NAME OF ULB-MEERUT

SECTOR WISE SLIP TEMPLATE: WATER SUPPLY

1. ASSESS THE SERVICE LEVEL GAP

The first step is to assess the existing situation and service levels gaps for Water Supply (AMRUT Guidelines; para 3 & 6). This will also include existing institutional framework for the sector. AMRUT is focused on improvement in service levels. The zone wise data shall be used in identifying the gaps. These zone-wise gaps will be added to arrive at city level service gaps. While assessing service level gap reply following questions not more than word indicated against each question.

QUESTION: What kind of baseline information is available for water supply system of the city? Detail out the data, information, plans, reports etc related to sector. Is zone wise information available? (75 words)

1.1 DPR related to water supply sewerage, drainage and solid waste management are available with Nagar Nigam Meerut-Meerut water supply JNNURM.

QUESTION: Have you collected census 2011 data? Are you aware of baseline survey data of MoUD? Have you correlated data from these and other sources? (75 words)

YES. DATA OF CENSUS 2011 IS AVAILABLE WITH NAGAR NIGAM AND THE SOURCE IS NIC. IS AWARE OF MOUD SURVEY DATA. THE DATA AVAILABLE IS BEING USED AS REFERENCE TO DEVELOP THE SLIP. Total Population Location of source of drinking **Total Number** Tapwater from (Census, 2011) water of Households treated source Population 13.05.429 101745 7844 Total Within the premises 53911 28747 6539 Near the premises 34626 13208 842 Away Departmental 14,86,303 232144 117526 Data (2015)

QUESTION: What are existing service levels for water supply in the city? What is the coverage of water supply Connections? What is per capita supply of water? How much is the extent of metering? How much is non-revenue water? Provide information in table 1.1

Table 1.1 Status of Water Supply service levels

Sr.	Indicators	Present	MOUD	RELIBIL
No.		status	Benchmark	TY
1	Coverage of water supply connections 117526/232144	50.63%	100%	В
2	Per capita supply of water with NRW 259 MLD/14,86,303	175 LPCD	135 LPCD	D
3	Extent of metering of water connections	0%	100%	Α
4	Extent of non-revenue water	65%	20%	D
5	Quality of water supplied	100%	100%	D
6	Cost recovery in water supply services	40 %	100%	D
7	Efficiency in collection of water supply related charges	70%	90%	D

QUESTION: What is the gap in these service levels with regard to benchmarks prescribed by MoUD? (75 words)

As per above table it is clear that gap in service levels is as under:

1. Gap in coverage of water supply is 49.37 %

2. No Gap in Per capita water availability. ADDITIONAL 40 LPCD

3. Gap in Metering is 100%.

4. Gap in NRW is 45%

5. Gap in Quality of supplied water as per PHE norms is 0%

6. Gap in Cost recovery is 60 % with expenditure on electricity and power.

7. Gap in efficiency of water charges/tax collection is about 20%.

SOURCE OF WATER AND WATER TREATMENT SYSTEM

Please provide information in 150 words on the above responding to (however not limited to) following questions.

QUESTION: What is the existing source of water? Is it surface water source or underground water source? What is the capacity of these sources?

EXISTING SOURCE OF WATER IS UNDERGROUND WATER, there is no surface water source in recent future it will be generated with a capacity of 100 MLD from Ganga canal Ground Water -157 Tube wells X1.65 Avg. Discharge =Total 259 MLD

QUESTION: Is there any treatment provided to water from these sources? How much water is required to be treated daily? What is the treatment capacity installed in the city?

Yes, Yes in case of elevated reservoirs treatment is done by chlorination method and at tube well source.

QUESTION: What per capita water supply in LPCD (liter per capita per day) comes out, if you divide total water supply by the total population.

1.1 Per Capita water supply In existing system the source of water is underground water. 157 Tube wells established in different areas with 1.65 MLD average discharge of New & Old Tube Well =259 MLD. When divided by population 14,86,303(2015 pop) it comes 175 LPCD per capita water supply.

DISTRIBUTION ZONES

Please provide information in 150 words on the above responding to (however not limited to) following questions.

QUESTION: City is divided in how many zones for water supply?

Currently City is divided in 9 zones

QUESTION: Provide details of total no of Households (HH) in each zone, no of HH with and without water tap connections in the Table 1.2.

Table 1.2: Ward Wise Coverage of Households

ZONE No	Zone Name	Total No of Households(As per municipal)	Households with Water tap Connection	Household s without water tap connection s
1	ZONE 1	27554 HH	13951 HH	13602 HH
2	ZONE 2	19785 HH	10018 HH	9767 HH
3	ZONE 3	24133 HH	12219 HH	11914 HH
4	ZONE 4	29094 HH	14731 HH	14363 HH
5	ZONE 5	34680 HH	17559 HH	17120 HH

6	ZONE 6	13421 HH	6796 HH	6626 HH
7	ZONE 7	38354 HH	19420 HH	18934 HH
8	ZONE 8	34355 HH	17395 HH	16960 HH
9	ZONE 9	10769 HH	5453 HH	5316 HH
Total 9	-	232145 HH	117542 HH	114602 HH

STORAGE OF WATER

Please provide information in 150 words on the above responding to (however not limited to) following questions.

QUESTION: What is the total water storage capacity in the city? What is capacity of elevated and ground water reservoirs?

1.1 The total water storage capacity in the city is 83.700 ML. The capacity of elevated is 67.700 ML(56 O.H.T) Ground water reservoirs is 16 ML(3 C.W.R)

QUESTION: In case of surface water, does city need to have ground level reservoirs to store raw treated water?

There has no sufficient water to cater water works during summer season for addressing this problem one lake should be formed to store raw water

QUESTION: Is water being supplied to consumers through direct pumping or through elevated reservoirs?

2.1 Water is being supplied to consumers by both the means elevated as well as direct pumping .55 % of water available is supplied through direct pumping and 45 % through reservoirs.

QUESTION: Is storage capacity sufficient to meet the cities demand?

3.1 Currently storage capacity is sufficient to meet the cities demand in existing scenario.

DISTRIBUTION NETWORK

Please provide information in 150 words on the above responding to (however not limited to) following questions.

QUESTION: What is the total length of water supply distribution pipe line laid in the city?

4.1 Total length of water supply pipe lines is 1318 Km.

QUESTION: What is the total road length in the city? Is the pipe lines are laid in all streets? Is the objective of universal coverage of water supply pipe line is achieved?

5.1 1518 km is the total road length .pipe line is laid in 1318 km .universal coverage of water supply line is not achieved yet.

QUESTION: What are the kind of pipe materials used in distribution lines?

6.1 P.V.C, D.I, HDPE Pipe is used in laying of pipe line.

QUESTION: Provide zone wise details of street length with and without water distribution lines in the Table 1.3.

Table 1.3: Ward Wise length of distribution network

Total ward No	Total Street Length(As per LNN data) AS PER MUNCIPAL CORPORATIN MEERUT	Street length with water distribution pipe line data)	Street length without water distribution pipe line
ZONE 1	165 KM	144 KM	21 KM
ZONE 2	114 KM	99 KM	15 KM
ZONE 3	91 KM	79 KM	12 KM
ZONE 4	116 KM	99 KM	17 KM
ZONE 5	169 KM	147 KM	22 KM
ZONE 6	170 KM	148 KM	22 KM
ZONE 7	358 KM	311 KM	47 KM
ZONE 8	310 KM	269 KM	41 KM
ZONE 9	25 KM	22 KM	3 KM
Total	1518 KM	1318 KM	200 KM

INSTITUTIONAL FRAMEWORK

Please provide information in 150 words on the above responding to (however not limited to) following questions.

QUESTION: Define role and responsibilities in terms of O&M, policy planning, funding, service provision in table 1.4.

Table 1.4: Functions, roles, and responsibilities

Planning and Design	Construction/ Implementation	O&M
UP jal Nigam & ULB's	UP jal Nigam & ULB's	ULB'

QUESTION: How city is planning to execute projects?

BY NODAL AGENCY JAL NIGAM. THE EXECUTION OF THE PROJECTS WILL BE DONE AS PER INSTRUCTIONS GIVEN BY THE STATE GOVERNMENT AS WELL AS MOUD & SMALLER PROJECTS LIKE BRANCH LINES, GAPS IN PIPE LINES WIL BE DONE BY NAGAR PALIKA PARISHAD.

QUESTION: Shall the implementation of project be done by Municipal Corporation or any parastatal body? Please refer para 8.1 of AMRUT guidelines.

THE IMPLEMENTATION OF THE PROJECTS WILL BE DONE BY PARA STATAL AGENCIES AS PER INSTRUCTIONS OF STATE GOVERNMENT AS WELL AS MOUD. SMALLER PROJECTS LIKE BRANCH LINES, GAPS IN PIPE LINES WILL BE DONE BY NAGAR PALIKA PARISHAD.

2. BRIDGE THE GAP

Once the gap between the existing Service Levels is computed, based on initiatives undertaken in different ongoing programs and projects, objectives will be developed to bridge the gaps to achieve universal coverage. (AMRUT Guidelines; para 6.2 & 6.3, Annexure-2; Table 2.1). Each of the identified objectives will be evolved from the outcome of assessment and meeting the opportunity to bridge the gap.

QUESTION: List out initiatives undertaken in different ongoing programs and projects to address these gaps. For this provide details of ongoing projects being carried out for sector under different schemes with status and when the existing projects are scheduled to be completed? Provide information in Table 1.4

Table 1.4: Status of Ongoing/ Sanctioned NA

S . N o .	Name of Project Scheme Name	Project components	Cost	Month of Compl etion	Status (as on dd mm 2015)
1	ONGOIING MERRUT Water Supply scheme	(W.T.P 100 MLD) FEDER, PUMPING MAIN & DISTRIBUTION, TUBEWELLS etc	341.30 crore	Dec 2015	98 %(July 2015)

QUESTION: How much the existing system will able to address the existing gap in water supply system? Will completion of above will improve the coverage of network and collection efficiency? If yes, how much. (100 words)

The schemes of water supply are formulated by UPJN and also executed by UPJN. after execution such schemes are handover to JalkalVibhag Nagar Nigam Meerut.

- 7.1 Question: Shall the implementation of project be done by Municipal Corporation or any parastatal body? Please refer para 8.1 of AMRUT guidelines.
- 8.1 Implementation of the project shall be done by State Level Parastatal Agency U.P. Jal Nigam. Nagar Nigam Meerut will follow the para 8.1 of the AMRUT Guidelines while execution of the project.

QUESTION: Does the city require additional infrastructure to improve the services? What kind of services will be required to fulfill the gap?

Yes, Yes city requires additional infrastructure to improve the services. Like laying of pipelines to unservied areas, augmentation of storage of raw water, augmentation of storage capacity in different zones.

QUESTION: How does the city visualize to take the challenge to rejuvenate the projects by changing their orientation, away from expensive asset replacement programs, to focusing on optimum use of existing assets?

Yes, We are using all assets and to focus on the optimum use of these assets and only those assets are kept in the project which are essential to provide the water supply.

QUESTION: Has city conducted assessment of Non Revenue Water? if yes, what is the NRW level? Is city planning to reduce NRW?

9.1 City has not conducted assessment of Non Revenue Water. We have assume NRW 65% Include of 25% by leakage of pipeline 10 % fire hydrant, Stand Post 10%, Water Tank which is in public interest.

QUESTION: Based on assessment of existing infrastructure and ongoing / sanctioned projects, calculate existing gaps and estimated demand by 2021 for water supply pipe network, number of household to be provided with tap connections, and required enhancement in capacity of water source/ treatment plant (MLD). Gaps in water supply service levels be provided as per

Table 1.5. Demand Gap Assessment for Water Supply Sector

Component		2015		2021	
	Present	Ongoing	Total	Demand	Gap
		projects			
SOURCE	UpperGanga(100	10.1 JNNURM+	359 Mld	-	
AUGMENTATION	Mld+Tubewell(259	ULB (tube wells)			
MLD)	Mld)	OLD (tube wens)			
TREATMENT	100 MLD	JNNURM(W.T.P)+	359 Mld	-	NOGAP
CAPACITY(MLD)	(treatment plant)+259 MLD (ULB (O.H.T/TUBE WELLS)			
	chlorination)	WEELS)			
ELEVATED	83.17 ML(56	-	83.17 ML	124.27	41.1 ML
STORAGE	O.H.T +3 C.W.R)			ML	
CAPACITY (ML)					
DISTRIBUTION	1318 KM	COMPLETED	1318Km	1518	200 KM
NETWORK				KM	
COVERAGE (KM)					

OBJECTIVES

Based on above, objectives will be developed to bridge the gaps to achieve universal coverage. While developing objectives following question shall be responded so as to arrive at appropriate objective.

QUESTION: Does each identified objectives will be evolved from the outcome of assessment?

- 1. Yes. The objective is to increase the coverage to un served areas and to reduce NRW and enhance storage capacity of raw water.
- 1-Improvement of water connections. The gap between the houses and existing connections will be full fill.
- 2-Decrease NRW by increasing connection will be reduced.

QUESTION: Does each objective meet the opportunity to bridge the gap?

yes each objective meet the opportunity to bridge the gap.

Please provide List out objectives to meet the gap in not more than 100 words.

3. EXAMINE ALTERNATIVES AND ESTIMATE COST

The objective will lead to explore and examine viable alternatives options available to address these gaps. These will include out of box approaches. (AMRUT Guidelines; Para 6.4 & 6.8 & 6.9). This will also include review of smart solutions. The cost estimate with broad source of funding will be explored for each. While identifying the possible activities, also examine the ongoing scheme and its solutions including status of completion, coverage and improvement in O&M. Please provide information on the above responding to (however not limited to) following questions.

QUESTION: What are the possible activities and source of funding for meeting out the objectives? (75 words)

The source of funding of activities shall be: 1. AMRUT, 2. 14th Finance Commission 3. State Government Funds

QUESTION: How can the activities be converged with other programme like JICA/ ADB funded projects in the city etc? (100 words)

NO

QUESTION: What are the options of completing the ongoing activities? (75 words)

On going activities in JNNURM are going on.98% work has been completed

QUESTION: What are the lessons learnt during implementation of similar projects? (100 words)

Now we are focusing for universal coverage and reduction on NRW.

QUESTION: Have you analyzed best practices and innovative solutions in sector? Is any of the practice be replicated in the city? (75 words)

Yes we have analyzed the best practices and proposing SCADA in water supply system

QUESTION: What measures may be adopted to recover the O&M costs? (100 words)

Regularize of illegal connection, enhancement of coverage area, house hold connections and use of ICT in collection of tax/charges

QUESTION: Whether reduction in O&M cost by addressing NRW levels be applied? (75 words)

Yes, Reorganization of water supply scheme is in progress .Addressing NRW levels will significantly reduce O & M costs .

QUESTION: Are different options of PPP such as Design-build-Operate-Transfer (DBOT), Design Built Finance Operate and Transfer (DBFOT) are considered? (100 words)

O/M activities will be explored under PPP option of design built operate transfer.

The alternative activities to meet these activities be defined as per Table 1.6

Table 1.6 ALTERNATIVE ACTIVITIES TO MEET OBJECTIVES

	CT.O ALTERNATIVE ACTIVITIES TO MILLI OBSESTIVES								
Sr.	OBJECTIVE	ACTIVITIES	COST	Financing					
No.				Source					
1	Coverage of House-hold	Providing House-Hold level connections		AMRUT/State					
	water connections	to increase coverage (28087 HH x Rs.	14.61 Cr	and ULB					
		5201/- per connection)							
2	Coverage of water supply net work	200 KM new pipe line @ 0.30 Cr per km	60 Cr						
3	REDUCTION IN NRW level	Leakage Detection & Rehabilitation of old Pipe line & Pump house & boundary Wall & Segregation of Zones	50.00 Cr.	State and ULB					
4	Increasing Efficiency in collection of water supply	SCADA of @2 Lakhs per Tube well 157 TUBE WELLS	3.14 Cr.	State and ULB					
	TOTAL		127.75 Cr						

4. <u>CITIZEN ENGAGEMENT</u>

ULBs will organize and conduct city level citizen consultation and receive feedback on the suggested alternatives and innovations. Each alternative will be discussed with citizens and activities to be taken up will be prioritized to meet the service level gaps. ULB will prioritize these activities and their scaling up based on the available resources. (AMRUT Guidelines; Para 6.6, 6.7 & 7.2). Please explain following questions in not more than 200 words detailing out the needs, aspirations and wishes of the local people.

QUESTION: Has all stakeholders involved in the consultation?

Yes, all stakeholders are being involved in the consultation

QUESTION: Has ward/zone level consultations held in the city?

Yes, consultations have been done with ward Councilors and Public of city for all projects

QUESTION: Has alternative proposed above are crowd sourced?

Yes, ward/ zone level consultations is being held in the city

QUESTION: What is feedback on the suggested alternatives and innovations?

Feedback on the suggested alternatives and innovations are being considered.

QUESTION: Has alternative taken up for discussions are prioritized on the basis of consultations?

Yes, alternatives taken up for discussions are prioritized on the basis of consultations

QUESTION: What methodology adopted for prioritizing the alternatives?

Alternatives have been prioritized based on demand raised through consultation with citizens, officials and parastatal agencies.

5. PRIORITIZE PROJECTS

Based on the citizen engagement, ULB will prioritize these activities and their scaling up based on the available resources to meet the respective objectives. While prioritizing projects, please reply following questions in not more than 200 words.

QUESTION: What are sources of funds?

The source of funding of activities shall be: 1. AMRUT, 2. 14th Finance Commission 3. State Government Funds

QUESTION: Has projects been converged with other program and schemes?

Yes, The convergence factor has been considered while designing and funding of project.

QUESTION: Has projects been prioritized based on "more with less" approach?

Yes the projects are being prioritized based on "more with less" approach

QUESTION: Has the universal coverage approach indicated in AMRUT guidelines followed for prioritization of activities?

Yes, universal coverage approach indicated in AMRUT guidelines has been followed for prioritization of activities

6. CONDITIONALITIES

Describe in not more than 300 words the Conditionalities of each project in terms of availability of land, environmental obligation and clearances, required NOC, financial commitment, approval and permission needed to implement the project.

YES. Land is available, all clearances have been obtained, no further NOC is required.

Required approvals will be sought from ULBs and competent authority and resilience factor would be built in to ensure environmentally sustainable water supply scheme. Describe in not more than 300 words regarding resilience built in the proposals.

Resilience factor will be built in the project components.

7. FINANCIAL PLAN

Once the activities are finalized and prioritized after consultations, investments both in terms of capital cost and O&M cost has to be estimated. (AMRUT Guidelines; para 6.5) Based on the investment requirements, different sources of finance have to be identified. Financial Plan for the complete life cycle of the prioritized development will be prepared. (AMRUT Guidelines; para 4, 6.6, 6.12, 6.13 & 6.14). The financial plan will include percentage share of different stakeholders (Centre, State and City) including financial convergence with various ongoing projects. While preparing finance plan please reply following questions in not more than 250 words

QUESTION: How the proposed finance plan is structured for transforming and creating infrastructure projects?

As per the guidelines of the AMRUT, the structured plan of the project has been developed. The financial plan for the complete life cycle of the prioritized development Rs. 131.49 Crores

QUESTION: list of individual projects which is being financed by various stakeholders?

Project will be financed by GOI State GOVT and ULB.

QUESTION: Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

Yes, financial plan prepared for identified projects are based on financial convergence and consultation with funding partner

QUESTION: Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations?

Yes, the proposed financial structure is sustainable and project has been categorized based on financial considerations

QUESTION: Have the financial assumptions been listed out?

Yes, financial assumptions have been listed out

QUESTION: does financial plan for the complete life cycle of the prioritized development?

11.1 yes, financial plan has been done for the complete life cycle of the prioritized development

QUESTION: does financial plan include percentage share of different stakeholders (Centre, State, ULBs and)

Yes, financial plans as per following percentage share of different stakeholders (Centre, State, ULBs) 33.33 % Central Gov. 66.67% State & ULBs

QUESTION: does it include financial convergence with various ongoing projects.

Yes, it includes financial convergence with various ongoing projects

QUESTION: Does it provide year-wise milestones and outcomes?

Yes, year-wise milestones and outcomes have been provided.

Details in financial plan shall be provided as per Table 1.7,1.8,1.9,1.10 and 1.11. These tables are based on AMRUT guidelines tables 2.1, 2.2, 2.3.1, 2.3.2, and 2.5.

Table 1.7 Master Plan of Water Supply Projects for Mission period (As per Table 2.1of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Project Name	Priority number	Year in which to be implemented	Year in which proposed to be completed	Estimate d Cost
1	COVERAGE OF HOUSE HOLD WATER CONNECTIONS	1	2016	2020	00.57CR
2	COVERAGE OF HOUSE HOLD WATER CONNECTIONS +200 km network	2	2016	2020	74.04CR
3	COVERAGE OF HOUSE HOLD WATER CONNECTIONS	3	2016	2020	50.00 Cr.
4	REDUCTION IN NRW	4	2016	2020	3.14 Cr
	TOTAL				127.75 Cr

Table 1.8 Master Service Levels Improvements during Mission Period (As per Table 2.2 of AMRUT guidelines) (Amount in Rs. Cr)

		DUVCICAL	CHANGE IN	SERVICE LE	EVELS	Full works I Quark
Sr. No.	PROJECT NAME	PHYSICAL COMPONENTS	Indicator	Existing (As-Is)	After (To-be)	Estimated Cost (Cr)
1	COVERAGE OF HOUSE HOLD WATER CONNECTIONS	Providing House-Hold level connections to increase coverage (28087 HH x Rs. 5201/- per connection)	COVERAGE	50.63 %	75.36 %	14.61 Cr
2	COVERAGE OF WATER SUPPLY DISTRIBUTION NETWORK	LAYING OF BRANCH & SUB BRANCH NETWORK - WATER SUPPLY LINE MAINS – 200 km		75.36 %	100%	60 Cr
	COVERAGE OF HOUSE HOLD WATER CONNECTIONS REDUCTION IN N.R.W	LEAKAGE DETECTION Rehabilitation of old Pipe line & Pump house Segregation of Zones .Zoning,	N.R.W	65%	30%	50.00 Cr.
4	REDUCTION IN N.R.W	SCADA of @2 Lakhs per Tube- well 2*157=3.14 cr	N.R.W	65%	30%	3.14 Cr
Tota	İ					127.75 Cr

(As per Table 2.3.1of AMRUT guidelines)

(Amount in Rs. Cr)

Sr.	NAME OF PROJECT	TOTAL PROJECT	SHARE					
No.		COST	GOI	State	ULB	Others	Total	
					-	-		
1	Providing House-Hold level connections to increase coverage (28087 HH x Rs. 5201/- per connection)	14.61 Cr	7.305 Cr	7.305Cr	-	-	14.61 Cr	
2	COVERAGE OF WATER SUPPLY DISTRIBUTION NETWORK	74.04 Cr	30 Cr	30 Cr	-	-	60 Cr	
3	LEAKAGE DETECTION Rehabilitation of old Pipe line & Pump house Segregation of Zones .Zoning.	50 Cr	16.66 Cr	33.34 Cr	-	-	50 cr	
4	REDUCTION IN N.R.W	3.14 Cr	1.046 Cr	2.094 Cr	-	-	3.14 cr	
	TOTAL COST OF PROJECTS						127.75 Cr	

Table 1.10 Annual Fund Sharing Break-up for Water Supply Projects (As per Table 2.3.2 of AMRUT Guidelines)

Amount in Rs.Cr)

(

Sr. No.	Project	Gol		State		L	JLB		Converge	Others	Total
INO.	-		14 th	Others	Total	14 th	thers	Total	nce		
	Coverage of house hold water connections	33%	-	67%	-						
1						-	-	-			100%
2	LEAKAGE DETECTION Rehabilitation of old Pipe line & Pump house Segregation of Zones .Zoning,	33%	-	67%	-	-	-	-			100%
3	Reduction in N.R.W level .	33%	-	67%	-	1	-	1			100%

Ī	Proposed	Project	Indicator	Base	Annual Targets
	Projects	Cost	iliuicatoi	line	(Increment from the Baseline Value)

Table 1.11 Year wise Plan for Service Levels Improvements

(As per Table 2.5 of AMRUT guidelines)

Water Supply				H1	/ 2016 H2	FY 2017	FY 201 8	FY 201 9	FY 202 0
COVERAGE OF HOUSE HOLD WATER CONNECTIONS +200 km network	74.61 cr	100%	50.63 %		60%	75 %	85 %	90%	100%
LEAKAGE DETECTION Rehabilitation of old Pipe line & Pump house Segregation of Zones .Zoning,	50 cr	20%	65%	60%	609/	55%	40%	30%	20%
REDUCTION IN NRW	3.14 cr				60%				