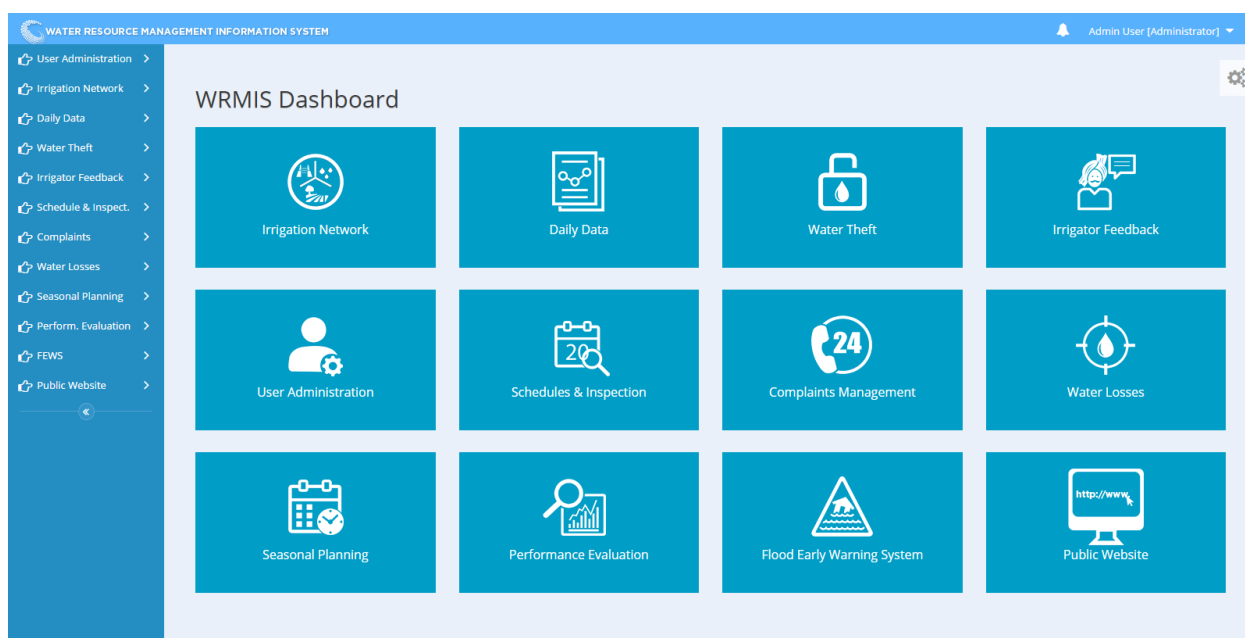
1. Water Loss n Gain:-

This module provides an interface to view Command Water loss n Gain, Channel loss n Gain, Sub Divisional and Divisional Water loss n Gain. Application provides interfere to view Sub Divisional and Divisional Water loss n Gain on Daily, monthly and yearly basis. Command Loss n Gain is calculated according to provided number of days into Lag Time screen.

Business User: Administrator

Any other user can access “Water Losses” based on assigned rights from Roles and Rights (User Administration)

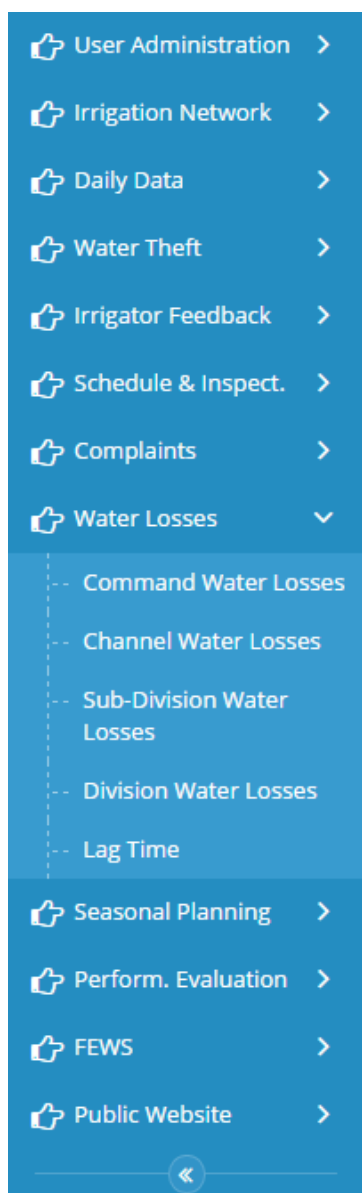
Pre-Requisite: Daily Data should be available for the selected command and channels.



1.1 Command Water Losses

This section provides the Water losses and Gain between the reaches of Indus command and Jhelum command. The Losses is calculated after the Lag Time delay entered at Lag Time screen. For each reach the lag time varies from months to months.

How to Access: Main Menu -> Water Losses- > Command Loss n Gain





Water Losses

Command Water Losses

1 Command 2 Reach
 3 Year 4 Month
 View

Tarbela-Kalabagh water loss for April 2009

All discharges are in Cusecs

Tarbela Date	Tarbela M.Inflow	Tarbela M.Outflow	River Kabul	Total	Kalabagh Date	Kalabagh US	Kalabagh DS	Kalabagh Loss Gain
01-Apr	27,100	22,000	21,800	43,800	02-Apr	40,155	37,155	-3,645
02-Apr	27,500	18,000	22,100	40,100	03-Apr	22,700	18,700	-17,400
03-Apr	26,800	18,000	22,600	40,600	04-Apr	42,438	38,438	1,838
04-Apr	35,300	18,000	24,400	42,400	05-Apr	47,190	43,190	4,790
05-Apr	29,100	18,000	25,300	43,300	06-Apr	53,306	49,306	10,006
06-Apr	29,400	24,000	24,000	48,000	07-Apr	47,190	43,190	-810
07-Apr	30,700	24,000	24,700	48,700	08-Apr	53,306	49,306	4,606
08-Apr	34,100	24,000	30,000	54,000	09-Apr	59,421	55,421	5,421
09-Apr	36,900	20,000	33,200	53,200	10-Apr	60,548	58,148	7,348
10-Apr	38,100	20,000	40,300	60,300	11-Apr	67,569	67,569	7,269
11-Apr	32,000	20,000	35,600	55,600	12-Apr	48,055	48,055	-7,545
12-Apr	29,600	20,000	29,000	49,000	13-Apr	53,490	53,490	4,490
13-Apr	28,300	20,000	29,200	49,200	14-Apr	39,900	39,900	-9,300
14-Apr	29,200	20,000	30,400	50,400	15-Apr	56,465	56,465	6,065
15-Apr	30,700	20,900	36,600	57,500	16-Apr	73,388	73,388	15,888
16-Apr	41,800	20,000	69,700	89,700	17-Apr	83,270	83,270	-6,430
17-Apr	50,100	20,000	64,800	84,800	18-Apr	68,069	68,069	-16,731
18-Apr	53,900	15,000	53,300	68,300	19-Apr	53,551	53,551	-14,749
19-Apr	44,800	15,000	44,500	59,500	20-Apr	58,354	58,354	-1,146
20-Apr	42,200	15,000	45,000	60,000	21-Apr	56,197	55,947	-3,803
21-Apr	47,800	20,000	45,900	65,900	22-Apr	66,849	63,849	949
22-Apr	48,000	30,000	47,200	77,200	23-Apr	79,498	73,498	2,298
23-Apr	46,500	40,000	46,700	86,700	24-Apr	85,425	79,425	-1,275
24-Apr	41,800	40,000	46,100	86,100	25-Apr	68,453	62,453	-17,647
25-Apr	36,600	53,000	39,800	92,800	26-Apr	79,498	73,498	-13,302
26-Apr	34,500	53,000	36,500	89,500	27-Apr	73,475	67,475	-16,025
27-Apr	36,000	53,000	37,500	90,500	28-Apr	85,425	79,425	-5,075
28-Apr	36,400	58,000	37,200	95,200	29-Apr	79,498	73,498	-15,702
29-Apr	35,500	58,000	37,400	95,400	30-Apr	85,425	79,425	-9,975
30-Apr	39,100	58,000	39,500	97,500	01-May	79,498	73,498	-18,002

Command Loss n Gain:

1

Command

Select

- Select command from the 'command' dropdown.
- On selection of command, system enables Reach dropdown and populates all reaches based on selected command.
- User can select either Indus command or Jhelum Chenab Command.

2

Reach

Select



- Select reach from the 'Reach' dropdown.
- On selection of reach, relevant data years are populated in the year dropdown.
- On selection of Indus command, system populates the following reaches. i.e.
Tarbela Kalabagh
Kalabagh Chashma
Chashma Taunsa
Taunsa Guddu
Guddu Sukkur
Sukkur Kotri
Terbela Chashma
Chashma Kotri
- On selection of Jhelum Chenab command, system populates the following reaches. i.e.
Mangla Marala Rasul
Rasul Trimmu
Trimmu Panjnad
Mangla Panjnad

3

Year

Select



- Select year from the 'Year' dropdown.
- On selection of year, relevant months are populated in the month dropdown.

4

Month

Select



- Select month from the 'Month' dropdown.

5

View

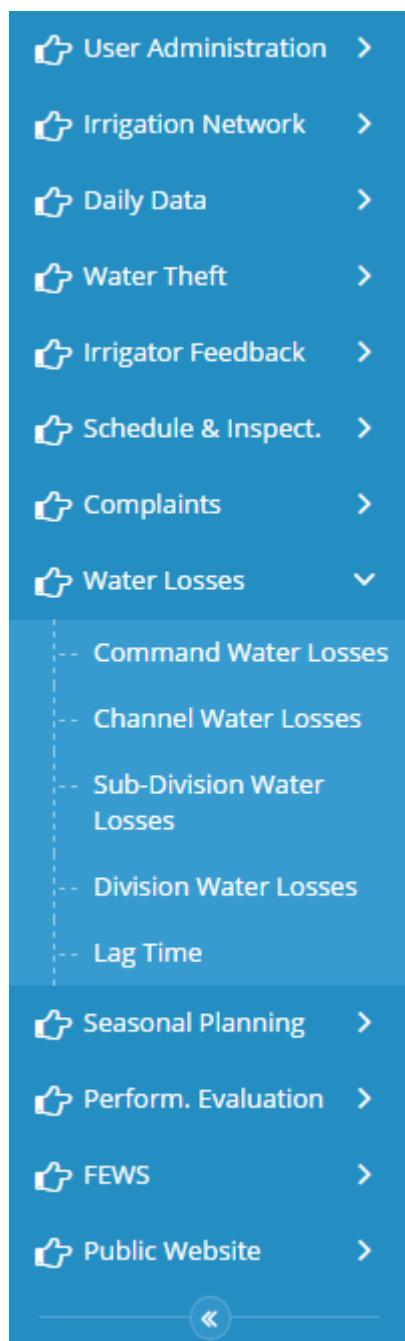
View

- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'

1.2 Channel Losses

User can select Main canal, Branch canal, Distributary, Minor and or sub Minor. System shows the channel discharge on each gauge available on the channel and losses on each gauge. System shows the Discharge of the direct outlets on the selected canal and the offtakes discharge as well.

How to Access: Left Menu -> Water Losses -> Channel Losses



Water Losses

Channel Water Losses

1 Canal System Lower Bahawal Canal

2 Branch Canal Ahmedpur Branch

3 Distributry Select

4 Minor Select

5 Sub Minor Select

6 From Date 01-Oct-2009

7 To Date 31-Oct-2009

8 View

9 Reset

Channel Name	RD		Discharge				Difference	% Loss
	From	To	From	To	Offtakes	Direct Outlets		
Ahmedpur Branch	0+000	98+000	643	594.3	0	0	-48.8	-7.6
	98+000	199+000	594.3	235.2	305.9	2.0	-51.1	-8.6
	199+000	210+800	235.2	104.6	0	0	-130.6	-55.5
Total	0+000	210+800	643	104.6	305.9	2.0	-230.5	-35.8

All discharges are in Cusecs

Channel Water Losses:

1

Canal System

Select

- Select Main Canal from the 'Canal System' drop down.
- Canal System is a required field for viewing record.
- On selection of Canal System, relevant canals are populated in the Branch Canal, Distributry, Minor and Sub Minor dropdowns.

2

Branch Canal

Select

- Select Branch Canal from the 'Branch Canal' dropdown.
- Branch Canal is a required field for viewing Branch Losses record.
- On selection of Branch Canal, relevant distributry, minor and sub minors are populated into their respective dropdown.

3

Distributry

Select

- Select Distributaries from the 'Distributry' dropdown.
- Distributry is a required field for viewing Distributry Losses record.
- On selection of Distributry, relevant minor and sub minors are populated into their respective dropdown.

4

Minor

- Select Minor from the 'Minor' dropdown.
- Minor is a required field for viewing Minor Losses record.
- On selection of Minor sub minors are populated into their respective dropdown.

5

Sub Minor

- Select Sub Minor from the 'Minor' dropdown.
- Sub Minor is a required field for viewing Minor Losses record.

6

From Date

- Click on 'From Date' dropdown.
- Select a date from appeared calendar
- From date should be less than or equal to 'To Date'.

7

To Date

- Click on 'To Date' dropdown.
- Select a date from appeared calendar.
- To date should be greater to 'From Date'.

8

View

- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'

9

Reset

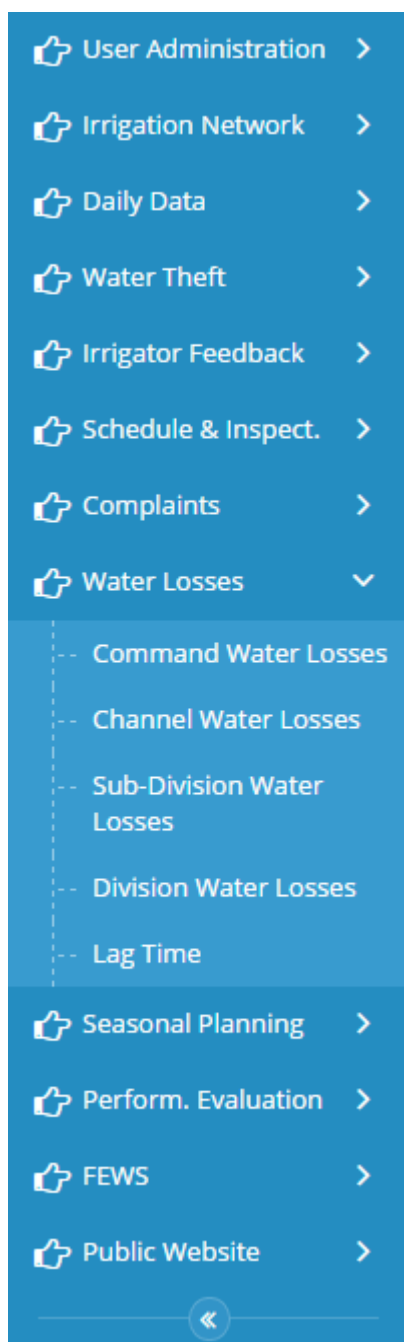
- Click on <Reset> button reset the selection criteria.



1.3 Sub Divisional Water Losses

System shows the Sub Divisional Water losses on the Daily, monthly and yearly basis. In Daily Sub divisional water losses system shows the discharge on the selected days of the month and the discharge of direct Outlets and their losses. In the end system shows the average Sub divisional discharge, average reported discharge and average losses of selected dates. Similarly system shows the monthly and yearly

How to Access: Left Menu -> Water Losses -> Sub Divisional Water Losses





Water Losses

Sub-Divisional Water Losses

1 Zone: 2 Circle:

3 Division: 4 Sub-Division:

5 ☐ Yearly ☐ Monthly ☒ Daily

6 From Date: 7 To Date:

8

Daily Loss of Ahmedpur from 01-Oct-2009 to 15-Oct-2009

All discharges are in Cusecs

Channel Name	Design Discharge	01-Oct	02-Oct	03-Oct	04-Oct	05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
Ahmedpur Branch	2,000.0	1,398.7	1,046.0	1,492.3	1,199.3	1,299.9	1,476.5	1,679.5	1,166.7	1,679.0	1,092.8	1,247.2	1,247.2	895.1	837.5	664.4
1AR/AP Disty	11.0	11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-L/AP Disty	41.0	45.0	0	0	0	0	30.0	45.0	0	0	0	0	0	0	0	0
1-R /AP Disty	94.0	106.0	0	0	0	0	68.0	106.0	0	0	0	0	0	0	0	0
2-L/AP Disty	7.0	0	0	0	0	0	0	0	5.2	7.1	7.1	7.1	7.1	7.1	6.1	2.7
2-R/AP Disty	7.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-L/AP Disty	129.0	0	0	0	0	0	0	0	102.0	211.0	202.0	221.0	221.0	221.0	192.0	109.0
4-L/AP Disty	170.0	0	0	0	0	0	0	0	190.0	170.9	170.9	170.9	170.9	170.9	151.7	121.2
5-L/AP Disty	42.0	53.5	0	53.5	0	0	0	17.5	0	0	0	0	0	0	0	0
6-L/AP Disty	396.0	389.0	632.0	651.0	670.0	670.0	700.0	700.0	374.0	558.0	221.0	185.0	185.0	0	0	0
7-L/AP Disty	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	0	0	0
8-L/AP Disty	25.0	19.0	0	19.0	0	0	19.0	19.0	0	0	0	0	0	0	0	0
9-L/AP Disty	10.0	4.0	0	4.0	0	0	4.0	4.0	0	0	0	0	0	0	0	0
Direct Outlets	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total	940.0	639.5	640.0	735.5	678.0	678.0	829.0	899.5	679.2	955.0	609.0	592.0	592.0	401.0	351.8	234.9
Water delivered to Kotla Musa Khan		650.5	297.2	631.8	406.0	506.6	506.6	627.1	372.1	561.6	380.3	554.6	554.6	425.9	425.9	389.6
Total Sub-Divisional Discharge		1,398.7	1,046.0	1,492.3	1,199.3	1,299.9	1,476.5	1,679.5	1,166.7	1,679.0	1,092.8	1,247.2	1,247.2	895.1	837.5	664.4
Total Reported Discharge		1,290.0	937.2	1,367.3	1,084.0	1,184.6	1,335.6	1,526.6	1,051.3	1,516.6	989.3	1,146.6	1,146.6	826.9	777.7	624.5
Losses		-108.7	-108.8	-125.0	-115.3	-115.3	-140.9	-152.9	-115.5	-162.4	-103.5	-100.6	-100.6	-68.2	-59.8	-39.9
% Losses		-7.8	-10.4	-8.4	-9.6	-8.9	-9.5	-9.1	-9.9	-9.7	-9.5	-8.1	-8.1	-7.6	-7.1	-6.0

Average Sub-Divisional Discharge: 1,228.1
Average Loss: -107.8
Percentage Loss: -8.8 %

Daily Sub Divisional Water Losses:

1

Zone

Select

- Select zone from the 'Zone' dropdown.
- On selection of zone, relevant circles are populated in the circle dropdown.

2

Circle

Select

- Select circle from the 'Circle' dropdown.
- On selection of circle, relevant divisions are populated in the division dropdown.

3

Division



Select



- User selects a division into 'Division' dropdown.
- All the sub divisions associated with the above Division will be populated into 'Sub Division' dropdown.

4

Sub Division

Select



- User selects a division into 'Sub Division' dropdown.
- All the sections associated with the above sub division will be populated in a table.

5

Daily Radio Button

☐ Yearly ☐ Monthly ☒ Daily

- Select Daily option by clicking on 'Daily' Radio button

6

From Date



01-Oct-2009



- Click on 'From Date' dropdown.
- Select a date from appeared calendar
- From date should be less than or equal to 'To Date'.

7

To Date



15-Oct-2009



- Click on 'To Date' dropdown.
- Select a date from appeared calendar.
- To date should be greater to 'From Date'.

8

View

View

- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'



Monthly Sub Divisional Water Losses:

Water Losses

Sub-Divisional Water Losses

1 Zone

2 Circle

3 Division

4 Sub-Division

5 ☐ Yearly ☒ Monthly ☐ Daily

6 Season

7 Year

8 View

Monthly Loss of Ahmedpur for Rabi 2009-10

Channel Name	Design Discharge	Oct	Nov	Dec	Jan	Feb	Mar
Ahmedpur Branch	2,000.0	594.3	71.3	0	0	0	0
1AR/AP Disty	11.0	0.4	0	0	0	0	0
1-L/AP Disty	41.0	3.9	0	0	0	0	0
1-R /AP Disty	94.0	9.0	0	0	0	0	0
2-L/AP Disty	7.0	1.6	0	0	0	0	0
2-R/AP Disty	7.0	0.1	0	0	0	0	0
3-L/AP Disty	129.0	47.7	3.3	0	0	0	0
4-L/AP Disty	170.0	42.5	9.5	0	0	0	0
5-L/AP Disty	42.0	4.0	0	0	0	0	0
6-L/AP Disty	396.0	191.5	27.0	0	0	0	0
7-L/AP Disty	6.0	2.3	0	0	0	0	0
8-L/AP Disty	25.0	2.5	0	0	0	0	0
9-L/AP Disty	10.0	0.5	0	0	0	0	0
Direct Outlets	2.0	1.0	0.5	0	0	0	0
Total	940.0	306.9	40.3	0	0	0	0
Water delivered to Kotla Musa Khan		235.2	35.9	0	0	0	0
Total Sub-Divisional Discharge		594.3	71.3	0	0	0	0
Total Reported Discharge		542.1	76.2	0	0	0	0
Losses		-52.2	4.9	0	0	0	0
% Losses		-8.8	6.9	0	0	0	0

All discharges are in Cusecs

Average Sub-Divisional Discharge 110.9
Average Loss -7.9
Percentage Loss -7.1 %

1

Zone

Select

- Select zone from the 'Zone' dropdown.
- On selection of zone, relevant circles are populated in the circle dropdown.

2


Circle

Select

- Select circle from the 'Circle' dropdown.
- On selection of circle, relevant divisions are populated in the division dropdown.

3


Division

Select 

- User selects a division into 'Division' dropdown.
- All the sub divisions associated with the above Division will be populated into 'Sub Division' dropdown.

4

Sub Division

Select 

- User selects a division into 'Sub Division' dropdown.
- All the sections associated with the above sub division will be populated in a table.

5

Monthly Radio Button

☐ Yearly ☒ Monthly ☐ Daily

- Select Monthly option by clicking on 'Monthly' Radio button

6

Season

Rabi 

- Select a season from 'Season' dropdown.
- All the years containing the data of selected season prompts into year dropdown.

7

Year

2009-10 

- Select a year into 'Year' dropdown.
- For Rabi season years, system populates double year.
- For Kharif season system shows single year option.

8

View

View

- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'



Yearly Sub Divisional Water Losses:

Water Losses

Sub-Divisional Water Losses

1 Zone Bahawalpur

2 Circle Bahawalpur

3 Division Ahmedpur

4 Sub-Division Ahmedpur

5 ☒ Yearly ☐ Monthly ☐ Daily

6 From Year 2009-10

7 To Year 2009-10

8 View

Yearly Loss of Ahmedpur from 2009-10 to 2009-10

Channel Name	Design Discharge	2009-10
Ahmedpur Branch	2,000.0	686.3
1AR/AP Disty	11.0	2.6
1-L/AP Disty	41.0	12.1
1-R /AP Disty	94.0	23.9
2-L/AP Disty	7.0	2.2
2-R/AP Disty	7.0	1.4
3-L/AP Disty	129.0	44.5
4-L/AP Disty	170.0	50.7
5-L/AP Disty	42.0	13.4
6-L/AP Disty	396.0	131.1
7-L/AP Disty	6.0	1.7
8-L/AP Disty	25.0	6.5
9-L/AP Disty	10.0	2.2
Direct Outlets	2.0	1.0
Total	940.0	293.2
Water delivered to Kotla Musa Khan		348.0
Total Sub-Divisional Discharge		686.3
Total Reported Discharge		641.2
Losses		-45.1
% Losses		-6.6

Average Sub-Divisional Discharge

686.3

Average Loss

-45.1

Percentage Loss

-6.6 %

1

Zone

Select

- Select zone from the 'Zone' dropdown.
- On selection of zone, relevant circles are populated in the circle dropdown.

2

Circle

Select

- Select circle from the 'Circle' dropdown.
- On selection of circle, relevant divisions are populated in the division dropdown.

3

Division

- User selects a division into 'Division' dropdown.
- All the sub divisions associated with the above Division will be populated into 'Sub Division' dropdown.

4

Sub Division

- User selects a division into 'Sub Division' dropdown.
- All the sections associated with the above sub division will be populated in a table.

5

Yearly Radio Button

☒ Yearly ☐ Monthly ☐ Daily

- Select Yearly option by clicking on 'Yearly' Radio button

6

From Year

- Select a Year from 'From Year' dropdown.
- All the years containing the data of selected season prompts into From Year dropdown.

7

To Year

- Select a year into 'To Year' dropdown.
- All the years containing the data of selected season prompts into From Year dropdown.
- Data is shown into water year basis.

8

View

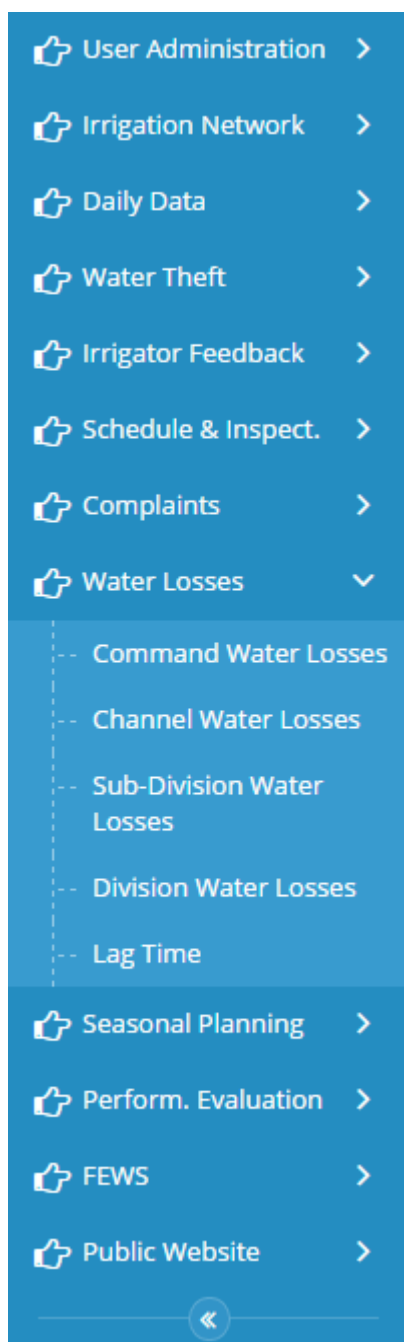
- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'



1.4 Divisional Water Losses

System shows the Divisional Water losses on the Daily, monthly and yearly basis. In Daily Divisional water losses system shows the discharge on the selected days of the month and the discharge of direct Outlets and their losses. In the end system shows the average divisional discharge, average reported discharge and average losses of selected dates. Similarly system shows the monthly and yearly

How to Access: Left Menu -> Water Losses -> Divisional Water Losses





Water Losses

Divisional Water Losses

1 Zone: 2 Circle:

3 Division:

4 ☐ Yearly ☐ Monthly ☒ Daily

5 From Date: 6 To Date:

7

Daily Loss of Ahmedpur from 01-Oct-2009 to 15-Oct-2009

All discharges are in Cusecs

	Design Discharge	15-Oct	14-Oct	13-Oct	12-Oct	11-Oct	10-Oct	09-Oct	08-Oct	07-Oct	06-Oct	05-Oct	04-Oct	03-Oct	02-Oct	01-Oct
Kotla Musa Khan																
Ahmedpur Branch (199+000)		389.6	425.9	425.9	554.6	554.6	380.3	561.6	372.1	627.1	506.6	506.6	406.0	631.8	297.2	650.5
Offtakes Discharge	1,482.0	333.0	364.0	364.0	474.0	474.0	325.0	480.0	318.0	536.0	433.0	433.0	347.0	540.0	254.0	556.0
Direct Outlets Discharge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abbassia Canal (1+500)		974.9	974.9	974.9	974.9	980.7	922.2	980.7	980.7	980.7	980.7	933.9	976.0	976.0	970.2	970.2
Offtakes Discharge	146.3	141.0	141.0	141.0	141.0	141.0	141.0	141.0	141.0	141.0	141.0	105.0	141.0	141.0	141.0	141.0
Direct Outlets Discharge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ahmedpur																
Ahmedpur Branch (98+000)	2,000.0	664.4	837.5	895.1	1,247.2	1,247.2	1,092.8	1,679.0	1,166.7	1,679.5	1,476.5	1,299.9	1,199.3	1,492.3	1,046.0	1,398.7
Offtakes Discharge	938.0	232.9	349.8	399.0	590.0	590.0	607.0	953.0	677.2	897.5	827.0	676.0	676.0	733.5	638.0	637.5
Direct Outlets Discharge	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Abbassia																
Abbassia Canal (65+000)		809.9	809.9	809.9	809.9	815.7	757.2	815.7	815.7	815.7	815.7	811.1	811.1	811.1	805.2	805.2
Offtakes Discharge	468.5	676.0	676.0	676.0	676.0	681.0	631.0	681.0	681.0	681.0	681.0	677.0	677.0	677.0	672.0	672.0
Direct Outlets Discharge	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
Total Divisional Discharge		1,639.3	1,812.3	1,869.9	2,222.1	2,227.9	2,015.0	2,659.7	2,147.4	2,660.2	2,457.2	2,233.8	2,175.3	2,468.4	2,016.2	2,368.9
Total Diversion		1,401.1	1,549.0	1,598.2	1,899.2	1,904.2	1,722.2	2,273.2	1,835.4	2,273.7	2,100.2	1,909.2	1,859.2	2,109.7	1,723.2	2,024.7
Losses		-238.2	-263.3	-271.7	-322.9	-323.7	-292.8	-386.4	-312.0	-386.5	-357.0	-324.6	-316.1	-358.7	-292.9	-344.2
% Losses		-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5
Average Divisional Discharge 2,198.2																
Average Loss -319.4																
Percentage Loss -14.5 %																

Daily Divisional Water Losses:

1

Zone

Select

- Select zone from the 'Zone' dropdown.
- On selection of zone, relevant circles are populated in the circle dropdown.

2

Circle

Select

- Select circle from the 'Circle' dropdown.
- On selection of circle, relevant divisions are populated in the division dropdown.

3

Division

Select



- User selects a division into 'Division' dropdown.
- All the sub divisions associated with the above Division will be populated into 'Sub Division' dropdown.

4

Daily Radio Button

☐ Yearly ☐ Monthly ☒ Daily

- Select Daily option by clicking on 'Daily' Radio button

5

From Date



01-Oct-2009



- Click on 'From Date' dropdown.
- Select a date from appeared calendar
- From date should be less than or equal to 'To Date'.

6

To Date



15-Oct-2009



- Click on 'To Date' dropdown.
- Select a date from appeared calendar.
- To date should be greater to 'From Date'.

7

View

View

- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'



Monthly Divisional Water Losses:

Water Losses

Divisional Water Losses

1 Zone

Bahawalpur

2 Circle

Bahawalpur

3 Division

Ahmedpur

4

Yearly

Monthly

Daily

5 Season

Rabi

6 Year

2009-10

7 View

Monthly Loss of Ahmedpur for Rabi 2009-10

Design Discharge	Oct	Nov	Dec	Jan	Feb	Mar
Abbasia						
Abbassia Canal (65+000)	758.9	465.9	314.7	108.1	143.6	257.6
Offtakes Discharge	468.5	632.4	382.0	85.1	113.5	204.5
Direct Outlets Discharge	16.2	16.2	15.2	7.3	9.3	15.7
Ahmedpur						
Ahmedpur Branch (98+000)	2,000.0	594.3	71.3	0	0	0
Offtakes Discharge	938.0	305.9	39.8	0	0	0
Direct Outlets Discharge	2.0	1.0	0.5	0	0	0
Kotla Musa Khan						
Abbassia Canal (1+500)	856.0	0	0	0	0	0
Offtakes Discharge	146.3	119.3	0	0	0	0
Direct Outlets Discharge	0	0	0	0	0	0
Ahmedpur Branch (199+000)	235.2	35.9	0	0	0	0
Offtakes Discharge	1,482.0	201.0	30.7	0	0	0
Direct Outlets Discharge	0	0	0	0	0	0
Total Divisional Discharge	1,450.3	71.3	0	0	0	0
Total Diversion	1,275.8	469.2	269.0	92.4	122.7	220.2
Losses	-174.5	397.9	269.0	92.4	122.7	220.2
% Losses	-12.0	558.5	0	0	0	0

Average Divisional Discharge

253.6

Average Loss

154.6

Percentage Loss

61.0 %

1

Zone

Select

- Select zone from the 'Zone' dropdown.
- On selection of zone, relevant circles are populated in the circle dropdown.

2

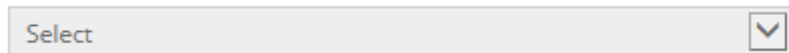
Circle

Select

- Select circle from the 'Circle' dropdown.
- On selection of circle, relevant divisions are populated in the division dropdown.

3

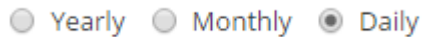
Division



- User selects a division into 'Division' dropdown.
- All the sub divisions associated with the above Division will be populated into 'Sub Division' dropdown.

4

Daily Radio Button



- Select Daily option by clicking on 'Daily' Radio button

5

From Date



- Click on 'From Date' dropdown.
- Select a date from appeared calendar
- From date should be less than or equal to 'To Date'.

6

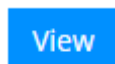
To Date



- Click on 'To Date' dropdown.
- Select a date from appeared calendar.
- To date should be greater to 'From Date'.

7

View



- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'

Yearly Sub Divisional Water Losses:

Water Losses

Divisional Water Losses

1 Zone Bahawalpur

2 Circle Bahawalpur

3 Division Ahmedpur

4 ☒ Yearly ☐ Monthly ☐ Daily

5 From Year 2009-10

6 To Year 2009-10

7 View

Yearly Loss of Ahmedpur from 2009-10 to 2009-10

All discharges are in Cusecs

Design Discharge		2009-10
Abbasia		
Abbassia Canal (65+000)		548.9
Offtakes Discharge	468.5	454.4
Direct Outlets Discharge	16.2	14.7
Ahmedpur		
Ahmedpur Branch (98+000)	2,000.0	686.3
Offtakes Discharge	938.0	289.0
Direct Outlets Discharge	2.0	1.0
Kotla Musa Khan		
Abbassia Canal (1+500)		497.6
Offtakes Discharge	146.3	68.4
Direct Outlets Discharge	0	0
Ahmedpur Branch (199+000)		348.0
Offtakes Discharge	1,482.0	297.4
Direct Outlets Discharge	0	0
Total Divisional Discharge		1,183.9
Total Diversion		1,125.0
Losses		-58.9
% Losses		-5.0
Average Divisional Discharge	1,183.9	
Average Loss	-58.9	
Percentage Loss	-5.0 %	

1

Zone

Select

- Select zone from the 'Zone' dropdown.
- On selection of zone, relevant circles are populated in the circle dropdown.

2

Circle

Select

- Select circle from the 'Circle' dropdown.
- On selection of circle, relevant divisions are populated in the division dropdown.

3

Division

- User selects a division into 'Division' dropdown.
- All the sub divisions associated with the above Division will be populated into 'Sub Division' dropdown.

4

Sub Division

- User selects a division into 'Sub Division' dropdown.
- All the sections associated with the above sub division will be populated in a table.

5

Yearly Radio Button

☒ Yearly ☐ Monthly ☐ Daily

- Select Yearly option by clicking on 'Yearly' Radio button

6

From Year

- Select a Year from 'From Year' dropdown.
- All the years containing the data of selected season prompts into From Year dropdown.

7

To Year

- Select a year into 'To Year' dropdown.
- All the years containing the data of selected season prompts into From Year dropdown.
- Data is shown into water year basis.

8

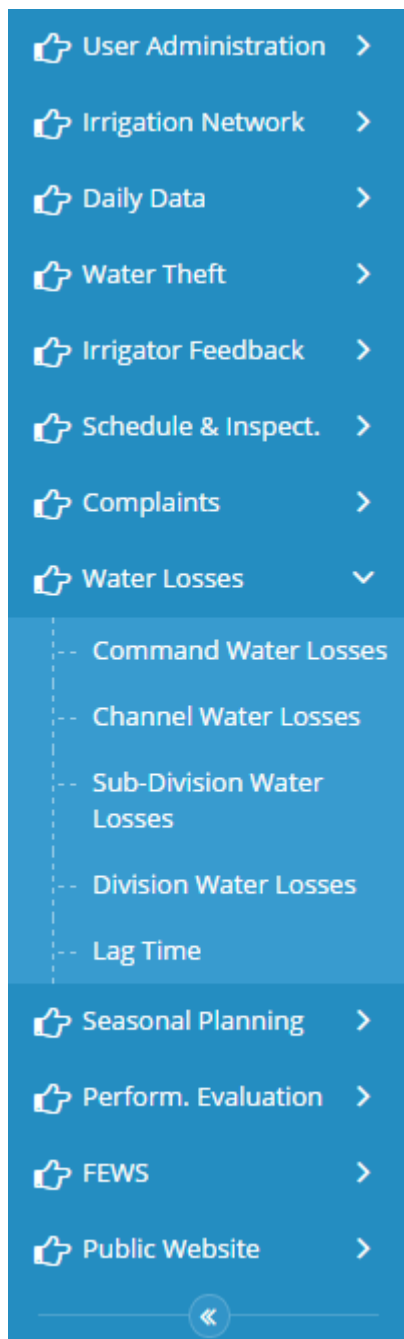
View

- Click on the <View> button.
- System displays all the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message '**No record found**'

1.5 Lag Time

User edits the lag time from Lag Time screen. This page contains the information which is used into command water losses. User enters the data in days. This entered information shows after how many days the water travel from one reach to other.

How to Access: Left Menu -> Water Losses - > Lag Time



Water Losses

Lag Time					
River	Reaches	Nov-Apr	May-Jun	Jul-Aug	Sep-Oct
Indus Command	Kalabagh-Chashma	1	1	1	1
Indus Command	Chashma-Taunsa	4	3	2	2
Indus Command	Taunsa-Panjnad	2	1	1	1
Indus Command	Panjnad-Guddu	2	2	2	2
Indus Command	Guddu-Sukkur	2	1	1	1
Indus Command	Sukkur-Kotri	5	4	3	3
Indus Command	Tarbela-Kalabagh	1	1	1	1
Jhelum Chenab Command	Mangla-Marala-Rasul	1	1	1	1
Jhelum Chenab Command	Rasul-Tail CJ Link	2	1	1	1
Jhelum Chenab Command	Rasul-Trimmu	4	3	2	3
Jhelum Chenab Command	Trimmu-Tail TP Link	2	2	2	2
Jhelum Chenab Command	Trimmu-Panjnad	5	4	3	3

1

Edit



- Click on 'Edit' image to edit the existing record.
- System opens the record into editable form

2

Change History



- Click on < History> image to view the change history against that specific record.

3

Save



- Click on 'Save' image, system verify all the required fields.
- System saves the data into the database & displays a message "Records saved successfully".
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

4

Cancel





- By clicking on the Cancel image, system moves the user to Zone page without saving the record.