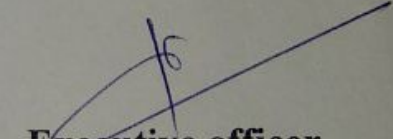


कार्यालय-नगर पालिका परिषद, जौनपुर।

ULB NAME	ULB ACCOUNT NO.	ACCOUNT HOLDER NAME	IFSC CODE	BANK CODE
NAGAR PALIKA PARISHAD JAUNPUR	3748268279-5	NAGAR PALIKA PARISHAD,	SBIN0001224	1224


Executive officer
Nagar Palika Parishad,
Jaunpur

Account Number:	<u>3748268279-5</u>	INR	Product:	<u>CA-GEN-PUB OTH-NONF</u>	Invt Type:	<u>0</u>			
Home Branch:	<u>01224</u>	User Codes:	<u>..0.....10</u>	Status:	<u>OP</u>				
District:	<u>0</u>	Agent Code:	<u>0</u>	Rel Manager:	<u>0</u>	Notice Ind:	<u>0</u>	Mail Ind:	<u>1</u>
Account Name:	<u>RAJYA STARIYA E-NAGAR SEWA WEB PORTAL</u>				Account Maintained At:	<u>0</u>			
Customer Name:	<u>NAGAR PALIKA PARISHAD</u>				Int Paid 1:	<u>0</u>			
Door/FlatNo;Buiding/Society:	<u>NAGAR PALIKA PARISHAD</u>				Int Paid 2:	<u>0</u>			
Street/Road Name/Block:					Int Paid 3:	<u>0</u>			
Locality/Village/Tehsil:	<u>JAUNPUR</u>				Int Paid 4:	<u>0</u>			
District:	<u>Jaunpur</u>			<u>222001</u>	Int Paid 5:	<u>0</u>			
Open Dt:	<u>20/01/2018</u>	Cr Int Rate:	<u>0</u>	Dr Int Rate:	<u>16.7</u>				
Balance:	<u>0</u>	Od Limit:	<u>0</u>	Od Exp:	<u>99/9</u>				
Unclear:	<u>0</u>	Hold Value:	<u>0</u>	Term Receipt No :					
Clis Int:	<u>0</u>	Cr Int Incr:	<u>0</u>	Int From:	<u>23/0</u>				
Clis Tax:	<u>0</u>	Cr Int Proj:	<u>0</u>	Int To:	<u>23/0</u>				
Od Int:	<u>0</u>	Int Avail:	<u>0</u>	Last Txn:					
Avl Bal:	<u>0</u>	Matched Rate:		LastAcc TypeChange:					
Comp. Freq:		Comp. Amt:	<u>0</u>	Int. Monthly Basis					
Comp. SOP Dt:		Comp. EOP Dt:		Renewal Date:					

S.No.	Type	Post-Dt	Jrnl.No.	Value-Dt	Txn-Amount	Curr-Balanc
END OF TXN						



Chas

कार्यालय नगर पालिका परिषद, जौनपुर।

यूजर चार्जेज का विवरण:-

क्र०सं०	नगर निकाय का नाम	कुल सम्पत्ति	यूजर चार्जेज के लिए दिये गये बिलों की सं०	बिल का प्रतिशत
1	2	3	4	5
1	नगर पालिका परिषद, जौनपुर	19654	19654	100.00%

यूजर चार्जेज मॉग, वसूली का विवरण (लाख रुपये में)

क्र०सं०	नगर निकाय का नाम	वित्तीय वर्ष	कुल डिमाण्ड	वसूली	वसूली का प्रतिशत
1	2	3	4	5	6
1	नगर पालिका परिषद, जौनपुर	मार्च, 2018 तक	58.96	47.16	80.16

कर अधीक्षक
नगर पालिका परिषद, जौनपुर।

कर निर्धारण अधिकारी
नगर पालिका परिषद, जौनपुर।

~~अधिसूची~~ अधिकारी
नगर पालिका परिषद, जौनपुर।



ACTION PLAN FOR THE REDUCTION OF NRW AT JAUNPUR

JAUNPUR NAGAR PALIKA PARISHAD
JAUNPUR

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1. About the NPP Jaunpur

Impact of government's schemes like AMRUT & SBM and strategic location of Jaunpur area Urbanization of the city is growing at faster rate than ever. Most of the services in the city are crumbling to the increasing pressure. City is trying to serve its growing population. Limited resources and inefficient man power are the main hurdles in serving population. Along with the other services of the city, water supply is also struggling to maintain adequacy and quality of services provided to the citizens. Major problem faced by water supply sector is water loss and the poor collection of revenue for the supplied water in the city. Nagar Palika is not getting revenue from 22.86% of supplied water. This kind of water handling management is common in most of the cities and has led to insufficient performance of water supply services.

To overcome the challenges and increase the efficiency, city has identified the losses and necessary measures to reduce NRW.

Non-revenue water (NRW) is water which is supplied to citizen and not paid for it. NRW also includes technical losses, unbilled water, illegal connections, theft water, and other accidental losses.

To save the water, central government targeted to reduce the NRW. Under AMRUT scheme same considered as a priority reform.

Within the Nagar Palika Parishad area, the total supply of water is around 30.14 MLD. NRW is calculated as approx. 6.89 MLD which accounts 22.87% of total supplied water. Around 0.41% of supplied water account of unbilled consumption and around 19.46% commercial losses and around 3% technical losses

2. Parameters to measure NRW

Non-revenue water (NRW) is defined as the part of produced water which is either lost due to miss-handling or Unbilled authorized consumption. In simplified form NRW-indicator highlights the extent of water produced which does not earn the utility any revenue. This is computed as the difference between the total water produced (ex-treatment plant) and the total water sold expressed as a percentage of the total water produced.

NRW comprises of:

a) *Unbilled Authorized Consumption:*

Consumption which is authorized but not billed, such as public stand posts water used by the utility for operational purposes, water used for firefighting, and water provided for free to certain consumer groups;

b) *Commercial (or apparent) losses:*

Apparent losses such as illegal water connections, metering inaccuracies, customer meter under registration, data handling errors and theft of water in various forms;

c) *Physical (or real) losses:*

Real losses which are leakages in the transmission and distribution networks from all parts of the system and overflows at the utility's reservoirs. They are caused by poor operations and maintenance, the lack of active leakage control, and poor quality of underground assets.

3. Definition as per International Water Association Water Balance

The following are definitions of principal components of IWA water balance.

- System Input Volume** is the annual volume put into the part of a water supply system that relates to water balance calculation.
- Authorized Consumption** is the annual volume of metered and/or non-metered water taken by registered customers, water suppliers, and others who are implicitly or explicitly authorized to do so for residential, commercial, and industrial purposes. It includes water that is exported.
- Water Losses** can be identified by calculating the difference between system input volume and authorized consumption. They consist of apparent losses and real losses.
- Apparent Losses** result from unauthorized consumption and all types of inaccuracies associated with metering.
- Real Losses** result from losses at mains, service reservoirs, and service connections (up to the point of customer metering). The annual volume lost through all types of leaks, bursts, and overflows depends on their individual frequencies, flow rates, and duration.
- Non-Revenue Water** is the difference between system input volume and billed authorized consumption, and it consists of the following:
 - Unbilled Authorized Consumption (usually a minor component of water balance)
 - Apparent Losses
 - Real Losses

System Input Volume	Authorized Consumption	Billed Authorized Consumption	Billed Metered Consumption (including water exported)	Revenue Water
			Billed Non-metered Consumption	
		Unbilled Authorized Consumption	Unbilled Metered Consumption	Non- Revenue Water
			Unbilled Non-metered Consumption	
	Water Losses	Apparent Losses	Unauthorized Consumption	
			Metering Inaccuracies	
		Real Losses	Leakage on Transmission and/or Distribution Mains	
			Leakage and Overflows at Utility's Storage Tanks	
Leakage on Service Connections up to Customers' Meters				

IWA Water Balance

4. Identified parameters NRW in Jaunpur NPP

Assessment has been done to identify the parameters for water loss and non-revenue water. Based on identified parameters existing measures/steps taken by JNPP has been analyzed. It has been observed that the large amount of water is being provided to citizen at free of cost under "Minha". Identified parameters and corresponding scenario is provided in the following table.

	Parameters	Scenario at Jaunpur
A	Unbilled Authorized Consumption	

Action Plan for the Reduction of NRW at Jaunpur

	Parameters	Scenario at Jaunpur
1	Public stand posts	Nagar Palika is providing water through 207 PSP by 8 hours of operation per day
2	Water used for fire brigade	Fire brigade has 5 fire brigade vehicles with capacity of 4000 ltr. Each
B	Commercial losses	
1	Illegal water connections	Number of illegal connections - 5700, process of legalization is under process
2	Metering inaccuracies	Households do not have meter connection, houses are connected directly to the main lines
3	Customer meter under registration	
4	Theft of water in various forms	Unregistered properties are being Registered
C	Physical (or real) losses	
1	Leakages in the transmission and distribution networks	Periodic check of pipelines is being done and after getting complains from citizen, immediate action is being taken to repair pipelines/leakages.

5. Calculation of NRW

Estimated non-revenue water is 6.06 MLD, which accounts around 42.11% of total water supply. Around 5.2 MLD of water is being distributed free of cost under "Minha" which is an extra burden to JNPP. Component wise water consumption or loss has been given in the following table

	Components of NRW	Quantity	Percentage	Calculation steps
	Total water produced (in MLD)	30.14	100.00%	25 tube wells and 31 mini tube wells.
A	Unbilled Authorized Consumption			
	Public stand posts	103500	0.34%	207 PSP x 500 lpcd
	Water used for fire brigade	20000	0.07%	Total capacity of 5 brigades
B	Commercial losses			
	Illegal water connections	285000	9.46%	Amount of water consumed through 5700 illegal connections
	Metering inaccuracies	0		Meters are not available
	Customer meter under registration	0		
	Theft of water in various forms	301400	10%	Consumption of water by 10% HHs of unregistered houses
C	Physical (or real) losses			

	Components of NRW	Quantity	Percentage	Calculation steps
	Leakages in the transmission and distribution networks	904200	3.00%	3% of total water supply
	Total Loss in Ltr	6891700	22.87%	
	Total Loss in MLD	6.89		
	NRW (%)	22.87	%	

6. Priority wise action required for reduction of NRW

It is necessary to make an action plan to

1. Periodic water audit to know the accurate calculation of water loss and NRW
2. Reduce number of households getting water under Minha,
3. Legalize illegal water connection
4. Installation of metered water connections
5. Registered at least 95% of houses and to provide water connection to them
6. Periodic leakage detection in the existing pipelines and OHTs

SN	Components of NRW	Present situation	Action Required	2017-2018	2018-2019
1	Illegal water connections	14.72% of total houses	All illegal connections need to be legalized	5%	5%
2	Customer meter under registration	0% connection	Metered connection	-	-
3	Theft of water in various forms	10% total HHs	Unregistered properties need to be registered	5%	5%
4	Leakages in the transmission and distribution networks	3% of water supply	Periodic and immediate action required to reduce physical loss	2%	1%

6.1 Periodic water audit to know the accurate calculation of water loss and NRW

Periodic water audit must be conducted to know the accurate water loss and NRW. Audit shall be conducted for the existing water supply system in Mughalsarai area. this audit report shall be used for the preparation of DPR to strengthening the water supply network and to reduce the NRW.

6.2 Reduce number of households getting water under Minha

Under minha, Palika Parishad is wave off the water charges to the certain households. Presently Households under Minha is accounted as 40% of total households of the city. It is proposed to identify these households and levy water charges. These households need to be reduced to 6% during FY 2018-19 from 40%.

6.3 Legalize illegal water connection

Presently illegal connections are 5700 (14.72% of total connections). It is proposed to legalise the connection either through identification or organizing camp for connection registration. The Goal is to reduce illegal connection up to 5%.

6.4 Installation of metered water connections

At present the households area paying fixed water charges. This results in overdraw of water and thus increased NRW. To reduce water consumption in the city, it is proposed to install metered water connection. Users must pay water charges as per the consumption, this will further regulate the water consumption and hence reducing the NRW.

6.5 Theft of water in various forms (Registered at least 95% of houses and to provide water connection to them)

Presently NRW assumed to 10% of unregistered houses within the Jaunpur NPP area, which accounts approx. 0.5% of NRW. It is necessary to register the unregistered properties and keep an eye for the construction of new houses. It is proposed to registered at least 95% of structures by the end of FY 2018-19.

Jaunpur NPP also needs to do regular monitoring to minimize the theft of water in other form (commercial industrial, coal mafias etc). Citizen must be encouraged to give the information about water theft and regulations should be in place to penalise the water thieves which will result in reduction of NRW.

6.6 Periodic leakage detection in the existing pipelines and OHTs

Regular monitoring and a setup a technical team for the detection of leakage in the pipeline network is important to reduce the NRW. It is also advised to encourage citizen to give information about the accidental leakage in pipelines. Regular monitoring of all OHTs is necessary to reduce the NRW as well as unaccounted flow of water.