



The Hashemite Kingdom of Jordan Ministry of Water and Irrigation Millennium Challenge Corporation

# PREPARATION OF THE FEASIBILITY STUDY AND ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT FOR ZARQA GOVERNORATE WATER SYSTEM RESTRUCTURING AND REHABILITATION

# FEASIBILITY STUDY



May 2010





# THE HASHEMITE KINGDOM OF JORDAN MINISTRY OF WATER AND IRRIGATION

WATER AUTHORITY OF JORDAN

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# **FEASIBILITY STUDY**

Nicholas O'Dwyer Ltd. Consulting Engineers Nutgrove Office Park Nutgrove Avenue Dublin 14. (NOD) Amman Consulting Engineering and Planning Office Abdullah Bin Abbas St Shmeisani Amman 11190 (ACEPO)

May 2010

	PROJECT NO. 20445										
Revision	Reason for Revision	Prepared by	Reviewed by	Approved by	Issue Date						
-	First Issue - Draft	T. Cuddy	M. McArdle	J. Cronin	04/03/10						
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#### 1. INTRODUCTION

- **1.1** On 13<sup>th</sup> October 2009, Nicholas O'Dwyer Ltd and ACEPO were appointed by the Ministry of Water and Irrigation to proceed with the Consultancy Services for the Preparation of the Feasibility Study and Environmental and Social Impact Assessment for Zarqa Governorate Water System Restructuring and Rehabilitation. A copy of the Notice to Proceed is contained in Appendix 1.
- **1.2** The Terms of Reference for the project provide for the preparation of three linked reports on the restructuring and rehabilitation of the water supply system in the Zarqa Governorate. These are :
  - 1. Investment Master Plan
  - 2. Priority Investment Programme
  - 3. Feasibility Study this document

In the preparation of this report – the **Feasibility Study** – a detailed examination of economic benefits of the proposed Restructuring and Rehabilitation project was undertaken. These benefits were then assessed against the schemes costs in order to derive an Economic Rate of Return for the overall project and for the prioritised projects on an individual basis in accordance with the MCC Guidelines for Economic and Beneficiary Analysis. The Investment Master Plan is submitted as a separate document.

The **Priority Investment Programme** which is compiled as a separate document contains details of the selection criteria for project prioritisation and set outs a list of the prioritised projects.

**1.3** This report contains a total of 6 sections. Section 2 provides details of project costs which were determined as part of the Investment Master Plan and the Priority Investment Programme. Section 3 contains the detailed Economic Analysis. The review of the Beneficiary Analysis is contained in Section 4 and Section 5 contains the Economic Rate of Return Assessment (ERR). Section 6 contains our Conclusion Statements and Recommendations.

## 2. **PROJECT COSTS**

#### 2.1 Capital Costs

The cost estimates for the projects set out in the Investment Master Plan (IMP) Schedules of Works in Section 8 of the IMP document are set out in Table 2.1 overleaf. The cost estimates associated with the specific projects identified in the Priority Investment Programme (PIP) are also summarised in Table 2.1 as the Phase 1 (MCC) projects.

#### 2.2 Operating and Maintenance Costs

At the present time, as noted in Section 2.7 of the IMP document, the revenue obtained by Zarqa Water Affairs is unable to cover its operational costs. In the year 2007, there was a deficit of JD 3.75m or a recovery ratio of only 74%. In relation to water supply, a loss of JD 1.06m was recorded. The major areas of expenditure were water import and energy costs.

The proposed restructuring and rehabilitation project will significantly reduce the excessive quantity of unaccounted for and non-revenue water in the existing system, leading to significant reductions in the costs of water importation and pumping energy. Accordingly, for the purposes of the economic study we have assumed that, in the future, the Zarqa Governorate will be in a position to fully recover its operational costs through its revenue collection systems.

#### 2.3 Beneficiaries and Unit Costs

The current populations of the areas which will benefit from the IMP and PIP projects are set out in Table 2.2 overleaf, together with the unit cost per beneficiary of the project investment.

	-				Wate	er Supply Area	(WSA)				
	Strategic Infra.	Azraq	Dulail	King Abdullah City	Tatweer	Zarqa	Awajan	Russaifah	North	West-NW	Total Cost
Phase 1 (MCC)											
Primary Network	1,984,000	-	-	-	1,664,031	3,616,787	8,182,192	1,614,147	-	-	17,061,156
Secondary Network	-	-	-	-	1,412,292	7,152,275	8,026,195	5,197,827	-	-	21,788,589
Tertiary Network	-	-	-	-	1,038,827	16,268,506	12,983,065	6,340,053	-	-	36,630,451
Sum	1,984,000	-	_	-	4,115,150	27,037,567	29,191,452	13,152,026	_		75,480,195
Phase 1 (TBD)											
Primary Network	5,120,729	-	86,800	-	-	813,676	-	3,766,342	-	-	9,787,546
Secondary Network	-	-	2,326,919	-	-	-	-	12,128,262	7,843,329	5,085,722	27,384,232
Tertiary Network	-	125,121	5,481,260	-	-	-	-	14,793,456	4,161,569	4,442,093	29,003,500
Sum	5,120,729	125,121	7,894,980	-	-	813,676	-	30,688,060	12,004,898	9,527,815	66,175,279
Phase 2.											
Primary Network	29,811,513	876,516	6,862,552	3,145,012	-	5,319,600	8,622,030	11,926,148	3,028,248	4,427,274	74,018,893
Secondary Network	-	-	-	-	80,476	-	-	-	-	-	80,476
Tertiary Network	-	-	-	-	-	-	-	-	-	-	-
Sum	29,811,513	876,516	6,862,552	3,145,012	80,476	5,319,600	8,622,030	11,926,148	3,028,248	4,427,274	74,099,369
Phase 3.											
Primary Network	32,725,932	-	334,476	-	-	740,652	-	-	1,337,972	1,844,364	36,983,397
Secondary Network	-	-	-	-	-	-	-	-	-	-	_
Tertiary Network	-	-	-	-	-	-	-	-	-	-	-
Sum	32,725,932	-	334,476	-	-	740,652	-	-	1,337,972	1,844,364	36,983,397
Total											
Primary Network	69,642,174	876,516	7,283,829	3,145,012	1,664,031	10,490,714	16,804,222	17,306,636	4,366,220	6,271,638	137,850,992
Secondary Network	-	-	2,326,919	-	1,492,768	7,152,275	8,026,195	17,326,089	7,843,329	5,085,722	49,253,297
Tertiary Network	-	125,121	5,481,260	-	1,038,827	16,268,506	12,983,065	21,133,509	4,161,569	4,442,093	65,633,951
Sum	69,642,174	1,001,637	15,092,008	3,145,012	4,195,626	33,911,495	37,813,482	55,766,234	16,371,118	15,799,454	252,738,240

Phase 1 Works: Required for immediate upgrading of network. Will have immediate benefit, and will have structure and capacity for 2030 demand levels

Phase 2 Works: Required for improvement of network, Will be necessary for secure long term operation of the system with structure and capacity to 2030 demand levels even without additional inflows of water to the system.

Phase 3 Works: Additional works required to meet 2030 demands, as demand and flows grow with increasing population.

#### Table 2-1 - Summary IMP Cost Estimate

Population 2008 and 20	<u>30</u>										
			Water Supply Area (WSA)								
	Strategic Infrastructure	Azraq	Dulail	King Abdullah City	Tatweer	Zarqa	Awajan	Russaifah	North	West-NW	Total
Population with Water Supply 2008		7,396	37,790	-	8,501	283,526	149,171	303,448	51,629	12,864	854,325
Projected Population with Water Supply 2030		10,154	55,329	436,008	16,888	399,586	225,680	450,472	76,008	19,874	1,690,000
Full Investment Master P	Plan (IMP) Projects										
Beneficiaries 2008	854,325	7,396	37,790	-	8,501	283,526	149,171	303,448	51,629	12,864	854,325
Unit cost per Beneficiary	82	135	399	-	494	120	253	184	317	1,228	296
Priority Investment Progr	ramme (PIP) Projects										
Beneficiaries 2008	854,325	-	-	-	8,501	226,821	149,171	91,034	-	-	475,527
Unit cost per Beneficiary	2	-	-	-	484	119	196	144	-	-	159

 Table 2-2 – Beneficiary Populations of IMP and PIP project areas

#### 3. ECONOMIC ASSESSMENT

- **3.1** An economic model has been constructed in order to assess the costs and benefits of the proposed IMP and PIP projects. The structure of the model, including the determination of parameters and methods of calculation, has been developed in consultation with MCC economic advisors. The input data for the model has been obtained from the population, water demand, engineering and cost estimate analyses set out in the IMP, the prioritisation analysis set out in the PIP, the socio-economic and beneficiaries analysis set out in the MCA Beneficiaries Study (Ecoconsult April 2010), and the WAJ data records in relation to customer water use, water tariffs, billing revenue and expenditure.
- **3.2** To assess the economic rate of return (ERR) a cost benefit analysis (CBA) model has been developed on an excel spreadsheet. Two versions of the model have been prepared, one for the overall IMP projects, and one for the PIP, MCC priority projects. The model has 6 worksheets (Appendix 2).
- **3.3** In the "Soceon" worksheet, the socio-economic analysis is conducted using Household Expenditure and Income Survey (HEIS) (2006 and 2008) data. By using the purchasing power parity (PPP) exchange rate to convert dollars to JD and based on the HEIS data, it is estimated that in the Zarqa Governorate 5.60% of households (HHs) earn less than \$2 per day, 29.65% earn \$2-4 per day, and 64.76% earn > \$4 per day.
- **3.4** In the "wcon" worksheet, the current consumption patterns in terms of the following three types of water network, tanker and shop water- are analysed (step 2) as a basis to develop a baseline model of water consumption and expenditure (step 3). This leads to the creation of 20 tables (without project) and 20 tables (with project) to assess water supply and consumption patterns in years 1-20 (2010-2029) of the project. This worksheet is central and electronically feeds into the worksheets "hsehold", "heli", and "prod", which in turn feeds into worksheet "CBA" which contains a summary of the cost benefit analysis.
- **3.5** Central to the model are the input variables. They relate to consumption patterns of the three different types of water (network, tanker and shop), average size of HH, price of different types of water, the size of the target population, annual growth rate, size of unaccounted for water (UFW) with and without the project , and the reduction in the consumption of shop water with project as a percentage.

It is assumed that consumers will switch away from tanker water if their needs are sufficiently satisfied with the additional network water generated by the reduction of UFW. The switching from shop water to the additional network water depends very much on the quality of the additional network water as shop water is usually devoted to drinking and cooking, and hence quality if a factor.

The forty tables of the "wcon" worksheet depend on the values of the above input variables. The tables monitor:

- <i> changes in water consumption patterns with and without the project for year 2010-2029;
- <ii> changes in population size,
- <iii> changes in the demand for water; and
- <iv> the extent to which WAJ will have to purchase additional water (see box "deficit") in order to main HHs at current levels of consumption in the "without project" scenario. In the "with project" context the figures in box "deficit" have a negative sign indicating consumption levels above current consumption level, in other words it is a measure of the quantity of the additional water.
- **3.6** In the worksheet "hsehold", the total quantities of water (network, tanker and shop) are shown without and with project and over years 2010-2029. In addition the worksheet estimates the savings HHs gain from switching from tanker and shop water when faced when increased supply of network water over the twenty years of the life of the proposed project.

To proceed with the beneficiary analysis, it is necessary to reach an agreement on the quantities of water consumed across the three socio-economic categories and the three different water types.

**3.7** Worksheet "heli" analyses the unequal distribution of network water and water expenditure patterns. Worksheet "heli" also analyses the gains in health if those domestic consumers now consuming less than 50 lcd of network water are given access to 60 lcd of network water. The analysis depends on the Health and Environment Linkages Initiative (HELI): Jordan Pilot of June 2005. The "with project" scenario is analysed where water is more evenly distributed between group 1 (consumers formerly consuming less than 50 lcd) and group 2 (consumers formerly consuming more than 50 lcd) as there are gains in a more equal distribution across HHs.

**3.8** In worksheet "prod" the unit costs of network water production are estimated in both the "without project" scenario (rows ) and "with project" as well as the opportunity cost to WAJ if there is no investment. WAJ will be faced with supplying increased demand due to population increase if current consumption patterns of water are to be maintained; and WAJ would forego the benefit of additional supplies above the increased demand generated by population growth at current consumption levels.

#### 4. SOCIO ECONOMIC ASSESSMENT AND BENEFICIARY ANALYSIS

**4.1** The analysis of the socio-economic breakdown is conducted in worksheet "socecon"; and the figures have been given above. Conservative assumptions are made about the water consumption apportionment across the three different water types and across the three socio-economic categories.

### 5. ECONOMIC RATE OF RETURN (ERR)

- **5.1** The CBA model for the projects set out in the IMP generates an ERR of 20% if no allowance is made for WAJ investment costs which are likely to occur in any event to maintain the existing infrastructure in its current condition, and 26% if allowance is made for these costs. A sensitivity analysis is included in the model, which indicates that the ERR could be as low as 15% if no allowance is made for costs which are likely to occur in any event and if costs increase by 10% and benefits decrease by 10%.
- **5.2** The CBA model for the MCC priority projects set out in the PIP generates a higher ERR than for the full set of IMP projects. The ERR is 22% if no allowance is made for WAJ investment costs which are likely to occur in any event to maintain the existing infrastructure in its current condition, and 29% if allowance is made for these costs.

## 6. CONCLUSIONS AND RECOMMENDATIONS

- **6.1** The CBA model for the Investment Master Plan generates an ERR of 20% 26%, depending on whether allowance is made for WAJ investment costs which are likely to occur in any event to maintain the existing infrastructure in its current condition.
- **6.2** The CBA model for the MCC priority projects set out in the PIP generates a higher ERR of 22% 29%.

**APPENDIX 1 – NOTICE TO PROCEED** 





Ref. 7/2/12639 Date: 12/10/2009

MINISTRY OF WATER AND IRRIGATION Water Authority

Nicholas O'Dwyer Consulting Engineers Ltd. And Amman Consulting Engineering and Planning Office

Project :Consultancy Services for preparation of the feasibility study and environmental and social impact assessment for Zarqa Governorate Water System Restructuring and rehabilitation. Subject : Central Tender No. 67/2009 "Notice to Proceed."

íL,

#### Dear Mr. Richard Crowe,

Reference to the awarding decision, please be informed that the notice to proceed for contract No. 67/2009 will be 13<sup>th</sup>.October 2009.

Minister of Water and Irrigation /WAJ Eng. Raed Abu Sout Cc : MCA / Jordan Cc : Secretary General / WAJ Cc : Project Manager for P1-B Cc : File No. (13/1)

h.h/notice to proceed/1

#### The Hashemite Kingdom of Jordan Tel, +962 6 5680100/5683100 - Fax +962 6 5679143 - P.O.Box:5012 Amman 11181 Jordan - www.waj.cov.jo

**APPENDIX 2 – ECONOMIC ANALYSIS** 

#### Zarqa Water Supply Feasibility Study. Full List of IMP Projects. Work-sheet "Socecon"

Step 1 Step 1 ascertains the percentage of households that belong to the key socio-economic groupings of the TOR, namely, <\$ 2, \$2 - \$4, and >\$4. PPP exchange rates for the USA \$1 (2005) are used (see the Global Purchasing Power Parities and Real Expenditure: 2005 International Comparison Program, IBRD World Bank 2008)

Income per capita per day (\$)	Income per capita per day (JOD)			income Mean ita (JOD) per h	ousehold		Monthly income per household (JOD)							
	2 0.76 4 1.52		365 365	277 555	6	1,664	139							
	4 1.52	200	305	555	0	0,023	5 211							
PPP exchange rate US\$ 1= .38 JOD	0.	.38		1										
Income per capita per day (\$)	Annual income per household (JOD)			Governorate useholds % of I (cumu			Zarqa sub-district. % of households	% of households (cumulative)			% of house %	istrict of households cumulative)		sub-district of households sumulative)
< 2	<1664			6.2%	6.2%	,	5.1%	5.1%	7.9%	7.9%	3.8%	3.8%	4.1%	4.1%
Between 2-4	Between 1664-3329	)		32.3%	38.5%		27.0%	32.1%	40.6%	48.5%	37.2%	41.0%	22.4%	26.5%
> 4	>3329			61.5%	100.0%	,	67.9%	100.0%	51.5%	100.0%	59.0%	100.0%	73.5%	100.0%
				100.0%			100.0%	,	100.0%		100.0%		100.0%	

Income Groups 2006 (JOD per	annum)		Zarqa Governora	te		Zarqa sub-district		Ruseifa sub		Ruseifa sub-district		Berein sub-c	Berein sub-district			Hashameer sub-district		
			Nr households	% of households	% of households	Nr households	% of households	1	Vr households	% of house	nolds	Nr househ(%	6 of house	holds	Nr househ(%	6 of househ	olds	
				(	cumulative)		(cumulative)			(cumulative	)	(*	cumulative)	)	(1	cumulative)		
Low income group	<	1,800	9,786	6.7%	6.7%	4,208	5.5%	5.5%	4,492	8.5%	8.5%	88	4.1%	4.1%	382	4.4%	4.4%	
64.4%	1,800	2,400	14,742	2 10.1%	16.8%	5,749	7.5%	12.9%	7,563	14.3%	22.8%	280	13.0%	17.1%	545	6.3%	10.7%	
	2,400	3,000	21,634	14.8%	31.5%	9,281	12.1%	25.0%	9,865	18.7%	41.5%	281	13.0%	30.1%	1168	13.5%	24.3%	
	3,000	3,600	18,549	) 12.7%	44.2%	9,942	12.9%	37.9%	6,770	12.8%	54.3%	427	19.8%	49.9%	352	4.1%	28.3%	
	3,600	4,200	16,389	) 11.2%	55.4%	8,276	10.8%	48.7%	6,572	12.4%	66.7%	426	19.8%	69.7%	541	6.3%	34.6%	
	4,200	4,800	13,228	9.0%	64.4%	7,566	9.8%	58.5%	3,863	7.3%	74.0%	238	11.0%	80.7%	1177	13.6%	48.2%	
Midde income group	4,800	5,400	11,578	3 7.9%	72.3%	6,900	9.0%	67.5%	3,265	6.2%	80.2%	139	6.5%	87.2%	741	8.6%	56.8%	
28.4%	5,400	6,000	7,386	5.0%	77.4%	4,306	5.6%	73.1%	2,083	3.9%	84.2%	44	2.0%	89.2%	569	6.6%	63.4%	
	6,000	7,000	11,141	7.6%	85.0%	6,272	8.2%	81.3%	3,220	6.1%	90.3%	0	0.0%	89.2%	1315	15.2%	78.6%	
	7,000	8,000	6,365	5 4.3%	89.3%	4,265	5.5%	86.8%	1,674	3.2%	93.4%	45	2.1%	91.3%	178	2.1%	80.7%	
	8,000	9,000	5,140	3.5%	92.8%	3,691	4.8%	91.6%	771	1.5%	94.9%	46	2.1%	93.5%	565	6.5%	87.2%	
High income group	9,000	10,000	3,025	5 2.1%	94.9%	1,755	2.3%	93.9%	1,116	2.1%	97.0%	51	2.4%	95.8%	0	0.0%	87.2%	
7.2%	10,000	12,000	3,007	2.1%	97.0%	1,431	1.9%	95.8%	965	1.8%	98.8%	45	2.1%	97.9%	565	6.5%	93.7%	
	12,000	14,000	2,093	3 1.4%	98.4%	1,614	2.1%	97.9%	299	0.6%	99.4%	0	0.0%	97.9%	180	2.1%	95.8%	
	>	14000	2,369	1.6%	100.0%	1,642	2.1%	100.0%	322	0.6%	100.0%	45	2.1%	100.0%	360	4.2%	100.0%	
			146,432	2 100.0%		76,898			52,840			2,155			8,638			

#### Source: HEIS 2006, Department of Statistics

Adjustments at the i	income boundaries		arqa Governorate						Ruseifa sub-distri					listrict		sub-district
		Nr	r households % of l	households	Nr house	eholds %	6 of households		Nr households	% of house	holds		Nr househ(%	6 of households	Nr househc%	of households
	<	1,800	9,786	6.7%		4,208	5.5%		4,49	2 8.5%			88	4.1%	382	4.4%
	<	1,664	9,049	6.2%		3,891	5.1%		4,154	4 7.9%			81	3.8%	353	4.1%
	1,664	1,800	737	0.5%		317	0.4%		338	3 0.6%			7	0.3%	29	0.3%
	3,000	3,600	18,549	12.7%		9,942	12.9%		6,770	12.8%			427	19.8%	352	4.1%
	3,000	3,329	10,165	6.9%		5,448	7.1%		3,710	7.0%			234	10.9%	193	2.2%
	3,329	3,600	8,384	5.7%		4,494	5.8%		3,060	5.8%			193	9.0%	159	1.8%
Analysis of socio-	economic breakdown of pe	opulation of	MCC priority areas													
WSA	Population connected F	opulation Za	arqa sub-district Zarqa	a sub-district Zarq	a sub-district Zarqa su	ub-district R	Russaifah Rus	ssaifah	Russaifah	Russaifah	Host Popul	ation of MC	C priority are	as		
	(NOD/ACEPO) (I	host) (h	ost) population <\$2	betw	een \$2-\$4 >\$4	1)	host population)<\$2	2	between \$2-\$4	>\$4	<\$2	\$2-\$4	>\$4			
Tatweer	8,501	8,673	8,673	439	2,345	5,889										
Zarqa	226,821	231,407	231,407	11,709	62,579	157,120										
Awajan	149,171	152,187	152,187	7,701	41,155	103,331										
Russaifah	91,034	92,875					92,875	7,301	37,74	47,826						
Total	475,527	485,142	392,268	19,849	106,079	266,340	92,875	7,301	37,74	47,826	27,149	143,828	314,166 iı	real numbers		
											5.60%	29.65%	64.76% p	ercentage terms		
Connection rate	98.02%													0		

of h	% of house	ct households ulative)	Ashraq sub- % of house % (	
8	8.0%	8.0%	14.7%	14
47	39.3%	7.3%	38.0%	52
100	52.7%	0.0%	47.3%	10

100.0%

#### Dhilail sub-district..... Nr househ(% of households (cumulative)

()	Jumulative)	
382	8.6%	8.6%
383	8.6%	17.3%
822	18.5%	35.8%
927	20.9%	56.7%
475	10.7%	67.4%
278	6.3%	73.7%
463	10.4%	84.1%
288	6.5%	90.6%
201	4.5%	95.2%
108	2.4%	97.6%
0	0.0%	97.6%
106	2.4%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
4,433		

## trict..... f households nulative)

14.7%	14.7%
38.0%	52.7%
47.3%	100.0%
100.0%	

#### Ashraq sub-district..... Nr househ(% of households

	(cumulative)	
235	15.9%	15.9%
236	15.9%	31.8%
238	16.1%	47.9%
130	8.8%	56.7%
98	6.6%	63.3%
93	6.3%	69.6%
58	3.9%	73.5%
96	6.5%	80.0%
134	9.1%	89.1%
95	6.4%	95.5%
67	4.5%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
1,480		

#### Dhilail sub-district.....

Dhilail sub-d	istrict	Ashraq sub-c	listrict
Nr househ(%	6 of households	Nr househ %	of households
382	8.6%	235	15.9%
353	8.0%	217	14.7%
29	0.6%	18	1.2%
927	20.9%	130	8.8%
508	11.5%	71	4.8%
419	9.5%	59	4.0%

Zarqa Water	Supply Fea	isibility St	udy. Full	List of IMP P	rojects. Wo	ork-sheet "W	con"							
<u> </u>		1			41 L. 41 TOP									
Step 2 is to assess the														
From the analysis con			e percentage of	the Zarqa population i	n each socio-econ	omic group is as follo	DWS:							
<\$2	6.2%													
\$2-\$4	32.3%													
>\$4	61.5%													
(for details of the anal														
Deservation at a share of														
Proportionate shares														
	<\$2	\$2 - \$4	>\$4											
Shop water shares	1	1.5	5 3											
Tanker water	1	1	2											
Percentage water sha	res across water to	ne and socio-ec	onomic categor	V										
- s. sonago water sha	network water	tanker water	tanker water		shop water									
-	(percentage)	(share)	(percentage)	(snare)	(percentage)						l			
<\$2	6.2%		2 3.8%	1	2.6%		These figures represent the dis							
\$2-\$4	32.3%						billing data. The ECO Consult							ork
>\$4	61.5%		76.2%	34	77.2%		water received. However, the c						unknown.	
	100%	, ,	100%		100%		In the absence of data assumption	tions are ma	de; and the	ese assumptions apply on	ly to the beneficiary	analysis		
-														
Values of key indeper	dont (or input) vor	ables are outling	d hora approp	iotoly referenced:										
				lately referenced.	40.505	(FOO O			1 = = = >					
Average annual tanke	r water consumption	on per nousenoid	a (m3/nse/a)		13.535		calculated from raw data and a							
							imate as ECO Consult figures a	re based on	one quarte	r				
Average annual shop	water consumptior	n per household	(m3/hse/a)			(GFA Aug 2008 raw								
Price of shop water (J	OD/m3)				52.826	NOD/ACEPO engin	eers							
Price of tanker water (	JOD/m3) (conserv	ative)			4	(GFA Aug 2008:107	)							
Average size of house							a population 2008, 98.02% con	nection rate						
		to poreon charir	a the same rec	f Horo in the context (			e HHs that share the same wate							
N.D. THI SIZE III GEIIIO	l aprile data refers		ly the same roo		JI THE WATER SECTOR									
						m³/HH / annum								
The model below (tab					62									
The model also shows	(table 1:first row)	average consum	nption of networ	k water only is	56	146								
	,	-												
The findings are only	shown here but the	analysis is con	ducted on the ex	cel file of the 2008 bil	ling data and base	d on the certain assu	motions which							
were necessary as the														
							ounoumero.							
Hence, in order to dist														
<i> the quantities of w</i>							espectively;							
<ii> units that did not of</ii>					m were only regist	ered in 2009.								
<iii> units that consum</iii>	ne quantities >265	lcd are assumed	to be non-dom	estic.	L			<u> </u>						
The relevant conclusion	ons of the analysis	is outline in Tab	le 1 below unde	r network water in terr	ns of HHs and qua	ntities of water consu	umed.							
				bands is shown in wor							1			
of HHs consume less														
		s a ligare close			5, 5, 40.070.		l							
Soc	Annual water	Annual water	lcd	Nr HH	Water	Water	Price/ m3							
econ	consumption	consumption			revenue	expenditure	/socio-econ							
cat	(total)	per HH			(total)	per HH	cat							
(HEIS 06)	. ,	(average)			(JOD)	(JOD)	(JOD)							
	(m3)	(m3)			()	( <del>-</del> )	/							
	(	(113)	1		1									
	1	1	1		1	1		1		1	I	1		

Table 1: Supplies of	water to households in	Zarga Govern	orate: network, s	hop and tanker v	water (based on	2008 billing data)					
	Network water					/					
Total	17,600,328	146	56	120,611	3,874,082	32	0.22				
						-					
<\$2	0	0	0	0	0	0	0.00				
\$2-\$4	0	0	0	0	0	0	0.00				
>\$4	0	0	0	0	0	0	0.00				
	Shop water										
Total	183,471	2	1	120,611	9,692,035	80	53				
<\$2											
\$2-\$4											
>\$4											
	Tanker water		_								
Total	1,632,498	14	5	120,611	2,483,321	21	1.5		-		
<\$2											 
\$2-\$4											
>\$4											
T-4-1	Shop & tanker water	45	0	100.011	40.475.050	101					
Total <\$2	1,815,969	15	6	120,611	12,175,356	101					
<\$2 \$2-\$4											 
\$2-\$4 >\$4											 
<i>&gt;</i> φ4	Network, shop & tanker	water									 
Total	19,416,297	161	62	120,611	16,049,438	133					 
<\$2	13,410,297	101	02	120,011	10,049,430	155					 
<u>\$2-</u> \$4											
<u>\$2-\$4</u> >\$4											

Step 3													
A baselin	e (2010) mod	lel of water consum	nption based on t	able 1 above is	generated. The 201	0 population that is c	onnected to the WAJ	network is:					
						ssumes no HHs cons		or details see					
see works	sheet "Heli" s	ection (a). The 201	10 population incl	uding those no	t connected is:	929,162 (	for details see "Heli" s	ection (d))					
Table 2 S	Supplies of w	vater to targeted h	ouseholds: net	work, bottled	and tanker water (w	vithout project)	B	ASELINE					
network		target pop	current pop	hse incr	incr water	current water den	nand	2010					
	18,782,594	911,673	911,673	0		0 20,720,547	0						
		Network water	m3/hse/a	lcd	nr hse		vater revenue / hse wa						
Total		18,782,594		56			32	0.22					
<\$2		1,160,673		0	7,95		0	0.00					
\$2-\$4		6,064,280		0			0	0.00					
>\$4		11,557,641	0	0	79,20	)2 0	0	0.00					
		Shop water											
Total		195,795	2	1	128,71	10,343,078	80.35780185	53					
<\$2													
\$2-\$4													
>\$4		-	1			1							
<b>T</b> ( )		Tanker water		5	100 7		54						
Total <\$2		1,742,158	14	5	128,71	13 6,968,630	54	4.0					
\$2-\$4 >\$4													
>⊅4		Network, shop & ta	ankar watar										
Total		20,720,547		62	128,71	13 21,446,023	167						
<\$2		20,720,347	101	02	120,7	21,440,023	107						
<⊅∠ \$2-\$4													
<del>φ2-φ4</del> >\$4													
-ψ-τ													
		[							I				

Step 4	1		1						1		1	1	1		
Step 4 consists in ass	cosing onnual mode		our motion over t	ha 20 years of the life .	f the project (20)	10.2020) taking into									
account population gro					of the project (20	10-2029) taking into									
account population gro	owth and "without pi	oject" and "with	n project" scena	rios.											
<b>T</b> 1 ( 11 ) 1100															
The following addition		made:													
Population and conne															
Annual population gro	wth rate:			3.25%		Generated by the C									
Population (2008)				871,600		Source: Departmen									
Population (2029)				1,705,876		Source: NOD/ ACE									
Baseline data (2010)				929,162		Generated by the C									
Percentage of populat				98.02%		Source: NOD/ ACE									
Percentage of populat				99.07%		Source: NOD/ ACE									
Average annual increa				0.05%		Generated by the C									
Percentage of populat	ion connected (201	0)		98.12%		Generated by the C	BA model								
UFW parameters															
UFW physical as % of					70hrs/wk	Source: NOD/ ACE									
UFW physical as % of					70hrs/wk	Generated by the C									
UFW physical as % of				66.4%	70hrs/wk	Source: NOD/ ACE									
Average annual % cha	ange to UFW physic	al without proje	ect (2010-2029)	0.2%	70hrs/wk	Generated by the C									
UFW administrative as	s % of total system i	nput, without p	roject (2008)		70hrs/wk	Source: NOD/ ACE	PO engineers								
UFW administrative as	s % of total system i	nput, without p	roject (2010)	5.2%	70hrs/wk	Generated by the C	BA model								
UFW administrative as	s % of total system i	nput, without p	roject (2029)	5.0%	70hrs/wk	Source: NOD/ ACE	PO engineers								
Average annual % cha	ange to UFW admin	istrative withou	t project (2010 -	-0.2%	70hrs/wk	Generated by the C	BA model								
UFW physical as % of	total system input,	with project (20	008)	13.8%	70hrs/wk	Source: NOD/ ACE	PO engineers	The 2008 &	2010 UFW fi	gures with p	project				
UFW physical as % of	total system input,	with project (20	)10)	13.7%	70hrs/wk	Generated by the C	BA model	are hypothe	tical for the s	ake of the					
UFW physical as % of	total system input,	vith project (202	29)	12.4%	70hrs/wk	Source: NOD/ ACE	PO engineers	engineering	calculations.	In reality U	FW				
Average annual % cha	ange to UFW physic	al with project	(2010-2030)	-0.5%	70hrs/wk	Generated by the C	BA model	with project	is only realise	ed in year 3	of the				
UFW administrative as	s % of total system i	nput, with proje	ect (2008)	6.7%	70hrs/wk	Source: NOD/ ACEI	PO engineers	life of the pro	oject.						
UFW administrative as	s % of total system i	nput, with proje	ect (2010)	6.7%	70hrs/wk	Generated by the C	BA model		·						
UFW administrative as				6.9%	70hrs/wk	Source: NOD/ ACE	PO engineers								
Average annual % cha	ange to UFW admin	istrative with pr	oject	0.1%	70hrs/wk	Generated by the C	BA model								
Percentage of HHs aff				89.0%		Source: NOD/ ACE									
Consumption of shop				50%	(Conjecture that	can be modified with									
Currently, this is conje															
used for drinking and															
On the other hand, tar							ainly relied upon								
when network water is															
out by the ECO Consu				5 (	gonor										
22.3, 410 200 00100			1				1		1						
The model assumes the	hat benefits of the p	roposed project	t only are realise	ed in vear 3 of the life o	f the project. Up	till then the network o	perates in	1	1						
accordance with UFW															
	ga.oo minout pic														
								-							
I	1		1	1	l	1	1		L	1					

Table 3: Supplie	es of water to targeted	households: ne	twork, shop a	nd tanker water			2010	)						
				water demand (m3)		Year	1							
18,782					0		without project							
	Network water	m3/hse/a	lcd	nr hse	water revenue	water revenue/hse	water prices/ m3							
Total	18,782,594	146	56	128,713	4,134,316	32	0.22							
<\$2	1,160,673				0	0								
\$2-\$4	6,064,280				0									
>\$4	11.557.641				0	0								
	Shop water			,										
Total	195,795	2	1	128,713	10,343,078	80	53	Given the var	iety of variab	les it was	thought necessary to dev	ote separate		
<\$2	5,058				-,,						ables for each of the 20 ye			
\$2-\$4	39,640										ables feed off variables the			
>\$4	151,097										e size of population, popul			
	Tanker water										s etc. These can be chang			
Total	1,742,158	14	5	128,713	6,968,630	54					vill be fed electronically an			
<\$2	66,647		-		. ,						sh to explore different scer			
\$2-\$4	348,215										ere the ERR is decided.			
>\$4	1,327,296													
	Network, shop & t	anker water												
Total	20,720,547	161	62	128,713	21,446,023	167								
<\$2							I	The data gen	erated by the	ese 40 tabl	les is fed into the more tra	ditional		
\$2-\$4								worksheets "I						
>\$4														
Supplies of wate	er to targeted househo	lds: network, sh	op and tanke	r water			2010	)						
network water (n	m3) Deficit (m <sup>3</sup> )	baseline pop	pop connect	water demand (m3)		Year	1							
18,782	<b>2,594</b> 0	929,162	911,673	20,720,547	0		with project							
	Network water	m3/hse/a	lcd	nr hse	water revenue	water revenue/hse	water prices/ m3							
Total	18,782,594				4,134,316	32	0.22	2						
<\$2	1,160,673	146	56	7,954	0	0	0.00							
\$2-\$4	6,064,280						0.00							
>\$4	0,001,200	146	56		0	0								
	11,557,641		56	41,557	0 0	0	0.00							
	11,557,641 Shop water	146	56	41,557 79,202	0	0	0.00 0.00							
Total	11,557,641 Shop water 195,795	146 2	56 56	41,557 79,202	Ű	0	0.00 0.00							
Total <\$2	11,557,641 Shop water 195,795 5,058	146 2	56 56	41,557 79,202	0	0	0.00 0.00							
Total <\$2 \$2-\$4	11,557,641 Shop water 195,795 5,058 39,640	146 2	56 56	41,557 79,202	0	0	0.00 0.00							
Total <\$2	11,557,641 Shop water 195,795 5,058	146 2	56 56	41,557 79,202	0	0	0.00 0.00							
Total <\$2 \$2-\$4	11,557,641 Shop water 195,795 5,058 39,640	146 2	56 56 1	41,557 79,202 128,713	0	80	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158	146 2	56 56 1	41,557 79,202 128,713	0	0	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total <\$2	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647	146 2	56 56 1	41,557 79,202 128,713	0	80	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647           348,215	146 2 1 14	56 56 1	41,557 79,202 128,713	0	80	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total <\$2	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647	146 2 1 14	56 56 1	41,557 79,202 128,713	0	80	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647           348,215	146 2 14 14	56 56 1 5	41,557 79,202 128,713 128,713	0 10,343,078 6,968,630	0 80 54	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647           348,215           1,327,296	146 2 14 14 14	56 56 1	41,557 79,202 128,713 128,713	0	0 80 54	0.00 0.00 53				Image: Constraint of the sector of			
Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647           348,215           1,327,296           Network, shop & t	146 2 14 14	56 56 1 5	41,557 79,202 128,713 128,713	0 10,343,078 6,968,630	0 80 54	0.00 0.00 53							
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647           348,215           1,327,296           Network, shop & t	146 2 14 14	56 56 1 5	41,557 79,202 128,713 128,713	0 10,343,078 6,968,630	0 80 54	0.00 0.00 53							
Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4	11,557,641           Shop water           195,795           5,058           39,640           151,097           Tanker water           1,742,158           66,647           348,215           1,327,296           Network, shop & t	146 2 14 14	56 56 1 5	41,557 79,202 128,713 128,713	0 10,343,078 6,968,630	0 80 54	0.00 0.00 53							

Supplies of water to t	argeted househo	lds: network_sh	on and tanke	r water			2011				Ι
network water (m3)				water demand (m3)		Year	2011				
18,709,586	693,174		941,774		1		without project				
	Network water	m3/hse/a		nr hse	water revenu	water revenue / hse					
Total	18,709,586		54		4,118,245			,			
<\$2	1,156,162	141	54		4,110,240						
< <del>\$2</del> \$2-\$4	6,040,708	141	54	42,929	0						
<sub>⊅2-⊅4</sub> >\$4	11,512,716	141	54		0	0					
		141	04	01,017	0	0	0.00				
	Shop water	2	1	100.000	10 004 500	00	50				
Γotal <\$2	202,260 5,225		1	132,963	10,684,586	80	53	•			
											_
\$2-\$4	40,949										
•\$4	156,086	1		1			1				
	Tanker water										
Fotal	1,799,680	14	5	132,963	7,198,721	54	4	·			4
<\$2	68,847										
\$2-\$4	359,713										 1
>\$4	1,371,120										1
	Network, shop & ta										1
Fotal	21,404,700	161	62	132,963	22,001,553	165					1
<\$2											
\$2-\$4											
<b>&gt;</b> \$4											
Supplies of water to t							2011				
network water (m3)				water demand (m3)		Year	2				
18,709,586	693,174		941,774		1		with project				
	Network water	m3/hse/a	lcd	nr hse		water revenue / hse					
Fotal	18,709,586		54		4,118,245	31					
<\$2	1,156,162		54		0	0	0.00				
\$2-\$4	6,040,708	141	54	42,929	0	0	0.00				
>\$4	11,512,716	141	54	81,817	0	0	0.00				ſ
	Shop water										Τ
Total	202,260	2	1	132,963	10,684,586	80	53				Γ
<\$2	5,225										T
\$2-\$4	40,949										
>\$4	156,086										Τ
	Tanker water										
Total	1,799,680	14	5	132,963	7,198,721	54	4				T
<\$2	68,847										T
52-\$4	359,713										t
>\$4	1,371,120										t
	Network, shop & ta										t
Fotal	21,404,700		62	132,963	22,001,553	165					t
<\$2	21,101,100	101	02		22,001,000	100	· · · · · · · · · · · · · · · · · · ·				+
< <del>,</del> \$2-\$4											 +
<del>⊽2°⊽4</del> >\$4											 +
-ψ-ı											+
							1				

Supplies of water to	targeted househo	lds network st	on and tanke	r water			2012				1
network water (m3)				water demand (m3)		Year	3				
18,636,407					2	i cai	without project				
10,030,407	Network water	m3/hse/a	Icd	nr hse		water revenue / hse					
Total	18,636,407	136	52		4,102,138						
<\$2	1,151,640	136	52		4,102,138						
< <del>\$2</del> \$2-\$4	6,017,081	136	52	44,347	0						
\$2-\$4 >\$4	11,467,686	136			0	0					
>⊅4	Shop water	130	52	04,010	0	U	0.00				
Total	208,938	2	1	137,353	11,037,371	80	53				
<\$2	5,397	2	1	137,333	11,037,371	80					
<52 \$2-\$4	42,301										
	42,301										
>\$4											
Tatal	Tanker water	44		407.050	7 400 400	54					
Total	1,859,102		5	137,353	7,436,409	54	4				
<\$2 \$2-\$4	71,120 371,590								 		
\$2-\$4 >\$4	371,590 1,416,392								 		
>\$4											
Total	Network, shop & t		62	407.050	00 575 040	164			 	 	
Total	22,111,442	161	62	137,353	22,575,918	164					
<\$2											
\$2-\$4											
>\$4							1				
Supplies of water to						× ×	2012				
network water (m3)				water demand (m3)		Year	3				
18,636,407			972,870				with project				
<b>T</b> ( )	Network water	m3/hse/a	Icd	nr hse		water revenue / hse					
Total	18,636,407		52 52								
<\$2 \$2-\$4	1,151,640	136 136	52		0						
	6,017,081				0	0	0.00				
>\$4	11,467,686	136	52	84,518	0	U	0.00				
<b>T</b> ( )	Shop water			407.050	44.007.074		50				
Total <\$2	208,938 5,397	2	1	137,353	11,037,371	80	53		 		
<\$2 \$2-\$4	42,301								 		
\$2-\$4 >\$4	42,301 161,240								 		
>⊅4								<b>Ⅰ</b>	 		
Total	Tanker water	14	5	137,353	7 400 400	54	4		 		
<\$2	1,859,102	14	5	137,353	7,436,409	54	4		 		
<\$2 \$2-\$4	71,120 371,590								 		
\$2-\$4 >\$4									 		
>⊅4	1,416,392							<b>└───</b>	 	 	
1	Network, shop & t				22,575,918	164		<u> </u>	 	 	
Total	00 111 110	101	~~~			164	1	1 1 1			1
Total	22,111,442	161	62	137,353	22,375,916	101					
<\$2	22,111,442	161	62	137,353	22,575,918	101					
<\$2 \$2-\$4	22,111,442	161	62	137,353	22,575,918	104					
<\$2	22,111,442	161	62	137,353	22,373,916						

Supplies of water to	targeted househo	olds: network, sł	hop and tanke	r water			2013				
network water (m3)				water demand (m3)		Year	4				
18.563.058			1,004,992		3		without project				
	Network water			nr hse		water revenue/hse					
Total	18,563,058					29		1			
<\$2	1,147,107					0					
\$2-\$4	5,993,399					0					
<u>\$2°\$</u> >\$4	11,422,552					0					
	Shop water	- 131	51	07,505		0	0.00				
Total	215,837	7 2	1	141,888	11,401,804	80	53				
<\$2	5,576			141,000	11,401,004	00	55				
\$2-\$4	43,698										
<u>\$2-\$4</u> >\$4	166,563										
2ψ <del>4</del>	Tanker water										
Total	1,920,486	6 14	5	141,888	7,681,945	54	1				
<\$2	73,469		5	141,000	7,001,945		4				
<\$2 \$2-\$4	383,859										
52-54 >\$4	1.463.159										
	Network, shop &										
Total	22,841,520		62	141,888	23,169,742	163					
<\$2	22,041,320	5 101	02	141,000	23,109,742	103					
<\$2 \$2-\$4											
\$2-\$4 >\$4											
>⊅4	1										
Supplies of water to t	terreted bevech	ما بامد برمان	an and tanks	- water			2013				
		blas: network, sr	hop and tanke	r water			2013				
	Defield (m3)	haaalina nan	non connect	water demand (m2)	0/ LILla reached	Veer					
network water (m3)				water demand (m3)		Year	4				
27,559,224	-6,245,500	6 929,162	1,004,992	22,841,520	30%	3	with project				
27,559,224	-6,245,500 Network water	6 929,162 m3/hse/a	<b>1,004,992</b> Icd	22,841,520 nr hse	30% water revenue	3 water revenue/hse	with project water prices/ m3				
27,559,224 Total	-6,245,500 Network water 27,559,224	6 929,162 m3/hse/a 4 194	<b>1,004,992</b> Icd 75	22,841,520 nr hse 141,888	30% water revenue 6,066,176	3 water revenue/hse 43	with project water prices/ m3 0.22				
27,559,224 Total <\$2	-6,245,500 Network water 27,559,224 1,703,020	5 <b>929,162</b> m3/hse/a 4 194 5 194	1,004,992 Icd 75 75	22,841,520 nr hse 141,888 8,768	30% water revenue 6,066,176 0	3 water revenue/hse 43 0	with project water prices/ m3 0.22 0.00				
27,559,224 Total <\$2 \$2-\$4	-6,245,506 <u>Network water</u> 27,559,224 1,703,026 8,897,965	5         929,162           m3/hse/a         4           194         194           5         194	1,004,992 Icd 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811	30% water revenue 6,066,176 0 0	3 water revenue/hse 43 0 0	with project water prices/ m3 0.22 0.00 0.00				
27,559,224 Total <\$2 \$2-\$4 >\$4	-6,245,506 Network water 27,559,224 1,703,020 8,897,965 16,958,233	5         929,162           m3/hse/a         4           194         194           5         194	1,004,992 Icd 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811	30% water revenue 6,066,176 0 0	3 water revenue/hse 43 0	with project water prices/ m3 0.22 0.00				
27,559,224 Total <\$2 \$2-\$4 >\$4	-6,245,506 Network water 27,559,224 1,703,020 8,897,965 16,958,233 Shop water	929,162           m3/hse/a           4         194           5         194           5         194           6         194           7         194           8         194	1,004,992 lcd 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309	30% water revenue 6,066,176 0 0 0	3 water revenue/hse 43 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total	-6,245,500 Network water 27,559,22 1,703,020 8,897,969 16,958,23 Shop water 183,46	929,162           m3/hse/a           4         194           5         194           5         194           5         194           5         194           1         1	1,004,992 lcd 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309	30% water revenue 6,066,176 0 0 0	3 water revenue/hse 43 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2	-6,245,500 <u>Network water</u> 27,559,222 1,703,022 8,897,965 16,958,233 <u>Shop water</u> 183,46 <sup>-</sup> 4,735	929,162           m3/hse/a           4         194           5         194           5         194           6         194           7         194           8         194           1         1           9         1	1,004,992 lcd 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309	30% water revenue 6,066,176 0 0 0	3 water revenue/hse 43 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
27,559,224 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 \$4 \$4 \$2 \$2.\$4	-6,245,500 <u>Network water</u> 27,559,224 1,703,024 8,897,960 16,958,233 <u>Shop water</u> 183,466 4,735 37,143	929,162           m3/hse/a           4         194           5         194           5         194           6         194           1         1           3         194	1,004,992 lcd 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309	30% water revenue 6,066,176 0 0 0	3 water revenue/hse 43 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >	-6,245,500 <u>Network water</u> 27,559,224 1,703,024 8,897,960 16,958,233 <u>Shop water</u> 183,466 4,733 37,144 141,575	929,162           m3/hse/a           4         194           5         194           5         194           6         194           1         1           3         194	1,004,992 lcd 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309	30% water revenue 6,066,176 0 0 0	3 water revenue/hse 43 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4	-6,245,500 <u>Network water</u> 27,559,222 1,703,020 8,897,960 16,958,233 <u>Shop water</u> 183,466 4,738 37,143 141,579 <u>Tanker water</u>	929,162           m3/hse/a           4         194           5         194           3         194           1         1           3         94	1,004,992 Icd 75 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888	30% water revenue 6,066,176 0 0 0 0 9,691,533	3 water revenue/hse 43 0 0 0 0 68	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total Total	-6,245,500 Network water 27,559,224 1,703,020 8,897,960 16,958,233 Shop water 183,467 4,730 37,144 141,577 Tanker water 1,344,340	929,162           m3/hse/a           4         194           5         194           6         194           1         14           1         1           3         9           0         9	1,004,992 Icd 75 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309	30% water revenue 6,066,176 0 0 0 0 9,691,533	3 water revenue/hse 43 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00 53		Image:		
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	-6,245,500 Network water 27,559,224 1,703,020 8,897,960 16,958,233 Shop water 183,460 4,733 37,143 141,579 Tanker water 1,344,344 51,420	929,162           m3/hse/a           4         194           5         194           5         194           1         1           3         194           0         9           3         9	1,004,992 Icd 75 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888	30% water revenue 6,066,176 0 0 0 0 9,691,533	3 water revenue/hse 43 0 0 0 0 68	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
27,559,224 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 S4 S4 S4 S4 S4 S4 S4 S4 S4 S	-6,245,500 <u>Network water</u> 27,559,222 1,703,024 8,897,960 16,958,233 <u>Shop water</u> 183,466 4,733 37,142 141,579 <u>Tanker water</u> 1,344,340 51,422 268,70°	3     929,162       m3/hse/a     194       4     194       5     194       3     194       1     1       3     9       3     9       3     9       3     9       3     9	1,004,992 Icd 75 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888	30% water revenue 6,066,176 0 0 0 0 9,691,533	3 water revenue/hse 43 0 0 0 0 68	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 S4 S4 S4 S4 S4 S4 S4 S4 S4 S	-6,245,500 Network water 27,559,224 1,703,022 8,897,960 16,958,233 Shop water 183,460 4,730 37,144 141,579 Tanker water 1,344,340 51,422 2668,700 1,024,21	3     929,162       m3/hse/a     4       4     194       5     194       5     194       1     1       3     9       0     9       3     9	1,004,992 Icd 75 75 75 75 75 75	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888	30% water revenue 6,066,176 0 0 0 0 9,691,533	3 water revenue/hse 43 0 0 0 0 68	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 X Total <\$2 \$2-\$4 >\$4 X X X X X X X X X X X X X	-6,245,500 Network water 27,559,224 1,703,020 8,897,960 16,958,233 Shop water 183,467 4,735 37,144 141,579 Tanker water 1,344,340 51,422 268,700 1,024,211 Network, shop &	929,162       m3/hse/a       4     194       5     194       5     194       1     1       3     9       0     9       3     9       1     1       3     9       1     1       3     9       1     1       3     9       1     1       3     9       3     1       4     1       5     9       5     9       6     1       7     9       8     1       9     1       1	1,004,992 lcd 75 75 75 75 1 1	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888 141,888	30% water revenue 6,066,176 0 0 0 9,691,533 5,377,362	3 water revenue/hse 43 0 0 0 68 68 38	with project           water prices/ m3           0.22           0.00           0.00           0.00           53		Image: Sector		
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total <\$2 Total	-6,245,500 Network water 27,559,224 1,703,022 8,897,960 16,958,233 Shop water 183,460 4,730 37,144 141,579 Tanker water 1,344,340 51,422 2668,700 1,024,21	929,162           m3/hse/a           4         194           5         194           5         194           1         1           9         1           10         9           11         1           12         9           13         9           14         1           15         1           16         1           17         1           18         1           194         1           10         9           11         1           12         9           13         1           14         1           15         1           16         1           17         1           18         1           19         1           10         1           11         1           12         1           13         1           14         1           15         1           16         1           17         1           18 <t< td=""><td>1,004,992 lcd 75 75 75 75 1 1</td><td>22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888 141,888</td><td>30% water revenue 6,066,176 0 0 0 9,691,533 5,377,362</td><td>3 water revenue/hse 43 0 0 0 0 68</td><td>with project           water prices/ m3           0.22           0.00           0.00           0.00           53</td><td></td><td></td><td></td><td></td></t<>	1,004,992 lcd 75 75 75 75 1 1	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888 141,888	30% water revenue 6,066,176 0 0 0 9,691,533 5,377,362	3 water revenue/hse 43 0 0 0 0 68	with project           water prices/ m3           0.22           0.00           0.00           0.00           53				
27,559,224 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 }\$4 Total \$4 To	-6,245,500 Network water 27,559,224 1,703,020 8,897,960 16,958,233 Shop water 183,467 4,735 37,144 141,579 Tanker water 1,344,340 51,422 268,700 1,024,211 Network, shop &	929,162       m3/hse/a       4     194       5     194       5     194       1     1       3     9       0     9       3     9       1     1       3     9       1     1       3     9       1     1       3     9       1     1       3     9       3     1       4     1       5     9       5     9       6     1       7     9       8     1       9     1       1	1,004,992 lcd 75 75 75 75 1 1	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888 141,888	30% water revenue 6,066,176 0 0 0 9,691,533 5,377,362	3 water revenue/hse 43 0 0 0 68 68 38	with project           water prices/ m3           0.22           0.00           0.00           0.00           53				
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$2 \$2-\$4 \$	-6,245,500 Network water 27,559,224 1,703,020 8,897,960 16,958,233 Shop water 183,467 4,735 37,144 141,579 Tanker water 1,344,340 51,422 268,700 1,024,211 Network, shop &	929,162       m3/hse/a       4     194       5     194       5     194       1     1       3     9       0     9       3     9       1     1       3     9       1     1       3     9       1     1       3     9       1     1       3     9       3     1       4     1       5     9       5     9       6     1       7     9       8     1       9     1       1	1,004,992 lcd 75 75 75 75 1 1	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888 141,888	30% water revenue 6,066,176 0 0 0 9,691,533 5,377,362	3 water revenue/hse 43 0 0 0 68 68 38	with project           water prices/ m3           0.22           0.00           0.00           0.00           53		Image: Section of the sectio		
27,559,224 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$4 Total \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	-6,245,500 Network water 27,559,224 1,703,020 8,897,960 16,958,233 Shop water 183,467 4,735 37,144 141,579 Tanker water 1,344,340 51,422 268,700 1,024,211 Network, shop &	929,162       m3/hse/a       4     194       5     194       5     194       1     1       3     9       0     9       3     9       1     1       3     9       1     1       3     9       1     1       3     9       1     1       3     9       3     1       4     1       5     9       5     9       6     1       7     9       8     1       9     1       1	1,004,992 lcd 75 75 75 75 1 1	22,841,520 nr hse 141,888 8,768 45,811 87,309 141,888 141,888	30% water revenue 6,066,176 0 0 0 9,691,533 5,377,362	3 water revenue/hse 43 0 0 0 68 68 38	with project           water prices/ m3           0.22           0.00           0.00           0.00           53		Image: Section of the sectio		

Supplies of water to t	targeted househo	lds network sh	on and tanke	r water			2014				
network water (m3)				water demand (m3)		Year	5				
18,489,538					4		without project				
	Network water			nr hse			water prices/ m3				
Total	18,489,538							,			
<\$2	1,142,564		49		4,009,810	0					
<\$2 \$2-\$4	5,969,662		49		0						
\$2-\$4 >\$4	11,377,312		49		0	0					
	Shop water	120	49	90,192	U	U	0.00				
Total		2	1	146,573	11,778,270	90	53				
<\$2	222,963 5,760		1	140,573	11,778,270	80	53				
<\$2 \$2-\$4	45,141										
>\$4	172,063										
<b>T</b>	Tanker water			4 40 570	7 005 500						
Total	1,983,897		5	146,573	7,935,589	54	4				
<\$2	75,894										
\$2-\$4	396,533										
>\$4	1,511,470										
	Network, shop & t									 	 
Total	23,595,703	161	62	146,573	23,783,668	162				 	 
<\$2											
\$2-\$4											
>\$4				1							
Supplies of water to t							2014				
network water (m3)				water demand (m3)		Year	5				
36,663,575							with project				
				nr hse		water revenue/hse					
Total	36,663,575										
<\$2	2,265,631		97		0	-					
\$2-\$4	11,837,459		97		0	0					
>\$4	22,560,485	250	97	90,192	0	0	0.00				
	Shop water										
Total	156,074		0	146,573	8,244,789	56	53	i			
<\$2	4,032										
\$2-\$4	31,598										
>\$4	120,444										
	Tanker water										
Total	793,559		2	146,573	3,174,235	22	4				
<\$2	30,358								 		
\$2-\$4	158,613										
>\$4	604,588								 		
	Network, shop & t	anker water									
Total	37,613,209		99	146,573	19,489,198	133					
<\$2											
\$2-\$4											
>\$4											
•											
	I	1		1			1	I			

Supplies of water to	targeted househo	lds: network sh	on and tanke	r water			2015					Т
network water (m3)				water demand (m3)		Year	2013					+
18,415,848					5		without project					+
10,413,040				nr hse			water prices/ m3					+
Total	18,415,848											+
<\$2			47	- 1	4,055,589	0						+
< \\ \ \ \ \ \ \ \ \ \ \ \ \	1,138,010											+
\$2-\$4	5,945,870		47									+
>\$4	11,331,968	122	47	93,170	0	0	0.00					+
	Shop water											+
Total	230,325		1	151,412	12,167,166	80	53					_
<\$2	5,950											_
\$2-\$4	46,631											
>\$4	177,744											
	Tanker water											
Fotal	2,049,402		5	151,412	8,197,607	54	4					
<\$2	78,400											Γ
\$2-\$4	409,626											Τ
>\$4	1,561,375											T
	Network, shop & t	anker water										t
Total	24,374,789		62	151,412	24,418,362	161						t
<\$2	,,			,=	, .,							t
\$2-\$4												t
>\$4												+
τψτ												+
Supplies of water to	targeted househo	lds network sh	on and tanke	r water			2015					+
network water (m3)				water demand (m3)	% HHs roachod	Year	6					+
45,951,476							with project					+
43,551,470				nr hse		water revenue/hse						+
Total	45,951,476											+
<\$2	2,839,579		117		10,114,372	07						+
\$2-\$4	14,836,216		117		U U							+
						0						+
>\$4	28,275,681	303	117	93,170	0	0	0.00					+
<del>.</del>	Shop water		-		0.004.5							+
Total	126,679		0	151,412	6,691,941	44	53					+-
<\$2	3,272											4
\$2-\$4	25,647											4
>\$4	97,759											1
	Tanker water											
Total	204,940		1	151,412	819,761	5	4					
<\$2	7,840											
\$2-\$4	40,963											T
>\$4	156,138											T
	Network, shop & t											T
Total	46,283,095		118	151,412	17,626,274	116						t
<\$2	.0,200,000	500	110		,020,214	110						+
\$2-\$4												+
<del>\$2-\$4</del>												+
-ψ-												+
	1	1		1			1			1	1	1

		lde notwork ch	on and tanks	r water			2016			
network water (m3)	targeted househo			water demand (m3)		Year	2018			
18,341,986	4,482,613	020 162	1,107,864	25,179,598	6		without project			
				nr hse		water revenue/hse				
Total	18,341,986		45							
<\$2	1,133,446		45		4,037,331	0				
<⊕∠ \$2-\$4	5,922,022		45		v					
⊅2-⊅4 >\$4	11.286.518		45		0	0				
	Shop water	117	40	90,240	U		0.00			
Total	237,930	2	1	156,412	12,568,902	80	53			
<\$2	6,146		1	150,412	12,300,902	00				
<⊕∠ \$2-\$4	48,171									
∍∠-∍4 >\$4	183,613									
	Tanker water									 +
Total	2,117,069	14	5	156,412	8,468,276	54	4			 +
<\$2	2,117,009		5	130,412	0,400,270	54	4			+
<⊕∠ \$2-\$4	423,151									+
⊅2-⊅4 >\$4	1,612,929									+
	Network, shop & ta									+
Total	25,179,598		62	156,412	25,074,510	160				
<\$2	23,173,330	101	02	130,412	23,014,310	100				
<φ <u>2</u> \$2-\$4										
₽2-₽ <del>4</del> >\$4										
-ψ-										
Supplies of water to t	argeted househo	lds network sh	on and tanke	r water			2016			
network water (m3)				water demand (m3)	% HHs reached	Year	7			
46,772,283			1,107,864				with project			
				nr hse		water revenue/hse				
Total	46,772,283		116							
<\$2	2,890,300	299	116							
\$2-\$4	15,101,228	299	116	50,500	0	0	0.00			
>\$4	28,780,755		116		0	0	0.00			
	Shop water									1
Total	128,482	1	0	156,412	6,787,207	43	53			1
<\$2	3,319									1
\$2-\$4	26,012									1
>\$4	99,151									1
	Tanker water									1
Total	169,366	1	0	156,412	677,462	4	4			
<\$2	6,479									1
\$2-\$4	33,852									1
>\$4	129,034									
	Network, shop & ta	anker water								
Total	47,070,131		116	156,412	17,759,913	114				
<\$2										
\$2-\$4										
>\$4										1
-ψ-										1
\$2-\$4 >\$4 Total <\$2	33,852 129,034 Network, shop & ta	anker water	116	156,412	17,759,913	114				 

Supplies of water to t	argeted househo	lds: network_sh	on and tanke	r water			2017				1
etwork water (m3)				water demand (m3)		Year	8				-
18,267,953	5,310,271				7		without project				+
				nr hse			water prices/ m3				+
Fotal	18,267,953		44								+
<\$2	1,128,871	113	44		4,021,030	0					+
\$2-\$4	5,898,119		44								-
⊳2- <del>54</del> >\$4	11,240,962	113				0					+
		113	44	99,424	U	0	0.00				 -
	Shop water	0		404 570	40,000,004	00	50				 +
otal \$2	245,786		1	161,576	12,983,904	80	53				-
	6,349										
2-\$4	49,761										
\$4	189,676	1									
	Tanker water										_
otal	2,186,971	14	5	161,576	8,747,882	54	4				
\$2	83,663										 4
\$2-\$4	437,123										1
\$4	1,666,185										1
	Network, shop & ta										
otal	26,010,980	161	62	161,576	25,752,821	159					
\$2											
62-\$4											
•\$4											
supplies of water to t							2017				
etwork water (m3)				water demand (m3)		Year	8				
47,607,380	-21,857,885						with project				
	Network water			nr hse		water revenue/hse					
otal	47,607,380		114		10,479,060	65					
:\$2	2,941,905		114		0	0	0.00				
62-\$4	15,370,853	295	114	52,168	0	0	0.00				
<b>&gt;</b> \$4	29,294,622	295	114	99,424	0	0	0.00				
	Shop water										
Fotal	130,267	1	0	161,576	6,881,469	43	53				
:\$2	3,365										
2-\$4	26,373										
•\$4	100,528										
	Tanker water										
otal	131,218	1	0	161,576	524,873	3	4				1
\$2	5,020				. ,						1
2-\$4	26,227										1
\$4	99,971										1
	Network, shop & ta	anker water									+
otal	47,868,865		115	161,576	17,885,402	111					 +
<\$2	47,000,000	290	115	101,370	17,000,402	111					+
\$2-\$4											+
₀∠-ъ4 >\$4											+
> <b>д</b> 4								<b>Ⅰ</b>			+
											1

Supplies of water to	targeted househo	olds: network. sł	hop and tanke	r water			2018				
network water (m3)				water demand (m3)		Year	9				
18,193,747			1,182,231		8		without project				
	Network water			nr hse		water revenue/hse					
Total	18,193,747										
<\$2	1,124,285					0					
\$2-\$4	5,874,161										
<u>\$2-\$4</u> >\$4	11,195,301										
	Shop water	103	42	102,707		0	0.00				
Total	253,902	2 2	1	166,911	13,412,607	80	53				
<\$2	6,559			100,311	13,412,007	00					
\$2-\$4	51,404										
<u>\$2-\$4</u> >\$4	195,938										
<b>&gt;ψ</b> 4	Tanker water										
Total	2,259,180	14	5	166,911	9,036,721	54	1				
<\$2	2,239,180		5	100,911	3,030,721	- 54	4				
<\$2 \$2-\$4	451,556										
52-54 >\$4	1.721.19										
	Network, shop &										
Total	26,869,813		62	166,911	26,454,030	158					
<\$2	20,009,013	0 101	02	100,911	20,454,050	136					
<\$2 \$2-\$4											
\$2-\$4 >\$4											
>⊅4	1										
Cumpling of woter to t	terreted bevoeb	ام بالمعينية مع ماما	an and tanks	a weter			2019				
Supplies of water to t					0/ Lille reached	Veer	2018				
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop	pop connect	water demand (m3)		Year	9				
network water (m3) 48,456,940	Deficit (m <sup>3</sup> ) -21,809,523	baseline pop 929,162	pop connect 1,182,231	water demand (m3) 26,869,813	96%	8	9 with project				
network water (m3) 48,456,940	Deficit (m <sup>3</sup> ) -21,809,523 Network water	baseline pop 3 929,162 m3/hse/a	pop connect 1,182,231 Icd	water demand (m3) 26,869,813 nr hse	96% water revenue	8 water revenue/hse	9 with project water prices/ m3				
network water (m3) 48,456,940 Total	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,940	baseline pop 3 929,162 m3/hse/a 0 290	pop connect 1,182,231 Icd 112	water demand (m3) 26,869,813 nr hse 166,911	96% water revenue 10,666,060	8 water revenue/hse 64	9 with project water prices/ m3 0.22				
network water (m3) 48,456,940 Total <\$2	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,940 2,994,404	baseline pop           3         929,162           m3/hse/a         290           4         290	pop connect 1,182,231 lcd 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314	96% water revenue 10,666,060 0	8 water revenue/hse 64 0	9 with project water prices/ m3 0.22 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4	Deficit (m³) -21,809,523 Network water 48,456,940 2,994,404 15,645,148	baseline pop           3         929,162           m3/hse/a         290           4         290           3         290	pop connect 1,182,231 Icd 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890	96% water revenue 10,666,060 0 0	8 water revenue/hse 64 0 0	9 with project water prices/ m3 0.22 0.00 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4	Deficit (m³) -21,809,523 Network water 48,456,940 2,994,404 15,645,148 29,817,388	baseline pop           3         929,162           m3/hse/a         290           4         290           3         290	pop connect 1,182,231 Icd 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890	96% water revenue 10,666,060 0 0	8 water revenue/hse 64 0 0	9 with project water prices/ m3 0.22 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4	Deficit (m <sup>3</sup> ) -21,809,523 <u>Network water</u> 48,456,940 2,994,404 15,645,148 29,817,388 <u>Shop water</u>	baseline pop           3         929,162           m3/hse/a         290           4         290           3         290           3         290           3         290	pop connect 1,182,231 lcd 112 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707	96% water revenue 10,666,060 0 0 0	8 water revenue/hse 64 0 0 0 0	9 with project water prices/ m3 0.22 0.00 0.00 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total	Deficit (m <sup>3</sup> ) -21,809,523 <u>Network water</u> 48,456,940 15,645,144 29,817,386 <u>Shop water</u> 132,025	baseline pop           3         929,162           m3/hse/a         290           4         290           3         290           4         290           3         290           4         1	pop connect 1,182,231 lcd 112 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707	96% water revenue 10,666,060 0 0 0	8 water revenue/hse 64 0 0 0 0	9 with project water prices/ m3 0.22 0.00 0.00 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 <\$2 \$4 \$4 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,940 2,994,400 15,645,148 29,817,380 Shop water 132,022 3,411	baseline pop 3 929,162 m3/hse/a 2 290 4 290 3 290 3 290 3 290 9 1	pop connect 1,182,231 lcd 112 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707	96% water revenue 10,666,060 0 0 0	8 water revenue/hse 64 0 0 0 0	9 with project water prices/ m3 0.22 0.00 0.00 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$4 \$4 \$4 \$2 \$2-\$4 \$4 \$4 \$4 \$5 \$2 \$2-\$4 \$4 \$4 \$4 \$5 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,940 2,994,400 15,645,148 29,817,388 Shop water 132,025 3,411 26,730	baseline pop 3 929,162 m3/hse/a 0 290 4 290 3 290 3 290 4 290 3 290 4 1 1	pop connect 1,182,231 lcd 112 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707	96% water revenue 10,666,060 0 0 0	8 water revenue/hse 64 0 0 0 0	9 with project water prices/ m3 0.22 0.00 0.00 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 <\$2 \$4 \$4 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,94( 2,994,400 15,645,148 29,817,388 Shop water 132,022 3,411 26,730 101,888	baseline pop 3 929,162 m3/hse/a 0 290 4 290 3 290 3 290 4 290 3 290 4 1 1	pop connect 1,182,231 lcd 112 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707	96% water revenue 10,666,060 0 0 0	8 water revenue/hse 64 0 0 0 0	9 with project water prices/ m3 0.22 0.00 0.00 0.00				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >	Deficit (m <sup>3</sup> ) -21,809,522 Network water 48,456,944 2,994,404 15,645,144 29,817,388 <u>Shop water</u> 132,025 3,411 26,730 101,888 <u>Tanker water</u>	baseline pop 3 929,162 m3/hse/a 290 3 290 3 29	pop connect 1,182,231 lcd 112 112 112 112 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 0 0 0 0 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,944 2,994,400 15,645,144 29,817,384 Shop water 132,025 3,411 26,730 101,886 Tanker water 90,367	baseline pop 3 929,162 m3/hse/a 290 4 290 3 290 3 290 3 290 3 290 3 290 3 290 4 290 3 290 3 290 4 290 3 290 4 290 5 29	pop connect 1,182,231 lcd 112 112 112 112 112	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 0	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,940 2,994,400 15,645,146 29,817,380 Shop water 132,029 3,411 26,730 101,888 <u>Tanker water</u> 90,367 3,457	baseline pop 3 929,162 m3/hse/a 0 290 4 290 3 290 3 290 3 290 3 290 3 290 4 1 7 1	pop connect 1,182,231 lcd 112 112 112 112 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 0 0 0 0 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,940 2,994,400 15,645,148 29,817,388 Shop water 132,025 3,411 26,730 101,888 Tanker water 90,367 3,455 18,062	baseline pop 3 929,162 m3/hse/a 0 290 4 290 3	pop connect 1,182,231 lcd 112 112 112 112 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 0 0 0 0 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 >\$4 Total <\$2 \$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4	Deficit (m <sup>3</sup> ) -21,809,522 Network water 48,456,944 2,994,404 15,645,144 29,817,388 <u>Shop water</u> 132,025 3,411 26,730 101,886 <u>Tanker water</u> 90,367 18,066 68,846	baseline pop 3 929,162 m3/hse/a 290 3 290 3 290 4 20 3 290 3 290 3 290 3 290 4 20 3 290 3 290 4 20 3 290 4 20 3 290 3 290 4 20 3 290 3 290 4 20 3 290 4 20 5 20	pop connect 1,182,231 lcd 112 112 112 112 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 0 0 0 0 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 X	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,944 2,994,404 15,645,144 29,817,384 Shop water 132,025 3,411 26,733 101,884 Tanker water 90,365 3,455 18,062 68,844 Network, shop &	baseline pop 3 929,162 m3/hse/a 290 3 290 3 290 3 290 3 290 3 290 3 290 4 290 3 290 3 290 4 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	pop connect 1,182,231 lcd 112 112 112 00 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 42 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total <\$2 \$2-\$4 >\$4 Total	Deficit (m <sup>3</sup> ) -21,809,522 Network water 48,456,944 2,994,404 15,645,144 29,817,388 <u>Shop water</u> 132,025 3,411 26,730 101,886 <u>Tanker water</u> 90,367 18,066 68,846	baseline pop 3 929,162 m3/hse/a 290 3 290 3 290 3 290 9 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pop connect 1,182,231 lcd 112 112 112 00 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$2 \$2-\$4 >\$4 \$2 \$2-\$4 \$2-\$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,944 2,994,404 15,645,144 29,817,384 Shop water 132,025 3,411 26,733 101,884 Tanker water 90,365 3,455 18,062 68,844 Network, shop &	baseline pop 3 929,162 m3/hse/a 290 3 290 3 290 3 290 3 290 3 290 4 290 3 290 3 290 4 290 5 200 5 20	pop connect 1,182,231 lcd 112 112 112 00 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 42 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53				
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2-\$2 \$2-\$4 >\$4 \$2-\$4 >\$4 Total \$2-\$2-\$4 >\$4 \$2-\$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,944 2,994,404 15,645,144 29,817,384 Shop water 132,025 3,411 26,733 101,884 Tanker water 90,365 3,455 18,062 68,844 Network, shop &	baseline pop 3 929,162 m3/hse/a 290 3 290 3 290 3 290 3 290 3 290 4 290 3 290 3 290 4 290 5 200 5 20	pop connect 1,182,231 lcd 112 112 112 00 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 42 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53		-         -           -         -		
network water (m3) 48,456,940 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$2 \$2-\$4 >\$4 \$2 \$2-\$4 \$2-\$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m <sup>3</sup> ) -21,809,523 Network water 48,456,944 2,994,404 15,645,144 29,817,384 Shop water 132,025 3,411 26,733 101,884 Tanker water 90,365 3,455 18,062 68,844 Network, shop &	baseline pop 3 929,162 m3/hse/a 290 3 290 3 290 3 290 3 290 3 290 4 290 3 290 3 290 4 290 5 200 5 20	pop connect 1,182,231 lcd 112 112 112 00 0	water demand (m3) 26,869,813 nr hse 166,911 10,314 53,890 102,707 166,911 166,911	96% water revenue 10,666,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 water revenue/hse 64 0 0 0 42 42	9 with project water prices/ m3 0.22 0.00 0.00 0.00 53		Image: Constraint of the sector of		

Supplies of water to	targeted househ	olds: network. sl	hop and tanke	r water			2019			
network water (m3)				water demand (m3)	1	Year	10			
18.119.37			1,221,266		9		without project			
,	Network water	m3/hse/a		nr hse		water revenue/hse				
Total	18,119,370									
<\$2	1,119,68									
\$2-\$4	5,850,14									
>\$4	11,149,53					-				
<i>&gt;</i> ₽4	Shop water	3 105	41	100,090			0.00			
Total	262,28	5 2	1	172,422	13,855,466	80	53			
<\$2	6,77		1	172,422	15,655,400	00				
<#2 \$2-\$4	53,10									
\$2-\$4 >\$4	202,40									
>\$4		8			1					
Tatal	Tanker water	4 14	5	470.400	0.005.000	54	4			
Total	2,333,77		5	172,422	9,335,096	54	4	+		
<\$2	89,279							 +		
\$2-\$4	466,46							 		
>\$4	1,778,03									
<b>T</b> ( )	Network, shop &			170.000	07 170					
Total	27,757,003	3 161	62	172,422	27,178,892	158				
<\$2										
\$2-\$4										
>\$4			1							
Supplies of water to							2019			
network water (m3)				water demand (m3)		Year	10			
49,321,13							with project			
	Network water	m3/hse/a		nr hse	water revenue	water revenue/hse				
Total	49,321,13									
<\$2	3,047,80									
\$2-\$4	15,924,16					0				
>\$4	30,349,16	1 286	111	106,098	0	. 0	0.00			
	Shop water									
Total	133,76		0	172,422	7,066,288	41	53			
<\$2	3,450									
\$2-\$4	27,082									
>\$4	103,22	8								
	Tanker water									
Total	46,67	5 0	0	172,422	186,702	1	4			
<\$2	1,78									
\$2-\$4	9,329	9								
>\$4	35,56	1								
	Network, shop &	tanker water								
Total			111	172,422	18,109,272	105				
	Network, shop &		111	172,422	18,109,272	105				
Total <\$2	Network, shop &		111	172,422	18,109,272	105				
Total <\$2 \$2-\$4	Network, shop &		111	172,422	18,109,272	105				
Total <\$2	Network, shop &		111	172,422	. 18,109,272	105				

Supplies of water to	targeted househo	lde: notwork eh	on and tanko	r wator			2020				
network water (m3)				water demand (m3)		Year	11				
18,044,819	7,946,891	020 162	1,261,590	28,673,487	10		without project				
				nr hse							
Total	18,044,819		39			22					
<\$2	1,115,082		39		3,971,921	0					
<#2 \$2-\$4	5,826,077		39		v						
\$2-\$4 >\$4	11.103.660		39		0	0					
	Shop water		39	109,001	0	0	0.00				
Total	270,945	2	1	178,115	14,312,947	80	53				
<\$2	6,999		1	170,113	14,312,347	00					
<#2 \$2-\$4	54,855										
\$2-\$4 >\$4	209,091										
<i>&gt;</i> φ4	Tanker water	1									
Total	2,410,831	14	5	178,115	9,643,323	54	4		 		
<\$2	92.227		5	170,113	3,043,323		4		 		
<#2 \$2-\$4	481,867								 		
\$2-\$4 >\$4	1,836,737								 		
	Network, shop & t								 		
Total	28,673,487		62	178,115	27,928,191	157					
<\$2	20,073,407	101	02	170,113	21,320,191	137					
\$2-\$4											
<del>φ2°φ4</del> >\$4											
Supplies of water to	targeted househo	lds network sh	on and tanke	r water			2020				
network water (m3)				water demand (m3)	% HHs reached	Year	11				
50,200,151							with project				
				nr hse		water revenue/hse					
Total	50,200,151										
<\$2	3,102,126		109		0						
\$2-\$4	16,207,973		109		0	0					
>\$4	30,890,051		109		0	0	0.00				
	Shop water										
Total	135,473	1	0	178,115	7,156,474	40	53				
<\$2	3,500										
\$2-\$4	27,427										
>\$4	104,545	i									
	Tanker water										
Total	0	0	0	178,115	0	0	4				
<\$2	0	)									
\$2-\$4	0										
>\$4	0										
	Network, shop & t										
Total	50,335,623	283	109	178,115	18,206,239	102					
<\$2		·									
\$2-\$4											
>\$4										 	

Supplies of water to	targeted househo	lds: network sh	on and tanke	r water			2021					
network water (m3)				water demand (m3)		Year	12					
17,970,097					11		without project					
				nr hse			water prices/ m3					
Total	17,970,097				3,955,473							
<\$2	1,110,465	1	38		3,955,475	0						
<\$2 \$2-\$4	5,801,952		38		0							
52-54 >\$4	11,057,680				0	0						
>\$4		98	38	113,220	0	0	0.00	 				
<b>T</b> ( )	Shop water			100.000	44 705 500		50					
Total	279,891		1	183,996	14,785,533	80	53					
<\$2	7,230							 				
\$2-\$4	56,666							 				
>\$4	215,995											
	Tanker water											
Total	2,490,432		5	183,996	9,961,727	54	4					
<\$2	95,272											
\$2-\$4	497,777											
>\$4	1,897,383											
	Network, shop & t											
Total	29,620,230	161	62	183,996	28,702,734	156						
<\$2												
\$2-\$4												
>\$4												
Supplies of water to	targeted househo	lds: network, sh	op and tanke	r water			2021					
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop	pop connect	water demand (m3)		Year	12					
50,444,671	-20,964,387	929,162	1,303,245	29,620,230	11		with project					
	Network water	m3/hse/a	lcd	nr hse	water revenue	water revenue/hse	water prices/ m3					
Total	50,444,671	274	106	183,996	11,103,588							
<\$2	3,117,236		106	11,370	0	0	0.00					
\$2-\$4	16,286,921	274	106	59,406	0	0	0.00					
>\$4	31,040,514		106		0	0	0.00		1			
	Shop water								1			
Total	139,946	1	0	183,996	7,392,767	40	53					
<\$2	3,615				,,							
\$2-\$4	28,333								1			
>\$4	107,997											
	Tanker water								1			
Total	0	0	0	183,996	0	0	4		1			
<\$2	0	-	•		Ű	0						
\$2-\$4	0								+			
<del>φ2°φ4</del> >\$4	0								+			
· · ·	Network, shop & t	anker water							+			
Total	50,584,617		106	183,996	18,496,355	101			+ + +			-
<\$2	50,564,617	275	106	103,990	10,490,333	101			+ +			-
<\$2 \$2-\$4												
\$2-\$4 >\$4												
>.04								1	1 1	1		1
φ.		1										

Supplies of water to	targeted househo	lds: network, sh	nop and tanke	r water			2022				Т
etwork water (m3)				water demand (m3)		Year	13				+
17.895.200			1,346,276		12		without project				+
				nr hse			water prices/ m3				+
Fotal	17,895,200				3,938,988						+
<\$2	1,105,837				3,330,300	0					+
\$2-\$4	5,777,770				0						+
∍2-∍4 >\$4	11,011,594				0						-
	Shop water	94	30	110,900	U	U	0.00				-
Total		2	1	100.071	45 070 704	80	53				
	289,133			190,071	15,273,724	80	53				-
<\$2 \$2-\$4	7,469							 			-
	58,537							 			-
<b>&gt;</b> \$4	223,126										-
	Tanker water			100.074	10.000.011						_
Fotal	2,572,661		5	190,071	10,290,644	54	4				+
<\$2	98,418										+
\$2-\$4	514,213										+
>\$4	1,960,030										1
	Network, shop & t					·			<u> </u>		-
Fotal	30,598,234	161	62	190,071	29,503,356	155					+
:\$2											
62-\$4											
>\$4				1			1				
Supplies of water to the							2022				
network water (m3)				water demand (m3)		Year	13				
50,691,508					12		with project				
				nr hse			water prices/ m3				
Fotal	50,691,508				11,157,920						
<\$2	3,132,490				0	0					
\$2-\$4	16,366,616		103		0	0	0.00				
<b>&gt;</b> \$4	31,192,402	267	103	116,958	0	0	0.00				L
	Shop water										
otal	144,566		0	190,071	7,636,862	40	53				
:\$2	3,735										
62-\$4	29,269										T
<b>\$</b> 4	111,563										
	Tanker water										T
Fotal	C	0	0	190,071	0	0	4				T
<\$2	C										1
52-\$4	C										1
\$4	0										1
	Network, shop & t	anker water									1
Fotal	50,836,074		103	190,071	18,794,782	99					$\mathbf{t}$
<\$2	00,000,014	201	100		10,101,102	66					+
\$2-\$4											+
<del>∞2°≎+</del> >\$4											+
γψ1 											+
				1			1	1	1	1	1

Supplies of water to	targeted househ	olds network st	on and tanke	r water			2023					
network water (m3)				water demand (m3)		Year	14					
17,820,131					13		without project					
	Network water			nr hse		water revenue/hse						
Total	17,820,13											
<\$2	1,101,198											
\$2-\$4	5,753,533		35									
\$2-\$4 >\$4	10,965,400					0						
	Shop water	5 51		120,020	0		0.00					
Total	298,679	2	1	196,347	15,778,033	80	53					
<\$2	7,716			190,347	15,776,055	00						
<#2 \$2-\$4	60,470											
\$2-\$4 >\$4	230,494											
>\$4	Tanker water	•										
Total	2,657,60	5 14	5	196,347	10,630,422	54	4					
<\$2	2,657,603		5	190,347	10,030,422	54	4					
<\$2 \$2-\$4	531,19											
>\$4	2,024,74 Network, shop &											
	31,608,529		62	196,347	30,330,918	154	-					
Total	31,608,529	161	62	196,347	30,330,918	154						
<\$2												
\$2-\$4												
>\$4		1										
Supplies of water to							2023					
network water (m3)				water demand (m3)	10	Year	14					
50,940,698							with project					
	Network water			nr hse		water revenue/hse						
Total	50,940,698		100									
<\$2	3,147,888				0	0						
\$2-\$4	16,447,072											
>\$4	31,345,738	3 259	100	120,820	0	0	0.00					
	Shop water			400.047	7 000 010							
Total	149,340		0	196,347	7,889,016	40	53					
<\$2	3,858											
\$2-\$4 >\$4	30,235 115,247											
	Tanker water			400.047								
Total		0	0	196,347	0	0	4					
<\$2	(											
\$2-\$4	(											
>\$4												
1	Network, shop &											
						07	1	1 1	1 1			1
Total	51,090,038	3 260	101	196,347	19,101,787	97	l second s					
<\$2	51,090,038	3 260	101	196,347	19,101,787	51						
<\$2 \$2-\$4	51,090,038	3 260	101	196,347	19,101,787							
<\$2	51,090,038	3 260	101	196,347	19,101,787	31						

ISunnlies c	of water to t	argeted househo	lds network st	on and tanke	r water			2024				
		Deficit (m <sup>3</sup> )			water demand (m3)		Year	15				
	17,744,887	11,853,400				14		without project				
-		Network water			nr hse	water revenue	water revenue/hse					
Total		17,744,887										
<\$2		1,096,548		34		3,903,902						
<#2 \$2-\$4		5,729,239		34		0						
⇒2- <del></del> 54 >\$4		10,919,100				0	0					
>ֆ4		Shop water	0/	34	124,009	U	U	0.00				
Total		308,541	2	1	202,830	16,298,993	80	53				
<\$2		7,971		1	202,830	16,296,993	00	53				
<\$2 \$2-\$4		62,466										
\$2-\$4 >\$4												
>\$4		238,104										
<b>T</b> = 4 = 1		Tanker water			000.000	40.004.440	54					
Total		2,745,355		5	202,830	10,981,418	54	4				
<\$2 \$2-\$4		105,024 548,730										
>\$4		2,091,600										
Tetel		Network, shop & t		~~~	000.000	04 400 040						
Total		32,652,183	161	62	202,830	31,186,313	154					
<\$2												
\$2-\$4												
>\$4					1							
-	-											
		argeted househo						2024				
		Deficit (m <sup>3</sup> )			water demand (m3)		Year	15				
	51,192,282	-18,694,369						with project				
					nr hse		water revenue/hse					
Total		51,192,282	252									
<\$2		3,163,435		98		0	0					
\$2-\$4		16,528,300		98		0						
>\$4		31,500,547	252	98	124,809	0	0	0.00				
-		Shop water										
Total		154,271			202,830	8,149,497	40	53				
				0	202,030	0,140,401						
<\$2		3,985	,	0	202,030	0,140,407						
\$2-\$4		3,985 31,233	5	0	202,830	0,140,407						
		3,985 31,233 119,052	5	U	202,830	0,140,401						
\$2-\$4 >\$4		3,985 31,233 119,052 <u>Tanker water</u>										
\$2-\$4 >\$4 Total		3,985 31,233 119,052 <u>Tanker water</u> 0	0			0,110,101	0					
\$2-\$4 >\$4 Total <\$2		3,985 31,233 119,052 <u>Tanker water</u> C	0				0					
\$2-\$4 >\$4 Total <\$2 \$2-\$4		3,985 31,233 119,052 <u>Tanker water</u> 0	0				0					
\$2-\$4 >\$4 Total <\$2		3,985 31,233 119,052 <u>Tanker water</u> C C C C C C C C C C C C C C C C C C C	0				0					
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		3,985 31,233 119,052 <u>Tanker water</u> ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	0 anker water	0	202,830	0		4				
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total		3,985 31,233 119,052 <u>Tanker water</u> C C C C C C C C C C C C C C C C C C C	0 anker water	0	202,830			4				
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		3,985 31,233 119,052 <u>Tanker water</u> ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	0 anker water	0	202,830	0		4				
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		3,985 31,233 119,052 <u>Tanker water</u> ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	0 anker water	0	202,830	0		4				
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		3,985 31,233 119,052 <u>Tanker water</u> ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	0 anker water	0	202,830	0		4	Image: Constraint of the sector of			

Supplies of water to t	targeted househo	lds network sh	on and tanke	r water			2025		1		
network water (m3)				water demand (m3)		Year	16				<u> </u>
17,669,470					15		without project				+
				nr hse			water prices/ m3				
Total	17,669,470		33			19					+
<\$2	1,091,888		33		3,889,301						
<\$2 \$2-\$4	5,704,889		33								<u> </u>
⇒2-⇒4 >\$4	10,872,693				0	0			 		<u> </u>
	Shop water	04	33	120,930	U	U	0.00		 		
Total		2	4	200 527	40.007.455	00	53		 		
<\$2	318,729 8,234		1	209,527	16,837,155	80	53		 		 
									 		<u> </u>
\$2-\$4	64,529										<u> </u>
>\$4	245,966	1 1							 		<u> </u>
<b>T</b>	Tanker water										
Total	2,836,001		5	209,527	11,344,004	54	4				<u> </u>
<\$2	108,492								 		+
\$2-\$4	566,848								 		+
>\$4	2,160,661								 	 	 <b> </b>
	Network, shop & t										<u> </u>
Total	33,730,296	161	62	209,527	32,070,460	153			 	 	 L
<\$2											
\$2-\$4											L
>\$4				1			1				
Supplies of water to t							2025				L
network water (m3)				water demand (m3)		Year	16	i			L
51,446,298							with project				L
							water prices/ m3				
Total	51,446,298				11,324,060	54					
<\$2	3,179,132		95		0	0	0.00				
\$2-\$4	16,610,313		95		0	0	0.00				
>\$4	31,656,853	246	95	128,930	0	0	0.00				L
	Shop water								T		
Total	159,364		0	209,527	8,418,578	40	53		T		
<\$2	4,117								T		
\$2-\$4	32,265										
>\$4	122,983										
	Tanker water										
Total	0	0	0	209,527	0	0	4				
<\$2	0										
\$2-\$4	0										(
>\$4	0										(
	Network, shop & t	anker water									
Total	51,605,662		95	209,527	19,742,638	94					
<\$2	1.,115,002	110				01					
\$2-\$4											
<u>\$2</u> €1 >\$4											
	1	1		1			1				1

	of water to t	argeted househo	olds network st	hon and tanke	r water			2026					
	water (m3)				water demand (m3)		Year	17					+
	17,593,878					16		without project					+
		Network water			nr hse	water revenue	water revenue/hse						
Total		17,593,878											+
<\$2		1,087,216				0		l					
<u> </u>		5,680,483				0							+
⇒2-⊕4 >\$4		10,826,178				0	0						+
>94		Shop water	0	31	133,107	0	0	0.00					+
Total		329,252	2 2	1	216,446	17,393,086	80	53					+
<\$2		329,232 8,506			210,440	17,393,000	00	55					+
<⊅∠ \$2-\$4		66,660											
\$2-\$4 >\$4		254,08											
>\$4		Tanker water						Г					+
Total			14	F	046.446	11 710 501	EA	4					
Total		2,929,640 112,074		5	216,446	11,718,561	54	4					+
<\$2 \$2-\$4		112,074 585,564											+
													+
>\$4		2,232,002											+
Total		Network, shop &		62	216,446	32,984,309	152						
Total		34,844,006	5 161	62	216,446	32,984,309	152						
<\$2													
\$2-\$4													
>\$4			1					r					
		targeted househo						2026					
	water (m3)	Deficit (m <sup>3</sup> )											
					water demand (m3)		Year	17					
	51,702,788	-17,023,409	929,162	1,533,084	34,844,006			with project					
-		-17,023,409 Network water	9 929,162 m3/hse/a	1,533,084 Icd	34,844,006 nr hse	water revenue	water revenue/hse	with project water prices/ m3					
Total		-17,023,409 Network water 51,702,788	9 929,162 m3/hse/a 3 239	1,533,084 Icd 92	34,844,006 nr hse 216,446	water revenue 11,380,518	water revenue/hse 53	with project water prices/ m3 0.22					
<\$2		-17,023,409 <u>Network water</u> 51,702,788 3,194,982	9 929,162 m3/hse/a 3 239 2 239	1,533,084 Icd 92 92	34,844,006 nr hse 216,446 13,375	water revenue 11,380,518 0	water revenue/hse 53 0	with project water prices/ m3 0.22 0.00					
<\$2 \$2-\$4		-17,023,409 <u>Network water</u> 51,702,788 3,194,982 16,693,125	9         929,162           m3/hse/a         3         239           2         239         239           5         239         239	1,533,084 lcd 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883	water revenue 11,380,518 0 0	water revenue/hse 53 0 0	with project water prices/ m3 0.22 0.00 0.00					
<\$2		-17,023,409 <u>Network water</u> 51,702,788 3,194,982 16,693,122 31,814,68	9         929,162           m3/hse/a         3         239           2         239         239           5         239         239	1,533,084 lcd 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883	water revenue 11,380,518 0	water revenue/hse 53 0	with project water prices/ m3 0.22 0.00					
<\$2 \$2-\$4 >\$4		-17,023,409 <u>Network water</u> 51,702,788 3,194,982 16,693,129 31,814,68 <u>Shop water</u>	929,162           m3/hse/a           3         239           2         239           5         239           1         239	1,533,084 lcd 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187	water revenue 11,380,518 0 0 0	water revenue/hse 53 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total		-17,023,409 <u>Network water</u> 51,702,788 3,194,982 16,693,129 31,814,689 <u>Shop water</u> 164,620	929,162           m3/hse/a           3         239           2         239           5         239           1         239           6         1	1,533,084 lcd 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187	water revenue 11,380,518 0 0 0	water revenue/hse 53 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2		-17,023,409 <u>Network water</u> 51,702,784 3,194,982 16,693,129 31,814,693 <u>Shop water</u> 164,620 4,255	929,162 m3/hse/a 3 239 2 239 5 239 5 239 5 239 5 239 5 239 5 239 5 1 3	1,533,084 lcd 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187	water revenue 11,380,518 0 0 0	water revenue/hse 53 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		-17,023,409 <u>Network water</u> 51,702,788 3,194,982 16,693,122 31,814,68 <u>Shop water</u> 164,620 4,255 33,330	929,162           m3/hse/a           3         239           2         239           5         239           1         239           3         1           3         1           3         1	1,533,084 lcd 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187	water revenue 11,380,518 0 0 0	water revenue/hse 53 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2		-17,023,405 <u>Network water</u> 51,702,781 3,194,983 16,693,122 31,814,687 <u>Shop water</u> 164,620 4,255 33,330 127,044	929,162           m3/hse/a           3         239           2         239           5         239           1         239           3         1           3         1           3         1	1,533,084 lcd 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187	water revenue 11,380,518 0 0 0	water revenue/hse 53 0 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		-17,023,409 <u>Network water</u> 51,702,78 3,194,98 16,693,122 31,814,68 <u>Shop water</u> 164,622 4,252 33,330 127,044 <u>Tanker water</u>	9 929,162 m3/hse/a 3 239 2 239 5 239 1 239 5 239 1 239 5 1 3 3 5 1 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	1,533,084 Icd 92 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446	water revenue 11,380,518 0 0 0 8,696,543	water revenue/hse 53 0 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total		-17,023,409 Network water 51,702,786 31,949,98 16,693,129 31,814,689 Shop water 164,620 4,257 33,330 127,04 Tanker water	9 929,162 m3/hse/a 3 239 5 239 5 239 1 239 5 239 1 239 5 1 5 1 3 5 1 4 5 1 0 0 0 0	1,533,084 Icd 92 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446	water revenue 11,380,518 0 0 0 8,696,543	water revenue/hse 53 0 0 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		-17,023,409 <u>Network water</u> 51,702,788 3,194,983 16,693,129 31,814,689 <u>Shop water</u> 164,624 4,255 33,330 127,044 <u>Tanker water</u> (	929,162           m3/hse/a           a         239           5         239           5         239           6         1           6         1           7         7           8         0	1,533,084 Icd 92 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446	water revenue 11,380,518 0 0 0 8,696,543	water revenue/hse 53 0 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		-17,023,409 <u>Network water</u> 51,702,788 3,194,983 16,693,129 31,814,689 <u>Shop water</u> 164,624 4,255 33,330 127,044 <u>Tanker water</u> (	9 929,162 m3/hse/a 3 239 5 239 5 239 1 239 5 239 1 239 5 1 5 1 3 5 1 4 5 1 0 0 0 0	1,533,084 Icd 92 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446	water revenue 11,380,518 0 0 0 8,696,543	water revenue/hse 53 0 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		-17,023,405 <u>Network water</u> 51,702,788 3,194,983 16,693,122 31,814,689 <u>Shop water</u> 164,620 4,255 33,330 127,044 <u>Tanker water</u> (0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 929,162 m3/hse/a 3 239 5 239 5 239 5 239 5 239 5 239 5 1 3 5 1 3 5 1 3 5 0 4 4 4 5 0 0 0 0	1,533,084 Icd 92 92 92 92 92 92	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446	water revenue 11,380,518 0 0 0 8,696,543	water revenue/hse 53 0 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 <\$2 \$2-\$4 >\$4		-17,023,409 Network water 51,702,786 31,9498 16,693,129 31,814,68 Shop water 164,620 4,257 33,330 127,04 Tanker water ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	9 929,162 m3/hse/a 3 239 5 239 5 239 1 239 5 239 1 239 5 1 3 5 1 1 3 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,533,084 lcd 92 92 92 92 92 92 92 0 0	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446 216,446	water revenue 11,380,518 0 0 0 8,696,543 0	water revenue/hse 53 00 0 0 40	with project water prices/ m3 0.22 0.00 0.00 53 53		-           -			
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 Total		-17,023,405 <u>Network water</u> 51,702,788 3,194,983 16,693,122 31,814,689 <u>Shop water</u> 164,620 4,255 33,330 127,044 <u>Tanker water</u> (0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 929,162 m3/hse/a 3 239 5 239 5 239 5 239 1 239 5 339 6 1 3 3 5 1 3 3 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,533,084 lcd 92 92 92 92 92 92 92 0 0	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446 216,446	water revenue 11,380,518 0 0 0 8,696,543 0	water revenue/hse 53 0 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 53 53		-           -			
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$5 \$4 \$4 \$4 \$4 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		-17,023,409 Network water 51,702,786 31,9498 16,693,129 31,814,68 Shop water 164,620 4,257 33,330 127,04 Tanker water ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	9 929,162 m3/hse/a 3 239 5 239 5 239 1 239 5 239 1 239 5 1 3 5 1 1 3 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,533,084 lcd 92 92 92 92 92 92 92 0 0	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446 216,446	water revenue 11,380,518 0 0 0 8,696,543 0	water revenue/hse 53 00 0 0 40	with project water prices/ m3 0.22 0.00 0.00 53 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2-\$4 \$2-\$4 \$2-\$4 Total <\$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4		-17,023,409 Network water 51,702,786 31,9498 16,693,129 31,814,68 Shop water 164,620 4,257 33,330 127,04 Tanker water ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	9 929,162 m3/hse/a 3 239 5 239 5 239 1 239 5 239 1 239 5 1 3 5 1 1 3 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,533,084 lcd 92 92 92 92 92 92 92 0 0	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446 216,446	water revenue 11,380,518 0 0 0 8,696,543 0	water revenue/hse 53 00 0 0 40	with project water prices/ m3 0.22 0.00 0.00 53 53		-           -			
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$4 \$4 \$4 \$5 \$4 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		-17,023,409 Network water 51,702,786 31,9498 16,693,129 31,814,68 Shop water 164,620 4,257 33,330 127,04 Tanker water ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	9 929,162 m3/hse/a 3 239 5 239 5 239 1 239 5 239 1 239 5 1 3 5 1 1 3 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,533,084 lcd 92 92 92 92 92 92 92 0 0	34,844,006 nr hse 216,446 13,375 69,883 133,187 216,446 216,446	water revenue 11,380,518 0 0 0 8,696,543 0	water revenue/hse 53 00 0 0 40	with project water prices/ m3 0.22 0.00 0.00 53 53					

	ter to targeted house	olds: network, sl	hop and tanke	r water			2027				
	(m3) Deficit (m <sup>3</sup> )			water demand (m3)		Year	18				
17.51			1,583,703		17		without project				
17,51	Network water	m3/hse/a		nr hse		water revenue/hse					
Total	17,518,1										
<\$2											
	1,082,5				0						
\$2-\$4	5,656,0				0						
>\$4	10,779,5	56 78	30	137,585	0	0	0.00				
	Shop water										
Total	340,1		1	223,592	17,967,372	80	53				
<\$2	8,7										
\$2-\$4	68,8										
>\$4	262,4	77	I	1	I						
	Tanker water										
Total	3,026,3		5	223,592	12,105,486	54	4	•			
<\$2	115,7										
\$2-\$4	604,8										
>\$4	2,305,6										
	Network, shop &										
Total	35,994,4	38 161	62	223,592	33,928,843	152					
<\$2											
\$2-\$4											
>\$4											
Supplies of wat	ter to targeted house	nolds: network, sl	hop and tanke	r water			2027				
network water (	(m3) Deficit (m <sup>3</sup> )	baseline pop	pop connect	water demand (m3)		Year	18	:			
51,96					47		with much at				
	Network water			33.994.400	17		with project				
Total	INCLWORK WATER						with project water prices/ m3				
		m3/hse/a	lcd	nr hse	water revenue	water revenue/hse	water prices/ m3				
	51,961,7	m3/hse/a 94 232	lcd 90	nr hse 223,592	water revenue 11,437,528	water revenue/hse 51	water prices/ m3 0.22				
<\$2	51,961,7 3,210,9	m3/hse/a 232 237 232	lcd 90 90	nr hse 223,592 13,817	water revenue	water revenue/hse 51 0	water prices/ m3 0.22 0.00				
<\$2 \$2-\$4	51,961,7 3,210,9 16,776,7	m3/hse/a 232 237 232 50 232	Icd 90 90 90	nr hse 223,592 13,817 72,191	water revenue 11,437,528 0 0	water revenue/hse 51 0	water prices/ m3 0.22 0.00 0.00				
<\$2	51,961,7 3,210,9 16,776,7 31,974,0	m3/hse/a 232 237 232 50 232	Icd 90 90 90	nr hse 223,592 13,817 72,191	water revenue 11,437,528 0 0	water revenue/hse 51 0 0	water prices/ m3 0.22 0.00				
<\$2 \$2-\$4 >\$4	51,961,7 3,210,9 16,776,7 31,974,0 Shop water	m3/hse/a 24 232 37 232 50 232 57 232	lcd 90 90 90 90	nr hse 223,592 13,817 72,191 137,585	water revenue 11,437,528 0 0 0	water revenue/hse 51 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0	m3/hse/a 24 232 37 232 50 232 57 232 57 232 52 1	lcd 90 90 90 90	nr hse 223,592 13,817 72,191 137,585	water revenue 11,437,528 0 0 0	water revenue/hse 51 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	51,961,7 3,210,9 16,776,7 31,974,0 <u>Shop water</u> 170,0 4,3	m3/hse/a 24 232 37 232 50 232 57 232 57 232 57 232 52 1 33	lcd 90 90 90 90	nr hse 223,592 13,817 72,191 137,585	water revenue 11,437,528 0 0 0	water revenue/hse 51 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,33 34,4	m3/hse/a 24 232 37 232 50 232 57 232 57 232 57 232 57 233 50 1 33	lcd 90 90 90 90	nr hse 223,592 13,817 72,191 137,585	water revenue 11,437,528 0 0 0	water revenue/hse 51 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	51,961,7 3,210,9 16,776,7 31,974,0 <u>Shop water</u> 170,0 4,3 34,4 34,4 131,2	m3/hse/a 24 232 37 232 50 232 57 232 57 232 57 232 57 233 50 1 33	lcd 90 90 90 90	nr hse 223,592 13,817 72,191 137,585	water revenue 11,437,528 0 0 0	water revenue/hse 51 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,33 34,4	m3/hse/a m3/hse/a 232 237 232 250 232 257 232 257 232 257 232 232 30 388	lcd 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592	water revenue 11,437,528 0 0 0 8,983,686	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	51,961,7 3,210,9 16,776,7 31,974,0 <u>Shop water</u> 170,0 4,3 34,4 34,4 131,2	m3/hse/a           p4         232           p37         232           p50         232           p57         232           p38         0	lcd 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592	water revenue 11,437,528 0 0 0	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2	51,961,7 3,210,9 16,776,7 31,974,0 <u>Shop water</u> 170,0 4,3 34,4 34,4 131,2	m3/hse/a m3/hse/a 232 250 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 257 232 250 232 257 238 257 238 257 238 257 238 257 238 257 238 257 257 257 257 257 257 257 257	lcd 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592	water revenue 11,437,528 0 0 0 8,983,686	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 >\$4	51,961,7 3,210,9 16,776,7 31,974,0 <u>Shop water</u> 170,0 4,3 34,4 34,4 131,2	m3/hse/a           p4         232           p37         232           p50         232           p57         232           p38         0	lcd 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592	water revenue 11,437,528 0 0 0 8,983,686	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,3 34,4 131,2 Tanker water	m3/hse/a m3/hse/a 232 37 232 50 232 57 232 52 1 1 33 30 30 30 30 30 30 30 30 0 0 0 0 0	lcd 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592	water revenue 11,437,528 0 0 0 8,983,686	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53		Image:		
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$4 >\$4 X Total <\$2 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,3 34,4 131,2 Tanker water	m3/hse/a m3/hse/a 232 237 232 250 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 252 257 257	led 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592 223,592	water revenue 11,437,528 0 0 0 8,983,686 0 0	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 53 53 4		Image: Constraint of the sector of		
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 Total	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,3 34,4 131,2 Tanker water	m3/hse/a m3/hse/a 24 232 250 232 250 232 257 232 252 1 33 30 388 0 0 0 0 0 0 0 0 0 0 0 0 4 tanker water	led 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592 223,592	water revenue 11,437,528 0 0 0 8,983,686 0 0	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 53 53 4		Image: Constraint of the sector of		
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 S \$5 S \$4 S \$5 S \$4 S \$5 S \$5 S \$5 S \$4 S \$5	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,3 34,4 131,2 Tanker water	m3/hse/a m3/hse/a 232 237 232 250 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 252 257 257	led 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592 223,592	water revenue 11,437,528 0 0 0 8,983,686 0 0	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 53 53 4		Image: Constraint of the sector of		
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$2 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$5 \$4 \$4 \$4 \$4 \$5 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,3 34,4 131,2 Tanker water	m3/hse/a m3/hse/a 232 237 232 250 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 252 257 257	led 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592 223,592	water revenue 11,437,528 0 0 0 8,983,686 0 0	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 53 53 4		Image: Constraint of the sector of		
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total \$2.\$2 \$2.\$4 >\$4 Total \$2.\$2 \$2.\$4 >\$4 Total \$2.\$2 \$2.\$4 >\$4 Total \$2.\$2 \$2.\$4 >\$4 Total \$2.\$4 >\$4 Total \$2.\$4 >\$4 Total \$2.\$4 >\$4 Total \$2.\$4 >\$4 Total \$2.\$4 >\$4 Total \$2.\$4 \$2.\$4 \$4 \$4 \$2.\$4 \$4 \$2.\$4 \$4 \$4 \$2.\$4 \$4 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	51,961,7 3,210,9 16,776,7 31,974,0 Shop water 170,0 4,3 34,4 131,2 Tanker water	m3/hse/a m3/hse/a 232 237 232 250 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 257 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 232 250 252 257 257	led 90 90 90 90 90	nr hse 223,592 13,817 72,191 137,585 223,592 223,592	water revenue 11,437,528 0 0 0 8,983,686 0 0	water revenue/hse 51 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 53 53 4		Image: Constraint of the sector of		

	of water to t	argeted househo	lds: network_sh	on and tanke	r water			2028				
notwork w	vater (m3)				water demand (m3)		Year	19				
	17,442,169	16,263,139				18		without project				
		Network water			nr hse			water prices/ m3				
Total		17,442,169										
<\$2		1,077,842		29		3,839,209						
< <del>∍∠</del> \$2-\$4		5,631,501				0						
⊅2-⊅4 >\$4							0					
>\$4		10,732,826	5 76	29	142,127	0	U	0.00				
<b>T</b> + 1		Shop water			000.075	10 500 001		50				
Total		351,354		1	230,975	18,560,621	80	53				
<\$2		9,076										
\$2-\$4		71,134							 			
>\$4		271,143	5 1									
		Tanker water										
Total		3,126,296		5	230,975	12,505,186	54	4				-
<\$2		119,597										
\$2-\$4		624,871										
>\$4		2,381,828										
		Network, shop & t										
Total		37,182,958	161	62	230,975	34,905,075	151					
<\$2												
\$2-\$4												
>\$4												
Supplies o	of water to t	argeted househo	olds: network, sh	op and tanke	r water			2028				
network wa	vater (m3)	Deficit (m <sup>3</sup> )	baseline pop	pop connect	water demand (m3)		Year	19				
(	52,223,359	-15,216,078	929,162	1,635,994	37,182,958	18		with project				
						water revenue		water prices/ m3				
Total		52,223,359										
<\$2		3,227,150		87		0	0					
\$2-\$4		16,861,200		87		0	0					
>\$4		32,135,008		87		0	0	0.00			 1	1
		Shop water		0.		•						
Lotal	1	175 677	· 1	0	230 975	9,280,310	40					
		175,677		0	230,975	9,280,310	40					
<\$2		4,538	i i	0	230,975	9,280,310	40					
<\$2 \$2-\$4		4,538 35,567	•	0	230,975	9,280,310	40					
<\$2 \$2-\$4		4,538 35,567 135,572	•	0	230,975	9,280,310	40					
<\$2 \$2-\$4 >\$4		4,538 35,567 135,572 Tanker water						53				
<\$2 \$2-\$4 >\$4 Total		4,538 35,567 135,572 <u>Tanker water</u> 0		0		9,280,310		53				
<\$2 \$2-\$4 >\$4 Total <\$2		4,538 35,567 135,572 <u>Tanker water</u> 0 0						53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		4,538 35,567 135,572 <u>Tanker water</u> 0						53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		4,538 35,567 135,572 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0					53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		4,538 35,567 135,572 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 anker water	0	230,975	0	0					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total		4,538 35,567 135,572 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 anker water		230,975		0					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		4,538 35,567 135,572 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 anker water	0	230,975	0	0					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		4,538 35,567 135,572 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 anker water	0	230,975	0	0					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		4,538 35,567 135,572 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 anker water	0	230,975	0	0					

Supplies of water to	targeted househo	lds notwork sh	on and tanks	r water			2029				
network water (m3)				water demand (m3)		Year	2023				
17,366,051			1,690,011		19		without project				
			cd	nr hse		water revenue/hse					
Total	17,366,051	73	28								
<\$2	1,073,138		28								
\$2-\$4	5,606,925		28								
\$2-\$4 >\$4	10.685.988		28			-					
>94	Shop water		20	140,020			0.00				
Total	362,955	2	1	238,601	19,173,457	. 80	53				
<\$2	9,376		1	236,001	19,173,437	00	55	•			
<\$2 \$2-\$4	73,483										
φ <u>2</u> -φ <u>4</u>											
>\$4	280,096										
Total	Tanker water		-	000.004	10.010.000		4				 
Total	3,229,521		5	238,601	12,918,083	54	4				
<\$2	123,546										
\$2-\$4	645,503										 
>\$4	2,460,471										
	Network, shop & t										
Total	38,410,668	161	62	238,601	35,914,055	151					
<\$2											
\$2-\$4									-		
>\$4	1	1 1		1	1	1	1		-		
									-		
Supplies of water to							2029				
network water (m3)				water demand (m3)		Year	20				
52,487,524							with project				
			cd	nr hse							
Total	52,487,524		85								
<\$2	3,243,475		85						-		
\$2-\$4	16,946,491		85			0					
>\$4	32,297,559	220	85	146,820	0	0	0.00				 
	Shop water										
Total	181,477		0	238,601	9,586,729	40	53				
<\$2	4,688										
\$2-\$4	36,741										
>\$4	140,048										
	Tanker water										
Total	0	-	0	238,601	0	0	4	·			
<\$2	0										
\$2-\$4	0										
>\$4	0										
	Network, shop & t										
Total	52,669,002	221	85	238,601	21,139,978	89					
<\$2											
\$2-\$4											
>\$4											

Zarga Water Supply Eastibility Study Full I	ict of IMD		te Work	choot "	ucobold"															
Zarga Water Supply Feasibility Study. Full L		Project	IS. WOIK	-sneet	nsenoia															
Table 4: Household water consumption analysis across 20 years						pop growth:	3.25%		annual conne	ectivity growth:	: 0.05%									
	water prioces	s per m³:	network	0.22	shop	52.826		4		journy growth	0.0070									
	2010	· ·	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	202
	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
	1	2		4	5	•	7	8	9	10		12	13	14	15				19	
Target population (all HHs)	929,162	,	990,526	,- ,	, ,	,,	, ,	, ,	1,200,021	, ,	1,279,273	, ,	, ,	1,408,071	, ,	, ,	, ,	, ,	1,652,191	1,705,87
Target population (connected HHs)	911,673	941,774	972,870	1,004,992	1,038,175	1,072,454	1,107,864	1,144,444	1,182,231	1,221,266	1,261,590	1,303,245	1,346,276	1,390,728	1,436,647	1,484,082	1,533,084	1,583,703	1,635,994	1,690,01
Without project	10 702 504	18,709,586	18,636,407	18,563,058	18,489,538	10 415 040	18,341,986	19 267 052	18,193,747	19 110 270	19 044 910	17.970.097	17 905 200	17 020 121	17 744 007	17 660 470	17 502 979	17 510 111	17.442.169	17,366,05
Total network water consumed Total shop water consumed	195,795	202,260	208.938		222,963	230,325	237,930	245,786	253,902	262,285		279,891	289,133	298,679	308,541	318,729	329,252	340,124	/ /	362,95
Total tanker water consumed	1,742,158	,	1,859,102	- ,	1,983,897	2,049,402	,	2,186,971	2,259,180	,	2,410,831	,	2,572,661	2,657,605	,	2,836,001	2,929,640	,	3,126,296	3,229,52
With project	.,,	.,,	.,	.,020,100	.,,	_,,.	_,,	_,,	_,,	_,,	_,,	_,,	_,,	_,,	_,,	_,,	_,=_;,=	0,020,077	0,120,200	0,220,02
Total network water consumed	18,782,594	18,709,586	18,636,407	27,559,224	36,663,575	45,951,476	46,772,283	47,607,380	48,456,940	49,321,137	50,200,151	50,444,671	50,691,508	50,940,698	51,192,282	51,446,298	51,702,788	51,961,794	52,223,359	52,487,52
Total shop water consumed	195,795	202,260	208,938	183,461	156,074	126,679	128,482	130,267	132,029	133,765		139,946	144,566	149,340		159,364	164,626	170,062	175,677	181,47
Total tanker water consumed	1,742,158	1,799,680	1,859,102	1,344,340	793,559	204,940	169,366	131,218	90,367	46,675	0	0	0	0	0	0	0	0	0	
			-	4				0.077.00-			- 465 - 55				0.445 5 45	0.000 10-				
Savings from switching from shop water to network water			0	.,,	-,,	-, - ,	-, -,	-,- ,	6,411,226	-, -,	7,126,654	, ,	, ,	,, .	, ,	, ,	8,660,306	- , ,	9,241,641	9,546,78
Savings from switching from tanker water to network water			C	2,177,766	4,499,343	9/1,854	7,362,097	7,770,509	8,197,865	0,044,971	9,112,665	9,413,548	9,124,365	10,040,445	10,3/7,127	10,719,760	11,073,706	11,439,338	11,617,043	12,207,22
Total savings from switching from shop and tanker water			ſ	3,880,910	8,018,100	12,424,264	13 119 701	13,847,516	14 609 091	15 405 861	16 239 319	16,775,510	17 329 406	17 901 590	18 492 666	19 103 250	19 734 012	20 385 502	21 058 685	21 754 00
Total savings from switching from shop and tanker water				3,880,910	8,018,100	12,424,204	13,119,701	13,047,310	14,009,091	13,403,801	10,239,319	10,775,510	17,329,400	17,901,390	10,492,000	19,103,239	19,734,012	20,303,392	21,030,005	21,734,00
Poorest socio-economic group ( <\$2 per person per day)																				
Target population (all HHs)	57,418	59,283	61,210	63,199	65,252	67,372	69,561	71,822	74,155	76,565	79,053	81,622	84,274	87,012	89,839	92,758	95,772	98,884	102,097	105,41
Target population (connected HHs)	56,337	58,197	60,119	62,104	64,154	66,272	68,461	70,721	73,056	75,468	77,960	80,534	83,193	85,940	88,778	91,709	94,737	97,865	101,096	104,43
Without project																				
Total network water consumed	1,160,673	, ,	, - ,	, , .	, ,	1,138,010		1,128,871	1,124,285	1,119,689		1,110,465	1,105,837	1,101,198	, ,	1,091,888	, ,	1,082,534	, ,	1,073,13
Total shop water consumed	5,058	5,225	5,397	5,576	5,760	5,950	6,146	6,349	6,559	6,776	,	7,230	7,469	7,716	7,971	8,234	8,506	8,786	9,076	9,37
Total tanker water consumed	66,647	68,847	71,120	73,469	75,894	78,400	80,989	83,663	86,426	89,279	92,227	95,272	98,418	101,667	105,024	108,492	112,074	115,775	119,597	123,54
With project	4 400 070	4 450 400		1 700 000	0.005.004	0.000.570		0.044.005			0.400.400	0.447.000			0 400 405	0 170 100	0 40 4 000		0.007.450	
Total network water consumed	1,160,673		1,151,640	, ,	2,265,631	2,839,579		2,941,905	2,994,404	3,047,807		3,117,236	3,132,490	3,147,888	, ,	3,179,132	, ,	3,210,987	3,227,150	3,243,47
Total shop water consumed	5,058	5,225	5,397	4,739	4,032	3,272	3,319	3,365	3,411	3,456		3,615 0	3,735 0	3,858 0	3,985 0	4,117 0	4,253	4,393	4,538	4,68
Total tanker water consumed	66,647	68,847	71,120	51,428	30,358	7,840	6,479	5,020	3,457	1,786	U	0	U	U	0	U	U	U	U	
Savings from switching from shop water to network water			0	43,997	90.900	140,852	148,736	156,987	165,621	174,653	184,102	190.181	196,460	202,947	209,648	216,570	223,721	231,108	238,739	246,62
Savings from switching from tanker water to network water			0	83.311	172.123	266,710	281,639	297,263	313,611	330,716	,	360,118	372,008	384,291	396,980	410,087	423,627	437,615	452,064	466,99
						200,110			010,011		0.10,001		0.2,000		,	,	,0	,	.02,001	,
Total savings from switching from shop and tanker water			0	127,308	263,023	407,562	430,375	454,250	479,232	505,369	532,710	550,299	568,468	587,238	606,628	626,657	647,348	668,723	690,803	713,61
Medium poor socio-economic group ( \$2 - \$4 per person per day)																				
Target population (all HHs)	299,996	309,744	319,808	,	,	352,007	363,445	375,254	387,447	400,036		426,456	440,313	454,620	469,392	484,644	500,391	516,650	,	550,77
Target population (connected HHs)	294,349	304,068	314,108	324,479	335,193	346,260	357,693	369,503	381,703	394,307	407,326	420,775	434,668	449,020	463,846	479,161	494,982	511,326	528,208	545,64
Without project																				
Total network water consumed	6,064,280	6,040,708	6,017,081	5,993,399	5,969,662	5,945,870	5,922,022	5,898,119	5,874,161	5 850 147	5,826,077	5,801,952	5,777,770	5 752 522	5,729,239	5,704,889	5,680,483	5 656 020	5,631,501	5,606,92
Total shop water consumed	39,640		42,301		5,909,002	5,945,870 46,631	5,922,022 48,171	5,898,119 49,761	5,874,101 51,404	5,850,147		5,801,952	5,777,770	5,753,533 60,470	5,729,239 62,466	5,704,889 64,529	5,080,483 66,660	<u>5,656,020</u> 68,861	5,631,501 71,134	<u>5,606,92</u> 73,48
Total tanker water consumed	348,215	-							451,556			497,777	514,213	531,191	548,730	566,848	585,564	604,899		
With project	570,215	333,113	571,590	303,039	330,333	403,020	723,131		-101,000	+00,405	-101,007		517,213	551,191	040,730	000,040	303,304	307,039	JZ7,071	0-0,00
Total network water consumed	6,064,280	6,040,708	6,017,081	8,897,965	11,837,459	14,836.216	15,101,228	15,370,853	15.645.148	15,924,169	16,207.973	16,286,921	16,366.616	16,447.072	16.528.300	16,610.313	16.693.125	16,776,750	16,861.200	16,946,49
Total shop water consumed	39,640		42,301			25,647	26,012	26,373	26,730	27,082		28,333	29,269	30,235		32,265	33,330	34,430	, ,	36,74
Total tanker water consumed	348,215						33,852	26,227	18,062				0	0				0		
		, -	,		-,	.,	,		,	,			-		-	-			-	
Savings from switching from shop water to network water			C	•,•	,	, ,					, ,	1,490,485	, ,	, ,	, ,	, ,	, ,	,- ,	1,871,040	1 1-
Savings from switching from tanker water to network water			C	435,283	899,310	1,393,505	1,471,505	1,553,137	1,638,555	1,727,921	1,821,402	1,881,541	1,943,666	2,007,842	2,074,137	2,142,621	2,213,366	2,286,447	2,361,942	2,439,92
<b>T</b>																				4
Total savings from switching from shop and tanker water			C	780,097	1,611,709	2,497,387	2,637,176	2,783,473	2,936,556	3,096,714	3,264,247	3,372,026	3,483,364	3,598,378	3,717,189	3,839,924	3,966,711	4,097,684	4,232,982	4,372,74
Total savings from switching from shop and tanker water (both				907,405	1,874,732	2 004 040	3,067,550	2 227 722	3,415,788	3 603 093	3 706 056	3,922,324	4 054 022	1 195 646	1 222 017	A AGG E04	4 614 050	A 766 A00	4.923.784	5 006 25
socio-economic categories)			U	907,405	1,0/4,/32	2,904,949	3,007,330	3,231,123	3,413,788	3,002,083	3,130,330	3,922,324	4,031,832	4,100,010	4,323,017	4,400,361	4,014,009	4,100,400	4,923,784	5,000,35
Target Population (all HHs) of both socio-economic categories	357,414	369,027	381,018	393,398	406,181	419,379	433,006	447,076	461,603	476,601	492,088	508,077	524,586	541,632	559,231	577,402	596,164	615,535	635,535	656,18
	301,414	000,021	201,010				,	,			.52,000			0.1,002	000,201	J. 1,4 <b>7</b> 2		010,000		
	Table 4 feeds	s off the works	sheet "Wcon"	electronically.																
Health benefits for those consuming < 50 lcd																				
Health benefits for those consuming < 50 lcd Disability Adjusted Life Years (DALY) Avoided health-related costs		npact of the pr	roposed proje	ct is analysed	in section (d),ot	the worksheet	"Heli"													

# Zarqa Water Supply Feasibility Study. Full List of IMP Projects. Work-sheet "Heli"

(a) Analysing the 2008 billing data: a story of inequality in distribution between network water-poor and network water-rich HHs

Tables 1 & 3 are derived from the 2008 billing data and provide the following findings: <i> total quanities of network water and nr HHs across 11 different consumption bands (table H1)

<ii><ii>average annual consumption per HH, average HH bill and total revenue across consumption bands (table H3)

Table H1: Water co	nsumption across c	onsumption ranges							
Consumption bands		Water quantities	Water quantities	Cumulative	Cumulative	nr HHs	nr HHs per con	Cumulative	Cumulative
(con band)		per con band	per con band	in % terms	in % terms	per con band	range in % terms	in % terms	in % terms
		(m³)	in % terms	increasing	declining			increasing	declining
<50lcd		4,635,648	26.34%	26.	34% 100	.00% 62,04	4 51.44%	51.44%	100.00%
50lcd-	65lcd	2,709,956	15.40%	41.	74% 73	.66% 18,29	1 15.17%	66.61%	48.56%
65lcd-	80lcd	2,522,226	14.33%	56.	07% 58	.26% 13,528	3 11.22%	77.82%	33.39%
80lcd-	120lcd	4,793,678	27.24%	83.	30% 43	.93% 19,25	9 15.97%	93.79%	22.18%
120lcd-	145lcd	1,389,365	7.89%	91.	20% 16	.70% 4,104	4 3.40%	97.19%	6.21%
145lcd-	165lcd	624,570	3.55%	94.	75% 8	.80% 1,570	0 1.30%	98.49%	2.81%
165lcd-	185lcd	349,621	1.99%	96.	73% 5	25% 77	7 0.64%	99.14%	1.51%
185lcd	205lcd	230,410	1.31%	98.	04% 3	.27% 460	0.38%	99.52%	0.86%
205lcd	225lcd	136,962	0.78%	98.	32% 1	.96% 24	3 0.21%	99.72%	0.48%
225lcd	245lcd	125,671	0.71%	99.	53% 1	.18% 20	7 0.17%	99.90%	0.28%
245lcd	265lcd	82,220	0.47%	100.	00% 0	.47% 12	5 0.10%	100.00%	0.10%
Total water consump	tion (2008)	17,600,327				120,61	3		

The above table speaks for itself with respect to the unequal distribution of network water. This is indicated by a number of observations: 48.56% of all Zarqa HHs consume s50Icd of network water and 48.56% of all Zarqa HHs consume between 50-265 Icd of water and 62,044 HHs or in % terms 26.34% of Zarqa network water 58,569 HHs or in % terms 73.66% of Zarqa network water

Since the ECO Consult report indicates no correlation between income and water consumption levels, the inequality is based on unequal distribution generated by poor quality piping in certain areas which disadvantages households across all income groups.

The HELI (2005) report highlights the health benefit accruing from raising network water consumption from <50 lcd to 60 lcd and higher. In the context of Zarqa Governorate the following statistics are of interest in the HELI framework:

#### Table H2: Water consumption across groups 1 (HHs consuming <50 lcd) & 2 (HHs consuming between 50 - 265 lcd) with project Total water Group 1 water Group 2 water Total HHS connect Group 1 HHs Group 2 HHs Group 1 Group 2 Group 1 Group 2 Group 1 Group 2 Group 2 m³/HH/annum . m³/HH/annum ->60lcd after transf after transf lcd lcd to Group 1 to Group 1 (m<sup>3</sup>) 2.010 18.782.594 4.947.038 13.835.556 128.713 66.211 62.502 75 221 29 86 (m<sup>3</sup>) (lcd) 4,927,809 4,908,535 13,781,776 13,727,872 18,709,586 68,397 64,566 2,011 132,963 72 213 28 27 83 18,636,407 137,353 69 2,012 70,655 66,698 206 80 2,013 2,014 27,559,224 36,663,575 7,258,664 9,656,606 20,300,560 141,888 72,988 68,900 99 295 379 38 50 114 27,006,969 33,848,584 146,573 75,398 71,175 128 147 2,015 45,951,476 12,102,893 151,412 77,887 73,525 155 460 60 178 46,772,283 47,607,380 12,319,080 12,539,032 156,412 161,576 153 151 454 447 59 58 57 2,016 34,453,203 80,459 75,953 175 12,480,625 34,291,658 175 2,017 35,068,348 83,116 78,460 173 12,892,711 34,714,669 171 2,018 48,456,940 12,762,792 35,694,148 166,911 85,860 81,051 149 440 170 13,318,404 35,138,536 168 49,321,137 50,200,151 12,990,408 13,221,926 36,330,729 36,978,224 172,422 178,115 83,727 86,492 434 428 168 13,758,152 35,562,985 165 14,212,420 35,987,730 164 161 2,019 88,695 146 144 57 56 2,020 91,623 2.021 50.444.671 13.286.329 37.158.342 183.996 94.649 89.348 140 416 54 161 14.681.687 35.762.984 155 50,691,508 50,940,698 13,351,342 13,416,975 37,340,166 37,523,723 97,774 101,002 92,298 95,345 156 15,166,449 35,525,059 152 15,667,216 35,273,482 2,022 190,071 137 405 53 51 149 143 2,023 196,347 133 394 2.024 51.192.282 13.483.238 37,709,044 202.830 104.337 98.493 129 383 50 148 16.184.518 35.007.764 137 144 16,718,900 34,727,398 2,025 51,446,298 13,550,142 37,896,156 209,527 107,782 101,745 372 49 47 132 126 38,085,091 140 17,270,926 34,431,863 127 2,026 51,702,788 13,617,697 216,446 111,341 105,105 122 362 38,275,879 38,468,551 353 343 2,027 51,961,794 13.685.916 223,592 115.017 108,575 119 46 136 17,841,179 34,120,615 122 117 52,223,359 13,754,807 230,975 112,160 45 133 18,430,261 33,793,098 2,028 118,815 116 2,029 52,487,524 13,824,384 38,663,140 238,601 122,738 115,863 113 334 44 129 19,038,793 33,448,732 112

This table shows that in year 6 group 1 achieves average consumption level of 60 lcd. However to maintain this beyond year 6 redistribution of water from group 2 to group 1 is necessary. It is doable as it only requires modest reduction in the average water consumption level of group 2. In year 7 there is no reduction involved but in year 8 there is a reduction from 173 lcd to 171 lcd and in year 20 from 129 lcd to 119 lcd.

#### There are a number of reasons why network water poor HHs receive inadequate supplies. These include the following: <i>> unequal storage capacity

GFA 2008: 100 show that 1% of HHs have no storage; 13% have 1 m³ storage capacity, 48% have 2 m³ and 38% have more than 2.7 m³ (mean size) storage capacity.

Impact of storage capacity on benefiting from network water	storage:1m <sup>3</sup>	storage:2m <sup>3</sup>	storage:	2.73m <sup>3</sup>
Where tanks are only filled once a week this would generate the following consumption rates (lcd):-		20	40	55
It means that those HHs with the smaller tanks obtain <50 lcd				
The situation can be improved with 3 fillings per week giving the following lcd:-		61	121	165

<ii>> Altitude

Year

Where the household lives in high altitude areas pressure is weak and supply erratic as others at lower altitudes are at the front of the queue and hence supplied first.

<iii> Tariff structure

Given the large gap between the m<sup>3</sup> price of network water (varying between Jd 0.18 - JD 0.64),and that of tanker water (JD 4) and shop water (JD 52.83) (in the context of water scarcity) those who have the influence, storage capacity and appropriate altitude are able to harvest a disproportionate share of the network water as illustrated by table H1 above. In addition, EC Consult points out that the sharing of meters by poor HHs pushes up the price of network water

for the poor. One resolution is to ensure that poor HHs have access to one meter per HH as recommended by ECO Consult

Another resolution to this situation is to raise tariff rates much closer to commercial rates of tanker water, so that when HHs consume more than 165 lcd.

the price of network water is > JD 4, so that the network water-rich HHs are forced to purchase tanker water when their consumption is >165 lcd.

Network water-poor HHs are willing to pay higher tariffs at the lower consumption band rates (see GFA 2008:163-173)

In summary, constraints <>> and <i>> require an engineering resolution, while constraint <ii>> faces the challenge of reform of the tariff structure. Both sets of resolutions will be required to address the plight of network water-poor HHs, of which there are 62,044 HHs repres 62,044 HHs representing

51.44% of all HHs of Zarga.

# <c> Economic and financial analysis of the 2008 billing data

Table H 3 below analyses annual HH expenditure on water, average prices per m<sup>3</sup> and revenue across the consumption bands

### Table H3: HH network water consumption, water bills and revenue

Consumption bands		av HH con/annu	m av HH con/qu	art tariff		av HH	av price per	r rev	renue created		Cumulative	Cumulative
(con band)		per con band	per con band			annual bill	m <sup>3</sup> per con	per	r con band		in % terms	in % terms
		(m³)	(m³)	(JD)		(JD)	band (JD)	(JE	D)		increasing	declining
<50lcd			75	19	3.750		15	0.20	930,660	22.32%	22.32%	100.00%
50lcd-	65lcd	1	48	37	6.450		26	0.17	471,908	11.32%	33.64%	77.68%
65lcd-	80lcd	1	86	47	9.341		37	0.20	505,460	12.12%	45.76%	66.36%
80lcd-	120lcd	2	49	62	14.870		59	0.24	1,145,525	27.47%	73.24%	54.24%
120lcd-	145lcd	3	39	85	26.657		107	0.31	437,601	10.50%	83.73%	26.76%
145lcd-	165lcd	3	98	99	36.483		146	0.37	229,113	5.50%	89.23%	16.27%
165lcd-	185lcd	4	50	112	47.097		188	0.42	146,377	3.51%	92.74%	10.77%
185lcd	205lcd	5	01	125	58.296		233	0.47	107,265	2.57%	95.31%	7.26%
205lcd	225lcd	5	52	138	71.896		288	0.52	71,321	1.71%	97.02%	4.69%
225lcd	245lcd	6	07	152	88.250		353	0.58	73,071	1.75%	98.77%	2.98%
245lcd	265lcd	6	58	164	102.341		409	0.62	51,171	1.23%	100.00%	1.23%
									1 169 172			

There are some minor inequalities in billing before average price per m<sup>3</sup> begins to rise from 80 lcd onwards.

(d) Planning and implementing the HELI-desired outcome It is now assumed that engineering and policy steps relating to tariff reform will take place so that the necessary quantities of additional water created by the proposed projec will be channelled to HHs with <50 lcd so that their consumption rate is raised to 60 lcd; and this continues even in the face of population growth from year 9 onwards. The details of the re-distribution of water between groups 1 & 2 in order to lift HHs of group 1 to 60 lcd and to maintain these HHs at this level are worked out above (table H2).

Hence, I move on to calculate the health benefits. Lassume that the diarrhoea incidence/ person / year for those consuming < 50 lcd is .61

figure given Figure 6, HELI (2005) report, page 40. I also assume that the diarrhoea incidence/person/year is .27 for those consuming 60 lcd (ibid. Appling Table 10 (HELI 2005:43) to the metered population the health gains for raising consumption of group 1 to 60 lcd, health gains are estimated in Table H4 below.

# Table H4 Estimating the health benefits in lifting group 1 to consumption level of 60 lcd

Diarrhoea incidence		Total health cost	population size			
		(JD)				
	0.61	56,323,128	5,100,396	(HELI 2005:43)		
	0.27	24,929,909	5,100,396	(HELI 2005:43)		
Health gain (JD)		31,393,219	5,100,396			
				<b>.</b>		
Vara of the sectors		All socio-economic			ategories (poor & medium po	oor)
Year of the project		Target population		Target population		
	1	929,162		357,414		
	2	959,354		369,027	0	
	3	990,526		381,018		
	4	1,022,711		393,398	0	
	5	1,055,942		406,181	0	
	6	1,090,253				
	7	1,125,679		/	2,665,176	
	8	1,162,255				
	9	1,200,021			2,841,189	
	10	1,239,013	7,626,194	476,601	2,933,509	
	11	1,279,273	7,873,993	492,088	3,028,827	
	12	1,320,840	8,129,843	508,077	3,127,243	
	13	1,363,758	8,394,007	524,586	3,228,857	
	14	1,408,071	8,666,754	541,632	3,333,773	
	15	1,453,824	8,948,364	559,231	3,442,097	
	16	1,501,063	9,239,124	577,402	3,553,942	
	17	1,549,837	9,539,332	596,164	3,669,420	
	18	1,600,196	9,849,294	615,535	3,788,651	
	19	1,652,191	10,169,328	635,535	3,911,756	
	20	1,705,876	10,499,761	656,186	4,038,861	

Zarga Water Supply Feasibility Study. Full	List of IMF	P Project	ts. Wor	k-sheet "	Prod"																	
Step 5																						
Step 5 consists of an analysis of production costs in order to ascertain or This analysis is based on WAJ 2009, Zarga Water Administration Profit a			and water d	elivered to cons	sumers																	
	Years																			The analys	s only includ	es costs relating to t
Table 5a: Water production analysis Zarqa Governorate (2008	2010	2011 2	2012 3	2013 4	2014 5	2015		2017	2018	2019	2020		22 202 13 14			2026 17		2028 19	2029 20			ce it excludes costs i ures for cost reduction
Without project																				by data fror	n the work of	f the engineers.
Water production		52,134,804 5	2,134,804	52,134,804 5	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804 52,134,	52,134,804	52,134,804	4 52,134,804 52,7	134,804	52,134,804 52,134	,804 52,13	34,804			ksheet is conducted
Internal water sources (wells and springs) Water imports	39,074,642 13,060,162																					e governorate-wide er leakage "with pro
																						analysis is to ascert
Authorised consumption		25,506,847 2	5,407,082	25,307,086 2	25,206,856	25,106,393	25,005,697	24,904,767	24,803,603	24,702,204	24,600,569	24,498,699 24,396,	93 24,294,25	24,191,67	24,088,853 23,9	985,798	23,882,505 23,778	,973 23,67	75,202			ect" for the whole go
Billed metered consumption (billing system, tankers, exports) Unbilled metered consumption (free water in arid areas)	24,184,161 490,706																			The finding	s of this work	sheet feed into the
Flushing of network	931,513																			_		
Water production costs Salaries and wages (minus Sewerage Directorate & Irrigation Division)	12,484,700 1 1,743,119	12,484,700 1:	2,484,700	12,484,700 1	2,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700 12,484,	00 12,484,70	12,484,700	12,484,700 12,4	484,700	12,484,700 12,484	,700 12,48	34,700	There is an	adjustment f	for the fact that pum
Electricity expenses (Water Directorate total minus water treatement) Spare parts and maintenance (Water Directorate & Desert Wells)	4,973,336 803,256																					
Vehicle expenses (Water Directorate/ water tankers/ desert wells)	306,998																					
General and Admin Expenses devoted to water-related staff & activities Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir)	358,614 212,854																					
Water imports **Water related salaries & wages as percentage of total salary and	4,086,524 81%																					
wage bill (JOD 2,156,313)	0178													1								
Average cost per m3 of water produced (internal plus imports	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239 0.2	39 0.23	0.239	0.239	0.239	0.239 (	.239	0.239			
Average cost per m3 of water delivered to consumers	0.488	0.489	0.491	0.493	0.495	0.497	0.499	0.501	0.503		0.507	0.510 0.5	0.51	0.516	0.518	0.521	0.523	.525	0.527			
(authorised consumption	0.400	0.400	0.731	0.400	0.433	0.487	0.439	0.001	0.502	0.000	0.007	5.510 0.1	0.014	0.516	0.010	0.021	0.020					
										-					<u>├</u> ──							
Step 6 Step 6 ascertains what happens production costs (with project) given																						
percentage UFW "without project"	68.5%	68.6%	68.7%	68.8%	69.0%	69.1%			69.5%		69.7%	69.8% 70.				70.5%			70.8%			D/ACEPO engineers
but percentage UFW "with project" For the sake of the calculations it is assumed that the whole Zarqa	68.5%	68.6%	68.7%	19.5%	19.4%	19.3%	19.3%	19.2%	19.2%	19.1%	19.0%	19.0% 18.	9% 18.9%	18.8%	5 18.8%	18.7%	18.7% 1	3.6%	18.5%		Source: NOE	D/ACEPO engineers
water system is being rehabilitated and restructured. The key factors between the "without project" and "with project" scenarii is the																						
the difference between the UFW of without & with project																						
Making this wider assumption does not alter the calculation of unit costs of water production & delivery																						
With project Percentage of connected consumers reached				30%	60%	90%	92%	94%	96%	98%	100%											
Water production	52,134,804 5	52,134,804 5	2,134,804	52,134,804 5	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804 52,134,	04 52,134,80	52,134,804	4 52,134,804 52,7	134,804	52,134,804 52,134	,804 52,13	34,804			
Internal water sources (wells and springs) Water imports	39,074,642 13,060,162																					
													_									
Authorised consumptior The quanity of water delivered to consumers with project	25,606,380 2	25,506,847 2	5,407,082	37,339,502 4	9,361,034	61,471,626	62,315,937	63,165,915	64,021,556	64,882,860	65,749,825	65,796,493 65,842,	65,888,98	65,934,81	1 65,980,360 66,0	025,632	66,070,630 66,115	,353 66,15	59,804			
We do not expect any energy saving of note due to the project works.																						
At present the water is pumped from low-level pumping stations up to																						
high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped																						
to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which																						
is more energy efficient. In overall terms no energy saving of note is																						
envisaged. (NOD/ACEPO engineers 2010)																						
Water production costs	12,484,700 1	12,484,700 1:	2,484,700	12,484,700 1	2,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700 12,484,	00 12,484,70	12,484,700	0 12,484,700 12,4	184,700	12,484,700 12,484	,700 12,48	34,700			
Salaries and wages (minus Sewerage Directorate & Irrigation Division) Electricity expenses (Water Directorate total minus water treatement)	1,743,119							,	. ,			. , ,								_		
Spare parts and maintenance (Water Directorate & Desert Wells)	803,256																					
Vehicle expenses (Water Directorate/ water tankers/ desert wells) General and Admin Expenses devoted to water-related staff & activities	306,998 358,614												-									
Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir) Water imports	212,854 4,086,524																					
**Water related salaries & wages as percentage of total salary and	4,000,524																					
wage bill (JOD 2, 156, 313)													-									
Average cost per m3 of water produced (internal plus imports	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239 0.2	.239 0.239	0.239	0.239	0.239	0.239 (	.239	0.239			
Average cost per m3 of water delivered to consumers	0.488	0.489	0.491	0.334	0.253	0.203	0.200	0.198	0.195	0.192	0.190	0.190 0.1	90 0.189	0.189	0.189	0.189	0.189 (	.189	0.189			
(authorised consumption						1																
Water production & delivery savings per m3 (years 1-20 (Year 3)	0.000000	0.000000	0.000000	0.158972	0.242364	0.294175	0.298929	0.303648	0.308334	0.312989	0.317615	0.319859 0.322	26 0.324414	0.32672	5 0.329059 0.	331415	0.333795 0.33	6199 0.3	38627			
1 ···														1								
Table 5b Opportunity cost to WAJ for not investing: cost of	Years					1																
additional water required (without project)and loss of surpluse (with project)	1	2	3	4	5	6	7	8	9	10	11	12	13 14	1	5 16	17	18	19	20	_		
														1								
Without project Quantities of water (m <sup>3</sup> )	0	693,174			2,899,304			5,310,271									15,109,883 16,263					
Cost (JD)	0	337,965	685,997	1,044,426	1,413,591	1,793,845	2,185,552	2,589,087	3,004,837	3,433,205	3,874,603	4,329,459 4,798,2	15 5,281,328	5,779,268	6,292,523 6,8	321,596	7,367,006 7,929	,290 8,50	09,002			
With project		000 171	4 400 005	0.045 500	4 047 50-	04.000.000	04.000.503	04.057.057	04 000 5-	04 711 5-5	04.000.467	00.004.007 00.007	40 40 501	40.001.00	47.075.007	000 100	40 407 000 45 5	070 11-	0.004			
Quantities of water (m <sup>a</sup> ) Cost (JD)	0	693,174 337,965	1,406,995 685,997	-6,245,506 -1 -3,045,072 -											9 -17,875,367 -17,0 6 -8,715,351 -8,2		-16,137,368 -15,210 -7,867,969 -7,418	,078 -14,25 ,783 -6,95				
Opportunity cost to WAJ for not investing	0	0	0									14,550,899 14,665,-										
erretaining oool to this for not introduing	v	U	U	.,	5,2 11,333	,-,0,000	,000,040	.0,270,103	.0,000,004	,000,000	,+00,240	14,000,0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,000		,5,51 15,40		1	I	. <u> </u>

ists re	elating to the	e sewerage	directorate	for resident , and waste				
luctio	n "with proj	ect" are pro	visional and	d will be upo	lated			
ted fo	or the Zarqa	a Governora	ate as a wh	ole, since th	e data			
ide a	nd for that I	reason it is a	assumed fo	r the sake of	of the analys	sis		
proje	ect" is applic	cable to the	whole gove	ernorate.				
certa	in savings i	n the produ	ction & deli	very of				
e gov	/ernorate (s	ee cell b 80 sheet.	below).					
the "	CBA" works	sheet.						
oumpi	ing at wells	is subsidize	ed at JD0.0	43 per Kw i	nstead of th	e industrial	rate of JD0	.050
_								
eers eers								
	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	
				-			-	
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Table 6 Cost benefit analysis summary	Cost	Year	Year	Year	Year	/ear	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year		Year
	Totals Across	2010	2011	3 2012	4 2013	5 2014	6 2015	2016	8 2017	9 2018									
	20 years																		
Investment costs without project (Natural development of network to connect new HHs)		3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154	3,846,154					
Investment costs with project Phase 1 (MCC) direct investment in MCC priority areas	252,738,237 73,496,192	3,705,564 0	22,293,751 7,471,495			32,188,536 18,953,480		14,819,874	14,819,874	14,819,874	14,819,874	7,396,679	7,396,679	7,396,679	7,396,679	7,396,679		0	
Phase 1 (MCC) strategic infrastructure	1,984,000	396,800	1,587,200																
Phase (TBD) direct investment in the sub-districts Phase (TBD) strategic infrastructure	61,054,550 5,120,729		9,138,473 4,096,583	13,235,056	13,235,056	13,235,056	9,926,292												
Phase 2 direct investment in the WSA	44,287,856		4,000,000				8,857,571	8,857,571			8,857,571								
Phase 2: strategtic infrastructure Phase 3: direct investment in the WSA	29,811,513 4,257,465						5,962,303	5,962,303	5,962,303	5,962,303	5,962,303	851,493	851,493	8 851,493	851,493	8 851,493	2		
Phase 3: strategic infrastructure	32,725,932											6,545,186							
NOD/ACEPO engineers have provided these costings and are responsible for the details. The costs are inclusive of																			
construction and ancillary costs including management costs.																			
Percentage of costs assigned to domestic consumers	100% <b>252,738,237</b>	3,705,564	22,293,751	30,284,404	32,928,728	32,188,536	35,074,363	14,819,874	14,819,874	14,819,874	14,819,874	7,396,679	7,396,679	7,396,679	7,396,679	7,396,679	0 0	0	
130,987,974 (	NPV)																		
Water production & delivery savings (domestic water 85%)		-		0	2,951,004	4,481,192	5,417,478	5,482,952	5,547,032	5,609,759				5,764,509					
Water production & delivery savings per m3 (years 1-20) Quantity of water involved		0 18,782,594	18 709 586	0 18,636,407	0.15897188 18,563,058	0.24236363 18,489,538	0.2941748	0.298929	0.30364828 18,267,953	0.30833444		0.31761451		0.322125973 17,895,200		0.3267252 17,744,887		0.3314151 17.593.878	
32,949,351 (	(NPV)	10,102,001	10,700,000	10,000,101	10,000,000	10,100,000	10,110,010	10,011,000	10,207,000	10,100,11	10,110,010	10,011,010	11,010,001	,000,200	11,020,101	,	11,000,110	11,000,010	,0.10,11
Opportunity cost to WAJ for not investing in rehabilitation &		0	0	0	4,089,497	8 247 005	12,475,505	12 858 546	13,246,163	13 638 33/	14 035 035	14 436 240	14,550,899	14,665,419	14 779 773	1/ 803 03/	15,007,875	15 121 565	15 234 0
restructuring		0	0	0	4,009,497	0,247,993	12,475,505	12,030,340	13,240,103	13,030,334	14,035,035	14,430,240	14,550,698	14,000,418	14,779,773	14,093,934	15,007,675	15,121,505	15,234,9
61,210,626 (	(NPV)																		
Total savings from switching from shop and tanker water		0	0	0	3,880,910	8,018,100	12,424,264	13,119,701	13,847,516	14,609,091	15,405,861	16,239,319	16,775,510	17,329,406	17,901,590	18,492,666	5 19,103,259	19,734,012	20,385,59
(domestic water). Not possible to make calculations for						-,,		-, -, -		, ,	-,,	-,,-		,,	,,	-, - ,	-,,	-, -,-	- 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
non-domestic consumers. 68,395,263 (																			
Health gains in raising consumption of those <50 lcd to 60 lcd		0	0	0	0	0	6,710,568	6,928,615	7,153,747	7,386,194	7,626,194	7,873,993	8,129,843	8,394,007	8,666,754	8,948,364	9,239,124	9,539,332	9,849,29
30,670,859 (	(NPV)																		
Net benefit stream (excluding costs without project)		-3,705,564	-22,293,751	-30,284,404	-22,007,316	-11,441,249	1,953,452	23,569,939	24,974,584	26,423,504	27,918,385	36,884,169	37,807,479	38,756,662	39,732,545	40,735,987	49,164,549	50,225,786	51,317,32
	ERR)	20%	This is an unde	restimation as	benefits to nor	n-domestic co	onsumers could	d not be calcu	lated in the ab	sence of data	a on the cons	sumption of sh	op and tanker	water by non-do	mestic consum	iers.			
Net benefit stream (including costs without project)		140,590	-18,447,597	-26,438,250	-18,161,162	-7,595,095	5,799,606	27,416,093	28,820,738	30,269,658	31,764,538	40,730,323	41,653,633	42,602,815	39,732,545	6 40,735,987	49,164,549	50,225,786	51,317,32
	ERR)	26%																	
Sensititivy analysis (excluding costs without project)																			
Net benefit stream with 10% increase in costs		-4,076,120		-33,312,844	-25,300,189	-14,660,102	-1,553,984	22,087,952	23,492,597	24,941,517	26,436,397	36,144,501	37,067,811	38,016,994	38,992,877	39,996,319	49,164,549	50,225,786	51,317,32
(	ERR)	18%																	
Net benefit streamt with 10% reduction in benefits		-3,705,564	-22,293,751	-30,284,404	-23,099,457	-13,515,977	-1,749,329	19,730,958	20,995,138	22,299,166	23,644,559	32,456,084	33,287,063	34,141,327	35,019,623	35,922,720	44,248,094	45,203,208	46,185,58
(	ERR)	17%																	
Net benefit stream with 10% increase in costs and 10%		-4,076,120	-24,523,126	-33,312,844	-26,392,330	-16,734,831	-5,256,765	18,248,970	19,513,151	20,817,179	22,162,571	31,716,416	32,547,395	33,401,660	34,279,955	35,183,052	44,248,094	45,203,208	46,185,5
reduction in benefits (	ERR)	15%																	
Sensititivy analysis (including costs without project)																			
Net benefit stream with 10% increase in costs		-229,966	-20,676,972	-29,466,690	-21,454,035	-10,813,948	2,292,170	25,934,106	27,338,751	28,787,670	30,282,551	39,990,655	40,913,965	41,863,147	38,992,877	39,996,319	49,164,549	50,225,786	51,317,32
(	ERR)	22%																	
Net benefit stream with 10% reduction in benefits		140,590		-26,438,250	-19,253,304	-9,669,824	2,096,825	23,577,112	24,841,292	26,145,320	27,490,713	36,302,238	37,133,217	37,987,481	35,019,623	35,922,720	44,248,094	45,203,208	46,185,58
ERR (	ERR)	23%																	
Net benefit stream with 10% increase in costs and 10%		-229,966	-20,676,972	-29,466,690	-22,546,176	-12,888,677	-1,410,611	22,095,124	23,359,305	24,663,333	26,008,725	35,562,570	36,393,549	37,247,813	34,279,955	5 35,183,052	44,248,094	45,203,208	46,185,58
reduction in benefits (	ERR)	20%																	
Table 7 Beneficiary Analysis																			
Poor and medium poor socio-economic categories.																			
Total savings from switching from shop and tanker water (both		0	0	0	907,405	1,874,732	2,904,949	3,067,550	3,237,723	3 415 788	3,602,083	3,796,956	3,922,324	4,051,832	4,185,616	4,323,817	4,466,581	4,614,059	4,766,4
socio-economic categories combined)		0	0	0	501,400	1,074,102	2,004,040	0,001,000	0,201,120	0,410,700	0,002,000	0,700,000	0,022,024	4,001,002	4,100,010	4,020,011	4,400,001	4,014,000	4,700,40
15,991,669 ( Health gains in raising consumption of those <50 lcd to 60 lcd	(NPV)	0	0	0	0	0	2,581,302	2,665,176	2,751,776	2 9/1 190	2,933,509	3,028,827	3,127,243	3,228,857	3,333,773	3,442,097	3,553,942	3,669,420	3,788,6
11,797,919 (	(NPV)	0	0	0	U	0	2,561,502	2,003,170	2,751,776	2,041,109	2,933,509	3,020,027	3,127,243	5 3,220,037	3,333,773	5 3,442,097	3,553,942	3,009,420	3,700,03
	0.01	(15)																	
For each JD invested, how much will the two poorest groups benefit	0.21	(JD)																	
Richer socio-economic category																			
Total savings from switching from shop and tanker water		0	0	0	2,973,505	6,143,368	9,519,316	10,052,150	10,609,794	11,193,303	11,803,777	12,442,363	12,853,186	13,277,574	13,715,974	14,168,849	14,636,678	15,119,953	15,619,18
(richer socio-economic category) 52,403,594 (																			
Health gains in raising consumption of those <50 lcd to 60 lcd	NPV)	0	0	0	0	0	4,129,266	4,263,439	4,401,971	4,545,005	4,692,686	4,845,166	5,002,600	5,165,150	5,332,982	5,506,267	5,685,182	5,869,912	6,060,64
18,872,939 (	NPV)					0	,	, . 20		,		,		.,		,			
For each JD invested, how much will the richer socio-	0.54	(JD)																	
economic group benefit		(32)																	
WAL					<u> </u>						<u> </u>								
WAJ																-			
Total benefits (savings and opportunity gains)		0	0	0	7,040,502	12,729,187	17,892,983	18,341,498	18,793,195	19,248,093	19,706,204	20,167,536	20,298,805	5 20,429,928	20,560,881	20,691,636	20,822,166	20,952,442	21,082,43
			1	1							1	1	1	1	1	1	1	1	1
87,477,647 (	(NPV)						<u> </u>												

	Year	Year
18	19	20
2027	2028	2029
0	0	0
0	0	0
0	0	0
-		
0.47 400	5 004 040	5 000 040
847,460 3379514	5,864,040 0.336199	5,880,616 0.33862714
518,111	17,442,169	17,366,051
234,975	15,348,073	15,460,825
		,,
385,592	21.058 685	21,754,003
000,002	21,000,000	21,704,000
849.294	10,169,328	10,499,761
• ••,=• •		,
247 220	50 440 405	50 505 005
317,320	52,440,125	53,595,205
317,320	52,440,125	53,595,205
317,320	52,440,125	53,595,205
185,588	47,196,113	48,235,685
	-	
185,588	47,196,113	48,235,685
317,320	52,440,125	53,595,205
185,588	47 196 113	48,235,685
100,000	,	10,200,000
105 500	17 100 110	10.005.005
185,588	47,196,113	48,235,685
766,406	4,923,784	5,086,358
-	-	-
788 651	3,911,756	4,038,861
,	5,5 . 1,7 50	.,000,001
619,185	16,134,901	16,667,644
060,643	6,257,572	6,460,900
,040	0,201,012	5,400,900
082.435	21,212 112	21,341,442
		,,,.,.

# Zarqa Water Supply Feasibility Study. Selected List of PIP MCC Priority Projects. Work-sheet "Socecon"

Step 1 Step 1 ascertains the percentage of households that belong to the key socio-economic groupings of the TOR, namely, <\$ 2, \$2 - \$4, and >\$4. PPP exchange rates for the USA \$1 (2005) are used (see the Global Purchasing Power Parities and Real Expenditure: 2005 International Comparison Program, IBRD World Bank 2008)

Income per capita per day (\$)	Income per capi per day (JOD)	ita		ome Mean nr JOD) per hous		ncome Monthly sehold per hous (JOD)								
		0.7600	365	277	6	1,664	139							
	4 1	1.5200	365	555	6	3,329	277							
PPP exchange rate US\$ 1= .38 JOD		0.38		1		Zarga sul	h-district		Ruseifa sub-district		Berein sub-	district	Hashameer	sub-district
Income per capita per day (\$)	Annual income per household (JOD)		% of househ	olds % of hou (cumulat		% of hou	seholds %	of households cumulative)	% of households	% of households (cumulative)	% of house	% of households (cumulative)	% of house %	6 of households cumulative)
< 2	<1664			6.2%	6.2%		5.1%	5.1%	7.9%	7.9%	3.8%	3.8%	4.1%	4.1%
Between 2-4	Between 1664-33	329	3	2.3%	38.5%		27.0%	32.1%	40.6%	48.5%	37.2%	41.0%	22.4%	26.5%
> 4	>3329		6	1.5%	100.0%		67.9%	100.0%	51.5%	100.0%	59.0%	100.0%	73.5%	100.0%
			10	0.0%			100.0%		100.0%		100.0%		100.0%	

Income Groups 2006 (JOD pe	r annum)			Zarqa sub-district			Ruse	Ruseifa sub-district				Berein sub-district			Hashameer sub-district		
		Nr he	ouseholds %	6 of households % of	households % of	households % of	f households	% of	households %	of househ	olds	% of house %	of househ	olds	Nr househc%	of househ	olds
				(cum	nulative)	(cun	mulative)		(c	umulative)		(c	umulative)		(c	umulative)	
Low income group	<	1,800	9,786	6.7%	6.7%	4,208	5.5%	5.5%	4,492	8.5%	8.5%	88	4.1%	4.1%	382	4.4%	4.4%
64.4%	1,800	2,400	14,742	10.1%	16.8%	5,749	7.5%	12.9%	7,563	14.3%	22.8%	280	13.0%	17.1%	545	6.3%	10.7%
	2,400	3,000	21,634	14.8%	31.5%	9,281	12.1%	25.0%	9,865	18.7%	41.5%	281	13.0%	30.1%	1168	13.5%	24.3%
	3,000	3,600	18,549	12.7%	44.2%	9,942	12.9%	37.9%	6,770	12.8%	54.3%	427	19.8%	49.9%	352	4.1%	28.3%
	3,600	4,200	16,389	11.2%	55.4%	8,276	10.8%	48.7%	6,572	12.4%	66.7%	426	19.8%	69.7%	541	6.3%	34.6%
	4,200	4,800	13,228	9.0%	64.4%	7,566	9.8%	58.5%	3,863	7.3%	74.0%	238	11.0%	80.7%	1177	13.6%	48.2%
Midde income group	4,800	5,400	11,578	7.9%	72.3%	6,900	9.0%	67.5%	3,265	6.2%	80.2%	139	6.5%	87.2%	741	8.6%	56.8%
28.4%	5,400	6,000	7,386	5.0%	77.4%	4,306	5.6%	73.1%	2,083	3.9%	84.2%	44	2.0%	89.2%	569	6.6%	63.4%
	6,000	7,000	11,141	7.6%	85.0%	6,272	8.2%	81.3%	3,220	6.1%	90.3%	0	0.0%	89.2%	1315	15.2%	78.6%
	7,000	8,000	6,365	4.3%	89.3%	4,265	5.5%	86.8%	1,674	3.2%	93.4%	45	2.1%	91.3%	178	2.1%	80.7%
	8,000	9,000	5,140	3.5%	92.8%	3,691	4.8%	91.6%	771	1.5%	94.9%	46	2.1%	93.5%	565	6.5%	87.2%
High income group	9,000	10,000	3,025	2.1%	94.9%	1,755	2.3%	93.9%	1,116	2.1%	97.0%	51	2.4%	95.8%	0	0.0%	87.2%
7.2%	10,000	12,000	3,007	2.1%	97.0%	1,431	1.9%	95.8%	965	1.8%	98.8%	45	2.1%	97.9%	565	6.5%	93.7%
	12,000	14,000	2,093	1.4%	98.4%	1,614	2.1%	97.9%	299	0.6%	99.4%	0	0.0%	97.9%	180	2.1%	95.8%
	>	14000	2,369	1.6%	100.0%	1,642	2.1%	100.0%	322	0.6%	100.0%	45	2.1%	100.0%	360	4.2%	100.0%
			146,432	100.0%		76,898			52,840			2,155			8,638		

# Source: HEIS 2006, Department of Statistics

Adjustments at the	income boundaries				Zarqa sub	-district			Ruseifa sub-distric	t		Berein sub-d	istrict	Hashameer s	ub-district
		Nr	households % of	f households	Nr househ	nolds % a	f households		Nr households	% of househ	olds	Nr househ(%	of households	Nr househc%	of households
	<	1,800	9,786	6.7%		4,208	5.5%		4,492	8.5%		88	4.1%	382	4.4%
	<	1,664	9,049	6.2%		3,891	5.1%		4,154	7.9%		81	3.8%	353	4.1%
	1,664	1,800	737	0.5%		317	0.4%		338	0.6%		7	0.3%	29	0.3%
	3,000	3,600	18,549	12.7%		9,942	12.9%		6,770	12.8%		427	19.8%	352	4.1%
	3,000	3,329	10,165	6.9%		5,448	7.1%		3,710	7.0%		234	10.9%	193	2.2%
	3,329	3,600	8,384	5.7%		4,494	5.8%		3,060	5.8%		193	9.0%	159	1.8%
Analysis of socio	-economic breakdown of p	opulation of	MCC priority areas												
WSA	Population connected	Population Zar	rqa sub-district Zarq	a sub-distric Zarga	a sub-district Zarqa sub	-district Rus	saifah Russaifah	า	Russaifah	Russaifah I	lost Population of	MCC priority are	as		
	(NOD/ACEPO)	(host) (ho	st) population <\$2	betwo	een \$2-\$4 >\$4	(hos	st population) <\$2		between \$2-\$4	>\$4	\$2 \$2-\$4	>\$4			
Tatweer	8,501	8,673	8,673	439	2,345	5,889									
Zarqa	226,821	231,407	231,407	11,709	62,579	157,120									
Awajan	149,171	152,187	152,187	7,701	41,155	103,331									
Russaifah	91,034	92,875					92,875	7,301	37,748	47,826					
Total	475,527	485,142	392,268	19,849	106,079	266,340	92,875	7,301	37,748	47,826	27,149 143,8	28 314,166 in	real numbers		
											5.60% 29.6	5% 64.76% p	ercentage terms		
Connection rate	98.02%														

Please note Tatweer, Zarqa and Awajan WSA lie within the Zarqa sub-district and obviously Russaifa WSA lies within Russaifa sub-district The North WSA belongs to Hashmeer sub-district and West-NW WSA lies within Berein sub-district

% of house %	istrict 6 of households cumulative)	% of house %	district of households cumulative)
8.0%	8.0%	14.7%	14.7%
39.3%	47.3%	38.0%	52.7%
52.7%	100.0%	47.3%	100.0%
52.1%	100.0%	47.3%	100.0%
100.0%		100.0%	

# Dhilail sub-district..... Nr househ(% of households

(	cumulative)	
382	8.6%	8.6%
383	8.6%	17.3%
822	18.5%	35.8%
927	20.9%	56.7%
475	10.7%	67.4%
278	6.3%	73.7%
463	10.4%	84.1%
288	6.5%	90.6%
201	4.5%	95.2%
108	2.4%	97.6%
0	0.0%	97.6%
106	2.4%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
4,433		

# tive)

Ashraq sub- Nr househ		
(	cumulative)	
235	15.9%	15.9%
236	15.9%	31.8%
238	16.1%	47.9%
130	8.8%	56.7%
98	6.6%	63.3%
93	6.3%	69.6%
58	3.9%	73.5%
96	6.5%	80.0%
134	9.1%	89.1%
95	6.4%	95.5%
67	4.5%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
0	0.0%	100.0%
1,480		

# Ashraq sub-district.... Nr househ(% of households 235 15.9%

235	15.9%
217	14.7%
18	1.2%
130	8.8%
71	4.8%
59	4.0%

Dhilail sub-district.....

Brindin Odib die		
Nr househ(%	of households	
382	8.6%	
353	8.0%	
29	0.6%	
927	20.9%	
508	11.5%	
419	9.5%	

	<u> </u>												1
Zarga Water	Supply Fea	sibility St	<u>udy. Sele</u>	cted List of PIP MCC Pr	<u>iority Projec</u>	<u>ts. Work-sh</u>	eet "Wo	<u>con"</u>					
Step 2 is to assess the	e structure of water	distribution acros	ss the three so	cio-economic groups outlined in the TOR									
				the population in each socio-economic qu		rity areas is as follow	ws:						
<\$2	5.6%		percentage er										
\$2-\$4	29.6%												
¢2 ¢4 >\$4	64.8%												
(for details of the analy		"Sococon")											
(IOI details of the anal	Iysis see wurksheel	Socecon )											
Proportionate shares a		mia antogoroo (a	(acumptions)										
Proportionate shares a	<\$2	\$2 - \$4	>\$4										
<u>Ohan</u>	<\$2	• •	•										
Shop water shares		1.5	2										
Tanker water	1	1	2										
<u> </u>													
Percentage water sha													
	network water		tanker water										
	(percentage)		(percentage)					1					
<\$2	5.6%		3.4%	1 2.3%						er across the three main s			
\$2-\$4	29.6%	7	18.0%	8 18.2%	5					there is no relationship b			ork
>\$4	64.8%			35 79.5%						nker water across socio-			
	100%		100%	100%	b	In the absence of o	data assump	tions are ma	de; and thes	e assumptions apply only	y to the beneficiary	analysis	
Values of key indepen	ndent (or input) vari	ables are outlined	d here, appropr	ately referenced:									
Average annual tanke	er water consumption	n per household	(m3/hse/a)	13.535	ECO Consult 2010:	calculated from raw	v data and a	djusted to HI	l size)				
		·	Ĺ		This is an under-est	imate as ECO Cons	sult figures a	re based on	one quarter.				
Average annual shop	water consumption	per household (	m3/hse/a)	1.521	(GFA Aug 2008 raw		J						
Price of shop water (J			,										
Price of tanker water (		1		52.826	NOD/ACEPO engin	eers							
Average size of house	(JOD/m3) (conserv	ative)			NOD/ACEPO engin								
		ative)		4	(GFA Aug 2008:107	)	98.02% con	nection rate					
	ehold (HH)		g the same root	7.083	GFA Aug 2008:107 Based on DOS Zard	) a population 2008,							
	ehold (HH)		g the same roof	4	GFA Aug 2008:107 Based on DOS Zard	) a population 2008,							
	ehold (HH)		g the same root	. Here in the context of the water sector,	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple	) a population 2008,							
The model below (tab	ehold (HH) graphic data refers	to person sharin		Here in the context of the water sector,	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum	) ja population 2008, HHs that share the							
The model below (tabl	ehold (HH) graphic data refers	to person sharing	mption of all typ	. Here in the context of the water sector, context of the water sector, context of the water sector, context of the water sector, context of the water sector secto	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161	) a population 2008, HHs that share the							
The model below (tabl The model also shows	ehold (HH) graphic data refers	to person sharing	mption of all typ	. Here in the context of the water sector, context of the water sector, context of the water sector, context of the water sector, context of the water sector secto	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161	) a population 2008, HHs that share the							
The model also shows	ehold (HH) graphic data refers le 1:last row) show s (table 1:first row)	to person sharing s average consur average consum	mption of all typ ption of network	. Here in the context of the water sector, lcd es of water is 62 : water only is 56	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161 5 146	) a population 2008, HHs that share the							
The model also shows The findings are only s	ehold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the	to person sharing s average consur average consum average consum analysis is cond	mption of all typ ption of network	. Here in the context of the water sector, licd es of water is 62 water only is 56 cel file of the 2008 billing data and based	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 161 146 d on the certain assur	) a population 2008, HHs that share the http://www.commons.common							
The model also shows The findings are only s were necessary as the	ehold (HH) graphic data refers le 1:last row) show s (table 1:first row) s shown here but the e 2008 billing data	to person sharing s average consur average consum analysis is cond in contrast to the	mption of all typ ption of network ucted on the ex 2006 billing da	A 7.083 . Here in the context of the water sector, lcd es of water is 62 water only is 56 cel file of the 2008 billing data and based taj does not distinguish between domesi	(GFA Aug 2008:107     Based on DOS Zarc     HH refers to multiple     m³/HH / annum     161     146     d     on the certain assurt     tic and non-domestic	) a population 2008, HHs that share the http://www.commons.common							
The model also shows The findings are only s were necessary as the Hence, in order to dist	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data ( tinguish between di	to person sharing s average consur average consurg analysis is cond in contrast to the mestic and non-	mption of all typ ption of network ucted on the ex 2006 billing da dometic consur	A 7.083 . Here in the context of the water sector, lcd s of water is 62 water only is 55 cel file of the 2008 billing data and base ta) does not distinguish between domesi ption the following assumptions were u	(GFA Aug 2008:107     Based on DCS Zarc     HH refers to multiple     m³/HH / annum     161     1146     d on the certain assurt     tic and non-domestic     sed:	) a population 2008, HHs that share the http://www.analysis. mptions which consumers.							
The model also shows The findings are only s were necessary as the Hence, in order to dist <i> the quantities of w</i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data tinguish between di rater consumed by	to person sharing s average consur average consurg analysis is cond in contrast to the omestic and non- domestic HHs an	mption of all typ ption of network ucted on the ex 2006 billing da dometic consur id non-domestic	A 7.083 Here in the context of the water sector, Icd es of water is 62 water only is 56 cel file of the 2008 billing data and based ta) does not distinguish between domesi nption the following assumptions were u units are based on the 2006 billing data	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m <sup>3</sup> /HH / annum 161 146 d on the certain assur tic and non-domestic sed: a as 85% and 15% res	) a population 2008, HHs that share the http://www.analysis. mptions which consumers.							
The model also shows The findings are only s were necessary as the Hence, in order to dist <i> the quantities of w <ii> units that did not d</ii></i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data i tinguish between d vater consumed by consume any wate	to person sharing a average consum average consum analysis is cond in contrast to the omestic and non- domestic HHs an in 2008 are excl	mption of all typ ption of network ucted on the ex 2006 billing da dometic consur id non-domestic luded from the a	A 7.083 . Here in the context of the water sector, lcd es of water is 62 water only is 56 cel file of the 2008 billing data and based ta) does not distinguish between domesi ption the following assumptions were u : units are based on the 2006 billing data analysis. Some of them were only registe	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m <sup>3</sup> /HH / annum 161 146 d on the certain assur tic and non-domestic sed: a as 85% and 15% res	) a population 2008, HHs that share the http://www.analysis. mptions which consumers.							
The model also shows The findings are only were necessary as the Hence, in order to dist <i> the quantities of w <ii> units that did not c <iii> units that did not c</iii></ii></i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data 1 tinguish between di rater consumed by consume any watei ne quantities >265	to person sharing s average consum average consum analysis is cond in contrast to the omestic and non- domestic HHs an in 2008 are excl cof are assumed	mption of all typ ption of network ucted on the ex 2006 billing da dometic consur ind non-domestic luded from the a to be non-dome	A 7.083 . Here in the context of the water sector, es of water is 622 water only is 56 cel file of the 2008 billing data and baser ta) does not distinguish between domesi mption the following assumptions were u units are based on the 2006 billing data analysis. Some of them were only register stic.	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 161 161 d on the certain assurt tic and non-domestic sed: a as 85% and 15% res ared in 2009.	) a population 2008, HHs that share the hts that share the consumers.							
The model also shows The findings are only s were necessary as the Hence, in order to dist <i>&gt; the quantities of w <ii>&gt; units that did not of <ii>&gt; units that consum The relevant conclusio</ii></ii></i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data a tinguish between di rater consume any wate ne quantities >265 ons of the analysis	to person sharing average consum average consum analysis is cond in contrast to the mestic and non- domestic HHs an in 2008 are excl ccd are assumed is outline in Table	mption of all typ ption of network ucted on the ex 2006 billing da dometic consur ind non-domestic luded from the a to be non-dome e 1 below under	A 7.083 . Here in the context of the water sector, locd es of water is 62 : water only is 56 cel file of the 2008 billing data and based ta) does not distinguish between domesi : units are based on the 2006 billing data analysis. Some of them were only register istic. network water in terms of HHs and quai	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161 5 146 d on the certain assur tic and non-domestic sed: as 85% and 15% res red in 2009.	) a population 2008, HHs that share the hts that share the consumers.							
The model also shows The findings are only s were necessary as the Hence, in order to dist <i>&gt; the quantities of w <i>&gt; units that did not c <i>&gt; units that did not c The relevant conclusic The breakdown of dor</i></i></i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data tinguish between di rater consumed by consume any wate ne quantities >265 ons of the analysis mestic consumers i	to person sharing saverage consum average consum analysis is cond in contrast to the pomestic and non- mestic and non- in 2008 are excl cd are assumed is outline in Table soutline in Table	pition of all typ ption of all typ ption of network ucted on the ex 2006 billing da dometic consur d non-domestic luded from the to be non-dome e 1 below undet o consumption b	A 7.083 . Here in the context of the water sector, lcd es of water is 62 water only is 56 cel file of the 2008 billing data and based ta does not distinguish between domesi pution the following assumptions were u units are based on the 2006 billing data analysis. Some of them were only registe stic. network water in terms of HHs and qual ands is shown in worksheet "Heli". More	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161 5 146 d on the certain assur tic and non-domestic sed: as 85% and 15% res red in 2009.	) a population 2008, HHs that share the hts that share the consumers.							
The model also shows The findings are only s were necessary as the Hence, in order to dist <i>&gt; the quantities of w <i>&gt; units that did not c <i>&gt; units that did not c The relevant conclusic The breakdown of dor</i></i></i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data tinguish between di rater consumed by consume any wate ne quantities >265 ons of the analysis mestic consumers i	to person sharing saverage consum average consum analysis is cond in contrast to the pomestic and non- mestic and non- in 2008 are excl cd are assumed is outline in Table soutline in Table	pition of all typ ption of all typ ption of network ucted on the ex 2006 billing da dometic consur d non-domestic luded from the to be non-dome e 1 below undet o consumption b	A 7.083 . Here in the context of the water sector, locd es of water is 62 : water only is 56 cel file of the 2008 billing data and based ta) does not distinguish between domesi : units are based on the 2006 billing data analysis. Some of them were only register istic. network water in terms of HHs and quai	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161 5 146 d on the certain assur tic and non-domestic sed: as 85% and 15% res red in 2009.	) a population 2008, HHs that share the hts that share the consumers.							
The model also shows The findings are only s were necessary as the Hence, in order to dist <i>&gt; the quantities of w <i>&gt; units that did not c <ii>&gt; units that did not c <ii>&gt; units that consum The relevant conclusic The breakdown of dor</ii></ii></i></i>	hold (HH) graphic data refers le 1:last row) show s (table 1:first row) shown here but the e 2008 billing data tinguish between di rater consumed by consume any wate ne quantities >265 ons of the analysis mestic consumers i	to person sharing saverage consum average consum analysis is cond in contrast to the pomestic and non- mestic and non- in 2008 are excl cd are assumed is outline in Table soutline in Table	pition of all typ ption of all typ ption of network ucted on the ex 2006 billing da dometic consur d non-domestic luded from the to be non-dome e 1 below undet o consumption b	A 7.083 . Here in the context of the water sector, lcd es of water is 62 water only is 56 cel file of the 2008 billing data and based ta does not distinguish between domesi pution the following assumptions were u units are based on the 2006 billing data analysis. Some of them were only registe stic. network water in terms of HHs and qual ands is shown in worksheet "Heli". More	GFA Aug 2008:107 Based on DOS Zarc HH refers to multiple m³/HH / annum 2 161 5 146 d on the certain assur tic and non-domestic sed: as 85% and 15% res red in 2009.	) a population 2008, HHs that share the hts that share the consumers.							

									1			1	
Soc	Annual water	Annual water	cd	Nr HH	Water	Water	Price/ m3						
econ		consumption					/socio-econ						
cat		per HH					cat						
(HEIS 06)	()	(average)			(JOD)	(JOD)	(JOD)						
(	(m3)	(m3)			()	(/	(****)						
	(	()											
Table 1: Supplies of	water to househol	ds in Zarga Gove	ernorate: net	work, shop and tanke	water (based on	2008 billing data)							
	Network water												
Total	17,600,328	146	56	120,611	3,874,082	32	0.22						
<\$2	0	0	0	0	0	0	0.00						
\$2-\$4	0	0	0	0	0	0	0.00						
>\$4	0	0	0	0	0	0	0.00						
	Shop water												
Total	183,471	2	1	120,611	9,692,035	80	53						
<\$2													
\$2-\$4													
>\$4													
	Tanker water												
Total	1,632,498	14	5	120,611	2,483,321	21	1.5						
<\$2													
\$2-\$4													
>\$4													
	Shop & tanker wat												
Total	1,815,969	15	6	120,611	12,175,356	101							
<\$2													
\$2-\$4													
>\$4													
	Network, shop & ta												L
Total	19,416,297	161	62	120,611	16,049,438	133							
<\$2													
\$2-\$4													
>\$4													
				1									

Step 3													
A baselin	ie (2010) mod	el of water consun	nption based on t	able 1 above is	generated.	The 2010 po	pulation that is c	onnected to the WA	I network is:				
		This figure refers							For details see				
see work	sheet "Heli" s	ection (a). The 201	I 0 population incl	uding those no	t connected i	s:	517,189	(for details see "Heli	section (d))				
		ater to targeted h					ut project)		BASELINE				
network		target pop		hse incr	incr water	с	urrent water dei	nand	2010				
	10,454,745			0		0	11,533,446	0					
		Network water	m3/hse/a	lcd	nr hse			water revenue / hse					
Total		10,454,745		56		71,644	2,301,238	32	0.22				
<\$2		585,060		0		4,009	0	0	0.00				
\$2-\$4		3,099,461		0		21,240	0	0	0.00				
>\$4		6,770,224	<u>0</u>	0		46,395	0	0	0.00				
		Shop water											
Total		108,983	8 2	1		71,644	5,757,151	80.35780185	53				
<\$2													
\$2-\$4													
>\$4			1	1									
		Tanker water											
Total		969,718	8 14	5		71,644	3,878,871	54	4.0				
<\$2													
\$2-\$4													
>\$4							1			 			
-		Network, shop & t											
Total		11,533,446	6 161	62		71,644	11,937,260	167		 			
<\$2										 			
\$2-\$4										 			
>\$4										 			
											1		

Step 4						
Step 4 consists in assessing annual models of water consumption over t	the 20 years of the life of the project (201	0-2029) taking into				
account population growth and "without project" and "with project" scena						
The following additional assumptions are made:						
Population and connectivity parameters						
Annual population growth rate:	3.25%	Generated by the masterplan CBA me	odel			
Population (2008)	485,142	Source: NOD/ ACEPO engineers				
Population (2029)	949,643	Source: NOD/ ACEPO engineers				
Baseline data (2010)	517,189	Generated by the CBA model				
Percentage of population connected (2008)	98.02%	Source: NOD/ ACEPO engineers				
Percentage of population connected (2029)	99.07%	Source: NOD/ ACEPO engineers				
Average annual increase in population connected	0.05%	Generated by the CBA model				
Percentage of population connected (2010)	98.12%	Generated by the CBA model				
UFW parameters						
UFW physical as % of total system input, without project (2008)	63.60% 70hrs/wk	Source: NOD/ ACEPO engineers				
UFW physical as % of total system input, without project (2010)	63.9% 70hrs/wk	Generated by the CBA model				
UFW physical as % of total system input, without project (2029)	66.4% 70hrs/wk	Source: NOD/ ACEPO engineers				
Average annual % change to UFW physical without project (2010-2029)	0.2% 70hrs/wk	Generated by the CBA model				
UFW administrative as % of total system input, without project (2008)	5.2% 70hrs/wk	Source: NOD/ ACEPO engineers				
UFW administrative as % of total system input, without project (2010)	5.2% 70hrs/wk	Generated by the CBA model				
UFW administrative as % of total system input, without project (2029)	5.0% 70hrs/wk	Source: NOD/ ACEPO engineers				
Average annual % change to UFW administrative without project (2010 -	0.2% 70hrs/wk	Generated by the CBA model				
UFW physical as % of total system input, with project (2008)	13.8% 70hrs/wk	Source: NOD/ ACEPO engineers	The 2008 & 2010 UFW fi	gures with project		
UFW physical as % of total system input, with project (2010)	13.7% 70hrs/wk	Generated by the CBA model	are hypothetical for the s	ake of the		
UFW physical as % of total system input, with project (2029)	12.4% 70hrs/wk	Source: NOD/ ACEPO engineers	engineering calculations.	In reality UFW		
Average annual % change to UFW physical with project (2010-2030)	-0.5% 70hrs/wk	Generated by the CBA model	with project is only realise	ed in year 3 of the		
UFW administrative as % of total system input, with project (2008)	6.7% 70hrs/wk	Source: NOD/ ACEPO engineers	life of the project.			
UFW administrative as % of total system input, with project (2010)	6.7% 70hrs/wk	Generated by the CBA model				
UFW administrative as % of total system input, with project (2029)	6.9% 70hrs/wk	Source: NOD/ ACEPO engineers				
Average annual % change to UFW administrative with project	0.1% 70hrs/wk	Generated by the CBA model				
Percentage of HHs affected adversely by UFW administrative	89.0%	Source: NOD/ ACEPO engineers				
Consumption of shop water is reduced "with project" by 50%	50% (Conjecture that	can be modified with evidence				
(Currently, this is conjecture. But it is not foreseen that all HHs particular	y the richer ones will not totally give up t	he use of shop water as it is				
used for drinking and cooking. However, the quality of the additional net	work water would be significant in this de	ecision.				
On the other hand, tanker water will be easily subsituted for additional ne	etwork water on a one to one basis wher	available, as it is mainly relied upon				
when network water is not available and usually not for drinking and coo	king (unless treated) but for more genera	al domestic uses. This has been borne				
out by the ECO Consult draft report.						
The model assumes that benefits of the proposed project only are realise	ed in year 3 of the life of the project. Up t	till then the network operates in				
accordance with UFW figures "without project" as outlined above.						

Table 3: Supplies of	f water to targeted	households: netwo	rk. shop and tanke	r water			2010									
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop po	connect water d	emand (m3)		Year	1									
10,454,74			507,454	11,533,446	0		without project									
,,.	Network water	m3/hse/a lcd		,,		water revenue/hse	water prices/ m3									
Total	10,454,745		56	71,644												
<\$2	585,060		56	4.009												
\$2-\$4	3,099,461		56	21,240												
>\$4	6.770.224		56	46.395	0	0	0.00									
-ψ.	Shop water			.0,000	, i i i i i i i i i i i i i i i i i i i	Ŭ	0.00									
Total	108,983	2	1	71,644	5,757,151	80	53	Given the vari	iety of variab	les it was t	hought nece	esany to dev	te senarate			
<\$2	2,496		1	71,044	5,757,151	00		"without project								
<u> </u>	19,835												at are identified	ot		
⇒2- <del>5</del> 4 >\$4	86.652												ation growth ye			
<i>&gt;</i> ₀4	Tanker water							quanities of w						ais,		
Tatal		14	5	71,644	3,878,871	54							d automatically			
Total <\$2	969,718 32,937	14	ə	71,644	3,878,871	54	4						arii, and onwar			
<\$2 \$2-\$4	174,491							to the summar					iani, and onwar	u		
\$2-\$4 >\$4	762.289							to the summal	IN COA WORK	sneet whe		s decided.				
> <b>⊅</b> 4	Network, shop & t															
Tetel			<u></u>	74.014	44 007 000	107										
Total	11,533,446	161	62	71,644	11,937,260	167										
<\$2								The data gene				the more tra	ditional			
\$2-\$4								worksheets "h	isehold", "pr	od" and "C	BA".					
>\$4	_		1													
Supplies of water to							2010									
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop po	o connect water d			Year	1									
	Deficit (m <sup>3</sup> ) 5 0	baseline pop poj 517,189	connect water d 507,454	emand (m3) 11,533,446			1 with project									
network water (m3) 10,454,74	Deficit (m³)           5         0           Network water         0	baseline pop 517,189 m3/hse/a Icd	507,454 nr hse	11,533,446	water revenue	water revenue/hse	1 with project water prices/ m3									
network water (m3) 10,454,74 Total	Deficit (m³)           5         0           Network water         10,454,745	baseline pop pop 517,189 m3/hse/a lcd 146	connect water d 507,454 nr hse 56	<b>11,533,446</b> 71,644	water revenue 2,301,238	water revenue/hse 32	1 with project water prices/ m3 0.22									
network water (m3) 10,454,74 Total <\$2	Deficit (m <sup>3</sup> ) 5 0 <u>Network water</u> 10,454,745 585,060	baseline pop         pop           517,189         m3/hse/a         lcd           146         146         146	connect         water d           507,454         nr hse           56         56	<b>11,533,446</b> 71,644 <b>4,009</b>	water revenue 2,301,238 0	water revenue/hse 32 0	1 with project water prices/ m3 0.22 0.00									
network water (m3) 10,454,74 Total <\$2 \$2-\$4	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461	baseline pop po 517,189 m3/hse/a lcd 146 146 146	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240	water revenue 2,301,238 0 0	water revenue/hse 32 0 0	1 with project water prices/ m3 0.22 0.00 0.00									
network water (m3) 10,454,74 Total <\$2	Deficit (m³)           5         00           Network water         10,454,745           585,060         3,099,461           6,770,224         6,770,224	baseline pop po 517,189 m3/hse/a lcd 146 146 146	connect         water d           507,454         nr hse           56         56	<b>11,533,446</b> 71,644 <b>4,009</b>	water revenue 2,301,238 0 0	water revenue/hse 32 0	1 with project water prices/ m3 0.22 0.00 0.00									
network water (m3) 10,454,74 Total <\$2 \$2-\$4 >\$4	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461           6,770,224         Shop water	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240 46,395	water revenue 2,301,238 0 0 0	water revenue/hse 32 0 0 0 0	1 with project water prices/ m3 0.22 0.00 0.00 0.00									
network water (m3) 10,454,74 Total <\$2 \$2-\$4 >\$4 Total	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461           6,770,224         6,770,224           Shop water         108,983	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240	water revenue 2,301,238 0 0 0	water revenue/hse 32 0 0 0 0	1 with project water prices/ m3 0.22 0.00 0.00 0.00									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461           6,770,224         Shop water           108,983         2,496	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240 46,395	water revenue 2,301,238 0 0 0	water revenue/hse 32 0 0 0 0	1 with project water prices/ m3 0.22 0.00 0.00 0.00									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³) 5 00 Network water 10,454,745 585,060 3,099,461 6,770,224 Shop water 108,983 2,496 19,835	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240 46,395	water revenue 2,301,238 0 0 0	water revenue/hse 32 0 0 0 0	1 with project water prices/ m3 0.22 0.00 0.00 0.00									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461           6,770,224         Shop water           108,983         2,496	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240 46,395	water revenue 2,301,238 0 0 0	water revenue/hse 32 0 0 0 0	1 with project water prices/ m3 0.22 0.00 0.00 0.00									
network water (m3)           10,454,74           Total           <\$2	Deficit (m <sup>3</sup> ) 5 00 Network water 10,454,745 585,060 3,099,461 6,770,224 Shop water 108,983 2,496 19,835 86,652 Tanker water	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2	o connect   water d 507,454 nr hse 56 56 56 56 56 1	11,533,446 71,644 4,009 21,240 46,395 71,644	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80	1 with project water prices/ m3 0.22 0.00 0.00 0.00 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461           6,770.224         Shop water           108,983         2,496           19,835         86,652           Tanker water         969,718	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 2 2 2	2 connect water d 507,454 nr hse 56 56 56	11,533,446 71,644 4,009 21,240 46,395	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80	1 with project water prices/ m3 0.22 0.00 0.00 0.00 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         00           Network water         10,454,745           585,060         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         969,718           32,937         32,937	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2 2	o connect   water d 507,454 nr hse 56 56 56 56 56 1	11,533,446 71,644 4,009 21,240 46,395 71,644	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80	1 with project water prices/ m3 0.22 0.00 0.00 0.00 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,060         3,099,461           6,770.224         Shop water           108,983         2,496           19,835         86,652           Tanker water         969,718	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2 2	o connect   water d 507,454 nr hse 56 56 56 56 56 1	11,533,446 71,644 4,009 21,240 46,395 71,644	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80	1 with project water prices/ m3 0.22 0.00 0.00 0.00 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         00           Network water         10,454,745           585,060         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         969,718           32,937         32,937	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 2 2	o connect   water d 507,454 nr hse 56 56 56 56 56 1	11,533,446 71,644 4,009 21,240 46,395 71,644	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80	1 with project water prices/ m3 0.22 0.00 0.00 0.00 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³) 5 00 Network water 10,454,745 585,060 3,099,461 6,770,224 Shop water 108,983 2,496 19,833 2,496 19,833 2,496 19,833 2,496 32,937 174,491	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 2 2 2 14	o connect   water d 507,454 nr hse 56 56 56 56 56 1	11,533,446 71,644 4,009 21,240 46,395 71,644	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80	1 with project water prices/ m3 0.22 0.00 0.00 0.00 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         00           Network water         10,454,745           585,060         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         969,718           969,718         32,937           174,491         762,288	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 2 2 2 14 14 14 146 146	o connect   water d 507,454 nr hse 56 56 56 56 56 1	11,533,446 71,644 4,009 21,240 46,395 71,644	water revenue 2,301,238 0 0 0 0 5,757,151	water revenue/hse 32 0 0 0 0 80 80	1 with project water prices/ m3 0.22 0.00 0.00 53 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,960         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         32,937           174,491         762,288           Network, shop & t         7	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 146 146 146 146 146 146	o connect   water d 507,454   nr hse 56 56 56 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	11,533,446 71,644 4,009 21,240 46,395 71,644 71,644	water revenue 2,301,238 0 0 0 0 5,757,151 3,878,871	water revenue/hse 32 0 0 0 0 80 80	1 with project water prices/ m3 0.22 0.00 0.00 53 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,960         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         32,937           174,491         762,288           Network, shop & t         7	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 146 146 146 146 146 146	o connect   water d 507,454   nr hse 56 56 56 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	11,533,446 71,644 4,009 21,240 46,395 71,644 71,644	water revenue 2,301,238 0 0 0 0 5,757,151 3,878,871	water revenue/hse 32 0 0 0 0 80 80	1 with project water prices/ m3 0.22 0.00 0.00 53 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,960         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         32,937           174,491         762,288           Network, shop & t         7	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 146 146 146 146 146 146	o connect   water d 507,454   nr hse 56 56 56 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	11,533,446 71,644 4,009 21,240 46,395 71,644 71,644	water revenue 2,301,238 0 0 0 0 5,757,151 3,878,871	water revenue/hse 32 0 0 0 0 80 80	1 with project water prices/ m3 0.22 0.00 0.00 53 53									
network water (m3)           10,454,74           Total           <\$2	Deficit (m³)           5         0           Network water         10,454,745           585,960         3,099,461           6,770,224         Shop water           108,983         2,496           19,835         86,652           Tanker water         32,937           174,491         762,288           Network, shop & t         7	baseline pop poj 517,189 m3/hse/a lcd 146 146 146 146 146 146 146 146 146 146	o connect   water d 507,454   nr hse 56 56 56 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	11,533,446 71,644 4,009 21,240 46,395 71,644 71,644	water revenue 2,301,238 0 0 0 0 5,757,151 3,878,871	water revenue/hse 32 0 0 0 0 80 80	1 with project water prices/ m3 0.22 0.00 0.00 53 53									

Supplies of water to	targeted househo	ds: network, shop a	and tanker	water			2011			
network water (m3)				water demand (m3)		Year	2			
10,414,10			524,213		1	with	out project			
	Network water	m3/hse/a lcd		nr hse	water revenu	water revenue / hse wate				
Total	10,414,107		54		2,292,293		0.22			
<\$2	582,786	141	54	4,142	0	0	0.00			
\$2-\$4	3,087,413	141	54		0	0	0.00			
>\$4	6,743,908	141	54		0	0	0.00			
	Shop water			,						
Total	112,582	2	1	74,010	5,947,281	80	53			
<\$2	2,578		-		0,0 (=0.					
\$2-\$4	20,490									
>\$4	89,514									
×ψ÷	Tanker water									
Total	1,001,743	14	5	74,010	4,006,970	54	4			
<\$2	34,025	14	5	74,010	4,000,370	54				
\$2-\$4	180,254									
>\$4	787,464									
-ψ- -	Network, shop & ta	anker water						+		
Total	11,914,338		62	74,010	12,246,545	165		+		
<\$2	11,914,330	101	02	74,010	12,240,343	105				
\$2-\$4										
>ə4				1						
Supplies of water to	targeted househol	de: notwork, chop a	and tankor	wator			2011			
network water (m3)				water demand (m3)		Year	2011			
10,414,10			524,213		1		project			
10,414,10	Network water						project			
Total					water revenu		r pricoc/m2			
		m3/hse/a lcd		nr hse		water revenue / hse wate				
	10,414,107	m3/hse/a lcd 141	54	nr hse 74,010	2,292,293	water revenue / hse wate 31	0.22			
<\$2	10,414,107 582,786	m3/hse/a lcd 141 141	54 54	nr hse 74,010 4,142	2,292,293 0	water revenue / hse wate 31 0	0.22			
<\$2 \$2-\$4	10,414,107 582,786 3,087,413	m3/hse/a lcd 141 141 141	54 54 54	nr hse 74,010 4,142 21,941	2,292,293	water revenue / hse wate 31 0 0	0.22 0.00 0.00			
<\$2	10,414,107 582,786 3,087,413 6,743,908	m3/hse/a lcd 141 141	54 54	nr hse 74,010 4,142 21,941	2,292,293 0	water revenue / hse wate 31 0	0.22			
<\$2 \$2-\$4 >\$4	10,414,107 582,786 3,087,413 6,743,908 Shop water	m3/hse/a lcd 141 141 141 141 141	54 54 54 54	nr hse 74,010 4,142 21,941 47,927	2,292,293 0 0 0	water revenue / hse wate 31 0 0 0	0.22 0.00 0.00 0.00			
<\$2 \$2-\$4 >\$4 Total	10,414,107 582,786 3,087,413 6,743,908 Shop water 112,582	m3/hse/a lcd 141 141 141	54 54 54	nr hse 74,010 4,142 21,941 47,927	2,292,293 0	water revenue / hse wate 31 0 0	0.22 0.00 0.00			
<\$2 \$2-\$4 >\$4 Total <\$2	10,414,107 582,786 3,087,413 6,743,908 Shop water 112,582 2,578	m3/hse/a lcd 141 141 141 141 141	54 54 54 54	nr hse 74,010 4,142 21,941 47,927	2,292,293 0 0 0	water revenue / hse wate 31 0 0 0	0.22 0.00 0.00 0.00			
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	10,414,107 582,786 3,087,413 6,743,908 Shop water 112,582 2,578 20,490	m3/hse/a lcd 141 141 141 141 141	54 54 54 54	nr hse 74,010 4,142 21,941 47,927	2,292,293 0 0 0	water revenue / hse wate 31 0 0 0	0.22 0.00 0.00 0.00			
<\$2 \$2-\$4 >\$4 Total <\$2	10,414,107 582,786 3,087,413 6,743,908 5hop water 112,582 2,578 20,490 89,514	m3/hse/a lcd 141 141 141 141 141	54 54 54 54	nr hse 74,010 4,142 21,941 47,927	2,292,293 0 0 0	water revenue / hse wate 31 0 0 0	0.22 0.00 0.00 0.00			
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 >\$4	10,414,107 582,786 3,087,413 6,743,908 Shop water 112,582 2,578 20,490 89,514 Tanker water	m3/hse/a  cd 141 141 141 141 2	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010	2,292,293 0 0 0 5,947,281	water revenue / hse wate 31 0 0 0 80	0.22 0.00 0.00 53			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total Total	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 2,578 20,490 89,514 Tanker water 1,001,743	m3/hse/a lcd 141 141 141 141 141	54 54 54 54	nr hse 74,010 4,142 21,941 47,927 74,010	2,292,293 0 0 0	water revenue / hse wate 31 0 0 0 80	0.22 0.00 0.00 0.00			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 2,578 20,490 89,514 Tanker water 1,001,743 34,025	m3/hse/a  cd 141 141 141 141 2	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010	2,292,293 0 0 0 5,947,281	water revenue / hse wate 31 0 0 0 80	0.22 0.00 0.00 53			
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 2,578 20,490 89,514 <u>Tanker water</u> 1,001,743 34,025	m3/hse/a  cd 141 141 141 2 2 141 141	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010	2,292,293 0 0 0 5,947,281	water revenue / hse wate 31 0 0 0 80	0.22 0.00 0.00 53			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 20,490 89,514 Tanker water 1,001,743 34,025 180,254 787,464	m3/hse/a lcd 141 141 141 141 2 2	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010	2,292,293 0 0 0 5,947,281	water revenue / hse wate 31 0 0 0 80	0.22 0.00 0.00 53			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$4 \$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2-\$4 \$2 \$2 \$4 \$4 \$2 \$4 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 20,490 89,514 Tanker water 1,001,743 34,025 180,254 787,464 Network, shop & ta	m3/hse/a  cd 141 141 141 2 2 14 14 2 2 14 14 14 14 14 14 141 141	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010 74,010	2,292,293 0 0 5,947,281 4,006,970	water revenue / hse wate 31 0 0 0 80 80 54	0.22 0.00 0.00 53			
<\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 Total Total Total <\$2 Total T	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 20,490 89,514 Tanker water 1,001,743 34,025 180,254 787,464	m3/hse/a lcd 141 141 141 2 2 14 14 2	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010 74,010	2,292,293 0 0 0 5,947,281	water revenue / hse wate 31 0 0 0 80 80 54	0.22 0.00 0.00 53			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$2-\$5 \$2-\$4 \$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 20,490 89,514 Tanker water 1,001,743 34,025 180,254 787,464 Network, shop & ta	m3/hse/a  cd 141 141 141 2 2 14 14 2 2 14 14 14 14 14 14 141 141	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010 74,010	2,292,293 0 0 5,947,281 4,006,970	water revenue / hse wate 31 0 0 0 80 80 54	0.22 0.00 0.00 53			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$2-\$4 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 20,490 89,514 Tanker water 1,001,743 34,025 180,254 787,464 Network, shop & ta	m3/hse/a  cd 141 141 141 2 2 14 14 2 2 14 14 14 14 14 14 141 141	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010 74,010	2,292,293 0 0 5,947,281 4,006,970	water revenue / hse wate 31 0 0 0 80 80 54	0.22 0.00 0.00 53			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$2-\$5 \$2-\$4 \$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$	10,414,107 582,766 3,087,413 6,743,908 Shop water 112,582 20,490 89,514 Tanker water 1,001,743 34,025 180,254 787,464 Network, shop & ta	m3/hse/a  cd 141 141 141 2 2 14 14 2 2 14 14 14 14 14 14 141 141	54 54 54 54 1	nr hse 74,010 4,142 21,941 47,927 74,010 74,010	2,292,293 0 0 5,947,281 4,006,970	water revenue / hse wate 31 0 0 0 80 80 54	0.22 0.00 0.00 53			

Supplies of water to	targeted househol	ds: network, shop a	and tanker	water			2012				
network water (m3)				water demand (m3)		Year	3				
10,373,375			541,525		2	with	out project				
	Network water	m3/hse/a lcd		nr hse	water revenu	water revenue / hse wate					
Total	10,373,375		52		2,283,327		0.22				
<\$2	580,507	136	52		0		0.00				
\$2-\$4	3,075,337	136	52		0	0	0.00				
>\$4	6,717,531	136	52		0	ő	0.00				
	Shop water			10,010			0.00				
Total	116,301	2	1	76,454	6,143,690	80	53				
<\$2	2,664	2		10,404	0,140,000	00	00				
\$2-\$4	21,167										
>\$4	92,470										
>94	Tanker water			1							
Total	1,034,825	14	5	76,454	4,139,301	54	4				
<\$2	1,034,825	14	5	10,454	4,139,301	54	4				
<\$2 \$2-\$4	186,206								 		<u> </u>
\$2-\$4 >\$4	813,470								 		<u> </u>
>ə4									 		<u> </u>
Tatal	Network, shop & ta		00	70.454	40 500 040	401		<u>├───</u>	 		 <u> </u>
Total	12,307,809	161	62	76,454	12,566,318	164					
<\$2									 		
\$2-\$4											
>\$4				1					 		
Supplies of water to							2012				
network water (m3)		baseline pop pop	connect	water demand (m3)		Year	3				
10,373,375									 		
			541,525	12,307,809	2		project				
	Network water	m3/hse/a lcd		12,307,809 nr hse	water revenu	water revenue / hse wate	project r prices/ m3				
Total	Network water 10,373,375	m3/hse/a lcd 136	52	12,307,809 nr hse 76,454	water revenu 2,283,327	water revenue / hse wate 30	project r prices/ m3 0.22				
<\$2	Network water 10,373,375 580,507	m3/hse/a lcd 136 136	52 52	12,307,809 nr hse 76,454 4,278	water revenu 2,283,327 0	water revenue / hse wate 30 0	project r prices/ m3 0.22 0.00				
<\$2 \$2-\$4	Network water 10,373,375 580,507 3,075,337	m3/hse/a lcd 136 136 136	52 52 52	12,307,809 nr hse 76,454 4,278 22,666	water revenu 2,283,327	water revenue / hse wate 30 0 0	project r prices/ m3 0.22 0.00 0.00				
<\$2	Network water 10,373,375 580,507 3,075,337 6,717,531	m3/hse/a lcd 136 136	52 52	12,307,809 nr hse 76,454 4,278 22,666	water revenu 2,283,327 0	water revenue / hse wate 30 0	project r prices/ m3 0.22 0.00				
<\$2 \$2-\$4 >\$4	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water	m3/hse/a lcd 136 136 136 136 136	52 52 52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510	water revenu 2,283,327 0 0 0	water revenue / hse wate 30 0 0	project r prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total	Network water           10,373,375           580,507           3,075,337           6,717,531           Shop water           116,301	m3/hse/a lcd 136 136 136	52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510	water revenu 2,283,327 0	water revenue / hse wate 30 0 0	project r prices/ m3 0.22 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664	m3/hse/a lcd 136 136 136 136 136	52 52 52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510	water revenu 2,283,327 0 0 0	water revenue / hse wate 30 0 0	project r prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664 21,167	m3/hse/a lcd 136 136 136 136 2 2	52 52 52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510	water revenu 2,283,327 0 0 0	water revenue / hse wate 30 0 0	project r prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664	m3/hse/a lcd 136 136 136 136 2 2	52 52 52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510	water revenu 2,283,327 0 0 0	water revenue / hse wate 30 0 0	project r prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664 21,167	m3/hse/a lcd 136 136 136 136 2 2	52 52 52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454	water revenu 2,283,327 0 0 0 0 6,143,690	water revenue / hse wate 30 0 0 0 80	project r prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2.\$4 \$4 Total \$2.\$4 \$2.\$4 \$2.\$4 \$4 Total	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664 21,167 92,470 Tanker water 1,034,825	m3/hse/a lcd 136 136 136 2 2 2 136 136 136 136 136 136 136 136 136 136	52 52 52 52 52	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454	water revenu 2,283,327 0 0 0	water revenue / hse wate 30 0 0 0 80	project r prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2	Network water 10,373,375 580,507 3,075,337 6,717,531 116,301 2,664 21,167 92,470 <u>Tanker water</u> 1,034,825 35,149	m3/hse/a lcd 136 136 136 2 2 2 136 136 136 136 136 136 136 136 136 136	52 52 52 52 1	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454	water revenu 2,283,327 0 0 0 0 6,143,690	water revenue / hse wate 30 0 0 0 80	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$2-\$4	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664 21,167 92,470 Tanker water 1,034,825 35,149 186,206	m3/hse/a  cd 136 136 136 2 2 2 14	52 52 52 52 1	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454	water revenu 2,283,327 0 0 0 0 6,143,690	water revenue / hse wate 30 0 0 0 80	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2	Network water 10,373,375 580,507 3,075,337 6,717,531 116,301 2,664 21,167 92,470 <u>Tanker water</u> 1,034,825 35,149	m3/hse/a  cd 136 136 136 2 2 2 14	52 52 52 52 1	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454	water revenu 2,283,327 0 0 0 0 6,143,690	water revenue / hse wate 30 0 0 0 80	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$2-\$4	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664 21,167 92,470 Tanker water 1,034,825 35,149 186,206	m3/hse/a lcd 136 136 136 136 2 2 2	52 52 52 52 1	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454	water revenu 2,283,327 0 0 0 0 6,143,690	water revenue / hse wate 30 0 0 0 80	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 10,373,375 580,507 3,075,337 6,717,531 116,301 2,664 21,167 92,470 Tanker water 1,034,825 35,149 186,206 813,470 Network, shop & tz	m3/hse/a  cd 136 136 136 2 2 2 4 4 4 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	52 52 52 52 52 52 55	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454 76,454	water revenue 2,283,327 0 0 6,143,690 6,143,690 4,139,301	water revenue / hse wate 30 0 0 0 80 80 54	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$2.\$4 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total \$2.\$4 \$4 Total Total	Network water 10,373,375 580,507 3,075,337 6,717,531 Shop water 116,301 2,664 21,167 92,470 <u>Tanker water</u> 1,034,825 35,149 186,206 813,470	m3/hse/a  cd 136 136 136 2 2 4 4 4	52 52 52 52 1	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454 76,454	water revenu 2,283,327 0 0 0 0 6,143,690	water revenue / hse wate 30 0 0 0 80 80 54	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 Total \$2.\$4 \$4 \$4 \$4 Total \$2.\$4 \$4 \$4 Total \$2.\$4 \$4 \$4 Total \$2.\$4 \$4 \$4 \$4 Total \$2.\$4 \$4 \$4 Total Total \$2.\$4 \$4 \$4 Total	Network water 10,373,375 580,507 3,075,337 6,717,531 116,301 2,664 21,167 92,470 Tanker water 1,034,825 35,149 186,206 813,470 Network, shop & tz	m3/hse/a  cd 136 136 136 2 2 2 4 4 4 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	52 52 52 52 52 52 55	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454 76,454	water revenue 2,283,327 0 0 6,143,690 6,143,690 4,139,301	water revenue / hse wate 30 0 0 0 80 80 54	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 \$5 \$2.\$4 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	Network water 10,373,375 580,507 3,075,337 6,717,531 116,301 2,664 21,167 92,470 Tanker water 1,034,825 35,149 186,206 813,470 Network, shop & tz	m3/hse/a  cd 136 136 136 2 2 2 4 4 4 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	52 52 52 52 52 52 55	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454 76,454	water revenue 2,283,327 0 0 6,143,690 6,143,690 4,139,301	water revenue / hse wate 30 0 0 0 80 80 54	project r prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 \$4 \$2 \$2.\$4 >\$4 \$4 \$2 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$2.\$4 \$4 \$2.\$4 \$2.\$4 \$2.\$4 \$4 \$4 \$4 \$2.\$4 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 10,373,375 580,507 3,075,337 6,717,531 116,301 2,664 21,167 92,470 Tanker water 1,034,825 35,149 186,206 813,470 Network, shop & tz	m3/hse/a  cd 136 136 136 2 2 2 4 4 4 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	52 52 52 52 52 52 55	12,307,809 nr hse 76,454 4,278 22,666 49,510 76,454 76,454	water revenue 2,283,327 0 0 6,143,690 6,143,690 4,139,301	water revenue / hse wate 30 0 0 0 80 80 54	project r prices/ m3 0.22 0.00 0.00 0.00 53				

ISUDDIES OF Water to	targeted househo	lds: network. sho	p and tanker	water			2013					
network water (m3)				water demand (m3)		Year	4					
10,332,54	7 1,192,586		559,409	12,714,275	3	W	vithout project					
.,,.	Network water			nr hse			ater prices/ m3					
Total	10,332,547		51				0.22					
<\$2	578,222		51			0	0.00					
\$2-\$4	3,063,234		51			0	0.00					
>\$4	6,691,092		51			0	0.00					
	Shop water		0.	01,110	1		0.00					
Total	120,141	2	1	78,979	6,346,586	80	53					
<\$2	2,752			10,010	0,040,000	00	00					
\$2-\$4	21,866											
\$2-\$4 >\$4	95.524											
>\$4												
Total	Tanker water	14	5	78,979	4 076 004	54	4					
Total <\$2	1,069,000		5	78,979	4,276,001	54	4					
	36,309										<u> </u>	
\$2-\$4	192,356										<u> </u>	<b>├</b> ──── <b>│</b>
>\$4	840,335											ļ
	Network, shop & t				10.000							L
Total	12,714,275	161	62	78,979	12,896,927	163						
<\$2												
\$2-\$4												
>\$4												
Supplies of water to							2013					
network water (m3)												
				water demand (m3)		Year	4					
15,339,98	2 -3,476,128	517,189	559,409	12,714,275	30%	3 w	vith project					
15,339,98	2 -3,476,128 Network water	517,189 m3/hse/a Ic	559,409	12,714,275 nr hse	30% water revenue	3 w water revenue/hse w	vith project vater prices/ m3					
15,339,98 Total	2 -3,476,128 Network water 15,339,982	517,189 m3/hse/a lc 194	559,409 cd 75	12,714,275 nr hse 78,979	30% water revenue 3,376,548	3 w water revenue/hse w	vith project					
15,339,98 Total <\$2	2 -3,476,128 Network water 15,339,982 858,444	517,189 m3/hse/a lc 194 194	559,409 d 75 75	12,714,275 nr hse 78,979 4,420	30% water revenue 3,376,548 0	3 w water revenue/hse w	rith project rater prices/ m3 0.22 0.00					
15,339,98 Total <\$2 \$2-\$4	2 -3,476,128 Network water 15,339,982	517,189 m3/hse/a lc 194 194 194	559,409 cd 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414	30% water revenue 3,376,548 0 0	3 w water revenue/hse w 43	vith project vater prices/ m3 0.22					
15,339,98 Total <\$2	2 -3,476,128 Network water 15,339,982 858,444	517,189 m3/hse/a lc 194 194 194	559,409 d 75 75	12,714,275 nr hse 78,979 4,420 23,414	30% water revenue 3,376,548 0 0	3 w water revenue/hse w 43 0	rith project rater prices/ m3 0.22 0.00					
15,339,98 Total <\$2 \$2-\$4	2 -3,476,128 <u>Network water</u> 15,339,982 858,444 4,547,760	517,189 m3/hse/a Ic 194 194 194	559,409 cd 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145	30% water revenue 3,376,548 0 0 0	3 w water revenue/hse w 43 0 0	vith project vater prices/ m3 0.22 0.00 0.00 0.00					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778	517,189 m3/hse/a lc 194 194 194 194 194	559,409 cd 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145	30% water revenue 3,376,548 0 0 0	3 w water revenue/hse w 43 0 0 0 0	vith project vater prices/ m3 0.22 0.00 0.00					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water	517,189 m3/hse/a lc 194 194 194 194 194	559,409 cd 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145	30% water revenue 3,376,548 0 0 0	3 w water revenue/hse w 43 0 0 0 0	vith project vater prices/ m3 0.22 0.00 0.00 0.00					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total <\$2	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339	517,189 m3/hse/a lc 194 194 194 194 194 194	559,409 cd 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145	30% water revenue 3,376,548 0 0 0	3 w water revenue/hse w 43 0 0 0 0	vith project vater prices/ m3 0.22 0.00 0.00 0.00					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120	517,189 m3/hse/a lc 194 194 194 194 194 194 194	559,409 cd 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145	30% water revenue 3,376,548 0 0 0	3 w water revenue/hse w 43 0 0 0 0	vith project vater prices/ m3 0.22 0.00 0.00 0.00					
15,339,98 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195	517,189 m3/hse/a lc 194 194 194 194 194 194 194	559,409 cd 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145	30% water revenue 3,376,548 0 0 0	3 w water revenue/hse w 43 0 0 0 0	vith project vater prices/ m3 0.22 0.00 0.00 0.00					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 ×\$4 >\$4 ×\$4 ×\$4 ×\$4 ×\$4 ×\$4 ×\$2 \$2-\$4 >\$4 ×\$2 \$2-\$4 >\$4 ×\$2 \$2-\$4 >\$4 ×\$2 \$2-\$4 >\$4 ×\$4 ×\$4 ×\$4 ×\$4 ×\$4 ×\$4 ×\$4 ×	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195 Tanker water	517,189 m3/hse/a (c 194 194 194 194 194	559,409 cd 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979	30% water revenue 3,376,548 0 0 0 0 5,394,598	3 w water revenue/hse w 43 0 0 0 0 0 68	vith project vater prices/ m3 0.22 0.00 0.00 0.00					
15,339,98 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total Total	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195 Tanker water 748,300	517,189 m3/hse/a [c 194 194 194 194 194 194 194 194 9	559,409 3d 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979	30% water revenue 3,376,548 0 0 0 0 5,394,598	3 w water revenue/hse w 43 0 0 0 0	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195 Tanker water 748,300 25,417	517,189 m3/hse/a (c 194 194 194 194 194 194	559,409 3d 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979	30% water revenue 3,376,548 0 0 0 0 5,394,598	3 w water revenue/hse w 43 0 0 0 0 0 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195 Tanker water 748,300 25,417 134,648	517,189 m3/hse/a lc 194 194 194 194 194 9	559,409 3d 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979	30% water revenue 3,376,548 0 0 0 0 5,394,598	3 w water revenue/hse w 43 0 0 0 0 0 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195 <u>Tanker water</u> 748,300 25,417 134,649 568,234	517,189 m3/hse/a [c 194 194 194 194 194 194 194 194 194 9	559,409 3d 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979	30% water revenue 3,376,548 0 0 0 0 5,394,598	3 w water revenue/hse w 43 0 0 0 0 0 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98           Total           <\$2           \$2.\$4           >\$4           Total           <\$2           \$2.\$4           >\$4           Total           <\$2           \$2.\$4           >\$4           Total           <\$2           \$2.\$4           >\$4           >\$4           >\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,122 2,339 18,586 81,195 Tanker water 748,300 25,417 134,649 588,234 Network, shop & t	517,189 m3/hse/a ic 194 194 194 194 194 194 194 194 194 194	559,409 3d 75 75 75 75 75 1	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979 78,979	30% water revenue 3,376,548 0 0 0 5,394,598 2,993,201	3 w water revenue/hee w 0 0 0 68 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           <\$2           \$4           Total           <\$4           Total           <52           \$4           Total           <54	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,120 2,339 18,586 81,195 <u>Tanker water</u> 748,300 25,417 134,649 568,234	517,189 m3/hse/a (c 194 194 194 194 194 194 194 194 194 194	559,409 3d 75 75 75 75 75 75	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979 78,979	30% water revenue 3,376,548 0 0 0 5,394,598 2,993,201	3 w water revenue/hee w 0 0 0 68 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98           Total           <\$2           \$2.\$4           >\$4           Total           <\$2           \$2.\$4           >\$4           Total           <\$2.\$4           >\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,122 2,339 18,586 81,195 Tanker water 748,300 25,417 134,649 588,234 Network, shop & t	517,189 m3/hse/a ic 194 194 194 194 194 194 194 194 194 194	559,409 3d 75 75 75 75 75 1	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979 78,979	30% water revenue 3,376,548 0 0 0 5,394,598 2,993,201	3 w water revenue/hee w 0 0 0 68 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98           Total           <\$2           \$2.\$4           >\$4           Total           <\$2           \$2.\$4	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,122 2,339 18,586 81,195 Tanker water 748,300 25,417 134,649 588,234 Network, shop & t	517,189 m3/hse/a ic 194 194 194 194 194 194 194 194 194 194	559,409 3d 75 75 75 75 75 1	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979 78,979	30% water revenue 3,376,548 0 0 0 5,394,598 2,993,201	3 w water revenue/hee w 0 0 0 68 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					
15,339,98           Total           <\$2           \$2.\$4           >\$4           Total           <\$2           \$4           Total           <\$2.\$4           >\$4           Total           <\$2.\$4           >\$4           Total           <\$2           <\$4      Total           <\$2	2 -3,476,128 Network water 15,339,982 858,444 4,547,760 9,933,778 Shop water 102,122 2,339 18,586 81,195 Tanker water 748,300 25,417 134,649 588,234 Network, shop & t	517,189 m3/hse/a ic 194 194 194 194 194 194 194 194 194 194	559,409 3d 75 75 75 75 75 1	12,714,275 nr hse 78,979 4,420 23,414 51,145 78,979 78,979	30% water revenue 3,376,548 0 0 0 5,394,598 2,993,201	3 w water revenue/hee w 0 0 0 68 68	rith project rater prices/ m3 0.22 0.00 0.00 0.00 53					

Supplies of water to	targeted househo	lds: network. shop	and tanker	water			2014					
network water (m3)				water demand (m3)		Year	5					
10,291,625			577,883	13,134,164	4	wi	ithout project					
, ,		m3/hse/a Icd	,	nr hse	water revenue		ater prices/ m3					
Total	10,291,625		49				0.22					
<\$2	575,932		49			0	0.00					
\$2-\$4	3,051,102		49			0	0.00					
>\$4	6,664,592	120	49			0	0.00					
	Shop water	120		02,004			0.00					
Total	124,109	2	1	81,587	6,556,182	80	53					
<\$2	2,842			01,307	0,000,102	00	55					
<\$2 \$2-\$4	22,588											
\$2-\$4 >\$4	98,679											
>\$4										 		
Tatal	Tanker water		_	o:	4 447 8 48			<u> </u>	+ +	 		
Total	1,104,304		5	81,587	4,417,216	54	4	·	+ +	 		
<\$2	37,509											
\$2-\$4	198,708											
>\$4	868,087											
	Network, shop & ta											
Total	13,134,164	161	62	81,587	13,238,731	162						
<\$2												
\$2-\$4												
>\$4												
Supplies of water to	targeted househo	lds: network, shop	and tanker	water			2014					
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop po	p connect	water demand (m3)	% HHs reached	Year	5					
20,407,636	-7,802,070											
		517,189	577,883	13,134,164	60%	4 wi	ith project					
		517,189 m3/hse/a lcd				4 wi water revenue/hse wa						
	Network water	m3/hse/a Icd		nr hse	water revenue	water revenue/hse wa						
Total	Network water 20,407,636	m3/hse/a Icd 250	97	nr hse 81,587	water revenue 4,492,010	water revenue/hse wa	ater prices/ m3					
Total <\$2	Network water 20,407,636 1,142,036	m3/hse/a Icd 250 250	97 97	nr hse 81,587 4,566	water revenue 4,492,010 0	water revenue/hse wa 55	ater prices/ m3 0.22 0.00					
Total <\$2 \$2-\$4	Network water 20,407,636 1,142,036 6,050,140	m3/hse/a lcd 250 250 250	97 97 97	nr hse 81,587 4,566 24,188	water revenue 4,492,010 0 0	water revenue/hse wa 55 0	ater prices/ m3 0.22 0.00 0.00					
Total <\$2	Network water 20,407,636 1,142,036 6,050,140 13,215,460	m3/hse/a Icd 250 250 250	97 97	nr hse 81,587 4,566 24,188	water revenue 4,492,010 0 0	water revenue/hse wa 55 0 0	ater prices/ m3 0.22 0.00					
Total <\$2 \$2-\$4 >\$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water	m3/hse/a lcd 250 250 250 250	97 97 97 97 97	nr hse 81,587 4,566 24,188 52,834	water revenue 4,492,010 0 0 0	water revenue/hse wa 55 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876	m3/hse/a lcd 250 250 250 250 250 1	97 97 97	nr hse 81,587 4,566 24,188 52,834	water revenue 4,492,010 0 0 0	water revenue/hse wa 55 0 0	ater prices/ m3 0.22 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990	m3/hse/a lcd 250 250 250 250 250 1	97 97 97 97 97	nr hse 81,587 4,566 24,188 52,834	water revenue 4,492,010 0 0 0	water revenue/hse wa 55 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812	m3/hse/a lcd 250 250 250 250 250 1	97 97 97 97 97	nr hse 81,587 4,566 24,188 52,834	water revenue 4,492,010 0 0 0	water revenue/hse wa 55 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2	Network water 20,407,636 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075	m3/hse/a lcd 250 250 250 250 250 1	97 97 97 97 97	nr hse 81,587 4,566 24,188 52,834	water revenue 4,492,010 0 0 0	water revenue/hse wa 55 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 >\$4 - \$2 \$2-\$4 >\$4 - \$4 - \$2 \$2-\$4 - \$4 - \$4 - \$2 \$4 - - \$4 - - - \$4 - - \$4 - - - - - \$4 - - - - - - - - - - - - -	Network water 20,407,636 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water	m3/hse/a lcd 250 250 250 250 250 1	97 97 97 97 0	nr hse 81,587 4,566 24,188 52,834 81,587	water revenue 4,492,010 0 0 0 4,589,327	water revenue/hse wa 55 0 0 0 56	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	Network water 20,407,636 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722	m3/hse/a lcd 250 250 250 250 250 1	97 97 97 97 97	nr hse 81,587 4,566 24,188 52,834 81,587	water revenue 4,492,010 0 0 0 4,589,327	water revenue/hse wa 55 0 0 0 56	ater prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003	m3/hse/a lcd 250 250 250 250 250 250 5	97 97 97 97 0	nr hse 81,587 4,566 24,188 52,834 81,587	water revenue 4,492,010 0 0 0 4,589,327	water revenue/hse wa 55 0 0 0 56	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 >\$4 Total <\$2 \$4 Total <\$2 \$4 \$4 Total \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483	m3/hse/a lcd 250 250 250 250 250 250 5	97 97 97 97 0	nr hse 81,587 4,566 24,188 52,834 81,587	water revenue 4,492,010 0 0 0 4,589,327	water revenue/hse wa 55 0 0 0 56	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	Network water 20,407,636 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235	m3/hse/a lcd 250 250 250 250 250 250 5	97 97 97 97 0	nr hse 81,587 4,566 24,188 52,834 81,587	water revenue 4,492,010 0 0 0 4,589,327	water revenue/hse wa 55 0 0 0 56	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 X X X X X X X X X X X X X	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235 Network, shop & ta	m3/hse/a lcd 250 250 250 250 250 5 300 5	97 97 97 97 97 97 2	nr hse 81,587 4,566 24,188 52,834 81,587 81,587	water revenue 4,492,010 0 0 4,589,327 1,766,886	water revenue/hse wa 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 Total Total <\$2 \$2-\$4 Total Tot	Network water 20,407,636 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235	m3/hse/a lcd 250 250 250 250 250 5 3 5	97 97 97 97 0	nr hse 81,587 4,566 24,188 52,834 81,587 81,587	water revenue 4,492,010 0 0 4,589,327 1,766,886	water revenue/hse wa 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235 Network, shop & ta	m3/hse/a lcd 250 250 250 250 250 5 300 5	97 97 97 97 97 97 2	nr hse 81,587 4,566 24,188 52,834 81,587 81,587	water revenue 4,492,010 0 0 4,589,327 1,766,886	water revenue/hse wa 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$4 \$2 \$2-\$4 \$4 \$4 \$4 \$2 \$2-\$4 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235 Network, shop & ta	m3/hse/a lcd 250 250 250 250 250 5 300 5	97 97 97 97 97 97 2	nr hse 81,587 4,566 24,188 52,834 81,587 81,587	water revenue 4,492,010 0 0 4,589,327 1,766,886	water revenue/hse wa 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235 Network, shop & ta	m3/hse/a lcd 250 250 250 250 250 5 300 5	97 97 97 97 97 97 2	nr hse 81,587 4,566 24,188 52,834 81,587 81,587	water revenue 4,492,010 0 0 4,589,327 1,766,886	water revenue/hse wa 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00 53					
Total \$2 \$2-\$4 Total \$2-\$4 Total \$2 \$2-\$4 Total \$2-\$4 \$2-\$4 \$2-\$4 Total \$2-\$4 Total \$2-\$4 \$2-\$4 \$2-\$4	Network water 20,407,636 1,142,036 6,050,140 13,215,460 Shop water 86,876 1,990 15,812 69,075 Tanker water 441,722 15,003 79,483 347,235 Network, shop & ta	m3/hse/a lcd 250 250 250 250 250 5 300 5	97 97 97 97 97 97 2	nr hse 81,587 4,566 24,188 52,834 81,587 81,587	water revenue 4,492,010 0 0 4,589,327 1,766,886	water revenue/hse wa 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ater prices/ m3 0.22 0.00 0.00 0.00 53					

Supplies of water to	targeted househo	lds: network, sho	p and tanker	water			2015				
network water (m3)				water demand (m3)		Year	6				
10.250.607			596,968	13,567,920	5	1	without project				
, ,		m3/hse/a lc	:d	nr hse	water revenue		water prices/ m3				
Total	10,250,607		47				0.22	,			
<\$2	573,636		47		0	0	0.00				
\$2-\$4	3,038,941	122	47		0	0	0.00				
>\$4	6,638,030	122	47		0	0	0.00				
· • ·	Shop water			01,070	Ŭ	, i i i i i i i i i i i i i i i i i i i	0.00				
Total	128,208	2	1	84,282	6,772,700	80	53				
<\$2	2,936			04,202	0,772,700	00	55				
\$2-\$4	23,334										
⇒2- <del>∍</del> 4 >\$4	101,937										
>\$4											
	Tanker water										
Total	1,140,774	14	5	84,282	4,563,095	54	4	·	+	 	
<\$2	38,747										
\$2-\$4	205,271									 	
>\$4	896,756										
	Network, shop & ta										
Total	13,567,920	161	62	84,282	13,592,099	161					
<\$2											
\$2-\$4											
>\$4											
Supplies of water to	targeted househo	lds: network, sho	p and tanker	water			2015	i			
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop po	op connect	water demand (m3)	% HHs reached	Year	6				
25,577,456	-12,194,128	517,189	596,968	13,567,920	90%	5 \	with project				
	Network water	m3/hse/a lc	:d	nr hse	water revenue	water revenue/hse	water prices/ m3				
Total	25,577,456										
<\$2		303			5.629.961	67	0.22				
\$2-\$4			117	84,282	5,629,961 0	67 0	0.22				
	1,431,345	303	117 117	84,282 4,717			0.00				
	1,431,345 7,582,808	303 303	117 117 117	84,282 4,717 24,987	0	0	0.00 0.00				
>\$4	1,431,345 7,582,808 16,563,303	303	117 117	84,282 4,717 24,987	0	0 0	0.00				
>\$4	1,431,345 7,582,808 16,563,303 Shop water	303 303 303	117 117 117 117 117	84,282 4,717 24,987 54,579	0 0 0	0 0 0	0.00 0.00 0.00				
>\$4 Total	1,431,345 7,582,808 16,563,303 Shop water 70,514	303 303 303 1	117 117 117	84,282 4,717 24,987 54,579	0 0 0	0 0 0	0.00 0.00				
>\$4 Total <\$2	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615	303 303 303 303 1	117 117 117 117 117	84,282 4,717 24,987 54,579	0 0 0	0 0 0	0.00 0.00 0.00				
>\$4 Total <\$2 \$2-\$4	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834	303 303 303 1	117 117 117 117 117	84,282 4,717 24,987 54,579	0 0 0	0 0 0	0.00 0.00 0.00				
>\$4 Total <\$2	1,431,345 7,582,808 16,563,303 <u>Shop water</u> 70,514 1,615 12,834 56,066	303 303 303 1	117 117 117 117 117	84,282 4,717 24,987 54,579	0 0 0	0 0 0	0.00 0.00 0.00				
>\$4 Total <\$2 \$2-\$4 >\$4	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water	303 303 303 1	117 117 117 117 117 0	84,282 4,717 24,987 54,579 84,282	0 0 0 3,724,985	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2-\$4 >\$4 Total	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077	303 303 303 1 1	117 117 117 117 117	84,282 4,717 24,987 54,579 84,282	0 0 0 3,724,985	0 0 44	0.00 0.00 0.00				
>\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 <u>Tanker water</u> 114,077 3,875	303 303 303 1 1	117 117 117 117 117 0	84,282 4,717 24,987 54,579 84,282	0 0 0 3,724,985	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077 3,875 20,527	303 303 303 1 1	117 117 117 117 117 0	84,282 4,717 24,987 54,579 84,282	0 0 0 3,724,985	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2	1,431,345 7,582,808 16,563,303 Shop water 70,514 12,834 56,066 <u>Tanker water</u> 114,077 3,875 20,527 89,676	303 303 303 1 1	117 117 117 117 117 0	84,282 4,717 24,987 54,579 84,282	0 0 0 3,724,985	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 >\$4	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077 3,875 20,527 89,676 Network, shop & ta	303 303 303 1 1 1	117 117 117 117 0	84,282 4,717 24,987 54,579 84,282 84,282	0 0 3,724,985 456,309	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	1,431,345 7,582,808 16,563,303 Shop water 70,514 12,834 56,066 <u>Tanker water</u> 114,077 3,875 20,527 89,676	303 303 303 1 1 1	117 117 117 117 117 0	84,282 4,717 24,987 54,579 84,282 84,282	0 0 3,724,985 456,309	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 S2 \$2-\$5 \$2-\$5 S4 S4 S5 S4 S4 S5 S4 S5 S5 S5 S5 S5 S5 S5 S5 S5 S5	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077 3,875 20,527 89,676 Network, shop & ta	303 303 303 1 1 1	117 117 117 117 0	84,282 4,717 24,987 54,579 84,282 84,282	0 0 3,724,985 456,309	0 0 44	0.00 0.00 0.00 53				
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077 3,875 20,527 89,676 Network, shop & ta	303 303 303 1 1 1	117 117 117 117 0	84,282 4,717 24,987 54,579 84,282 84,282	0 0 3,724,985 456,309	0 0 44	0.00 0.00 0.00 53		Image: Constraint of the sector of		
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total Total \$2-\$4 >\$4 Total Total \$2-\$4 \$4 Total Total \$2-\$4 \$4 Total Total \$2-\$4 \$4 Total Total \$2-\$4 Total Total \$2-\$4 Total Total Total \$2-\$4 Total Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total Total \$4 Total \$4 Total T	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077 3,875 20,527 89,676 Network, shop & ta	303 303 303 1 1 1	117 117 117 117 0	84,282 4,717 24,987 54,579 84,282 84,282	0 0 3,724,985 456,309	0 0 44	0.00 0.00 0.00 53		Image: Constraint of the sector of		
>\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$4 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	1,431,345 7,582,808 16,563,303 Shop water 70,514 1,615 12,834 56,066 Tanker water 114,077 3,875 20,527 89,676 Network, shop & ta	303 303 303 1 1 1	117 117 117 117 0	84,282 4,717 24,987 54,579 84,282 84,282	0 0 3,724,985 456,309	0 0 44	0.00 0.00 0.00 53		-         -           -         -		

Supplies of water to	targeted househo	lds: network, shop	o and tanker	water			2016	; ;				
network water (m3)				water demand (m3)		Year	7					
10,209,494			. 616,683	14,016,000	6	wi	ithout project					
, ,	Network water	m3/hse/a lco	d	nr hse	water revenue		ater prices/ m3					
Total	10,209,494		45				0.22					
<\$2	571,336		45			0	0.00					
\$2-\$4	3,026,753		45			0	0.00					
>\$4	6,611,406		45		0	Ő	0.00					
	Shop water			00,001			0.00					
Total	132,442	2	1	87,065	6,996,368	80	53					
<\$2	3,033			07,005	0,330,300	00	55		-			
<\$2 \$2-\$4	24,104											
>\$4	105,304				1							
	Tanker water		_									
Total	1,178,448	14	5	87,065	4,713,791	54	4	+	 			L
<\$2	40,027								 		1	
\$2-\$4	212,050											
>\$4	926,371										1	
	Network, shop & ta											
Total	14,016,000	161	62	87,065	13,957,414	160						
<\$2												
\$2-\$4												
>\$4												
Supplies of water to t	targeted househo	Ide: network shor	and tankor	wator			0010					
							2016					
network water (m3)	Deficit (m <sup>3</sup> )				% HHs reached	Year	2016					
network water (m3) 26.034.332		baseline pop po	op connect	water demand (m3)			7					
26,034,332	-12,184,126	baseline pop po 517,189	op connect 616,683	water demand (m3) 14,016,000	92%	6 <b>w</b> i	7 ith project					
26,034,332	-12,184,126 Network water	baseline pop po 517,189 m3/hse/a lca	op connect 616,683 d	water demand (m3) 14,016,000 nr hse	92% water revenue	6 wi water revenue/hse wa	7 ith project ater prices/ m3					
26,034,332 Total	-12,184,126 Network water 26,034,332	baseline pop         po           517,189         m3/hse/a         lca           299         lca         lca	<b>616,683</b> d 116	water demand (m3) 14,016,000 nr hse 87,065	92% water revenue 5,730,526	6 wi water revenue/hse wa 66	7 ith project ater prices/ m3 0.22					
26,034,332 Total <\$2	-12,184,126 Network water 26,034,332 1,456,913	baseline pop         pc           517,189	<b>bp connect</b> 616,683 d 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872	92% water revenue 5,730,526 0	6 wi water revenue/hse wa 66 0	7 ith project ater prices/ m3 0.22 0.00					
26,034,332 Total <\$2 \$2-\$4	-12,184,126 <u>Network water</u> 26,034,332 1,456,913 7,718,256	baseline pop         pc           517,189         m3/hse/a         lca           299         299         299           299         299         299	op connect 616,683 d 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812	92% water revenue 5,730,526 0	6 wi water revenue/hse wa 66 0 0	7 ith project ater prices/ m3 0.22 0.00 0.00					
26,034,332 Total <\$2	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164	baseline pop         pc           517,189         m3/hse/a         lca           299         299         299           299         299         299	<b>bp connect</b> 616,683 d 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812	92% water revenue 5,730,526 0	6 wi water revenue/hse wa 66 0	7 ith project ater prices/ m3 0.22 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water	baseline pop         pr           517,189         Ica           m3/hse/a         Ica           299         299           299         299           299         299           299         299	op connect 616,683 d 116 116 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381	92% water revenue 5,730,526 0 0 0	6 wi water revenue/hse wa 66 0 0 0	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total	-12,184,126 <u>Network water</u> 26,034,332 1,456,913 7,718,256 16,859,164 <u>Shop water</u> 71,519	baseline pop pr 517,189 m3/hse/a lcc 299 299 299 299 299	op connect 616,683 d 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381	92% water revenue 5,730,526 0 0 0	6 wi water revenue/hse wa 66 0 0 0	7 ith project ater prices/ m3 0.22 0.00 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2	-12,184,126 <u>Network water</u> 26,034,332 1,456,913 7,718,256 <u>16,859,164</u> <u>Shop water</u> 71,519 <u>1,638</u>	baseline pop pr 517,189  cr 299 299 299 299 299 299 10 299	op connect 616,683 d 116 116 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381	92% water revenue 5,730,526 0 0 0	6 wi water revenue/hse wa 66 0 0 0	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	-12,184,126 <u>Network water</u> 26,034,332 1,456,913 7,718,256 16,859,164 <u>Shop water</u> 71,519 1,638 13,016	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 299 1	op connect 616,683 d 116 116 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381	92% water revenue 5,730,526 0 0 0	6 wi water revenue/hse wa 66 0 0 0	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 299 1	op connect 616,683 d 116 116 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381	92% water revenue 5,730,526 0 0 0	6 wi water revenue/hse wa 66 0 0 0	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >\$4 >	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 299 299 1 1	op connect 616,683 d 116 116 116 116 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065	92% water revenue 5,730,526 0 0 0 0 0 3,778,039	6 wi water revenue/hse 66 0 0 0 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	-12,184,126 <u>Network water</u> 26,034,332 1,456,913 7,718,256 16,859,164 <u>Shop water</u> 71,519 1,638 13,016 <u>56,864</u> <u>Tanker water</u> 94,276	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 1 1	op connect 616,683 d 116 116 116 116 116	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065	92% water revenue 5,730,526 0 0 0 0 0 3,778,039	6 wi water revenue/hse 66 0 0 0 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$2 \$2-\$4 >\$4 \$2 \$2-\$4 >\$4 \$2 \$2-\$4 \$2 \$2 \$2-\$4 \$2 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$4 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$2 \$4 \$2 \$2 \$4 \$2 \$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202	baseline pop pr 517,189 m3/hse/a loc 299 299 299 299 1 1	op connect 616,683 d 116 116 116 116 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065	92% water revenue 5,730,526 0 0 0 0 0 3,778,039	6 wi water revenue/hse wa 66 0 0 0 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 299 299 299 1 1	op connect 616,683 d 116 116 116 116 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065	92% water revenue 5,730,526 0 0 0 0 0 3,778,039	6 wi water revenue/hse wa 66 0 0 0 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$2-\$4 >\$4 Total \$2-\$4 >\$4 \$2-\$4	-12,184,126 Network water 226,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110	baseline pop po 517,189 m3/hse/a (ca 299 299 299 299 299 1 1	op connect 616,683 d 116 116 116 116 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065	92% water revenue 5,730,526 0 0 0 0 0 3,778,039	6 wi water revenue/hse wa 66 0 0 0 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110 Network, shop & t	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 1 1 1 anker water	op connect 616,683 d 116 116 116 116 0 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065 87,065	92% water revenue 5,730,526 0 0 0 3,778,039 3,778,039	6 wi water revenue/hse wa 66 0 0 43 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332           Total           <\$2           §2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           Total	-12,184,126 Network water 226,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110	baseline pop pr 517,189 m3/hse/a loc 299 299 299 299 1 1 1 anker water	op connect 616,683 d 116 116 116 116 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065 87,065	92% water revenue 5,730,526 0 0 0 3,778,039 3,778,039	6 wi water revenue/hse wa 66 0 0 43 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 <\$2 \$2.\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 Total <\$2 \$2.\$4 Total <\$2 Total <\$2 \$2.\$4 \$2.\$4 Total <\$2 \$2.\$4 \$	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110 Network, shop & t	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 1 1 1 anker water	op connect 616,683 d 116 116 116 116 0 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065 87,065	92% water revenue 5,730,526 0 0 0 3,778,039 3,778,039	6 wi water revenue/hse wa 66 0 0 43 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332           Total           <\$2           §2-\$4           >\$4           Total           <\$2           \$2-\$4           >\$4           Total           Total	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110 Network, shop & t	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 1 1 1 anker water	op connect 616,683 d 116 116 116 116 0 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065 87,065	92% water revenue 5,730,526 0 0 0 3,778,039 3,778,039	6 wi water revenue/hse wa 66 0 0 43 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 <\$2 \$2.\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 Total <\$2 \$2.\$4 Total <\$2 Total <\$2 \$2.\$4 \$2.\$4 Total <\$2 \$2.\$4 \$	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110 Network, shop & t	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 1 1 1 anker water	op connect 616,683 d 116 116 116 116 0 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065 87,065	92% water revenue 5,730,526 0 0 0 3,778,039 3,778,039	6 wi water revenue/hse wa 66 0 0 43 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					
26,034,332 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 \$4 Total \$2-\$4 \$4 \$4 Total \$2-\$4 \$4 \$4 \$4 \$4 Total \$2-\$4 \$4 \$4 \$4 \$4 \$2 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	-12,184,126 Network water 26,034,332 1,456,913 7,718,256 16,859,164 Shop water 71,519 1,638 13,016 56,864 Tanker water 94,276 3,202 16,964 74,110 Network, shop & t	baseline pop po 517,189 m3/hse/a loc 299 299 299 299 1 1 1 anker water	op connect 616,683 d 116 116 116 116 0 0	water demand (m3) 14,016,000 nr hse 87,065 4,872 25,812 56,381 87,065 87,065	92% water revenue 5,730,526 0 0 0 3,778,039 3,778,039	6 wi water revenue/hse wa 66 0 0 43 43	7 ith project ater prices/ m3 0.22 0.00 0.00 0.00 53					

Supplies /	of water to t	argeted househo	lds: network, shop	and tanker	water			2017	7				
					water demand (m3)		Year	8	8				
	10,168,286	2,956,411		637,049		7		without project					
			m3/hse/a lcd					water prices/ m3					
otal		10,168,286		44		2,238,184	25	0.22					
<\$2		569,030		44			0	0.00					1
\$2-\$4		3,014,536		44		0	0	0.00					
>\$4		6,584,721	113	44		0	0	0.00					
-φ-		Shop water			00,240	U U	U U	0.00					
Total		136,816	2	1	89,941	7,227,423	80	53	2				
<\$2		3,134		1	09,941	1,221,423	80	50	3	 			
<u>&lt;</u> \$2-\$4		24,901											-
∍∠-ъ4 >\$4										 			
>\$4		108,782											
		Tanker water		_									_
Total		1,217,366		5	89,941	4,869,464	54	4	4				4
<\$2		41,349								 			_
\$2-\$4		219,053								 			_
>\$4		956,964											
		Network, shop & ta											
Total		14,478,879	161	62	89,941	14,335,071	159						
<\$2													
\$2-\$4													
>\$4													
Supplies	of water to t	argeted househo	lds: network, shop	and tanker	water			2017	7				
					water water demand (m3)	% HHs reached	Year		7				
network w		Deficit (m <sup>3</sup> )	baseline pop pop		water demand (m3)								
network w	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838	baseline pop pop	p connect 637,049	water demand (m3)	94%	7	8	8				
network w	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838 Network water	baseline pop 517,189 m3/hse/a Icd	p connect 637,049	water demand (m3) 14,478,879 nr hse	94%	7 water revenue/hse	8 with project	8				
network w	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838 Network water 26,499,163	baseline pop pop 517,189 m3/hse/a Icd 295	p connect 637,049 114	water demand (m3) 14,478,879 nr hse 89,941	94% water revenue	7	8 with project water prices/ m3 0.22	2				
network w Total <\$2	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838 <u>Network water</u> 26,499,163 1,482,925	baseline pop         pop           517,189         Icd           m3/hse/a         Icd           295         295	p connect 637,049 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033	94% water revenue 5,832,842	7 water revenue/hse 65	8 with project water prices/ m3 0.22 0.00	8 2 0				
network w Total <\$2 \$2-\$4	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838 Network water 26,499,163 1,482,925 7,856,061	baseline pop         pop           517,189         m3/hse/a         lcd           295         295         295	p connect 637,049 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664	94% water revenue 5,832,842 0 0	7 water revenue/hse 65 0	8 with project water prices/ m3 0.22 0.00 0.00	8 2 0 0				
Total <\$2 \$2-\$4	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177	baseline pop         pop           517,189         m3/hse/a         lcd           295         295         295	p connect 637,049 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664	94% water revenue 5,832,842 0 0	7 water revenue/hse 65 0 0	8 with project water prices/ m3 0.22 0.00	8 2 0 0				
Total <\$2 \$2-\$4 >\$4	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838 <u>Network water</u> 26,499,163 1,482,925 7,856,061 17,160,177 <u>Shop water</u>	baseline pop         pop           517,189         Icd           m3/hse/a         Icd           295         295           295         295           295         295           295         295	p connect 637,049 114 114 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243	94% water revenue 5,832,842 0 0 0	7 water revenue/hse 65 0 0 0	8 with project water prices/ m3 0.22 0.00 0.00 0.00	8 2 0 0				
Total <\$2 \$2-\$4 >\$4 Total	vater (m3) 26,499,163	Deficit (m <sup>3</sup> ) -12,165,838 <u>Network water</u> 26,499,163 1,482,925 7,856,061 17,160,177 <u>Shop water</u> 72,512	baseline pop         pop           517,189         Icd           m3/hse/a         Icd           295         295           295         295           295         295           295         295	p connect 637,049 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243	94% water revenue 5,832,842 0 0	7 water revenue/hse 65 0 0	8 with project water prices/ m3 0.22 0.00 0.00	8 2 0 0				
network w Total <\$2 \$2-\$4 >\$4 Total <\$2	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 295 295 295	p connect 637,049 114 114 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243	94% water revenue 5,832,842 0 0 0	7 water revenue/hse 65 0 0 0	8 with project water prices/ m3 0.22 0.00 0.00 0.00	8 2 0 0				
network v Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1	p connect 637,049 114 114 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243	94% water revenue 5,832,842 0 0 0	7 water revenue/hse 65 0 0 0	8 with project water prices/ m3 0.22 0.00 0.00 0.00	8 2 0 0				
network v Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	vater (m3) 26,499,163	Deficit (m³) -12,165,838 <u>Network water</u> 26,499,163 1,482,925 7,856,061 17,160,177 <u>Shop water</u> 72,512 1,661 13,197 57,654	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1	p connect 637,049 114 114 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243	94% water revenue 5,832,842 0 0 0	7 water revenue/hse 65 0 0 0	8 with project water prices/ m3 0.22 0.00 0.00 0.00	8 2 0 0				
network v Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 >\$4	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1	p connect 637,049 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941	94% water revenue 5,832,842 0 0 0 0 3,830,534	7 water revenue/hse 65 0 0 0 0 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total >\$4 Total	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 1 1 1 1	p connect 637,049 114 114 114 114 114	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941	94% water revenue 5,832,842 0 0 0	7 water revenue/hse 65 0 0 0	8 with project water prices/ m3 0.22 0.00 0.00 0.00	8 2 2 0 0 0 3 3				
Total           <\$2	vater (m3) 26,499,163	Deficit (m*) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1	p connect 637,049 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941	94% water revenue 5,832,842 0 0 0 0 3,830,534	7 water revenue/hse 65 0 0 0 0 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
rotal \$2 \$2-\$4 \$4 54 52 52-\$4 \$4 52 \$2-\$4 \$2-\$4 54 Total 52 52-\$4 54 54 54 54 54 54 54 54 52 52 52 52 52 52 52 52 52 52	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1 1	p connect 637,049 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941	94% water revenue 5,832,842 0 0 0 0 3,830,534	7 water revenue/hse 65 0 0 0 0 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
rotal \$2 \$2 \$4 \$4 50 \$2 \$2 \$4 \$4 52 \$2 \$2 \$4 \$4 52 52 \$2 \$4 \$4 52 52 \$4 \$5 52 \$2 \$4 \$4 \$5 52 \$2 \$4 \$5 \$2 \$5 \$2 \$5 \$2 \$5 \$5 \$2 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143 57,418	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 1 1 1 1	p connect 637,049 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941	94% water revenue 5,832,842 0 0 0 0 3,830,534	7 water revenue/hse 65 0 0 0 0 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
retwork v Total \$2 \$2-\$4 \$4 Total \$2 \$2-\$4 \$4 Total \$2 \$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143 57,418 Network, shop & ta	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1 1 1 1 1	p connect 637,049 114 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941 89,941	94% water revenue 5,832,842 0 0 0 3,830,534 292,168	7 water revenue/hse 65 0 0 0 43 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
network v Total <\$2 \$2-\$4 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 \$4 Total <\$2 \$4 Total <\$2 \$4 Total	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143 57,418	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1 1 1 1 1 1	p connect 637,049 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941 89,941	94% water revenue 5,832,842 0 0 0 0 3,830,534	7 water revenue/hse 65 0 0 0 0 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
network v Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 Total <\$4 \$4 Total <\$2 \$4 \$4 Total <\$4 \$4 \$4 Total \$4 \$4 Total \$4 \$4 Total \$4 \$4 Total \$4 \$4 Total \$4 \$4 Total \$4 \$4 Total \$4 \$4 Total \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 Total \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143 57,418 Network, shop & ta	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1 1 1 1 1	p connect 637,049 114 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941 89,941	94% water revenue 5,832,842 0 0 0 3,830,534 292,168	7 water revenue/hse 65 0 0 0 43 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
network v Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$5 \$4 Total \$5 \$4 Total \$5 \$4 Total \$5 \$4 Total \$5 \$4 \$5 \$4 Total \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143 57,418 Network, shop & ta	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1 1 1 1 1	p connect 637,049 114 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941 89,941	94% water revenue 5,832,842 0 0 0 3,830,534 292,168	7 water revenue/hse 65 0 0 0 43 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				
network v Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total \$4 Total To	vater (m3) 26,499,163	Deficit (m³) -12,165,838 Network water 26,499,163 1,482,925 7,856,061 17,160,177 Shop water 72,512 1,661 13,197 57,654 Tanker water 73,042 2,481 13,143 57,418 Network, shop & ta	baseline pop pop 517,189 m3/hse/a lcd 295 295 295 295 1 1 1 1 1 1	p connect 637,049 114 114 114 114 114 0	water demand (m3) 14,478,879 nr hse 89,941 5,033 26,664 58,243 89,941 89,941	94% water revenue 5,832,842 0 0 0 3,830,534 292,168	7 water revenue/hse 65 0 0 0 43 43	8 with project water prices/ m3 0.22 0.00 0.00 0.00 53	8 2 2 0 0 0 3 3				

Supplies o	of water to t	argeted househol	lds: network, shop	and tanke	r water			2018				
					water demand (m3)		Year	9				
	10,126,982	3,431,159		658,087		8		without project				
	, ,		m3/hse/a lo		nr hse	water revenue		water prices/ m3				
Total		10,126,982		42								
<\$2		566,718		42			0					
\$2-\$4		3,002,291	109	42								
>\$4		6,557,973	109	42		0	0	0.00				
· • .		Shop water		-			, i i i i i i i i i i i i i i i i i i i	0.00				
Total		141,334	2	1	92,911	7,466,109	80	53				
<\$2		3,237			52,511	1,400,100	00	00				
<φ∠ \$2-\$4		25,723										
φ2-φ4 >\$4		112,374										
>ə4												
<b>T</b>		Tanker water		-	00.011	5 000 070	<b>5</b> 4					
Total		1,257,569		5	92,911	5,030,278	54	4		 		+
<\$2		42,714										
\$2-\$4		226,287										
>\$4		988,568										
		Network, shop & ta										
Total		14,957,044	161	62	92,911	14,725,480	158					
<\$2												
\$2-\$4												
>\$4												
Supplies o	of water to t	argeted househol	lds: network, shop	and tanke	r water			2018				
network wa	ater (m3)	Deficit (m <sup>3</sup> )	baseline pop po	op connect	water demand (m3)	% HHs reached	Year	9				
1	26,972,044	-12,138,796	517,189	658,087	14,957,044	96%	8	with project				
		Network water	m3/hse/a lco	b	nr hse	water revenue	water revenue/hse	water prices/ m3				
Total		26,972,044	290	112			64	0.22				
<\$2		1,509,388	290	112			0	0.00				
\$2-\$4		7,996,254	290	112	27,545	0	0	0.00				
>\$4		17,466,402	290	112			0					
		Shop water						0.00			1	1
Total		73,494										
<\$2			1	0	92 911	3.882 377	42	53				
				0	92,911	3,882,377	42	53				
		1,683		0	92,911	3,882,377	42	53				
\$2-\$4		1,683 13,376		0	92,911	3,882,377	42	53				
		1,683 13,376 58,435		0	92,911	3,882,377	42	53				
\$2-\$4 >\$4		1,683 13,376 58,435 <u>Tanker water</u>										
\$2-\$4 >\$4 Total		1,683 13,376 58,435 <u>Tanker water</u> 50,303	1	0			42					
\$2-\$4 >\$4 Total <\$2		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709	1									
\$2-\$4 >\$4 Total <\$2 \$2-\$4		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051										
\$2-\$4 >\$4 Total <\$2		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051 39,543	1									
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051 39,543 Network, shop & ta	1	0	92,911	201,211	2					
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051 39,543	1		92,911	201,211	2					
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051 39,543 Network, shop & ta	1	0	92,911	201,211	2					
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051 39,543 Network, shop & ta	1	0	92,911	201,211	2					
\$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		1,683 13,376 58,435 <u>Tanker water</u> 50,303 1,709 9,051 39,543 Network, shop & ta	1	0	92,911	201,211	2					

Supplies of water to	targeted househo	lds: network, shop	and tanker	water			2019				
network water (m3)				water demand (m3)		Year	10	)			
10,085,582			679,821	15,451,001	9	v	vithout project				
, ,		m3/hse/a lcc	d ,	nr hse	water revenue		vater prices/ m3				
Total	10,085,582		41				0.22	,			
<\$2	564,401	105	41	5,371		0	0.00				
\$2-\$4	2,990,017	105	41			0	0.00				
>\$4	6,531,163	105	41			0	0.00				
-ψ.	Shop water			02,101			0.00				
Total	146,002	2	1	95,979	7,712,678	80	53	2			
<\$2	3,344			33,313	7,712,070	00	55				
\$2-\$4	26,572										
\$2-\$4 >\$4	116,085										
>\$4									 	 	
	Tanker water		-		=				 	 	
Total	1,299,101		5	95,979	5,196,403	54	4			 	
<\$2	44,125								 	 	
\$2-\$4	233,760										
>\$4	1,021,216										
	Network, shop & ta										
Total	15,451,001	161	62	95,979	15,129,060	158					
<\$2											
\$2-\$4											
>\$4											
Supplies of water to	targeted househol	lds: network, shop	and tanker	water			2019				
network water (m3)	Deficit (m <sup>3</sup> )	baseline pop po	op connect	water demand (m3)	% HHs reached	Year	10				
27.453.073											
		517,189	679.821	15.451.001		9 v	vith project				
			679,821		98%		vith project				
Total	Network water	m3/hse/a lcc	b	nr hse	98% water revenue	water revenue/hse w	vater prices/ m3				
Total	Network water 27,453,073	m3/hse/a lcc 286	d 111	nr hse 95,979	98% water revenue 6,042,811	water revenue/hse w 63	vater prices/ m3 0.22	2			
<\$2	Network water 27,453,073 1,536,307	m3/hse/a lcc 286 286	111 111	nr hse 95,979 5,371	98% water revenue 6,042,811 0	water revenue/hse w 63 0	vater prices/ m3 0.22 0.00	2			
<\$2 \$2-\$4	Network water 27,453,073 1,536,307 8,138,862	m3/hse/a lcc 286 286 286	d 111 111 111	nr hse 95,979 5,371 28,454	98% water revenue 6,042,811 0 0	water revenue/hse w 63 0 0	vater prices/ m3 0.22 0.00 0.00				
<\$2	Network water 27,453,073 1,536,307 8,138,862 17,777,904	m3/hse/a lcc 286 286 286	111 111	nr hse 95,979 5,371 28,454	98% water revenue 6,042,811 0 0	water revenue/hse w 63 0	vater prices/ m3 0.22 0.00				
<\$2 \$2-\$4 >\$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water	m3/hse/a lcc 286 286 286 286	d 111 111 111 111	nr hse 95,979 5,371 28,454 62,154	98% water revenue 6,042,811 0 0 0	water revenue/hse v 63 0 0 0	vater prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461	m3/hse/a lcc 286 286 286 286 286 1	d 111 111 111	nr hse 95,979 5,371 28,454 62,154	98% water revenue 6,042,811 0 0 0	water revenue/hse v 63 0 0 0	vater prices/ m3 0.22 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705	m3/hse/a lcc 286 286 286 286 1	d 111 111 111 111	nr hse 95,979 5,371 28,454 62,154	98% water revenue 6,042,811 0 0 0	water revenue/hse v 63 0 0 0	vater prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552	m3/hse/a lcc 286 286 286 286 286 1	d 111 111 111 111	nr hse 95,979 5,371 28,454 62,154	98% water revenue 6,042,811 0 0 0	water revenue/hse v 63 0 0 0	vater prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203	m3/hse/a lcc 286 286 286 286 286 1	d 111 111 111 111	nr hse 95,979 5,371 28,454 62,154	98% water revenue 6,042,811 0 0 0	water revenue/hse v 63 0 0 0	vater prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203 Tanker water	m3/hse/a loc 286 286 286 286 286 286 1	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979	98% water revenue 6,042,811 0 0 0 0 3,933,466	water revenue/hse v 63 0 0 0 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2.\$4 >\$4 Total \$2.\$4 \$2.\$4 >\$4 Total Total	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203 Tanker water 25,982	m3/hse/a loc 286 286 286 286 286 1 1	d 111 111 111 111	nr hse 95,979 5,371 28,454 62,154 95,979	98% water revenue 6,042,811 0 0 0 0 3,933,466	water revenue/hse v 63 0 0 0 41	vater prices/ m3 0.22 0.00 0.00 0.00	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203 <u>Tanker water</u> 25,982 883	m3/hse/a loc 286 286 286 286 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979	98% water revenue 6,042,811 0 0 0 0 3,933,466	water revenue/hse v 63 0 0 0 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$2-\$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203 Tanker water 25,982 883 4,675	m3/hse/a loc 286 286 286 286 286 1 1	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979	98% water revenue 6,042,811 0 0 0 0 3,933,466	water revenue/hse v 63 0 0 0 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203 Tanker water 25,982 883 4,675 20,424	m3/hse/a loc 286 286 286 286 286 1 1	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979	98% water revenue 6,042,811 0 0 0 0 3,933,466	water revenue/hse v 63 0 0 0 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 59,203 Tanker water 25,982 883 4,675 20,424 Network, shop & ta	m3/hse/a loc 286 286 286 286 1 1 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979 95,979	98% water revenue 6,042,811 0 0 0 3,933,466 103,928	water revenue/hse v 63 0 0 0 0 41 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$2.\$4 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total \$2.\$4 \$4 Total Total	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 13,552 59,203 Tanker water 25,982 883 4,675 20,424	m3/hse/a loc 286 286 286 286 1 1 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979 95,979	98% water revenue 6,042,811 0 0 0 3,933,466 103,928	water revenue/hse v 63 0 0 0 0 41 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 Total <\$2 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 59,203 Tanker water 25,982 883 4,675 20,424 Network, shop & ta	m3/hse/a loc 286 286 286 286 1 1 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979 95,979	98% water revenue 6,042,811 0 0 0 3,933,466 103,928	water revenue/hse v 63 0 0 0 0 41 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$2.\$4 \$2.\$4 \$4 Total <\$2 \$2.\$4 \$4 Total \$2.\$4 \$4 Total Total	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 59,203 Tanker water 25,982 883 4,675 20,424 Network, shop & ta	m3/hse/a loc 286 286 286 286 1 1 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979 95,979	98% water revenue 6,042,811 0 0 0 3,933,466 103,928	water revenue/hse v 63 0 0 0 0 41 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2.\$4 \$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 Total <\$2 \$2 \$4 Total <\$2 Total <\$2 \$4 Total <\$2 \$2 \$4 Total <\$2 \$4 Sa \$4 Total Total <\$2 \$4 Sa \$4 Total Cotal	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 59,203 Tanker water 25,982 883 4,675 20,424 Network, shop & ta	m3/hse/a loc 286 286 286 286 1 1 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979 95,979	98% water revenue 6,042,811 0 0 0 3,933,466 103,928	water revenue/hse v 63 0 0 0 0 41 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 \$4 \$2 \$2-\$4 >\$4 \$4 \$2 \$2-\$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Network water 27,453,073 1,536,307 8,138,862 17,777,904 Shop water 74,461 1,705 59,203 Tanker water 25,982 883 4,675 20,424 Network, shop & ta	m3/hse/a loc 286 286 286 286 1 1 1 1 1 0	3 111 111 111 111 0	nr hse 95,979 5,371 28,454 62,154 95,979 95,979	98% water revenue 6,042,811 0 0 0 3,933,466 103,928	water revenue/hse v 63 0 0 0 0 41 41	vater prices/ m3 0.22 0.00 0.00 0.00 53	-         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -			

Capplies	of water to t	argeted househo	lds: network, shop	and tanker	water			2020					
					water demand (m3)		Year	11					
	10,044,086	4,424,357		702,272		10		without project					
			m3/hse/a lcd					water prices/ m3					
Total		10,044,086		39				0.22	•				
<\$2		562,079		39			0	0.00					
\$2-\$4		2,977,715		39		0		0.00					
<u>¢2</u> ¢ . >\$4		6,504,292	101	39		0	0	0.00					
-ψ.		Shop water			0 1,200	Ŭ	, i i i i i i i i i i i i i i i i i i i	0.00					
Total		150,823	2	1	99,149	7,967,389	80	53					
<\$2		3,454			33,143	7,307,303	00						
<ul><li>\$2-\$4</li></ul>		27,450								 			
⇒2-⊕4 >\$4		119,919											
> <b>9</b> 4		Tanker water								 			
Total			14	5	00 4 40	E 260 044	<b>F</b> 4	1		 			
Total <\$2		1,342,004	14	5	99,149	5,368,014	54	4		 		1	1
<\$2 \$0.\$4		45,582								 		<u> </u>	+
\$2-\$4		241,480								 			
>\$4		1,054,941											
L		Network, shop & ta			-							L	1
Total		15,961,270	161	62	99,149	15,546,249	157						
<\$2													
\$2-\$4													
>\$4													
			lds: network, shop	and tankor	water			2020					
network													
			baseline pop po	p connect	water demand (m3)		Year	11					
	27,942,348	-12,056,490	baseline pop poj 517,189		water demand (m3)	100%	10	11 with project					
	27,942,348	-12,056,490 Network water	baseline pop 517,189 m3/hse/a Icd	p connect 702,272	water demand (m3) 15,961,270 nr hse	100% water revenue	10	11 with project water prices/ m3					
Total	27,942,348	-12,056,490	baseline pop pop 517,189 m3/hse/a lcd 282	p connect 702,272	water demand (m3) 15,961,270 nr hse	100% water revenue	10	11 with project					
Total	27,942,348	-12,056,490 Network water	baseline pop 517,189 m3/hse/a Icd	p connect 702,272	water demand (m3) 15,961,270 nr hse	100% water revenue 6,150,507	10 water revenue/hse	11 with project water prices/ m3					
Total <\$2	27,942,348	-12,056,490 Network water 27,942,348	baseline pop         pop           517,189         m3/hse/a         lcd           282         282         282	p connect 702,272 109	water demand (m3) 15,961,270 nr hse 99,149 5,548	100% water revenue 6,150,507 0	10 water revenue/hse 62	11 with project water prices/ m3 0.22					
Total <\$2 \$2-\$4	27,942,348	-12,056,490 <u>Network water</u> 27,942,348 1,563,687 8,283,915	baseline pop         pop           517,189         m3/hse/a         lcd           282         282         282           282         282         282	p connect 702,272 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394	100% water revenue 6,150,507 0 0	10 water revenue/hse 62 0	11 with project water prices/ m3 0.22 0.00					
Total <\$2	27,942,348	-12,056,490 <u>Network water</u> 27,942,348 1,563,687	baseline pop         pop           517,189         m3/hse/a         lcd           282         282         282           282         282         282	p connect 702,272 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394	100% water revenue 6,150,507 0 0	10 water revenue/hse 62 0 0	11 with project water prices/ m3 0.22 0.00 0.00					
Total <\$2 \$2-\$4 >\$4	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water	baseline pop         poj           517,189         Icd           m3/hse/a         Icd           282         282           282         282           282         282           282         282	p connect 702,272 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206	100% water revenue 6,150,507 0 0 0	10 water revenue/hse 62 0 0	11 with project water prices/ m3 0.22 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total	27,942,348	-12,056,490 <u>Network water</u> 27,942,348 1,563,687 8,283,915 18,094,746 <u>Shop water</u> 75,412	baseline pop         poj           517,189         Icd           m3/hse/a         Icd           282         282           282         282           282         282           282         282	p connect 702,272 109 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206	100% water revenue 6,150,507 0 0 0 0	10 water revenue/hse 62 0 0 0	11 with project water prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2	27,942,348	-12,056,490 <u>Network water</u> 27,942,348 1,563,687 8,283,915 18,094,746 <u>Shop water</u> 75,412 1,727	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 1	p connect 702,272 109 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206	100% water revenue 6,150,507 0 0 0	10 water revenue/hse 62 0 0 0	11 with project water prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,727 13,725	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 1	p connect 702,272 109 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206	100% water revenue 6,150,507 0 0 0	10 water revenue/hse 62 0 0 0	11 with project water prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,727 13,725 59,959	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 1	p connect 702,272 109 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206	100% water revenue 6,150,507 0 0 0	10 water revenue/hse 62 0 0 0	11 with project water prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 <u>Shop water</u> 75,412 1,727 13,725 59,959 Tanker water	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 1	p connect 702,272 109 109 109 109 0	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149	100% water revenue 6,150,507 0 0 0 0 3,983,694	10 water revenue/hse 62 0 0 0 0 0 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 <u>Shop water</u> 75,412 1,727 13,725 59,959 <u>Tanker water</u> 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 1 1 1 0	p connect 702,272 109 109 109 109	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149	100% water revenue 6,150,507 0 0 0 0 3,983,694	10 water revenue/hse 62 0 0 0	11 with project water prices/ m3 0.22 0.00 0.00 0.00					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 Total <\$2	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,727 13,725 59,959 Tanker water 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 1 1	p connect 702,272 109 109 109 109 0	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149	100% water revenue 6,150,507 0 0 0 0 3,983,694	10 water revenue/hse 62 0 0 0 0 0 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$2-\$4	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,727 13,725 59,959 Tanker water 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 1 1 1	p connect 702,272 109 109 109 109 0	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149	100% water revenue 6,150,507 0 0 0 0 3,983,694	10 water revenue/hse 62 0 0 0 0 0 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 Total <\$2	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 <u>Shop water</u> 75,412 13,725 59,595 <u>Tanker water</u> 0 0 0 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 1 1 1 0	p connect 702,272 109 109 109 109 0	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149	100% water revenue 6,150,507 0 0 0 0 3,983,694	10 water revenue/hse 62 0 0 0 0 0 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2-\$4 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,725 59,959 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 0 1 1 0 0	p connect 702,272 109 109 109 109 00	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149 99,149	100% water revenue 6,150,507 0 0 0 3,983,694 0	10 water revenue/hse 62 0 0 0 40 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total Total	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 <u>Shop water</u> 75,412 13,725 59,595 <u>Tanker water</u> 0 0 0 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 0 1 1 0 0	p connect 702,272 109 109 109 109 0	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149 99,149	100% water revenue 6,150,507 0 0 0 3,983,694 0	10 water revenue/hse 62 0 0 0 40 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 \$2-\$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total -\$5 -\$5 Total -\$5 -\$5 Total -\$5 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,725 59,959 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 0 1 1 0 0	p connect 702,272 109 109 109 109 00	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149 99,149	100% water revenue 6,150,507 0 0 0 3,983,694 0	10 water revenue/hse 62 0 0 0 40 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 \$4 \$2.\$4 Total \$2.\$4 Total <\$2 \$4 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total <\$2 \$2.\$4 Total Total <\$2 \$2.\$4 Total	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,725 59,959 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 0 1 1 0 0	p connect 702,272 109 109 109 109 00	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149 99,149	100% water revenue 6,150,507 0 0 0 3,983,694 0	10 water revenue/hse 62 0 0 0 40 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$2-\$4 -\$5 \$2-\$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total <\$2 \$4 -\$5 Total -\$5 -\$5 Total -\$5 -\$5 Total -\$5 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5	27,942,348	-12,056,490 Network water 27,942,348 1,563,687 8,283,915 18,094,746 Shop water 75,412 1,725 59,959 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	baseline pop poj 517,189 m3/hse/a lcd 282 282 282 282 282 282 282 0 1 1 0 0	p connect 702,272 109 109 109 109 00	water demand (m3) 15,961,270 nr hse 99,149 5,548 29,394 64,206 99,149 99,149	100% water revenue 6,150,507 0 0 0 3,983,694 0	10 water revenue/hse 62 0 0 0 40 40	11 with project water prices/ m3 0.22 0.00 0.00 0.00 53					

Supplies of water to	targeted househo	lds: network, sho	p and tanker	water			20	21
network water (m3)				water demand (m3)		Year		12
10,002,49			725,464		11		without project	t
, ,	Network water	m3/hse/a lo	d	nr hse	water revenue	water revenue/hse	water prices/ m	
Total	10,002,494	98	38				0.	22
<\$2	559,752	98	38	5,732	0	0	0.	00
\$2-\$4	2,965,384	98	38	30,365	0	0	0.	00
>\$4	6,477,358	98	38	66,327	0	0	0.	00
	Shop water							
Total	155,804		1	102,423	8,230,512	80		53
<\$2	3,568							
\$2-\$4	28,356							
>\$4	123,879							
	Tanker water							
Total	1,386,323	14	5	102,423	5,545,293	54		4
<\$2	47,088							
\$2-\$4	249,455							
>\$4	1,089,781							
	Network, shop & ta	anker water						
Total	16,488,391	161	62	102,423	15,977,496	156		
<\$2								
\$2-\$4								
>\$4								
		lds: network, sho	p and tanker	water			20	
		baseline pop p		water water demand (m3)		Year		21
	Deficit (m <sup>3</sup> )	baseline pop p		water demand (m3)	11			
network water (m3)	Deficit (m <sup>3</sup> ) 3 -11,667,964	baseline pop p 517,189 m3/hse/a lo	op connect 725,464	water demand (m3) 16,488,391				12
28,078,45	Deficit (m <sup>3</sup> ) 3 -11,667,964	baseline pop p 517,189 m3/hse/a lo	op connect 725,464	water demand (m3) 16,488,391 nr hse	water revenue	water revenue/hse	with project water prices/ m	1 <b>2</b> 3
network water (m3) 28,078,45 Total <\$2	Deficit (m <sup>3</sup> ) 3 -11,667,964 Network water	baseline pop         p           517,189         m3/hse/a         lo           274         274         lo	op connect 725,464	water demand (m3) 16,488,391 nr hse 102,423	water revenue 6,180,466	water revenue/hse 60	with project water prices/ m 0.	12 3 22
network water (m3) 28,078,45 Total <\$2	Deficit (m <sup>3</sup> ) 3 -11,667,964 Network water 28,078,453	baseline pop         p           517,189         Id           m3/hse/a         Id           274         274	op connect 725,464 cd 106	water demand (m3) 16,488,391 nr hse 102,423 5,732	water revenue 6,180,466 0	water revenue/hse 60	with project water prices/ m 0. 0.	12 3 22 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304	baseline pop p 517,189 m3/hse/a ld 274 274 274	op connect 725,464 cd 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365	water revenue 6,180,466 0 0	water revenue/hse 60	with project water prices/ m 0. 0.	12 3 22 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265	baseline pop p 517,189 m3/hse/a ld 274 274 274	op connect 725,464 2d 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365	water revenue 6,180,466 0 0	water revenue/hse 60	with project water prices/ m 0. 0. 0.	12 3 22 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         182,884	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 274	op connect 725,464 2d 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327	water revenue 6,180,466 0 0 0 0	water revenue/hse 60 0 0 0	with project water prices/ m 0. 0. 0. 0.	12 3 22 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         Shop water	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 274 274 274	op connect 725,464 3d 106 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327	water revenue 6,180,466 0 0 0 0	water revenue/hse 60 0 0 0	with project water prices/ m 0. 0. 0. 0.	12 3 22 00 00 00
network water (m3) 28,076,45 Total <\$2 \$2-\$4 >\$4 Total <\$2	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         Shop water           77,902         77,902	baseline pop p 517,189 m3/hse/a li 274 274 274 274 274 274 1	op connect 725,464 3d 106 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327	water revenue 6,180,466 0 0 0 0	water revenue/hse 60 0 0 0	with project water prices/ m 0. 0. 0. 0.	12 3 22 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 \$4 \$4 \$2 \$2-\$4	Deficit (m <sup>3</sup> ) 3 -11,667,964 Network water 28,078,453 1,571,304 8,324,265 18,182,884 Shop water 77,902 1,784	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 274 274 1	op connect 725,464 3d 106 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327	water revenue 6,180,466 0 0 0 0	water revenue/hse 60 0 0 0	with project water prices/ m 0. 0. 0. 0.	12 3 22 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 \$4 \$4 \$2 \$2-\$4	Deficit (m <sup>3</sup> ) 3 -11,667,964 Network water 28,078,453 1,571,304 8,324,265 18,182,884 Shop water 77,902 1,784 14,178 61,940	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 274 274 1	op connect 725,464 3d 106 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327	water revenue 6,180,466 0 0 0 0	water revenue/hse 60 0 0 0	with project water prices/ m 0. 0. 0. 0.	12 3 22 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$2-\$4 >\$4 >\$4	Deficit (m <sup>3</sup> ) 3 -11,667,964 Network water 28,078,453 1,571,304 8,324,265 18,182,884 Shop water 77,902 1,784 14,178	baseline pop p 517,189 m3/hse/a li 274 274 274 274 274 1	op connect 725,464 3d 106 106 106 106	water demand (m3) 16,488,391 nr hse 102,423 30,365 66,327 102,423	water revenue 6,180,466 0 0 0 4,115,256	water revenue/hse 600 0 0 0 0 40	with project water prices/ m 0, 0, 0, 0,	12 3 22 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 Total Total Total	Deficit (m*)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         Shop water           77,902         1,784           14,1784         14,178           61,1940         Tanker water	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 274 274 1	op connect 725,464 d 106 106 106 106 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423	water revenue 6,180,466 0 0 0 4,115,256	water revenue/hse 600 0 0 0 0 40	with project water prices/ m 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 \$4 \$2 \$2.\$4 \$4 \$4 \$2 \$2.\$4 \$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         Shop water           77,902         1,784           14,178         61,940           Tanker water         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 1 1	op connect 725,464 d 106 106 106 106 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423	water revenue 6,180,466 0 0 0 4,115,256	water revenue/hse 600 0 0 0 0 40	with project water prices/ m 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	Deficit (m <sup>3</sup> ) 3 -11,667,964 Network water 28,078,453 1,571,304 8,324,265 18,182,884 Shop water 77,902 1,784 14,178 61,940 Tanker water 0 0	baseline pop p 517,189 m3/hse/a li 274 274 274 274 274 1 1	op connect 725,464 d 106 106 106 106 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423	water revenue 6,180,466 0 0 0 4,115,256	water revenue/hse 600 0 0 0 0 40	with project water prices/ m 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 Total <\$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 >\$4 \$2 \$2.\$4 \$4 \$2 \$2.\$4 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         Shop water           77,902         1,784           14,178         61,940           7anker water         0           0         0           0         0           0         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 274 274 1	op connect 725,464 d 106 106 106 106 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423	water revenue 6,180,466 0 0 0 4,115,256	water revenue/hse 600 0 0 0 0 40	with project water prices/ m 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$2-\$4 >\$4 Total \$4 \$4 Total \$4 \$4 \$4 Total \$4 \$4 \$4 Total \$4 \$4 \$4 \$4 Total \$4 \$4 \$4 \$4 Total \$4 \$4 \$4 \$4 \$4 \$4 Total \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,812,884         Shop water           77,902         1,784           14,178         61,940           Tanker water         0           0         0           0         0           0         0           0         0           0         0           0         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 1 1 0 0	op connect 725,464 2d 106 106 106 106 0 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423 102,423	water revenue 6,180,466 0 0 0 0 4,115,256 0 0	water revenue/hse 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0	with project water prices/ m 0, 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,182,884         Shop water           77,902         1,784           14,178         61,940           7anker water         0           0         0           0         0           0         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 1 1 0 0	op connect 725,464 d 106 106 106 106 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423 102,423	water revenue 6,180,466 0 0 0 0 4,115,256 0 0	water revenue/hse 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0	with project water prices/ m 0, 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,812,884         Shop water           77,902         1,784           14,178         61,940           Tanker water         0           0         0           0         0           0         0           0         0           0         0           0         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 1 1 0 0	op connect 725,464 2d 106 106 106 106 0 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423 102,423	water revenue 6,180,466 0 0 0 0 4,115,256 0 0	water revenue/hse 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0	with project water prices/ m 0, 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 S4 \$4 S4 S4 S4 S4 S4 S4 S4 S4 S4 S	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,812,884         Shop water           77,902         1,784           14,178         61,940           Tanker water         0           0         0           0         0           0         0           0         0           0         0           0         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 1 1 0 0	op connect 725,464 2d 106 106 106 106 0 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423 102,423	water revenue 6,180,466 0 0 0 0 4,115,256 0 0	water revenue/hse 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0	with project water prices/ m 0, 0, 0, 0, 0,	12 33 222 00 00 00 00 00 00 00 00 00 00
network water (m3) 28,078,45 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$4 Total <\$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	Deficit (m³)           3         -11,667,964           Network water         28,078,453           1,571,304         8,324,265           18,812,884         Shop water           77,902         1,784           14,178         61,940           Tanker water         0           0         0           0         0           0         0           0         0           0         0           0         0	baseline pop p 517,189 m3/hse/a lc 274 274 274 274 1 1 0 0	op connect 725,464 2d 106 106 106 106 0 0	water demand (m3) 16,488,391 nr hse 102,423 5,732 30,365 66,327 102,423 102,423	water revenue 6,180,466 0 0 0 0 4,115,256 0 0	water revenue/hse 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0	with project water prices/ m 0, 0, 0, 0, 0,	12 3 3 22 00 00 53 53

Supplies	of water to t	argeted househo	lds: network. sh	op and tanke	r water			2022		-		
	water (m3)				water demand (m3)		Year	13				
	9,960,805	5,479,059		749,423		12		without project				
	, ,	Network water	m3/hse/a	lcd	nr hse	water revenue		water prices/ m3		1		
Total		9,960,805		36				. 0.22				
<\$2		557,419		36			0	0.00				
\$2-\$4		2,953,025		36			0	0.00				
>\$4		6,450,361	94	36			0	0.00				
		Shop water										
Total		160,950	2	1	105,806	8,502,325	80	53		-		
<\$2		3,686								-		
\$2-\$4		29,293										
>\$4		127,970										
		Tanker water										
Total		1,432,107		5	105,806	5,728,426	54	4				
<\$2		48,643				<u>.</u>						
\$2-\$4		257,693										
>\$4		1,125,771										
		Network, shop & ta										
Total		17,032,920	161	62	105,806	16,423,265	155				Ì	
<\$2											Ì	
\$2-\$4											Ī	
>\$4											Γ	
											Γ	
		argeted househol						2022			ſ	
	water (m3)		baseline pop		water demand (m3)		Year	13			l	
	28,215,847	-11,263,401		749,423				with project				
						water revenue		water prices/ m3				
Total		28,215,847	267	103				0.22				
<\$2		1,578,993	267	103	5,921		Ŭ					
\$2-\$4		8,364,997	267	103			0	0.00				
>\$4		18,271,857	267	103	68,517	0	0	0.00			1	
		Shop water									1	
Total		80,475		0	105,806	4,251,162	40	53			1	
<\$2		1,843									1	
\$2-\$4		14,646										
>\$4		63,985										
		Tanker water										
Total		0	-	0	105,806	0	0	4				
<\$2		0										
\$2-\$4		0										
>\$4		0										
		Network, shop & ta										
Total		28,296,322	267	103	105,806	10,461,871	99					
<\$2												
\$2-\$4												
<b>A</b> 4											1	
>\$4												
>\$4												·

	of water to t	argeted househo	lds: network, sho	p and tanke	r water			2023
				oop connect	water demand (m3)		Year	14
	9,919,020	6,030,746	517,189	774,172	17,595,433	13		without project
		Network water	m3/hse/a	cd	nr hse	water revenue	water revenue/hse	water prices/ m3
Fotal		9,919,020		35				
<\$2		555,080	91	35	6,117	0	0	
\$2-\$4		2,940,637	91	35	32,404	0	0	0.00
>\$4		6,423,302	91	35	70,780	0	0	0.00
		Shop water						
Total		166,265	2	1	109,300	8,783,114	80	53
<\$2		3,808			·			
\$2-\$4		30,260						
>\$4		132,197						
		Tanker water						
Total		1,479,402		5	109,300	5,917,608	54	4
<\$2		50,249						
\$2-\$4		266,204						
>\$4		1,162,949						
		Network, shop & ta						
Total		17,595,433	161	62	109,300	16,884,038	154	
<\$2								
\$2-\$4								
>\$4								
		argeted househo						2023
		Deficit (m <sup>3</sup> )	baseline non r	on connect	water demand (m3)	1	Year	14
			busenine pop		mater aemana (me)			
	28,354,551	-10,842,251	517,189	774,172	17,595,433			with project
		-10,842,251 Network water	517,189 m3/hse/a	774,172 cd	17,595,433 nr hse	water revenue	water revenue/hse	water prices/ m3
Total		-10,842,251 Network water 28,354,551	517,189 m3/hse/a li 259	774,172 cd 100	17,595,433 nr hse 109,300	water revenue 6,241,239	water revenue/hse 57	water prices/ m3 0.22
Total <\$2		-10,842,251 <u>Network water</u> 28,354,551 1,586,755	517,189 m3/hse/a li 259 259	774,172 cd 100 100	17,595,433 nr hse 109,300 6,117	water revenue 6,241,239 0	water revenue/hse 57 0	water prices/ m3 0.22 0.00
Total <\$2 \$2-\$4		-10,842,251 <u>Network water</u> 28,354,551 1,586,755 8,406,118	517,189 m3/hse/a li 259 259 259	774,172 cd 100 100 100	17,595,433 nr hse 109,300 6,117 32,404	water revenue 6,241,239 0 0	water revenue/hse 57 0	water prices/ m3 0.22 0.00 0.00
Total <\$2		-10,842,251 <u>Network water</u> 28,354,551 1,586,755 8,406,118 18,361,678	517,189 m3/hse/a li 259 259 259	774,172 cd 100 100	17,595,433 nr hse 109,300 6,117 32,404	water revenue 6,241,239 0 0	water revenue/hse 57 0	water prices/ m3 0.22 0.00
Total <\$2 \$2-\$4 >\$4		-10,842,251 <u>Network water</u> 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u>	517,189 m3/hse/a li 259 259 259 259 259	774,172 cd 100 100 100 100	17,595,433 nr hse 109,300 6,117 32,404 70,780	water revenue 6,241,239 0 0 0 0	water revenue/hse 57 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total		-10,842,251 <u>Network water</u> 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u> 83,132	517,189 m3/hse/a li 259 259 259 259 259	774,172 cd 100 100 100	17,595,433 nr hse 109,300 6,117 32,404 70,780	water revenue 6,241,239 0 0 0 0	water revenue/hse 57 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2		-10,842,251 <u>Network water</u> 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u> 83,132 1,904	517,189 m3/hse/a k 259 259 259 259 259 1	774,172 cd 100 100 100 100	17,595,433 nr hse 109,300 6,117 32,404 70,780	water revenue 6,241,239 0 0 0 0	water revenue/hse 57 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		-10,842,251 <u>Network water</u> 28,354,551 1,586,755 8,406,118 <u>18,361,678</u> <u>Shop water</u> 83,132 1,904 15,130	517,189 m3/hse/a k 259 259 259 259 259 1	774,172 cd 100 100 100 100	17,595,433 nr hse 109,300 6,117 32,404 70,780	water revenue 6,241,239 0 0 0 0	water revenue/hse 57 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u> 83,132 1,904 15,130 66,098	517,189 m3/hse/a k 259 259 259 259 259 1	774,172 cd 100 100 100 100	17,595,433 nr hse 109,300 6,117 32,404 70,780	water revenue 6,241,239 0 0 0 0	water revenue/hse 57 0 0 0 0	water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 Shop water 83,132 1,904 15,130 66,098 Tanker water	517,189 m3/hse/a li 259 259 259 1	774,172 cd 100 100 100 100 00	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300	water revenue 6,241,239 0 0 0 0 4,391,557	water revenue/hse 57 0 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u> 83,132 1,904 15,130 <u>66,098</u> <u>Tanker water</u> 0	517,189 m3/hse/a ii 259 259 259 259 259 1 1	774,172 cd 100 100 100 100	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300	water revenue 6,241,239 0 0 0 0 4,391,557	water revenue/hse 57 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$2-\$4 \$2-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$5-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$5-\$4 \$4 \$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$5 \$5-\$5 \$ \$5-\$5 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 Shop water 83,132 1,904 15,130 66,098 Tanker water 0 0	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 00	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300	water revenue 6,241,239 0 0 0 0 4,391,557	water revenue/hse 57 0 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 Total <\$2 \$4 \$2-\$4 \$4		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,757 Shop water 83,132 1,904 15,130 66,098 Tanker water 0 0 0 0	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 00	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300	water revenue 6,241,239 0 0 0 0 4,391,557	water revenue/hse 57 0 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$4 \$2-\$4 \$2-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$5-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$4 \$5-\$4 \$4 \$5-\$4 \$5-\$4 \$4 \$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$4 \$5-\$5 \$5-\$5 \$ \$5-\$5 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u> 83,132 1,904 15,130 <u>66,098</u> <u>Tanker water</u> 0 0 0 0 0 0	517,189           m3/hse/a         Ii           259         259           259         259           259         259           1         1	774,172 cd 100 100 100 100 00	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300	water revenue 6,241,239 0 0 0 0 4,391,557	water revenue/hse 57 0 0 0 0 0 40	water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 Shop water 83,132 1,904 15,130 66,098 Tanker water 0 0 0 0 0 0 Network, shop & ta	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 0	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300 109,300	water revenue 6,241,239 0 0 0 0 0 4,391,557 0 0	water revenue/hse 57 0 0 0 0 40	water prices/ m3 0.22 0.000 0.00 0.00 53 53
Totai <\$2 \$2-\$4 >\$4 Totai <\$2 \$2-\$4 >\$4 Totai <\$2 \$2-\$4 \$4 Totai \$2-\$4 Totai \$2-\$4 Totai \$2-\$4 Totai \$2-\$4 Totai		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 <u>Shop water</u> 83,132 1,904 15,130 <u>66,098</u> <u>Tanker water</u> 0 0 0 0 0 0	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 00	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300 109,300	water revenue 6,241,239 0 0 0 0 0 4,391,557 0 0	water revenue/hse 57 0 0 0 0 40	water prices/ m3 0.22 0.000 0.00 0.00 53 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 Total <\$2 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 Total <\$2 \$4 \$5 \$4 Total <\$2 \$4 \$5 \$4 Total <\$2 \$4 \$5 \$4 Total <\$2 \$4 \$5 \$4 \$4 Total <\$2 \$4 \$5 \$4 Total <\$2 \$4 \$5 \$4 Total <\$2 \$4 \$5 \$4 Total <\$2 \$4 \$4 Total \$4 Total Total <\$5 \$4 Total		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 Shop water 83,132 1,904 15,130 66,098 Tanker water 0 0 0 0 0 0 Network, shop & ta	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 0	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300 109,300	water revenue 6,241,239 0 0 0 0 0 4,391,557 0 0	water revenue/hse 57 0 0 0 0 40	water prices/ m3 0.22 0.000 0.00 0.00 53 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 S4 S4 S4 S4 S4 S4 S4 S4 S4 S		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 Shop water 83,132 1,904 15,130 66,098 Tanker water 0 0 0 0 0 0 Network, shop & ta	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 0	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300 109,300	water revenue 6,241,239 0 0 0 0 0 4,391,557 0 0	water revenue/hse 57 0 0 0 0 40	water prices/ m3 0.22 0.000 0.00 0.00 53 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 -\$5 Total <\$2 \$4 -\$4 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$4 -\$5 -\$5 -\$4 -\$5 -\$4 -\$5 -\$5 -\$4 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5 -\$5		-10,842,251 Network water 28,354,551 1,586,755 8,406,118 18,361,678 Shop water 83,132 1,904 15,130 66,098 Tanker water 0 0 0 0 0 0 Network, shop & ta	517,189 m3/hse/a li 259 259 259 259 1 1	774,172 cd 100 100 100 100 0	17,595,433 nr hse 109,300 6,117 32,404 70,780 109,300 109,300	water revenue 6,241,239 0 0 0 0 0 4,391,557 0 0	water revenue/hse 57 0 0 0 0 40	water prices/ m3 0.22 0.000 0.00 0.00 53 53

of water to t	argeted househo	lds: network, shop a	and tanker	water			2024							
						Year								
		517.189	799.739	18.176.522	14									
						0								
		07	34	73,117	0	0	0.00							-
			4	440.040	0.070.470	00	50							
			1	112,910	9,073,176	00	53	,						
														-
														-
													L	
			5	112,910	6,113,037	54	4	ł						
	18,176,522	161	62	112,910	17,360,311	154								
of water to t	argeted househo	lds: network, shop a	and tanker	water			2024							
						Year								
					14		with project							
								,						
	8,447,634					U U								
		252		33 474	0	0	0.00							
	18 452 362		98	33,474		0		)						
	18,452,362 Shop water	252 252		33,474 <b>73</b> ,117		0 0		)						
	Shop water	252	98 98	73,117	0	0	0.00							
	Shop water 85,878	252	98	73,117	0		0.00							
	Shop water 85,878 1,967	252 1	98 98	73,117	0	0	0.00							
	<u>Shop water</u> 85,878 1,967 15,630	252 1	98 98	73,117	0	0	0.00							
	<u>Shop water</u> 85,878 1,967 15,630 68,281	252 1	98 98	73,117	0	0	0.00							
	<u>Shop water</u> 85,878 1,967 15,630 68,281 Tanker water	252	98 98 0	73,117 112,910	4,536,588	0 40	0.00							
	<u>Shop water</u> 85,878 1,967 15,630 68,281 Tanker water 0	252	98 98	73,117 112,910	4,536,588	0	0.00							
	<u>Shop water</u> 85,878 1,967 15,630 <u>68,281</u> <u>Tanker water</u> 0 0	252	98 98 0	73,117 112,910	4,536,588	0 40	0.00							
	<u>Shop water</u> 85,878 1,967 15,630 68,281 <u>Tanker water</u> 0 0 0 0	252 1 0 0	98 98 0	73,117 112,910	4,536,588	0 40	0.00							
	<u>Shop water</u> 85,878 1,967 15,630 68,281 <u>Tanker water</u> 0 0 0 0 0 0 0 0	252 1 0	98 98 0	73,117 112,910	4,536,588	0 40	0.00							
	Shop water           85,878           1,967           15,630           68,281           Tanker water           0	252	98 98 0	73,117 112,910 112,910 112,910	0 4,536,588 0	0 40	0.00 53							
	<u>Shop water</u> 85,878 1,967 15,630 68,281 <u>Tanker water</u> 0 0 0 0 0 0 0 0	252 1 0 0	98 98 0	73,117 112,910 112,910 112,910	0 4,536,588 0	0 40	0.00 53							
	Shop water           85,878           1,967           15,630           68,281           Tanker water           0	252	98 98 0	73,117 112,910 112,910 112,910	0 4,536,588 0	0 40	0.00 53							
	Shop water           85,878           1,967           15,630           68,281           Tanker water           0	252	98 98 0	73,117 112,910 112,910 112,910	0 4,536,588 0	0 40	0.00 53							
	Shop water           85,878           1,967           15,630           68,281           Tanker water           0	252	98 98 0	73,117 112,910 112,910 112,910	0 4,536,588 0	0 40	0.00 53							
	vater (m3) 9,877,138 9,877,138	vater (n3) Deficit (m*) 9,877,138 6,599,369 Network water 9,877,138 552,737 2,928,221 6,396,181 Shop water 171,756 3,934 31,260 136,562 Tanker water 1,528,259 51,909 274,995 1,201,356 Network, shop & tr 18,176,522 0 0 0 0 0 0 0 13,165 1,909 274,995 1,201,356 Network, shop & tr 18,176,522 0 0 0 0 0 0 0 0 0 0 0 0 0	vater (m3)         Deficit (m*)         baseline pop         pop           9,877,138         6,599,369         517,189         lcd           Network water         m3/hse/a         lcd         9,877,138         87           9,877,138         87	vater (m3)         Deficit (m*)         baseline pop (5,9,877,138)         pop connect (7,189)         pop connect (7,189)           9,877,138         6,599,369         517,189         799,739           Network water         m3/hse/a         Icd           9,877,138         87         34           552,737         87         34           2,928,221         87         34           6,396,181         87         34           Shop water         1         3           31,260         31,366         1           31,260         1         55           131,260         1         55           274,995         1         55           1,528,259         14         55           51,909         2         2           274,995         1         1         62           18,176,522         161         62           of water to targeted households: network, shop and tanker         9           of water to targeted households: network, shop and tanker         799,739           Network water         m3/hse/a         Icd           28,494,587         225         98	9,877,138         6,599,369         517,189         799,739         18,176,522           Network water         m3/hse/a         lcd         nr hse           9,877,138         87         34         112,910           552,737         87         34         6,319           2,928,221         87         34         34,474           6,399,6181         87         34         73,117           Shop water         1         112,910         34,3474           31,260         1         112,910         31,260           31,260         136,562         1         112,910           274,995         14         5         112,910           51,909         274,995         14         5         112,910           21,921,356         12,910         114,176,522         161         62         112,910           9,974         118,176,522         161         62         112,910           9,84         18,176,522         161         62         112,910           9,84,94,587         10,403,943         517,189         799,739         18,176,522           9,84,94,587         10,403,943         517,189         799,739         18,176,522	vater (m3)         Deficit (m*)         baseline pop         pop connect         water demand (m3)           9,877,138         6,599,369         517,189         799,739         18,176,522         14           Network water         m3/hse/a         lcd         nr hse         water revenue           9,877,138         87         34         112,910         2,174,098           552,737         87         34         6,319         00           2,928,221         87         34         33,474         00           6,396,181         87         34         73,117         0           Shop water         112,910         9,073,176         3,934           31,260         3,934         112,910         9,073,176           31,260         136,562         112,910         6,113,037           13,528,259         14         5         112,910         6,113,037           51,909         274,995         1,201,356         12,910         17,360,311           18,176,522         161         62         112,910         17,360,311           2         12,01,356         12,910         17,360,311         13,260           31,8176,522         161         62         112,910<	vater (m3)         Deficit (m')         baseline pop         pop connect         water demand (m3)         Year           9,877,138         6,59,369         517,189         799,739         18,176,522         14           Network water         m3/hse/a         Icd         nr hse         water revenue         water revenue/hse           9,877,138         87         34         112,910         2,174,098         19           552,737         87         34         6,319         0         0           2,928,221         87         34         6,319         0         0           6,396,181         87         34         73,117         0         0         0           Shop water	vater (m3)         Deficit (m*)         baseline pop (59,87,138)         opp connect (559,369)         opp connect (517,188)         vater demand (m3)         Year         115           9,877,138         6,599,369         517,189         799,739         18,176,522         14         without project         without project         water revenue         water revenue/nse         0.020           2,928,221         87         34         73,117         0         0         0.000           3,934         3,934         3,112,910         9,073,176         800         53         53           1,528,259         14         5         112,910         6,113,037         54	Vater (m3)         Deficit (m')         baseline pop (5.99,369)         pop connect (with out project)         vithout project           9,877,138         6,599,369         517,189         799,739         18,176,522         14         without project         1           9,877,138         87         34         0.12         yithout project         without project         1           9,877,138         87         34         0.12,910         2,174,098         19         0.22         1           9,877,138         87         34         6,319         0         0         0.00         1           2,928,221         87         34         73,117         0         0         0.00         1           6,396,181         87         34         73,117         0         0         0.00         1           1717,1756         2         1         112,910         9,073,176         80         53         1         1           312,60	vater (m3)         Deficit (m4)         baseline pop         pop connect         water demand (m3)         Year         15         (m1)           9,877,138         6,599,369         517,189         799,739         18,176,522         14         without project         (m1)         <	vater (m3)         Deficit (m*)         baseline pop (m3)         pop connect         water demand (m3)         Vear         15         Image: m3 (m3)         m3 (m3)	valer (m3)         Deficit (m')         baseline pop (59,369)         pop connect (m1)         water retenue (m2)         Ver         15         (m2)         (m3)           9,877,138         6.599,369         517,189         79,739         18,176,522         14         water revenue/se (water revenue/se (water revenue/se)         water revenue/se (water revenue/se)         0.000         0.000         0.00         0.00             10,125,255           112,910           0,113,037           54	vater (m3)         Deficit (m')         baseline pop (5,99,37)         pop connect (7,108)         vater (m2,108)         vater (m2,108)	Vater (m3)         Deficit (m')         baseline pop (5.993 76)         pop connect (m f hse)         vater (m3)         Vear         115         C <thc< th="">        C</thc<>

JOUDDINES OF W	vater to ta	argeted househol	lds: network, shop	and tanker	water			2025	5			
network wate					water demand (m3)		Year	16				
	,835,159	7,185,484		826,151	18,776,802	15		without project				
-,			m3/hse/a Icd		nr hse			water prices/ m3				
Total	÷	9,835,159		33				0.22	,			
<\$2		550,387	84	33			0	0.00				
<u>~</u> \$2-\$4		2,915,776		33	34,579		-	0.00				
⇒2-⇒4 >\$4		6,368,996	84	33			0	0.00				
<b>∕</b> φ4		Shop water	04		10,002	1	0	0.00				
Total	s	177,428	2	1	116,639	9,372,818	80	53				
<\$2		4,064		1	110,039	9,372,010	80	53	5			
<\$Z										 		_
\$2-\$4		32,292										
>\$4		141,072										1
	]	Tanker water										+
Total		1,578,730	14	5	116,639	6,314,920	54	4				 
<\$2		53,623										
\$2-\$4		284,077										
>\$4		1,241,030										
	1	Network, shop & ta										
Total		18,776,802	161	62	116,639	17,852,596	153					
<\$2												
\$2-\$4												
>\$4												
Supplies of w	water to ta	argeted househol	lds: network, shop	and tanker	water			2025	5			
network wate	er (m3)	Deficit (m <sup>3</sup> )	baseline pop po	n aannaat	water demand (m2)		Year	16				
	,635,977			p connect	water demand (ms)		rear	10				
- 1	.635.977	-9.947.890				15						
		-9,947,890 Network water	517,189	826,151	18,776,802			with project				
Total		Network water	517,189 m3/hse/a lcd	826,151	18,776,802 nr hse	water revenue	water revenue/hse	with project water prices/ m3				
		Network water 28,635,977	517,189 m3/hse/a lcd 246	<b>826,151</b> 95	18,776,802 nr hse 116,639	water revenue 6,303,185	water revenue/hse 54	with project water prices/ m3 0.22	2			
<\$2		Network water 28,635,977 1,602,504	517,189 m3/hse/a lcd 246 246	826,151 95 95	18,776,802 nr hse 116,639 6,527	water revenue 6,303,185 0	water revenue/hse 54 0	with project water prices/ m3 0.22 0.00	2			
<\$2 \$2-\$4		Network water 28,635,977 1,602,504 8,489,551	517,189 m3/hse/a lcd 246 246 246	826,151 95 95 95	18,776,802 nr hse 116,639 6,527 34,579	water revenue 6,303,185 0 0	water revenue/hse 54 0 0	with project water prices/ m3 0.22 0.00 0.00				
<\$2 \$2-\$4	<u>1</u>	Network water 28,635,977 1,602,504 8,489,551 18,543,922	517,189 m3/hse/a lcd 246 246	826,151 95 95	18,776,802 nr hse 116,639 6,527 34,579	water revenue 6,303,185 0 0	water revenue/hse 54 0	with project water prices/ m3 0.22 0.00				
<\$2 \$2-\$4 >\$4	<u>1</u>	Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water	517,189 m3/hse/a lcd 246 246 246 246 246	826,151 95 95 95 95 95	18,776,802 nr hse 116,639 6,527 34,579 75,532	water revenue 6,303,185 0 0 0 0	water revenue/hse 54 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total	<u>1</u>	Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714	517,189 m3/hse/a lcd 246 246 246 246 246	826,151 95 95 95	18,776,802 nr hse 116,639 6,527 34,579 75,532	water revenue 6,303,185 0 0 0 0	water revenue/hse 54 0 0 0	with project water prices/ m3 0.22 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2	<u>1</u>	Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032	517,189 m3/hse/a lcd 246 246 246 246 246 1	826,151 95 95 95 95 95	18,776,802 nr hse 116,639 6,527 34,579 75,532	water revenue 6,303,185 0 0 0 0	water revenue/hse 54 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	<u>1</u>	Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146	517,189         Icd           m3/hse/a         Icd         246           246         246         246           246         246         1	826,151 95 95 95 95 95	18,776,802 nr hse 116,639 6,527 34,579 75,532	water revenue 6,303,185 0 0 0 0	water revenue/hse 54 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536	517,189         Icd           m3/hse/a         Icd         246           246         246         246           246         246         1	826,151 95 95 95 95 95	18,776,802 nr hse 116,639 6,527 34,579 75,532	water revenue 6,303,185 0 0 0 0	water revenue/hse 54 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water	517,189 m3/hse/a lcd 246 246 246 246 246 1	826,151 95 95 95 95 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639	water revenue 6,303,185 0 0 0 0 0 4,686,409	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0	517,189 m3/hse/a lcd 246 246 246 246 1 1 1 0	826,151 95 95 95 95 95	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639	water revenue 6,303,185 0 0 0 0 0 4,686,409	water revenue/hse 54 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0	517,189 m3/hse/a lcd 246 246 246 246 1 1	826,151 95 95 95 95 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639	water revenue 6,303,185 0 0 0 0 0 4,686,409	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639	water revenue 6,303,185 0 0 0 0 0 4,686,409	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 1 0	826,151 95 95 95 95 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639	water revenue 6,303,185 0 0 0 0 0 4,686,409	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 Total <\$2 \$4 \$4 \$54 \$2-\$4 \$4 \$2-\$4 \$2-\$4 \$2-\$4 \$4 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$5 \$4 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		Network water 28,633,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 00 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639 116,639	water revenue 6,303,185 0 0 0 0 4,686,409 0	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 \$54 Total <\$2 \$2-\$4 \$2-\$4 \$4 Total Cotal \$2-\$4 \$4 Total \$4 Total Total Total \$2-\$4 \$4 \$4 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$2 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		Network water 28,635,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639 116,639	water revenue 6,303,185 0 0 0 0 4,686,409 0	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 \$54 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 \$4 \$52 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5 \$2-\$4 \$2-\$5		Network water 28,633,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 00 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639 116,639	water revenue 6,303,185 0 0 0 0 4,686,409 0	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
<\$2 \$2-\$4 \$54 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		Network water 28,633,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 00 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639 116,639	water revenue 6,303,185 0 0 0 0 4,686,409 0	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2 \$2-\$4 \$4 \$4 \$4 \$2 \$2-\$4 \$4 \$4 \$4 \$4 \$2 \$2-\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4		Network water 28,633,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 00 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639 116,639	water revenue 6,303,185 0 0 0 0 4,686,409 0	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				-         -           -         -
\$2 \$2 \$4 fotal \$2 \$2 \$2 \$2 \$4 fotal \$2 \$2 \$4 \$4 fotal \$2 \$2 \$4 \$4 fotal \$2 \$2 \$4 \$4 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$2 \$4 \$4 \$4 \$2 \$2 \$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$2 \$4 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2		Network water 28,633,977 1,602,504 8,489,551 18,543,922 Shop water 88,714 2,032 16,146 70,536 Tanker water 0 0 0 0 0 0 0 0	517,189 m3/hse/a lcd 246 246 246 1 1 0	826,151 95 95 95 95 00 0	18,776,802 nr hse 116,639 6,527 34,579 75,532 116,639 116,639	water revenue 6,303,185 0 0 0 0 4,686,409 0	water revenue/hse 54 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53				-           -

Supplies o	of water to t	argeted househo	lds: network. sh	op and tanke	r water			2026
					water demand (m3)		Year	17
	9,793,083	7,789,667				16		without project
		Network water	m3/hse/a	lcd	nr hse			water prices/ m3
Fotal		9,793,083						
<\$2		548,033	81				0	
\$2-\$4		2,903,302					0	0.00
>\$4		6,341,749	81				0	0.00
		Shop water						
Total		183,288	2	1	120,491	9,682,355	80	53
<\$2		4,198						
\$2-\$4		33,358						
>\$4		145,731						
		Tanker water						
Total		1,630,867	14	5	120,491	6,523,470	54	4
<\$2		55,394						
\$2-\$4		293,458						
>\$4		1,282,015						
		Network, shop & ta	anker water					
Total		19,396,906		62	120,491	18,361,422	152	
<\$2								
\$2-\$4								
>\$4								
•								
Supplies o	of water to t	argeted househo	lds: network, sh	op and tanke	r water			2026
network wa								
			baseline pop	pop connect	water demand (m3)		Year	17
	28,778,745	-9,473,483	517,189	pop connect 853,435		16		
	28,778,745	-9,473,483	<b>517,189</b> m3/hse/a	853,435 lcd	19,396,906 nr hse	water revenue	water revenue/hse	17 with project water prices/ m3
Total	28,778,745	-9,473,483 Network water 28,778,745	<b>517,189</b> m3/hse/a 239	853,435 Icd 92	19,396,906 nr hse 120,491	water revenue	water revenue/hse	17 with project
Total <\$2	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493	517,189 m3/hse/a 239 239	853,435 Icd 92 92	19,396,906 nr hse 120,491 6,743	water revenue 6,334,610	water revenue/hse 53	17 with project water prices/ m3 0.22 0.00
Total <\$2 \$2-\$4	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493 8,531,876	517,189 m3/hse/a 239 239 239	853,435 lcd 92 92 92	19,396,906 nr hse 120,491 6,743 35,721	water revenue 6,334,610 0 0	water revenue/hse 53 0	17 with project water prices/ m3 0.22
Total <\$2 \$2-\$4	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493 8,531,876 18,636,375	517,189 m3/hse/a 239 239	853,435 lcd 92 92 92	19,396,906 nr hse 120,491 6,743 35,721	water revenue 6,334,610 0 0	water revenue/hse 53 0	17 with project water prices/ m3 0.22 0.00
Total <\$2 \$2-\$4 >\$4	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water	517,189 m3/hse/a 239 239 239 239	853,435 lcd 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027	water revenue 6,334,610 0 0 0	water revenue/hse 53 0 0 0 0	17 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644	517,189 m3/hse/a 239 239 239 239 239	853,435 lcd 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027	water revenue 6,334,610 0 0 0	water revenue/hse 53 0 0 0 0	17 with project water prices/ m3 0.22 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644 2,099	517,189 m3/hse/a 239 239 239 239 239 1	853,435 lcd 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027	water revenue 6,334,610 0 0 0	water revenue/hse 53 0 0 0 0	17 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679	517,189 m3/hse/a 239 239 239 239 239 1	853,435 lcd 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027	water revenue 6,334,610 0 0 0	water revenue/hse 53 0 0 0 0	17 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644 2,099	517,189 m3/hse/a 239 239 239 239 239 1	853,435 lcd 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027	water revenue 6,334,610 0 0 0	water revenue/hse 53 0 0 0 0	17 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679	517,189 m3/hse/a 239 239 239 239 239 239	853,435 lod 92 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 4,841,178	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total Total	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679 72,866	517,189 m3/hse/a 239 239 239 239 239 239	853,435 lcd 92 92 92 92 92 02	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 4,841,178	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	28,778,745	-9,473,483 <u>Network water</u> 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644 2,099 16,679 72,866 <u>Tanker water</u> 0 0	517,189 m3/hse/a 239 239 239 239 239 1 1	853,435 lod 92 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 4,841,178	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total           <\$2	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644 2,099 16,679 72,866 <u>Tanker water</u> 0	517,189 m3/hse/a 239 239 239 239 239 1 1	853,435 lod 92 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 4,841,178	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644 2,099 16,679 72,866 <u>Tanker water</u> 0 0 0 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 239 239 0 0	853,435 lod 92 92 92 92 92 92	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 4,841,178	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 0.00 53
2 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 S2-\$4 >\$4 S2-\$4 S4 S4 S2-\$4 S4 S2-\$4 S4 S4 S2-\$4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S4 S4 S2-\$4 S4 S4 S4 S2-\$4 S4 S4 S4 S4 S4 S4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S2-\$4 S4 S4 S4 S4 S4 S4 S4 S4 S4 S	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679 72,866 Tanker water 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 0 0 0 0 0	853,435 lcd 92 92 92 92 92 92 92 0 0	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 0 0 0 0 0 0 0 0	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 53 53 4
2 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total T	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 <u>Shop water</u> 91,644 2,099 16,679 72,866 <u>Tanker water</u> 0 0 0 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 0 0 0 0 0	853,435 lcd 92 92 92 92 92 92 92 0 0	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 0 0 0 0 0 0 0 0	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 53 53 4
2 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$4 Total \$2-\$4 Total \$4 \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$4 Total \$2-\$54 Total \$2-\$54 Total Total \$2-\$54 Total Total \$2-\$54 Total \$2-\$54 Total \$2-\$54 Total Total \$2-\$54 Total Total Total \$2-\$54 Total To	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679 72,866 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 0 0 0 0 0	853,435 lcd 92 92 92 92 92 92 02	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 0 0 0 0 0 0 0 0	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 53 53 4
2 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 \$2 \$4 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$2 \$2 \$4 \$4 \$4 \$2 \$2 \$4 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$2 \$2 \$4 \$2 \$4 \$4 \$2 \$2 \$4 \$4 \$4 \$2 \$2 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679 72,866 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 0 0 0 0 0	853,435 lcd 92 92 92 92 92 92 02	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 0 0 0 0 0 0 0 0	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 53 53 4
2 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 >\$4 Total (\$2 \$2.\$4 \$4 \$4 \$2.\$4 \$4 \$4 Total (\$2 \$4 \$4 \$4 Total (\$2 \$4 \$4 \$4 Total (\$2 \$4 \$4 \$4 Total (\$2 \$4 \$4 \$4 Total Total (\$2 \$4 \$4 \$4 Total Tota	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679 72,866 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 0 0 0 0 0	853,435 lcd 92 92 92 92 92 92 02	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 0 0 0 0 0 0 0 0	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 53 53 4
2 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2 \$2-\$4 \$4 \$4 \$4 \$2 \$4 \$4 Total \$2 \$4 \$4 \$4 Total \$2 \$4 \$4 \$4 Total \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	28,778,745	-9,473,483 Network water 28,778,745 1,610,493 8,531,876 18,636,375 Shop water 91,644 2,099 16,679 72,866 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 239 239 239 239 239 239 0 0 0 0 0	853,435 lcd 92 92 92 92 92 92 02	19,396,906 nr hse 120,491 6,743 35,721 78,027 120,491	water revenue 6,334,610 0 0 0 0 0 0 0 0 0 0	water revenue/hse 53 0 0 0 0 40	17 with project water prices/ m3 0.22 0.00 0.00 53 53 4

Supplies (	of water to t	argeted househo	lds: network. sh	op and tanke	r water			2027
					water demand (m3)		Year	18
	9,750,910	8,412,511	517,189	881,619	20,037,489	17		without project
		Network water		lcd	nr hse	water revenue		water prices/ m3
Fotal		9,750,910		30			17	0.22
<\$2		545,673		30		0	0	0.00
\$2-\$4		2,890,799		30			0	0.00
>\$4		6,314,439	78	30	80,603	0	0	0.00
		Shop water						
Total		189,341	2	1	124,470	10,002,115	80	53
<\$2		4,337						
\$2-\$4		34,460						
>\$4		150,544						
		Tanker water						
Total		1,684,727	14	5	124,470	6,738,908	54	4
<\$2		57,223						
\$2-\$4		303,150						
>\$4		1,324,354						
		Network, shop & ta						
Total		20,037,489	161	62	124,470	18,887,336	152	
<\$2								
\$2-\$4								
>\$4								
		argeted househo	lds: network, sh	op and tanke	r water		1	2027
network w								
			baseline pop		water demand (m3)		Year	18
	28,922,912	-8,980,094	517,189	881,619	20,037,489			18 with project
	28,922,912	-8,980,094 Network water	<b>517,189</b> m3/hse/a	881,619 lcd	20,037,489 nr hse	water revenue	water revenue/hse	18 with project water prices/ m3
Total	28,922,912	-8,980,094 <u>Network water</u> 28,922,912	517,189 m3/hse/a 232	881,619 Icd 90	20,037,489 nr hse 124,470	water revenue 6,366,343	water revenue/hse 51	18 with project water prices/ m3 0.22
Total <\$2	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561	517,189 m3/hse/a 232 232	881,619 Icd 90 90	20,037,489 nr hse 124,470 6,965	water revenue 6,366,343 0	water revenue/hse 51 0	18 with project water prices/ m3 0.22 0.00
Total <\$2 \$2-\$4	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617	517,189 m3/hse/a 232 232 232	881,619 Icd 90 90 90	20,037,489 nr hse 124,470 6,965 36,901	water revenue 6,366,343 0 0	water revenue/hse 51 0	18 with project water prices/ m3 0.22 0.00 0.00
Total <\$2	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734	517,189 m3/hse/a 232 232 232	881,619 Icd 90 90	20,037,489 nr hse 124,470 6,965 36,901	water revenue 6,366,343 0 0	water revenue/hse 51 0	18 with project water prices/ m3 0.22 0.00
Total <\$2 \$2-\$4 >\$4	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734 <u>Shop water</u>	517,189 m3/hse/a 232 232 232 232 232	881,619 Icd 90 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603	water revenue 6,366,343 0 0 0 0	water revenue/hse 51 0 0 0	18 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734 <u>Shop water</u> 94,670	517,189 m3/hse/a 232 232 232 232 232 1	881,619 Icd 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603	water revenue 6,366,343 0 0 0 0	water revenue/hse 51 0 0 0	18 with project water prices/ m3 0.22 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734 <u>Shop water</u> 94,670 2,168	517,189 m3/hse/a 232 232 232 232 232 232 1	881,619 Icd 90 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603	water revenue 6,366,343 0 0 0 0	water revenue/hse 51 0 0 0	18 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 <b>1,618,561</b> 8,574,617 <b>18,729,734</b> <u>Shop water</u> 94,670 <b>2,168</b> <b>17,230</b>	517,189 m3/hse/a 232 232 232 232 232 232 1	881,619 Icd 90 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603	water revenue 6,366,343 0 0 0 0	water revenue/hse 51 0 0 0	18 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734 <u>Shop water</u> 94,670 2,168	517,189 m3/hse/a 232 232 232 232 232 232 1	881,619 Icd 90 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603	water revenue 6,366,343 0 0 0 0	water revenue/hse 51 0 0 0	18 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 <b>1,618,561</b> 8,574,617 <b>18,729,734</b> <u>Shop water</u> 94,670 <b>2,168</b> <b>17,230</b>	517,189 m3/hse/a 232 232 232 232 232 232 232 232	881,619 lcd 90 90 90 90 90	20,037,489 nr hse 124,470 8,965 36,901 80,603 124,470	water revenue 6,366,343 0 0 0 0 0 0 0 0 0 0	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 Total	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734 <u>Shop water</u> 94,670 2,168 17,230 75,272	517,189 m3/hse/a 232 232 232 232 232 232 232 232	881,619 Icd 90 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603 124,470	water revenue 6,366,343 0 0 0 0 0 0 0 0 0 0	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 >\$4 Total <\$2	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water	517,189 m3/hse/a 232 232 232 232 232 1 1	881,619 lcd 90 90 90 90 90	20,037,489 nr hse 124,470 8,965 36,901 80,603 124,470	water revenue 6,366,343 0 0 0 0 0 0 0 0 0 0	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0	517,189 m3/hse/a 232 232 232 232 11 1	881,619 lcd 90 90 90 90 90	20,037,489 nr hse 124,470 8,965 36,901 80,603 124,470	water revenue 6,366,343 0 0 0 0 0 0 0 0 0 0	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2	28,922,912	-8,980,094 <u>Network water</u> 28,922,912 1,618,561 8,574,617 18,729,734 <u>Shop water</u> 94,670 2,168 17,230 75,272 <u>Tanker water</u> 0 0	517,189 m3/hse/a 232 232 232 232 232 1 1	881,619 lcd 90 90 90 90 90	20,037,489 nr hse 124,470 8,965 36,901 80,603 124,470	water revenue 6,366,343 0 0 0 0 0 0 0 0 0 0	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0 0 0 0	517,189 m3/hse/a 232 232 232 232 1 1	881,619 lcd 90 90 90 90 90	20,037,489 nr hse 124,470 8,965 36,901 80,603 124,470	water revenue 6,366,343 0 0 0 0 0 0 0 0 0 0	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$4 Total	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0 0 0 0 0 0 0	517,189 m3/hse/a 232 232 232 232 1 1 1 0	881,619 lcd 90 90 90 90 90	20,037,489 nr hse 124,470 6,965 36,901 80,603 124,470 124,470	water revenue 6,366,343 0 0 0 0 0 5,001,058	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total           <\$2	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 232 232 232 232 1 1	881,619 Icd 90 90 90 90 90 00 90	20,037,489 nr hse 124,470 6,965 36,901 80,603 124,470 124,470	water revenue 6,366,343 0 0 0 0 0 5,001,058	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 232 232 232 232 1 1	881,619 Icd 90 90 90 90 90 00 90	20,037,489 nr hse 124,470 6,965 36,901 80,603 124,470 124,470	water revenue 6,366,343 0 0 0 0 0 5,001,058	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total           <\$2	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 232 232 232 232 1 1	881,619 Icd 90 90 90 90 90 00 90	20,037,489 nr hse 124,470 6,965 36,901 80,603 124,470 124,470	water revenue 6,366,343 0 0 0 0 0 5,001,058	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53
Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total \$2 \$2-\$4 \$2 \$4 \$2 \$4 \$2 \$4 Total \$2 \$4 \$4 \$2 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$2 \$4 \$2 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	28,922,912	-8,980,094 Network water 28,922,912 1,618,561 8,574,617 18,729,734 Shop water 94,670 2,168 17,230 75,272 Tanker water 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a 232 232 232 232 1 1	881,619 Icd 90 90 90 90 90 00 90	20,037,489 nr hse 124,470 6,965 36,901 80,603 124,470 124,470	water revenue 6,366,343 0 0 0 0 0 5,001,058	water revenue/hse 51 0 0 0 0 40	18 with project water prices/ m3 0.22 0.00 0.00 0.00 53

	of water to t	argeted househo	lds: network, shop	and tanker	water			2028	3				
					water demand (m3)		Year	19					
	9,708,639	9,054,629		910,735	20,699,227	18		without project					
			m3/hse/a lcd					water prices/ m3					
Total		9,708,639		29				0.22	,				
<\$2		543,307	76	29	7,196		0						
\$2-\$4		2,878,267	76	29			0	0.00					
<u>⊅∠-↓∔</u> >\$4		6,287,065	76	29			0	0.00					
		Shop water		23	00,200	0	U	0.00					
Total		<u>195,594</u>	2	1	128,580	10,332,435	80	53					
<\$2		4,480			128,380	10,332,433	80	55	,				
səz \$2-\$4													
<u>\$2-\$4</u>		35,598											
>\$4		155,516							· · · · · · · · · · · · · · · · · · ·	 <u>↓</u>			
		Tanker water		_	100				. <u> </u>	 <u>↓</u>			
Fotal		1,740,365		5	128,580	6,961,460	54	4					-
<\$2		59,113										L	1
\$2-\$4		313,161											
>\$4		1,368,091											
		Network, shop & ta											
Fotal		20,699,227	161	62	128,580	19,430,904	151						
<\$2													
\$2-\$4													
>\$4													
Supplies o	of water to t	argeted househo	lds: network, shop	and tanker	water			2028					
network w	/ater (m3)	Deficit (m <sup>3</sup> )	1										
1			baseline pop po	p connect	water demand (m3)		Year	19					
	29,068,504	-8,467,074		p connect 910,735		18		19 with project					
		-8,467,074		910,735	20,699,227								
Fotal		-8,467,074	517,189 m3/hse/a lcd	910,735	20,699,227 nr hse	water revenue	water revenue/hse	with project					
		-8,467,074 Network water	517,189 m3/hse/a lcd 226	910,735	20,699,227 nr hse	water revenue 6,398,390	water revenue/hse	with project water prices/ m3 0.22	2				
<\$2		-8,467,074 <u>Network water</u> 29,068,504 1,626,708	517,189 m3/hse/a lcd 226 226	910,735 87 87	20,699,227 nr hse 128,580 7,196	water revenue 6,398,390 0	water revenue/hse 50	with project water prices/ m3 0.22 0.00	2				
<\$2 \$2-\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780	517,189 m3/hse/a lcd 226 226 226	910,735 87 87 87 87	20,699,227 nr hse 128,580	water revenue 6,398,390 0 0	water revenue/hse 50 0	with project water prices/ m3 0.22 0.00 0.00					
<\$2 \$2-\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708	517,189 m3/hse/a lcd 226 226	910,735 87 87	20,699,227 nr hse 128,580 7,196 38,120	water revenue 6,398,390 0 0	water revenue/hse 50 0 0	with project water prices/ m3 0.22 0.00 0.00					
<\$2 \$2-\$4 >\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u>	517,189 m3/hse/a Icd 226 226 226 226 226	910,735 87 87 87 87 87 87	20,699,227 nr hse 128,580 7,196 38,120 83,265	water revenue 6,398,390 0 0 0 0	water revenue/hse 50 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797	517,189 m3/hse/a lcd 226 226 226 226 226 1	910,735 87 87 87 87	20,699,227 nr hse 128,580 7,196 38,120 83,265	water revenue 6,398,390 0 0 0 0	water revenue/hse 50 0 0 0	with project water prices/ m3 0.22 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240	517,189 m3/hse/a lcd 226 226 226 226 226 1	910,735 87 87 87 87 87 87	20,699,227 nr hse 128,580 7,196 38,120 83,265	water revenue 6,398,390 0 0 0 0	water revenue/hse 50 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 <u>18,824,015</u> <u>Shop water</u> 97,797 2,240 17,799	517,189 m3/hse/a lcd 226 226 226 226 226 1	910,735 87 87 87 87 87 87	20,699,227 nr hse 128,580 7,196 38,120 83,265	water revenue 6,398,390 0 0 0 0	water revenue/hse 50 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Fotal <\$2 \$2-\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 0,17,799 77,758	517,189 m3/hse/a lcd 226 226 226 226 226 1	910,735 87 87 87 87 87 87	20,699,227 nr hse 128,580 7,196 38,120 83,265	water revenue 6,398,390 0 0 0 0	water revenue/hse 50 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u>	517,189 m3/hse/a Icd 226 226 226 226 226 1	910,735 87 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580	water revenue 6,398,390 0 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,97 2,240 17,799 <u>77,758</u> <u>Tanker water</u> 0	517,189 m3/hse/a lcd 226 226 226 226 226 1	910,735 87 87 87 87 87 87	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580	water revenue 6,398,390 0 0 0 0 5,166,218	water revenue/hse 50 0 0 0	with project water prices/ m3 0.22 0.00 0.00 0.00					
<\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u> 0 0	517,189  cd 226 226 226 226 226 1	910,735 87 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580	water revenue 6,398,390 0 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		-8,467,074 <u>Network water</u> 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u> 0 0 0	517,189 Icd 226 226 226 226 226 1	910,735 87 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580	water revenue 6,398,390 0 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		-8,467,074 Network water 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,997 2,240 17,799 <u>77,758</u> <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189 m3/hse/a lcd 226 226 226 226 1 1	910,735 87 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580	water revenue 6,398,390 0 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project water prices/ m3 0.22 0.00 0.00 0.00 53					
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 Total <\$2 \$4 \$2-\$4 \$2-\$4 \$2-\$4		-8,467,074 Network water 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189  cd 226 226 226 226 226 1 1	910,735 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580 128,580	water revenue 6,398,390 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project           water prices/ m3           0.22           0.00           0.00           53           53           4					
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$2 \$2-\$4 \$4 Total <\$2 Total <\$2 Total Total <\$2 Total		-8,467,074 Network water 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,997 2,240 17,799 <u>77,758</u> <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189  cd 226 226 226 226 226 1 1	910,735 87 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580 128,580	water revenue 6,398,390 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project           water prices/ m3           0.22           0.00           0.00           0.00           53           53           4					
<\$2 \$2-\$4 \$3-\$4 Total <\$2 \$2-\$4 \$4 \$2-\$4 \$4 \$2 \$4 \$2-\$4 \$4 \$2 \$4 \$54 Total <\$2 \$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4 \$2-\$4 \$4 \$2-\$4		-8,467,074 Network water 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189  cd 226 226 226 226 226 1 1	910,735 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580 128,580	water revenue 6,398,390 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project           water prices/ m3           0.22           0.00           0.00           0.00           53           53           4					
Total <\$2 \$2-\$4 Total <\$2 \$2-\$4 \$2-\$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$4 \$5 \$4 Total \$2 \$2-\$4 \$4 \$2 \$2 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5		-8,467,074 Network water 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189  cd 226 226 226 226 226 1 1	910,735 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580 128,580	water revenue 6,398,390 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project           water prices/ m3           0.22           0.00           0.00           0.00           53           53           4					
<\$2 \$2-\$4 \$4 Total <\$2 \$2-\$4 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4 Total <\$2 \$2-\$4 >\$4		-8,467,074 Network water 29,068,504 1,626,708 8,617,780 18,824,015 <u>Shop water</u> 97,797 2,240 17,799 77,758 <u>Tanker water</u> 0 0 0 0 0 0 0 0 0 0 0 0 0	517,189  cd 226 226 226 226 226 1 1	910,735 87 87 87 87 0	20,699,227 nr hse 128,580 7,196 38,120 83,265 128,580 128,580	water revenue 6,398,390 0 0 0 5,166,218	water revenue/hse 50 0 0 0 0 40	with project           water prices/ m3           0.22           0.00           0.00           0.00           53           53           4					

Supplies of water to	o targeted househo	lds: network, shon :	and tanker	water			2029					
network water (m3)				water demand (m3)		Year	20					
9,666,27			940,812	21,382,819	19		thout project					
0,000,21	Network water	m3/hse/a lcd		nr hse	water revenue		iter prices/ m3					
Total	9,666,271	73	28				0.22	,				
<\$2	540,936	73	28	7,433		0	0.00					
<u>_</u> \$2-\$4	2,865,706		28	39,378			0.00					
<u>\$2-\$4</u> >\$4	6,259,628	73	28	86,015		0	0.00					
	Shop water	/3	20	00,013			0.00					
Total	202,053	2	1	132,827	10,673,664	80	53					
<\$2	4,628			152,021	10,075,004	00	55					
<#2 \$2-\$4	36,774											
⇒\$4	160,652											
>\$4												
Total	Tanker water 1,797,841	14	5	132,827	7,191,362	54	4					
Total <\$2	61,065		5	132,827	1,191,362	54	4			 		
<\$2 \$2-\$4	323,503									 		+
\$2-\$4 >\$4	1,413,272									 		
>\$4	Network, shop & ta									 		
<b>T</b> . ( . )				400.007	10 000 710	454						
Total	21,382,819	161	62	132,827	19,992,710	151						
<\$2	_											
\$2-\$4												
>\$4												
<b>o</b>							2029					
Supplies of water to							2029					
network water (m3)				water demand (m3)		Year		,				
29,215,54			940,812				th project					
	Network water	m3/hse/a Icd		nr hse	water revenue		iter prices/ m3					
Total	29,215,543		85				0.22					
<\$2	1,634,937	220	85	7,433		U	0.00					
\$2-\$4	8,661,372		85	39,378		0	0.00					
>\$4	18,919,235	220	85	86,015	0	0	0.00					
	Shop water											
Total	101,027	1	0	132,827	5,336,832	40	53					
<\$2									1			
\$2-\$4	2,314											
	18,387											
>\$4	18,387 80,326											
>\$4	18,387 80,326 <u>Tanker water</u>											
>\$4 Total	18,387 80,326 <u>Tanker water</u> 0		0	132,827	0	0	4					
>\$4 Total <\$2	18,387 80,326 <u>Tanker water</u> 0 0		0	132,827	C	0	4					
>\$4 Total <\$2 \$2-\$4	18,387 80,326 <u>Tanker water</u> 0 0 0 0		0	132,827	C	0	4					
>\$4 Total <\$2	18,387 80,326 <u>Tanker water</u> 0 0 0 0 0 0		0	132,827	0	0	4					
>\$4 Total <\$2 \$2-\$4 >\$4	18,387 80,326 <u>Tanker water</u> 0 0 0 0 Network, shop & ta	anker water					4					
>\$4 Total <\$2 \$2-\$4 >\$4 Total	18,387 80,326 <u>Tanker water</u> 0 0 0 0 0 0	anker water	0		11,767,588		4					
>\$4 Total <\$2 \$2:\$4 >\$4 Total <\$2	18,387 80,326 <u>Tanker water</u> 0 0 0 0 Network, shop & ta	anker water					4					
>\$4 Total <\$2 \$2-\$4 >\$4 Total	18,387 80,326 <u>Tanker water</u> 0 0 0 0 Network, shop & ta	anker water					4					

Zarga Water Supply Esssibility Study, Sala	atad Liat a				ata Mar	k oboot "	Uaahala	J.I.												
Zarga Water Supply Feasibility Study. Sele					ects. won	k-sneet	nsenoic	<u>,</u>												
Table 4: Household water consumption analysis across 20 years						pop growth:	3.25%	2	annual conne	ectivity growth	: 0.05%									
Table 4. Household water consumption analysis deross 20 years	water prioces	s per m³:	network	0.22	shop	52.826		4		growing growin	. 0.0070									
	2010	1	2012			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
	1	2	3		5	6	7	8	9	10		12	13	14	15	16		-	19	20
Target population (all HHs)	517,189	,	551,353	,	,	606,876	626,599	646,964	667,990	,	,	735,259	759,154	783,827	809,301	835,604	862,761	890,800	,	949,64
Target population (connected HHs)	507,454	524,213	541,525	559,409	577,883	596,968	616,683	637,049	658,087	679,821	702,272	725,464	749,423	774,172	799,739	826,151	853,435	881,619	910,735	940,81
Without project Total network water consumed	10 454 745	10,414,107	10,373,375	10,332,547	10,291,625	10,250,607	10 200 404	10,168,286	10,126,982	10 095 592	10.044.086	10,002,494	9,960,805	9,919,020	9,877,138	9,835,159	9,793,083	0 750 010	9.708.639	9,666,27
Total shop water consumed	10,454,745	112,582	116,301	120,141	124,109	128,208	132,442	136,816	141,334	146,002		155,804	9,960,805	9,919,020 166,265	9,677,136	9,835,159	9,793,083	<u>9,750,910</u> 189,341	9,708,039	202,05
Total tanker water consumed	969,718	,	1,034,825	,	1,104,304	1,140,774	1,178,448	1,217,366	1,257,569	,	,	1,386,323	1,432,107	1,479,402	,	1,578,730	,	,	1,740,365	1,797,84
With project		.,	.,	.,	.,	.,	.,	.,,	.,,	.,	.,,	.,	.,,	.,	.,020,200	.,,	.,,	.,	.,,	.,
Total network water consumed	10,454,745	10,414,107	10,373,375	15,339,982	20,407,636	25,577,456	26,034,332	26,499,163	26,972,044	27,453,073	27,942,348	28,078,453	28,215,847	28,354,551	28,494,587	28,635,977	28,778,745	28,922,912	29,068,504	29,215,54
Total shop water consumed	108,983	112,582	116,301	102,120	86,876	70,514	71,519	72,512	73,494	74,461	75,412	77,902	80,475	83,132	85,878	88,714	91,644	94,670	97,797	101,02
Total tanker water consumed	969,718	1,001,743	1,034,825	748,300	441,722	114,077	94,276	73,042	50,303	25,982	0	0	0	0	0	0	0	0	0	(
								0.000 -00			0.00-00-	4 000 10-	4 000 115	4 0 2 0 0 2 -	4 64- 44-	4 000 00-	4 00 - 00 -	4 000 0/-	<b>F</b> 4 4 4 <b>F</b> 4	
Savings from switching from shop water to network water			0	040,021	1,958,659	3,035,016	3,204,919	-,,	3,568,800	, ,	, ,	4,098,109	, , .	, ,	4,517,685	4,666,882	,- ,	, ,	5,144,691	5,314,59
Savings from switching from tanker water to network water			C	1,212,210	2,504,486	3,880,795	4,098,046	4,325,414	4,563,330	4,812,243	5,072,620	<b>ɔ,∠4</b> ∪,143	5,413,199	5,591,970	5,776,645	5,967,419	6,164,493	0,308,075	6,578,381	6,795,63
Total savings from switching from shop and tanker water			ſ	2,160,231	4,463,145	6,915,811	7,302,965	7,708,149	8,132,130	8 575 708	9,039,715	9 338 252	9.646.648	9 965 228	10 294 330	10,634,301	10 985 498	11 348 205	11,723,072	12 110 22
ויטנמי סעידוועס וויטווי סאונטווווע וויטוו סווטף מווע נמווגבו שמנכו			U	2,100,231	7,403,143	0,313,011	1,302,903	1,100,143	0,132,130	0,373,700	3,033,113	3,330,232	3,040,040	3,303,220	10,234,330	10,034,301	10,303,430	11,340,293	1,123,012	12,110,22
Poorest socio-economic group ( <\$2 per person per day)																				
Target population (all HHs)	28,943	29,883	30,854	31,857	32,892	33,961	35,065	36,205	37,382	38,596	39,851	41,146	42,483	43,864	45,289	46,761	48,281	49,850	51,470	53,143
Target population (connected HHs)	28,398	29,336	30,304	31,305	32,339	33,407	34,510	35,650	36,827	38,044	39,300	40,598	41,939	43,324	44,754	46,232	47,759	49,336	50,966	52,649
Without project																				
Total network water consumed	585,060	582,786	580,507	,	575,932	573,636	571,336	569,030	566,718	564,401	562,079	559,752	557,419	555,080	552,737	550,387	548,033	545,673	543,307	540,936
Total shop water consumed	2,496	2,578	2,664	2,752	2,842	2,936	3,033	3,134	3,237	3,344	,	3,568	3,686	3,808	3,934	4,064	4,198	4,337	4,480	4,628
Total tanker water consumed	32,937	34,025	35,149	36,309	37,509	38,747	40,027	41,349	42,714	44,125	45,582	47,088	48,643	50,249	51,909	53,623	55,394	57,223	59,113	61,065
With project																				
Total network water consumed	585,060	582,786	580,507	858,444	1,142,036	1,431,345	1,456,913	1,482,925	1,509,388	1,536,307	, ,	1,571,304	1,578,993	1,586,755	1,594,591	1,602,504	1,610,493	1,618,561	1,626,708	1,634,937
Total shop water consumed	2,496	2,578	2,664	2,339	1,990	1,615	1,638	1,661	1,683	1,705		1,784	1,843	1,904	1,967	2,032	2,099	2,168	2,240	2,314
Total tanker water consumed	32,937	34,025	35,149	25,417	15,003	3,875	3,202	2,481	1,709	883	0	0	0	0	0	0	0	0	0	0
Savings from switching from shop water to network water				21,713	44.860	69,512	73,403	77,475	81,737	86,195	90,859	93.860	96,959	100,162	103,469	106,886	110,416	114,063	117,830	121,721
Savings from switching from shop water to network water Savings from switching from tanker water to network water				41,174	,	131,814	139,193	146,916	154,997	163,452	,	93,860	96,959 183,864	189,936	103,469	202,688	209,382	216,297	223,440	230,819
Savings from switching from tanker water to network water				41,174	05,007	131,014	153,135	140,310	134,331	103,432	. 172,230	177,300	103,004	103,330	130,200	202,000	203,302	210,237	223,440	230,013
Total savings from switching from shop and tanker water			C	62.886	129.926	201,326	212,596	224,392	236.734	249,647	263,155	271.845	280.823	290,097	299.678	309,575	319.798	330,360	341,270	352,540
				,				,		,						,		,		,
Medium poor socio-economic group ( \$2 - \$4 per person per day)																				
Target population (all HHs)	153,328	158,311	163,457	168,769	174,254	179,917	185,764	191,802	198,035	204,471	211,117	217,978	225,062	232,377	239,929	247,727	255,778	264,091	272,674	281,53
Target population (connected HHs)	150,442	155,411	160,543	165,845	171,322	176,980	182,825	188,862	195,100	201,543	208,199	215,074	222,177	229,515	237,094	244,924	253,013	261,369	270,001	278,91
Without project					<b>.</b>															
Total network water consumed	3,099,461						3,026,753		3,002,291		2,977,715	2,965,384	2,953,025		2,928,221	2,915,776			2,878,267	2,865,700
Total shop water consumed	19,835		21,167		22,588	23,334	24,104	24,901	25,723			28,356	29,293	30,260	31,260	32,292	33,358	34,460	35,598	36,774
Total tanker water consumed	174,491	180,254	186,206	192,356	198,708	205,271	212,050	219,053	226,287	233,760	241,480	249,455	257,693	266,204	274,995	284,077	293,458	303,150	313,161	323,503
With project	0.000.404	2 007 110	0.075.00-	4 = 4 = = = =	6 050 1 15	7 500 000	7 740 050	7 050 001	7 000 05 1	0 400 000	0.000.015	0 00 4 005	0.004.007	0 400 440	0 4 47 00 1	0 400 554	0 504 070	0 574 445	0 647 700	0.004.0-
Total network water consumed	3,099,461					7,582,808	7,718,256	7,856,061	7,996,254		8,283,915		, ,		8,447,634	8,489,551	8,531,876		8,617,780	8,661,372
Total shop water consumed	19,835	20,490	21,167		15,812		13,016	13,197	13,376			14,178	14,646	15,130	15,630	16,146	16,679 0	17,230	17,799	18,387
Total tanker water consumed	174,491	180,254	186,206	134,649	79,483	20,527	16,964	13,143	9,051	4,675	0	0	0	0	0	0	U	0	0	6
Savings from switching from shop water to network water			0	172,540	356,477	552,375	583,297	615,660	649,524	684,953	722,014	745,858	770,490	795,936	822,221	849,375	877,426	906,403	936,337	967,259
Savings from switching from tanker water to network water			, i	218,125	,	698,310	737,402		821,126		,	942,911	974,051	,	1,039,449	,	1,109,239	,	1,183,714	1
				,	100,007		,			300,010			0. 1,001	.,,	.,,	.,	.,,	.,. 10,011	.,,	.,,000
Total savings from switching from shop and tanker water			C	390,665	807,134	1,250,685	1,320,700	1,393,975	1,470,649	1,550,868	1,634,781	1,688,770	1,744,541	1,802,155	1,861,671	1,923,153	1,986,665	2,052,274	2,120,051	2,190,065
Total savings from switching from shop and tanker water (both			C	453,552	937,061	1,452,011	1,533,296	1,618,366	1,707,383	1,800,515	1,897,936	1,960,615	2,025,364	2,092,252	2,161,349	2,232,727	2,306,463	2,382,634	2,461,321	2,542,60
socio-economic categories)																				
Target Population (all HHs) of both socio-economic categories	182,271	188,195	194,311	200,626	207,146	213,879	220,830	228,007	235,417	243,068	250,968	259,124	267,546	276,241	285,219	294,488	304,059	313,941	324,144	334,67
						ļ														
Harlik kanafita fan ikana annowel († 150 k.)	Table 4 feeds	s off the works	sneet "Wcon"	electronically.																
Health benefits for those consuming < 50 lcd Disability Adjusted Life Years (DALY)	The bealth in	anact of the st	roposod proio	t is analyzed	in contion (d) of	f the worksheet	"Holi"													
	The health in	npact of the pl	oposeu proje	l analysed																
Avoided health-related costs		1		1	1					1										

# Zarqa Water Supply Feasibility Study. Selected List of PIP MCC Priority Projects. Work-sheet "Heli"

(a) Analysing the 2008 billing data: a story of inequality in distribution between network water-poor and network water-rich HHs

Tables 1 & 3 are derived from the 2008 billing data and provide the following findings: <i> total quanities of network water and nr HHs across 11 different consumption bands (table H1)

<ii><ii>average annual consumption per HH, average HH bill and total revenue across consumption bands (table H3)

Table H1: Water co	nsumption across c	onsumption ranges							
Consumption bands		Water quantities	Water quantities	Cumulative	Cumulative	nr HHs	nr HHs per con	Cumulative	Cumulative
(con band)		per con band	per con band	in % terms	in % terms	per con band	range in % terms	in % terms	in % terms
		(m³)	in % terms	increasing	declining			increasing	declining
<50lcd		4,635,648	26.34%	26.34%	100.00%	62,044	51.44%	51.44%	100.00%
50lcd-	65lcd	2,709,956	15.40%	41.74%	73.66%	18,291	15.17%	66.61%	48.56%
65lcd-	80lcd	2,522,226	14.33%	56.07%	58.26%	13,528	11.22%	77.82%	33.39%
80lcd-	120lcd	4,793,678	27.24%	83.30%	43.93%	19,259	15.97%	93.79%	22.18%
120lcd-	145lcd	1,389,365	7.89%	91.20%	16.70%	4,104	3.40%	97.19%	6.21%
145lcd-	165lcd	624,570	3.55%	94.75%	8.80%	1,570	1.30%	98.49%	2.81%
165lcd-	185lcd	349,621	1.99%	96.73%	5.25%	777	0.64%	99.14%	1.51%
185lcd	205lcd	230,410	1.31%	98.04%	3.27%	460	0.38%	99.52%	0.86%
205lcd	225lcd	136,962	0.78%	98.82%	1.96%	248	0.21%	99.72%	0.48%
225lcd	245lcd	125,671	0.71%	99.53%	1.18%	207	0.17%	99.90%	0.28%
245lcd	265lcd	82,220	0.47%	100.00%	0.47%	125	0.10%	100.00%	0.10%

Total water consumption (2008) 17.600.327

The above table speaks for itself with respect to the unequal distribution of network water. This is indicated by a number of observations: 48.56% of all Zarga HHs consume between 50-265 lcd of water and 62,044 HHs or in % terms 26.34% of Zarqa network water 58,569 HHs or in % terms 73.66% of Zarqa network water

Since the ECO Consult report indicates no correlation between income and water consumption levels, the inequality is based on unequal distribution generated by poor quality piping in certain areas which disadvantages households across all income groups.

The HELI (2005) report highlights the health benefit accruing from raising network water consumption from <50 lcd to 60 lcd and higher.

In the context of Zarqa Governorate the following statistics are of interest in the HELI framework:

Table H2: Water consumption across groups 1 (HHs consuming <50 lcd) & 2 (HHs consuming between 50 - 265 lcd) with project

	Total water	Group 1 water	Group 2 water	Total HHS connect	Group 1 HHs	Group 2 HHs	Group 1 m³/HH/annum	Group 2 m³/HH/annum	Group 1 lcd	Group 2 Icd	=	>60lcd	Group 2 after transf to Group 1	Group 2 after transf to Group 1
2,0	10,454,745	2,753,615	7,701,131	71,644	36,854	34,790	) 75	221		29	86	,	(m <sup>3</sup> )	(lcd)
2,0	011 10,414,107	2,742,911	7,671,196	74,010	38,071	35,939	72	213		28	83		. ,	. ,
2,0	10,373,375	2,732,183	7,641,192	76,454	39,328	37,126	69	206		27	80			
2,0	15,339,982	4,040,309	11,299,673	78,979	40,627	38,352	2 99	295		38	114			
2,0	20,407,636	5,375,049	15,032,587	81,587	41,969	39,618	3 128	379		50	147			
2,0	25,577,456	6,736,698	18,840,758	84,282	43,355	40,927	7 155	460		60	178			
2,0	26,034,332	6,857,032	19,177,301	87,065	5 44,787	42,278	3 153	454		59	175	6,947,229	19,087,103	175
2,0	26,499,163	6,979,461	19,519,702	89,941	46,266	43,675	5 151	447		58	173	7,176,662	19,322,501	171
2,0	26,972,044	7,104,010	19,868,034	92,911	47,794	45,117	' 149	440		57	170	7,413,671	19,558,373	168
2,0	019 27,453,073	7,230,705	20,222,367	95,979	49,372	46,607	' 146	434		57	168	7,658,508	19,794,565	164
2,0	27,942,348	7,359,573	20,582,775	99,149	51,003	48,146	6 144	428		56	165	7,911,430	20,030,918	161
2,0	28,078,453	7,395,421	20,683,032	102,423	52,687	49,736	5 140	416		54	161	8,172,705	19,905,748	155
2,0	28,215,847	7,431,608	20,784,239	105,806	5 54,427	51,379	137	405		53	156	8,442,609	19,773,238	149
2,0	28,354,551	7,468,141	20,886,410	109,300	56,225	53,076	5 133	394		51	152	8,721,426	19,633,125	143
2,0	28,494,587	7,505,024	20,989,563	112,910	58,081	54,828	3 129	383		50	148	9,009,451	19,485,136	137
2,0	28,635,977	7,542,264	21,093,713	116,639	60,000	56,639	126	372		49	144	9,306,988	19,328,989	132
2,0	28,778,745	7,579,867	21,198,878	120,491	61,981	58,510	) 122	362		47	140	9,614,352	19,164,393	127
2,0	28,922,912	7,617,838	21,305,074	124,470	64,028	60,442	2 119	352		46	136	9,931,866	18,991,047	122
2,0	29,068,504	7,656,185	21,412,319	128,580	) 66,142	62,438	3 116	343		45	133 1	10,259,865	18,808,638	117
2,0	29,215,543	7,694,912	21,520,631	132,827	68,327	64,500	) 113	334		44	129 1	10,598,698	18,616,846	112

120.613

This table shows that in year 6 group 1 achieves average consumption level of 60 lcd. However to maintain this beyond year 6 redistribution of water from group 2 to group 1 is necessary. It is doable as it only requires modest reduction in the average water consumption level of group 2. In year 7 there is no reduction involved but in year 8 there is a reduction from 173 lcd to 171 lcd and in year 20 from 129 lcd to 119 lcd.

#### There are a number of reasons why network water poor HHs receive inadequate supplies. These include the following: <i> unequal storage capacity

GFA 2008: 100 show that 1% of HHs have no storage; 13% have 1 m³ storage capacity, 48% have 2 m³ and 38% have more than 2.7 m³ (mean size) storage capacity.

	Impact of storage capacity on benefiting from network water	storage:1m <sup>3</sup>	storage:2m <sup>3</sup>	storage:2	.73m³
1	Where tanks are only filled once a week this would generate the following consumption rates (lcd):-		20	40	55
	It means that those HHs with the smaller tanks obtain <50 lcd				
	The situation can be improved with 3 fillings per week giving the following lcd:-		61	121	165

<ii>> Altitude

Year

Where the household lives in high altitude areas pressure is weak and supply erratic as others at lower altitudes are at the front of the queue and hence supplied first.

<iii> Tariff structure

Given the large gap between the m<sup>3</sup> price of network water (varying between Jd 0.18 - JD 0.64),and that of tanker water (JD 4) and shop water (JD 52.83) (in the context of water scarcity) those who have the influence, storage capacity and appropriate altitude are able to harvest a disproportionate share of the network water as illustrated by table H1 above. In addition, EC Consult points out that the sharing of meters by poor HHs pushes up the price of network water

for the poor. One resolution is to ensure that poor HHs have access to one meter per HH as recommended by ECO Consult.

Another resolution to this situation is to raise tariff rates much closer to commercial rates of tanker water, so that when HHs consume more than 165 lcd.

the price of network water is > JD 4, so that the network water-rich HHs are forced to purchase tanker water when their consumption is >165 lcd.

Network water-poor HHs are willing to pay higher tariffs at the lower consumption band rates (see GFA 2008:163-173)

In summary, constraints <>> and <i>> require an engineering resolution, while constraint <ii>> faces the challenge of reform of the tariff structure. Both sets of resolutions will be required to address the plight of network water-poor HHs, of which there are 62,044 HHs repres 62,044 HHs representing

51.44% of all HHs of Zarqa.

# <c> Economic and financial analysis of the 2008 billing data

Table H 3 below analyses annual HH expenditure on water, average prices per m<sup>3</sup> and revenue across the consumption bands

### Table H3: HH network water consumption, water bills and revenue

Consumption bands		av HH con/ann	um av HH co	n/quart tariff	a	av HH	av price per	rev	enue created	(	Cumulative	Cumulative
(con band)		per con band	per con b	and	a	annual bill	m <sup>3</sup> per con	pe	r con band	ī	in % terms	in % terms
		(m³)	(m³)	(JD)	(.	JD)	band (JD)	(JE	D)	i	increasing	declining
<50lcd			75	19	3.750		15	0.20	930,660	22.32%	22.32%	100.00%
50lcd-	65lcd		148	37	6.450	2	26	0.17	471,908	11.32%	33.64%	77.68%
65lcd-	80lcd		186	47	9.341	:	37	0.20	505,460	12.12%	45.76%	66.36%
80lcd-	120lcd		249	62	14.870		59	0.24	1,145,525	27.47%	73.24%	54.24%
120lcd-	145lcd		339	85	26.657	1(	07	0.31	437,601	10.50%	83.73%	26.76%
145lcd-	165lcd		398	99	36.483	14	46	0.37	229,113	5.50%	89.23%	16.27%
165lcd-	185lcd		450	112	47.097	18	88	0.42	146,377	3.51%	92.74%	10.77%
185lcd	205lcd		501	125	58.296	23	33	0.47	107,265	2.57%	95.31%	7.26%
205lcd	225lcd		552	138	71.896	28	88	0.52	71,321	1.71%	97.02%	4.69%
225lcd	245lcd		607	152	88.250	3	53	0.58	73,071	1.75%	98.77%	2.98%
245lcd	265lcd		658	164	102.341	40	09	0.62	51,171	1.23%	100.00%	1.23%
									4 169 472			

There are some minor inequalities in billing before average price per m<sup>3</sup> begins to rise from 80 lcd onwards.

(d) Planning and implementing the HELI-desired outcome It is now assumed that engineering and policy steps relating to tariff reform will take place so that the necessary quantities of additional water created by the proposed projec will be channelled to HHs with <50 lcd so that their consumption rate is raised to 60 lcd; and this continues even in the face of population growth from year 9 onwards. The details of the re-distribution of water between groups 1 & 2 in order to lift HHs of group 1 to 60 lcd and to maintain these HHs at this level are worked out above (table H2).

Hence, I move on to calculate the health benefits. I assume that the diarrhoea incidence/ person / year for those consuming < 50 lcd is .61

igure given Figure 6, HELI (2005) report, page 40. I also assume that the diarrhoea incidence/person/year is .27 for those consuming 60 lcd (ibid.) Appling Table 10 (HELI 2005:43) to the metered population the health gains for raising consumption of group 1 to 60 lcd, health gains are estimated in Table H4 below.

# Table H4 Estimating the health benefits in lifting group 1 to consumption level of 60 lcd

Diarrhoea incidence		Total health cost	population size			
		(JD)				
	0.61	56,323,128		(HELI 2005:43)		
	0.27	24,929,909		(HELI 2005:43)		
Health gain (JD)		31,393,219	5,100,396			
		AU		<b>.</b>		
V		All socio-economic			ategories (poor & medium poo	or)
Year of the project		Target population		Target population		
	1	517,189		182,271	0	
	2	533,998		188,195	0	
	3	551,353		194,311	0	
	4	569,272		200,626	0	
	5	587,773		207,146		
	6	606,876	- / /	213,879	1,316,434	
	7	626,599		220,830		
	8	646,964	3,982,097	228,007	1,403,393	
	9	667,990	4,111,515	235,417	1,449,003	
	10	689,700	4,245,139	243,068	1,496,096	
	11	712,115	4,383,106	250,968	1,544,719	
	12	735,259	4,525,557	259,124	1,594,923	
	13	759,154	4,672,637	267,546	1,646,758	
	14	783,827	4,824,498	276,241	1,700,277	
	15	809,301	4,981,294	285,219	1,755,536	
	16	835,604	5,143,186	294,488	1,812,591	
	17	862,761	5,310,340	304,059	1,871,500	
	18	890,800	5,482,926	313,941	1,932,324	
	19	919,751	5,661,121	324,144	1,995,125	
	20	949,643	5,845,108	334,679	2,059,966	

														1	1		1	1			, , , , , , , , , , , , , , , , , , ,	
Zarga Water Supply Feasibility Study. Sele	ected List	of PIP N	ACC Pri	ority Pro	ojects. V	Vork-she	et "Proc	<u> "</u>														
Step 5																						
Step 5 consists of an analysis of production costs in order to ascertain co			d and water o	delivered to co	onsumers																	
This analysis is based on WAJ 2009, Zarqa Water Administration Profit a	Years	nent for 2008																		The analysis only incl	udes costs re	elating to the p
Table 5a: Water production analysis Zarqa Governorate (2008	2010		2012				2016	2017	2018	2019	2020											
Without project	1	2	3	4	5	0	1	8	9	10	11	12	13	14	1 15	16	17	18	19 20	) water treatment. The by data from the work		
Water production Internal water sources (wells and springs)	52,134,804 39,074,642	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804 52,134,804	4 The analysis in this w provided (WAJ 2009)		
Water imports	13,060,162	1																		that the reduction in w		
																				The ultimate goal of the	o analysis is	to ascertain s
Authorised consumptior	25,606,380		25,407,082	25,307,086	25,206,856	25,106,393	25,005,697	24,904,767	24,803,603	24,702,204	24,600,569	24,498,699	24,396,593	24,294,250	24,191,670	24,088,853	23,985,798	23,882,505	23,778,973 23,675,202			
Billed metered consumption (billing system, tankers, exports) Unbilled metered consumption (free water in arid areas)	24,184,161 490,706	2																		The findings of this w	ork choot foo	d into the "CR
Flushing of network	931,513	2																				
Water production costs	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700	12,484,700 12,484,700	There is an adjustmer	t for the fact	that pumping
Salaries and wages (minus Sewerage Directorate & Irrigation Division)	1,743,119	9																				
Electricity expenses (Water Directorate total minus water treatement) Spare parts and maintenance (Water Directorate & Desert Wells)	4,973,336 803,256	5																				
Vehicle expenses (Water Directorate/ water tankers/ desert wells)	306,998	3																				
General and Admin Expenses devoted to water-related staff & activities Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir)	358,614 212,854														+		<u> </u>	<u> </u>				
Water imports	4,086,524																1	1				
**Water related salaries & wages as percentage of total salary and	81%	, ,																				
wage bill (JOD 2,156,313)															-		+	+				
Average cost per m3 of water produced (internal plus imports	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239 0.239	9		
Average cost per m3 of water delivered to consumers	0.488	8 0.489	0.491	0.493	0.495	0.497	0.499	0.501	0.503	0.505	0.507	0.510	0.512	0.514	4 0.516	0.518	0.521	0.523	0.525 0.527	7	]	
(authorised consumption	0.400	0.403	0.431	0.490	0.430	0.437	0.439	0.001	0.000	0.000	0.007	0.010	0.012	0.014	. 0.010	0.010	0.021	0.020	0.520 0.527			
Step 6																	1	1				
Step 6 ascertains what happens production costs (with project) given	00.5	00.001	00 70	00.00	00.0	00.7-	00.0	00.00/	AA 2		00 7	00.071	70.01	70.7	70.07	70.01	70.5-	70.0	70.70/ 76.55			
percentage UFW "without project" but percentage UFW "with project"	68.5% 68.5%	68.6% 68.6%	68.7% 68.7%	68.8% 19.5%	69.0% 19.4%			69.3% 19.2%	69.5% 19.2%	69.6% 19.1%	69.7% 19.0%	69.8% 19.0%	70.0%	70.1%							DD/ACEPO	
For the sake of the calculations it is assumed that the whole Zarqa	00.070	, 00.070	00.7 70	13.370	13.470	13.57	13.370	13.270	13.270	13.170	13.070	13.070	10.576	10.570	10.070	10.070	10.770	10.770	10.070 10.070			chghicers
water system is being rehabilitated and restructured. The key factors																						
between the "without project" and "with project" scenarii is the the difference between the UFW of without & with project																						
Making this wider assumption does not alter the calculation of unit																						
costs of water production & delivery																						
With project																						
Percentage of connected consumers reached																						
, stormage of connected consumers reached	+			30%	60%	90%	92%	94%	96%	98%	100%											
Water production	52,134,804	52,134,804	52,134,804										52,134,804	52,134,804	1 52,134,804	52,134,804	52,134,804	52,134,804	52,134,804 52,134,804	4		
Water production Internal water sources (wells and springs)	39,074,642		52,134,804										52,134,804	52,134,804	1 52,134,804	52,134,804	52,134,804	52,134,804	52,134,804 52,134,804	4		
Water production			52,134,804										52,134,804	52,134,804	4 52,134,804	52,134,804	52,134,804	52,134,804	52,134,804 52,134,804	4		
Water production Internal water sources (wells and springs) Water imports Authorised consumptior	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804							52,134,804 52,134,804 66,115,353 66,159,804			
Water production Internal water sources (wells and springs) Water imports	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production Internal water sources (wells and springs) Water imports Authorised consumptior	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumptior           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumptior           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping wich is more energy efficient. In overall terms one energy saving of note with steady state pumping wich	39,074,642 13,060,162	9		52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804	52,134,804										
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)	39,074,642 13,060,162 25,606,380	25,506,847	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs         Salaries and wages (minus Sewerage Directorate & Irrigation Division)	39,074,642 13,060,162 25,606,380 25,606,380 12,484,700 1,743,119	25,506,847	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630		Image: Constraint of the second sec		
Water production Internal water sources (wells and springs)           Water imports           Authorised consumptior           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works. At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NDIACEPO engineers 2010)           Water production costs Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)	39,074,642 13,060,162 25,606,380 25,606,380 12,484,700 1,743,119 4,973,336	25,506,847	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Water production Internal water sources (wells and springs)           Water imports           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than a thresent, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate & Desert Wells)	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,988	) <b>25,506,847</b> ) <b>12,484,700</b> ) <b>12,484,700</b>	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Vater production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving on tote is envisaged. (NOD/ACEPO engineers 2010)           Water production costs         Salaries and wages (minus Severage Directorate & Irrigation Division)           Electricity expenses (Water Directorate to a minus water treatement)         Spare parts and maintenance (Water Directorate & Losert Wells)           Vehicle expenses (Water Directorate water transfers' desert wells)         Seleverage description due to reserve the start & activities	39,074,642 13,060,162 25,606,380 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614	2 25,506,847 2 25,506,506,847 2 25,506,847 2 25,507,507,507,507,507,507,507,507,507,50	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Water production Internal water sources (wells and springs)           Water imports           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than a thresent, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate & Desert Wells)	39,074,642 13,060,162 25,606,380 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,988 358,614 212,854	2 25,506,847	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate Seart Wells)           General and Admin Expenses devoled to water-related staff & activities Fuel expenses (minus Sewarage Directory but plus 61% of Admin Dir)           Water imports           "Water imports	39,074,642 13,060,162 25,606,380 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614	0 25,506,847	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to high-relevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs         Salaries and wages (minus Severage Directorate total minus water treatement).           Spare parts and maintenance (Water Directorate total minus water treatement).         Spare parts and maintenance (Water Directorate total minus water treatement).           Vehicle expenses (Mater Directorate total minus water treatement).         Spare parts and maintenance Water Directorate total staff & activities fuel activities fuel expenses (minus Severage Directorate desert Wells).           Vehicle expenses (minus Severage Directorate total staff & activities fuel activities fuel expenses (mater Severage Directorate total minus water treatement).	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,25	0 25,506,847	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034	52,134,804	52,134,804 62,315,937	52,134,804 63,165,915	52,134,804 64,021,556	52,134,804 64,882,860	52,134,804 65,749,825	52,134,804 65,796,493	65,842,879	65,888,985	65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804	Image: Constraint of the second sec		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division) Electricity expenses (Water Directorate Vater tankers/ desert Wells)           General and Admin Expenses devoted to water-related staff & activities Fuel expenses (minus Sewerage Directory but plus 81% of Admin Dir/ "Water imports"           Vehicle expenses (minus Sewerage Directory but plus 81% of Admin Dir/ Water imports           Vehicle staff & activities Fuel expenses (minus Sewerage Directory but plus 81% of Admin Dir/ Water imports	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,25	2 25,506,847 2 25,506,847 4 12,484,700 3 12,484,700 3 12,484,700 4 1 4 1 5 1 6 1 7 1 7 12,484,700 7 12,	25,407,082	52,134,804 37,339,502	52,134,804 49,361,034 12,484,700	52,134,804	52,134,804 62,315,937 12,484,700	52,134,804 63,165,915 12,484,700	52,134,804 64,021,556	52,134,804 64,882,860 12,484,700	52,134,804 65,749,825 12,484,700	52,134,804 65,796,493 12,484,700	65,842,879 12,484,700	65,888,985	5 65,934,811	65,980,360	66,025,632	66,070,630	66,115,353 66,159,804 12,484,700 12,484,700			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NODACEPO engineers 2010)           Water production costs           Salaries and wages (minus Severage Directorate & Irrigation Division)           Spare parts and maintenance (Water Directorate & Losert Wells)           Vehicle expenses (Mater Directorate/ water transers/ desert wells)           General and Admin Expenses dovated to water-related stalf & activities           Fuel expenses (minus Severage Directory but plus 81% of Admin Dir)           Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water produced (internal plus imports	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614 212,854 4,086,524 81%	2 25,506,847 2 25,506,847 2 25,506,847 2 25,506,847 2 2 2,506,847 2 2 2 2,506,847 2 2 2 2,506,847 2 2 2 2,506,847 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25,407,082	52,134,804 37,339,502 12,484,700 0.239	52,134,804 49,361,034 12,484,700 0,239	52,134,804 61,471,626 12,484,700	52,134,804 62,315,937 12,484,700 0,239	52,134,804 63,165,915 12,484,700 0.239	52,134,804 64,021,556 12,484,700 0.239	52,134,804 64,882,860 12,484,700 0,239	52,134,804 65,749,825 12,484,700 0,239	52,134,804 65,796,493 12,484,700 0,239	65,842,879	65,888,985	<ul> <li>65,934,811</li> <li>12,484,700</li> <li>12,484,700</li> <li>0,239</li> </ul>	65,980,360 12,484,700 0,239	66,025,632	66,070,630 12,484,700 0,239	66,115,353 66,159,804 12,484,700 12,484,700 0,239 0,235			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate / Directorate & Seart Wells)           Vehicle expenses (Water Directorate/ water tankers/ desert wells)           General and Admin Expenses devoled to water-related statif & activities           Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir)           Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 8,03,256 306,998 358,614 212,854 4,086,524 81%	2 25,506,847 2 25,506,847 2 25,506,847 2 25,506,847 2 2 2,506,847 2 2 2 2,506,847 2 2 2 2,506,847 2 2 2 2,506,847 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25,407,082	52,134,804 37,339,502 12,484,700	52,134,804 49,361,034 12,484,700	52,134,804 61,471,626 12,484,700	52,134,804 62,315,937 12,484,700 0,239	52,134,804 63,165,915 12,484,700 0.239	52,134,804 64,021,556 12,484,700	52,134,804 64,882,860 12,484,700	52,134,804 65,749,825 12,484,700	52,134,804 65,796,493 12,484,700 0,239	65,842,879 12,484,700	65,888,985	<ul> <li>65,934,811</li> <li>12,484,700</li> <li>12,484,700</li> <li>0,239</li> </ul>	65,980,360 12,484,700 0,239	66,025,632	66,070,630 12,484,700 0.239	66,115,353 66,159,804 12,484,700 12,484,700 0,239 0,238			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will had the more water pumped to high-level reservoirs, and the present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division) Electricity expenses (Water Directorate total minus water treatement) Spare parts and maintenance (Water Directorate & Kells)           General and Admin Expenses devoted to water-related staff & activities Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir) Water imports           "Water grade staries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water produced (internal plus imports           Average cost per m3 of water delivered to consumer: (authorised consumption.	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614 212,854 4,086,524 81% 0,239 0,239	2 25,506,847 2 25,506,847 2 12,484,700 2 12,484,700 3	25,407,082 12,484,700 0,239 0,491	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239 0.195	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192	52,134,804 65,749,825 12,484,700 0,239 0,190	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190	65,842,879 12,484,700 0.239 0.190	65,888,985 12,484,700 0.239 0.189	5 65,934,811	65,980,360 12,484,700 0.239 0.189	66,025,632	66,070,630 12,484,700 0.239 0.189	66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,239 0,189 0,188			
Water production Internal water sources (wells and springs)           Water imports           Authorised consumption The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works. At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms on energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs Salaries and wages (minus Sewerage Directorate & Irrigation Division) Electricity expenses (Water Directorate total minus water treatement) Spare parts and maintenance (Water Directorate Seart Wells) General and Admin Expenses devoled to water-related staff & activities General and Admin Expenses devoled to water-related staff & activities General and Admin Expenses devoled to water-related staff & activities Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir) "Water imports           "Water ented salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water delivered to consumer: (authorised consumption.           Water production & delivery savings per m3 (years 1-20	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614 212,854 4,086,524 81%	2 25,506,847 2 25,506,847 2 12,484,700 2 12,484,700 3	25,407,082	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192	52,134,804 65,749,825 12,484,700 0.239 0.190	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190	65,842,879	65,888,985 12,484,700 0.239 0.189	<ul> <li>65,934,811</li> <li>12,484,700</li> <li>12,484,700</li> <li>0,239</li> </ul>	65,980,360 12,484,700 0.239 0.189	66,025,632	66,070,630 12,484,700 0.239 0.189	66,115,353 66,159,804 12,484,700 12,484,700 0,239 0,235			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We to not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate & seart Wells)           Vehicle expenses (Mater Directorate/ water tankers/ desert wells)           General and Admin Expenses devoted to vater-related staff & activities           Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir)           Water imports           "Water ated salaries & wages as percentage of total salary and wage bill (JOD 2,156,313)           Average cost per m3 of water delivered to consumert (authorised consumption)	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614 212,854 4,086,524 81% 0,239 0,239	2 25,506,847 2 25,506,847 2 12,484,700 2 12,484,700 3	25,407,082 12,484,700 0,239 0,491	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239 0.195	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192	52,134,804 65,749,825 12,484,700 0,239 0,190	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190	65,842,879 12,484,700 0.239 0.190	65,888,985 12,484,700 0.239 0.189	5 65,934,811	65,980,360 12,484,700 0.239 0.189	66,025,632	66,070,630 12,484,700 0.239 0.189	66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,239 0,189 0,188			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to high-relevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NODACEPO engineers 2010)           Water production costs         Salaries and wages (minus Severage Directorate & Irrigation Division)           Electricity expenses (Water Directorate/ water tratement)         Spare parts and maintenance (Water Directorate & Lorigation Division)           Electricity expenses (minus Severage Directorate & Besert Wells)         Vehicle expenses (minus Severage Directorate & Larigation Division)           Spare parts and maintenance (Water Directorate & Larigation Division)         Spare parts and maintenance (Water Directorate & Larigation Division)           Vehicle expenses (minus Severage Directory but plus 81% of Admin Dir)         Water related salaries & wages as percentage of total salary and wage bill (UOD 2, 156, 313)           Average cost per m3 of water delivered to consumert (authorised consumption.         Average cost per m3 of water delivered to consumert (authorised con	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 2 25,506,847 2 2,506,847 2	25,407,082 12,484,700 0,239 0,491	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239 0.195	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192	52,134,804 65,749,825 12,484,700 0,239 0,190	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190	65,842,879 12,484,700 0.239 0.190	65,888,985 12,484,700 0.239 0.189	5 65,934,811	65,980,360 12,484,700 0.239 0.189	66,025,632	66,070,630 12,484,700 0.239 0.189	66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,239 0,189 0,188			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate & seart Wells)           Vehicle expenses (Water Directorate/ water tankers/ desert wells)           General and Admin Expenses devoted to vater-related statif & activities           Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir)           Water imports           "Water goods cost per m3 of water produced (internal plus imports           Average cost per m3 of water delivered to consumer:           (authorised consumption)           Water production & delivery savings per m3 (years 1-20 (Year 3) <t< td=""><td>39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614 212,854 4,086,524 81% 0,239 0,239</td><td>2 25,506,847 2 25,506,847 2 25,506,847 2 2,506,847 2 2,506,847 2</td><td>25,407,082 12,484,700 0,239 0,491</td><td>52,134,804 37,339,502 12,484,700 0.239 0.334</td><td>52,134,804 49,361,034 12,484,700 0.239 0.253</td><td>52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203</td><td>52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200</td><td>52,134,804 53,165,915 12,484,700 0.239 0.198</td><td>52,134,804 64,021,556 12,484,700 0.239 0.195</td><td>52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192</td><td>52,134,804 65,749,825 12,484,700 0,239 0,190</td><td>52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190 0.319859</td><td>65,842,879 12,484,700 0.239 0.322126</td><td>65,888,985</td><td>5 65,934,811 5 65,934,811 5 12,484,700 5 0.239 9 0.239 9 0.326725 6 0.326725</td><td>65,980,360</td><td>66,025,632 12,484,700 0.238 0.189 0.331415</td><td>66,070,630 12,484,700 0,239 0,239 0,333795</td><td>66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,239 0,238 0,336199 0,338627 0,336199 0,338627</td><td></td><td></td><td></td></t<>	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,256 306,998 358,614 212,854 4,086,524 81% 0,239 0,239	2 25,506,847 2 25,506,847 2 25,506,847 2 2,506,847 2	25,407,082 12,484,700 0,239 0,491	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239 0.195	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192	52,134,804 65,749,825 12,484,700 0,239 0,190	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190 0.319859	65,842,879 12,484,700 0.239 0.322126	65,888,985	5 65,934,811 5 65,934,811 5 12,484,700 5 0.239 9 0.239 9 0.326725 6 0.326725	65,980,360	66,025,632 12,484,700 0.238 0.189 0.331415	66,070,630 12,484,700 0,239 0,239 0,333795	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,239 0,238 0,336199 0,338627 0,336199 0,338627			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NODACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Mater Directorate/ water tratement)           Spare parts and maintenance (Water Directorate & Lorigation Division)           Electricity expenses (minus Sewarage Directory but plus 81% of Admin Dir)           Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water delivered to consumer: (authorised consumption.)           Average cost per m3 of water delivered to consumer: (authorised consumption.)           Water production & delivery savings per m3 (years 1-20 (Year 3)	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 4 1 4 1 5 1 5 1 6 1 7 12,484,700 5 1 6 1 7 12,484,700 7 12,484,7000 7 12,484,7000 7 12,48	25,407,082 12,484,700 0,239 0,491	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239 0.195	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192 0,312989	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190 0.319859	65,842,879 12,484,700 0.239 0.322126	65,888,985 12,484,700 0.239 0.189 0.324414	5 65,934,811 5 65,934,811 5 12,484,700 5 0.239 9 0.239 9 0.326725 6 0.326725	65,980,360	66,025,632 12,484,700 0.238 0.189 0.331415	66,070,630 12,484,700 0,239 0,239 0,189 0,333795	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,239 0,238 0,336199 0,338627 0,336199 0,338627			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate A seart Wells)           General and Admin Expenses devoted to water-related stalf & activities           Fuel expenses (Initus Sewarage Directory but plus B1% of Admin Dir)           Water imports           "Water ended salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water delivered to consumer:           Authorised consumption.           Water production & delivery savings per m3 (years 1-20 (Year 3)           Table 5b Opportunity cost to WAJ for not investing: cost of additional wate	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 4 1 4 1 5 1 5 1 6 1 7 12,484,700 5 1 6 1 7 12,484,700 7 12,484,7000 7 12,484,7000 7 12,48	25,407,082 12,484,700 0,239 0,491	52,134,804 37,339,502 12,484,700 0.239 0.334	52,134,804 49,361,034 12,484,700 0.239 0.253	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203	52,134,804 62,315,937 12,484,700 12,484,700 0.239 0.200	52,134,804 53,165,915 12,484,700 0.239 0.198	52,134,804 64,021,556 12,484,700 0.239 0.195	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192 0,312989	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190 0.319859	65,842,879 12,484,700 0.239 0.322126	65,888,985 12,484,700 0.239 0.189 0.324414	5 65,934,811 5 65,934,811 5 12,484,700 5 0.239 9 0.239 9 0.326725 6 0.326725	65,980,360	66,025,632 12,484,700 0.238 0.189 0.331415	66,070,630 12,484,700 0,239 0,239 0,189 0,333795	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,239 0,238 0,336199 0,338627 0,336199 0,338627			
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate besert Wells)           General and Admin Expenses devoted to water-related statif & activities           Fuel expenses ((minus Sewarage Directory but plus B1% of Admin Dir)           Water imports           "Water added salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 31.3)           Average cost per m3 of water delivered to consumer:           Authorised consumption           "Water indensition"           Water age bill (JOD 2, 156, 31.3)           Average cost per m3 of water delivered to consume	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 2 25,506,847 2 2 3 2 2,484,700 2 3 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4	25,407,082 25,407,082 12,484,700 0.239 0.491 0.000000 0.000000 3.3 3 783,309	52,134,804 37,339,502 12,484,700 12,484,700 0.239 0.334 0.158972 4 4 1,192,586	52,134,804 49,361,034 49,361,034 12,484,700 0,239 0,253 0,242364 5 1,614,126	52,134,804	52,134,804 62,315,937 12,484,700 12,484,700 0,239 0,200 0,298929 7 7 2,495,617	52,134,804 52,134,804 63,165,915 12,484,700 12,484,700 0.239 0.198 0.303648 0.303648 8 8 8 2,956,411	52,134,804 64,021,556 12,484,700 0.239 0.195 0.308334 9 9 3,431,159	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,312969 0,312969 10 3,920,316	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615 11 11 4,424,357	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0,239 0,190 0,319859 12 4,943,770	65,842,879 12,484,700 0,239 0,190 0,322126 13 5,479,059	65,888,985 12,484,700 0,239 0,324414 0,324414 14 6,030,746	5 65,934,811	65,990,360 12,484,700 0.239 0.329059 16 7,185,484	66,025,632 12,484,700 12,484,700 0,239 0,189 0,331415 17 7,789,667	66,070,630 12,484,700 0.239 0.189 0.333795 18 18 8,412,511	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,235 0,189 0,185 0,336199 0,338627 19 20 9,054,629 9,716,654	Image: state		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Severage Directorate & Irrigation Division)           Electricity expenses (Water Directorate/ water tanters' desert wells)           General and Admin Expenses devoled to water-related stalf & activities           Fuel expenses (minus Severage Directorate Vater tanters?           Vehicle expenses (minus Severage Directorate vater tanters?           Vehicle expenses (minus Severage Directorate vater tanters?           General and Admin Expenses devoled to water-related stalf & activities           Fuel expenses (minus Severage Directory but plus 81% of Admin Dir)           Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water poduced (Internal plus imports	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 2 25,506,847 2 2 3,506,847 2 3,507 2 3	25,407,082 25,407,082 12,484,700 0.239 0.491 0.000000 0.000000 3.3 3 783,309	52,134,804 37,339,502 12,484,700 12,484,700 0.239 0.334 0.158972 4 4 1,192,586	52,134,804 49,361,034 49,361,034 12,484,700 0,239 0,253 0,242364 5 1,614,126	52,134,804	52,134,804 62,315,937 12,484,700 12,484,700 0,239 0,200 0,298929 7 7 2,495,617	52,134,804 52,134,804 63,165,915 12,484,700 12,484,700 0.239 0.198 0.303648 0.303648 8 8 8 2,956,411	52,134,804 64,021,556 12,484,700 0,239 0,195 0,308334 9	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,312989 0,312989 10 3,920,316	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615 11 11 4,424,357	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0,239 0,190 0,319859 12 4,943,770	65,842,879 12,484,700 0,239 0,190 0,322126 13 5,479,059	65,888,985 12,484,700 0,239 0,324414 0,324414 14 6,030,746	5 65,934,811 12,484,700 12,484,700 0 0,239 0 0,239 0 0,239 0 0,239 1 0,326725 1 0,326725 1 15	65,990,360 12,484,700 0.239 0.329059 16 7,185,484	66,025,632 12,484,700 12,484,700 0,239 0,189 0,331415 17 7,789,667	66,070,630 12,484,700 0.239 0.189 0.333795 18 18 8,412,511	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,189 0,338627 0,336199 0,338627 19 20	Image: state		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate Vater treatement)           Spare parts and maintenance (Water Directorate & Saler Vells)           Vehicle expenses (Mater Directorate / water treatement)           Spare parts and maintenance (Water Directorate at latf & activities           Fuel expenses (Insus Sewarage Directory but plus 81% of Admin Dir)           Water realeted salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water delivered to consumer:           (authorised consumption           Water production & delivery savings per m3 (years 1-20 (Year 3)           Table 5b Opportunity cost to WAJ for not invest	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 2 25,506,847 2 2 3 2 2,484,700 2 3 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4	25,407,082 25,407,082 12,484,700 0.239 0.491 0.000000 0.000000 3.3 3 783,309	52,134,804 37,339,502 12,484,700 12,484,700 0.239 0.334 0.158972 4 4 1,192,586	52,134,804 49,361,034 49,361,034 12,484,700 0,239 0,253 0,242364 5 1,614,126	52,134,804	52,134,804 62,315,937 12,484,700 12,484,700 0,239 0,200 0,298929 7 7 2,495,617	52,134,804 52,134,804 63,165,915 12,484,700 12,484,700 0.239 0.198 0.303648 0.303648 8 8 8 2,956,411	52,134,804 64,021,556 12,484,700 0.239 0.195 0.308334 9 9 3,431,159	52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,312969 0,312969 10 3,920,316	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615 11 11 4,424,357	52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0,239 0,190 0,319859 12 4,943,770	65,842,879 12,484,700 0,239 0,190 0,322126 13 5,479,059	65,888,985 12,484,700 0,239 0,324414 0,324414 14 6,030,746	5 65,934,811	65,990,360 12,484,700 0.239 0.329059 16 7,185,484	66,025,632 12,484,700 12,484,700 0,239 0,189 0,331415 17 7,789,667	66,070,630 12,484,700 0.239 0.189 0.333795 18 18 8,412,511	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,235 0,189 0,185 0,336199 0,338627 19 20 9,054,629 9,716,654	Image: state		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for caustomers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACE/PO engineers 2010)           Water production costs         Salaries and wages (minus Severage Directorate & Irrigation Division)           Electricity expenses (Mater Directorate total minus water treatement)         Spare parts and maintenance (Water Directorate & Losert Wells)           Vehicle expenses (minus Severage Directory but plus 81% of Admin Dir)         Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water produced (internal plus imports         Average cost per m3 of water delivered to consumer: (authorised consumption.           Water production & delivery savings per m3 (years 1-20 (Year 3)         Table 5b Opportunity cost to WAJ for not investing: cost of additional water required (without project)           Without project         Quantities of water (m?)	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 2 12,484,700 3	25,407,082 25,407,082 12,484,700 0.239 0.491 0.000000 0.491 0.000000 381,912 783,309 381,912 783,309	52,134,804 37,339,502 37,339,502 12,484,700 12,484,700 0.239 0.334 0.158972 0.158972 4 4 1,192,586 581,460 -3,476,128	52,134,804 49,361,034 49,361,034 12,484,700 0,239 0,253 0,242364 0,242364 5 5 1,614,126 786,987 -7,802,070	52,134,804 61,471,626 12,484,700 12,484,700 0.235 0.203 0.203 0.204 12,194,125 6 6 -12,194,125	52,134,804 52,134,804 62,315,937 12,484,700 12,484,700 0,239 0,249 0,249 0,249 1,214	52,134,804 52,134,804 63,165,915 12,484,700 12,484,700 0.239 0.239 0.198 0.303648 0.303648 8 8 8 8 8 8 2,956,411 1,441,434 -12,165,838	52,134,804 64,021,556 12,484,700 0.239 0.195 0.308334 9 9 3,431,159 1,672,903	52,134,804 52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,239 0,312989 0,312989 10 10 3,920,316 1,911,398 -12,102,515	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615 	52,134,804 52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190 0.319859 0.319859 12 4.943,770 2.410,395 -11,667,964	65,842,879 12,484,700 0.239 0.322126 0.322126 13 5,479,059 2,671,381 -11,263,401	65,888,985	<ul> <li>65,934,811</li> <li>65,934,811</li> <li>12,484,700</li> <li>12,484,700</li> <li>0.239</li> <li>0.239</li> <li>0.189</li> <li>0.326725</li> <li>0.326725</li> <li>15</li> <li>6,599,369</li> <li>3,217,602</li> <li>-10,403,943</li> </ul>	65,980,360 12,484,700 0,239 0,329059 0,329059 16 16 7,185,484 3,503,370 -9,947,890	66,025,632	66,070,630 12,484,700 12,484,700 0.239 0.333795 0.333795 18 18 8,412,5111 4,101,621 4,101,621 	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,239 0,238 0,336199 0,338627 0,336199 0,338627 19 20 9,054,629 9,716,654 4,414,694 4,737,472 -8,467,074 -7,933,751	Image: state		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works. At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to high-relevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs         Salaries and wages (minus Sewerage Directorate & Irrigation Division)           Electricity expenses (Water Directorate total minus water treatement)         Spare parts and maintenance (Water Tinectorate & Desert Wells)           Variater production costs         Salaries and wages directorate/ water tankers/ desert wells)           General and Admin Expenses devoled to water-related staff & activities Fuel expenses (Water Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate & Desert Wells)           Water related salaries as devoled to water-related staff & activities Fuel expenses (mainus Sewarage Directory but plus B1% of Admin Dir)           Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water delivered to consumert (authorised consumptio	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	25,506,847 25,506,847 2,5,506	25,407,082 25,407,082 12,484,700 0.239 0.491 0.000000 0.491 0.000000 381,912 783,309 381,912 783,309	52,134,804 37,339,502 37,339,502 12,484,700 12,484,700 0.239 0.334 0.158972 0.158972 4 4 1,192,586 581,460 -3,476,128	52,134,804 49,361,034 49,361,034 12,484,700 0,239 0,253 0,242364 0,242364 5 5 1,614,126 786,987 -7,802,070	52,134,804 61,471,626 12,484,700 12,484,700 0.238 0.203 0.203 0.204175 0.294175 6 6	52,134,804 52,134,804 62,315,937 12,484,700 12,484,700 0,239 0,249 0,249 0,249 1,214	52,134,804 52,134,804 63,165,915 12,484,700 12,484,700 0.239 0.239 0.198 0.303648 0.303648 8 8 8 8 8 8 2,956,411 1,441,434 -12,165,838	52,134,804 64,021,556 12,484,700 0,239 0,195 0,308334 9 9 3,431,159 1,672,903	52,134,804 64,882,860 12,484,700 0,239 0,192 0,312989 10 10 3,920,316 1,911,398	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615 11 11 4,424,357 2,157,149	52,134,804 52,134,804 65,796,493 65,796,493 12,484,700 12,484,700 0.239 0.190 0.319859 0.319859 12 4.943,770 2.410,395 -11,667,964	65,842,879 12,484,700 0.239 0.322126 0.322126 13 5,479,059 2,671,381 -11,263,401	65,888,985	<ul> <li>65,934,811</li> <li>65,934,811</li> <li>12,484,700</li> <li>12,484,700</li> <li>0.239</li> <li>0.239</li> <li>0.326725</li> <li>0.326725</li> <li>0.326725</li> <li>3.217,602</li> </ul>	65,980,360 12,484,700 0,239 0,329059 0,329059 16 16 7,185,484 3,503,370 -9,947,890	66,025,632	66,070,630 12,484,700 12,484,700 0.239 0.333795 0.333795 18 18 8,412,5111 4,101,621 4,101,621 	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,239 0,239 0,239 0,239 0,239 0,336199 0,338627 0,336199 0,338627 19 20 9,054,629 9,716,654 4,414,694 4,737,472	Image: state		
Water production           Internal water sources (wells and springs)           Water imports           Authorised consumption           The quanity of water delivered to consumers with project           We do not expect any energy saving of note due to the project works.           At present the water is pumped from low-level pumping stations up to high-level reservoirs, and from there by gravity into the distribution network for customers' supply. There will in fact be more water pumped to higher elevations than at present, but there will be a trade-off in that the pumping to a reservoir can be done with steady state pumping which is more energy efficient. In overall terms no energy saving of note is envisaged. (NOD/ACEPO engineers 2010)           Water production costs           Salaries and wages (minus Sewarage Directorate & Irrigation Division)           Electricity expenses (Mater Directorate total minus water treatement)           Spare parts and maintenance (Water Directorate & Losert Wells)           Vehicle expenses (Mater Directorate vater tankers' desert wells)           General and Admin Expenses devoled to water-related stalf & activities           Fuel expenses (minus Sewarage Directory but plus 81% of Admin Dir)           Water related salaries & wages as percentage of total salary and wage bill (JOD 2, 156, 313)           Average cost per m3 of water produced (Internal plus imports           Average cost per m3 of water delivered to consumer: (authorised consumption.           Water production & delivery savings per m3 (years 1-20 (Year	39,074,642 13,060,162 25,606,380 12,484,700 1,743,119 4,973,336 803,2566 803,256 803,256 803,2	2 25,506,847 2 25,506,847 2 12,484,700 3	25,407,082 25,407,082 12,484,700 0.239 0.491 0.000000 0.491 0.000000 381,912 783,309 381,912 783,309	52,134,804 37,339,502 37,339,502 12,484,700 12,484,700 0.239 0.334 0.158972 0.158972 4 4 1,192,586 581,460 -3,476,128	52,134,804 49,361,034 49,361,034 12,484,700 12,484,700 0,239 0,253 0,242364 5 1,614,126 786,987 -7,802,070 -3,803,993	52,134,804	52,134,804 52,134,804 62,315,937 12,484,700 12,484,700 0,239 0,200 0,239 0,200 0,239 0,200 0,239 0,200 0,239 0,239 0,200 0,239 0,200 0,239 0,200	52,134,804 52,134,804 63,165,915 12,484,700 12,484,700 0.239 0.198 0.303648 0.303648 0.303648 8 8 8 8 8 -12,165,838 -5,931,602	52,134,804 64,021,556 12,484,700 0.239 0.195 0.308334 9 9 3,431,159 1,672,903	52,134,804 52,134,804 64,882,860 12,484,700 12,484,700 0,239 0,192 0,312989 0,312989 10 1,911,398 -12,102,515 -5,900,727	52,134,804 65,749,825 12,484,700 0,239 0,190 0,317615 	52,134,804 52,134,804 65,796,493 12,484,700 12,484,700 0,239 0,190 0,319859 0,319859 -11,667,964 -5,688,857	65,842,879 12,484,700 12,484,700 0,239 0,190 0,322126 13 5,479,059 2,671,381 -11,263,401 -5,491,607	65,888,985 12,484,700 12,484,700 0,238 0,238 0,324414 144 	<ul> <li>65,934,811</li> <li>65,934,811</li> <li>12,484,700</li> <li>12,484,700</li> <li>0.239</li> <li>0.239</li> <li>0.189</li> <li>0.326725</li> <li>0.326725</li> <li>15</li> <li>6,599,369</li> <li>3,217,602</li> <li>-10,403,943</li> </ul>	65,980,360 12,484,700 12,484,700 0,239 0,189 0,329059 0,329059 16 16 16 	66,025,632	66,070,630 12,484,700 12,484,700 0,239 0,239 0,333795 0,333795 18 18 8,412,511 4,101,621 -8,980,094 -4,378,353	66,115,353 66,159,804 66,115,353 66,159,804 12,484,700 12,484,700 12,484,700 12,484,700 12,484,700 12,484,700 0,239 0,238 0,239 0,238 0,336199 0,338627 0,336199 0,338627 19 20 9,054,629 9,716,654 4,414,694 4,737,472 -8,467,074 -7,933,751	Image: section of the secti		

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udes costs r	elating to th	e provision	of network	water both	for resident	s			
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igures for or of the engir		n "with proj	ect" are pro	visional and	will be upo	lated			
orksheet is o are governo							sis		
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t for the fac	t that pump	ing at wells	is subsidize	ed at JD0.04	43 per Kw ii	nstead of th	e industrial	rate of JD0	.050
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Zarga Water Supply Feasibility Study. Sele	ected	List of P	IP MCC Pr	iority Pro	jects. Work-she	<u>et "CBA"</u>												
Table 6 Cost benefit analysis summary		Cost	Year	Year	Year Year	Year Year	Year	Year	Year Yea	ar	Year Y	'ear	Year	Year	Year	Year	Year	Year Year
		Totals Across	1 2010	2 2011		5 6 2014 2015	6 7 5 2016	8 2017	9 2018	10 2019	11 2020	12 2021				16 2025		18 2027 :
lauranteen and a sold and and in at		20 years																
Investment costs without project (Natural development of network to connect new HHs)			2,173,541	2,173,541	2,173,541 2,173,541	2,173,541 2,173,541	1 2,173,541	2,173,541	2,173,541 2	2,173,541	2,173,541	2,173,541	2,173,541					
Percentage of infrastructure & without project costs devoted to MCC priority areas	56.5%	b																
Investment costs with project Phase 1 (MCC) direct investment in MCC priority areas	ok	128,584,133 73,496,192	803,006		17,049,348 19,693,672 17,049,348 19,693,672			6,676,626	6,676,626 6	6,676,626	3,817,324	3,817,324	3,817,324	3,817,324	3,817,324	0	0	0
Phase 1 strategic infrastructure (% devoted to MCC priority areas)	ok	731,130	224,240															
Phase (TBD) direct investment in MCC priority areas Phase (TBD) strategic infrastructure (% devoted to MCC priority areas	x ok	1,887,056	578,766	1,308,290														
Phase 2 direct investment in the MCC priority areas) Phase 2: strategtic infrastructure (% devoted to MCC priority areas)	(ok)	16,536,030 16,847,102				3,307,200 3,369,420		3,307,206 3,369,420		3,307,206 3,369,420								
Phase 3: direct investment in the MCC priority areas	ok (ok)	592,522				3,309,420	3,309,420	3,309,420	3,309,420 3	3,309,420	118,504	118,504	118,504					
Phase 3: strategic infrastructure (% devoted to priority MCC areas) NOD/ACEPO engineers have provided these costings and	ok	18,494,100									3,698,820	3,698,820	3,698,820	3,698,820	3,698,820			
are responsible for the details. The costs are inclusive of																		
construction and ancillary costs including management costs																		
Percentage of costs assigned in the CBA to domestic consumers 66,845,853		128,584,133	803,006	9,286,676	17,049,348 19,693,672	18,953,480 17,004,823	3 6,676,626	6,676,626	6,676,626 6	6,676,626	3,817,324	3,817,324	3,817,324	3,817,324	3,817,324	0	0	0
Investment benefits	(141 V)																	
Water production & delivery savings (domestic water 85%) Water production & delivery savings per m3 (years 1-20)			0	0	0 1,642,584 0 0.15897188	2,494,316 3,015,470 0.24236363 0.2941748		3,087,583 0.30364828		3,156,679 31298928	3,190,147 0.31761451	3,199,392 0.319859458	3,208,634 0.322125973			3,236,344 0.32905863		3,254,806 3,264 0.33379514 0.336
Quantity of water involved			10,454,745	10,414,107	10,373,375 10,332,547		7 10,209,494			0,085,582	10,044,086	10,002,494	9,960,805	9,919,020	9,877,138		9,793,083	9,750,910 9,708,
18,340,228	(NPV)																	
Opportunity cost to WAJ for not investing in rehabilitation & restructuring			0	0	0 2,276,288	4,590,980 6,944,083	3 7,157,286	7,373,036	7,591,320 7	7,812,125	8,035,436	8,099,252	8,162,989	8,226,633	8,290,170	8,353,584	8,416,858	8,479,975 8,542
34,070,792	(NPV)																	
Total savings from switching from shop and tanker water			0	0	0 2,160,231	4,463,145 6,915,81	1 7,302,965	7.708.149	8,132,130 8	8,575,708	9,039,715	9,338,252	9.646.648	9.965.228	10,294,330	10.634.301	10.985.498	11,348,295 11,723
(domestic water). Not possible to make calculations for							1	1 1									.,,	,,
non-domestic consumers. 38,072,622	(NPV)																	
Health gains in raising consumption of those <50 lcd to 60 lcd 17.073.178	(NPV)		0	0	0 0	0 3,735,353	3 3,856,752	3,982,097	4,111,515 4	4,245,139	4,383,106	4,525,557	4,672,637	4,824,498	4,981,294	5,143,186	5,310,340	5,482,926 5,661
	(141-0)																	
Net benefit stream (excluding costs without project)	(ERR)		-803,006 22%		-17,049,348 -13,614,569 erestimation as benefits to r											27,367,415	27,958,272	28,566,002 29,191
Net benefit stream (including costs without project)			1,370,535	-7 113 135	-14,875,807 -11,441,028	-5,231,498 5,779,435	5 16,865,832	17 647 778	18,454,377 19	286 566	23 004 622	23 518 660	24 047 125	22 /16 000	22 975 580	27 367 415	27 058 272	28,566,002 29,191
	(ERR)		29%		-14,075,007 -11,441,020	-5,251,430 5,775,455	10,005,052	17,047,770	10,434,377 13	3,200,300	23,004,022	23,310,003	24,047,125	22,410,303	22,373,300	27,307,413	21,330,212	20,300,002 23,131
Sensititivy analysis (excluding costs without project)																		
Net benefit stream with 10% increase in costs	(500)		-883,306		-18,754,283 -15,583,936	-9,300,387 1,905,41	1 14,024,628	14,806,575	15,613,173 16	6,445,362	20,449,348	20,963,396	21,491,851	22,035,176	22,593,848	27,367,415	27,958,272	28,566,002 29,191
	(ERR)		20%															
Net benefit streamt with 10% reduction in benefits	(ERR)		-803,006 20%		-17,049,348 -14,222,479	-8,559,883 1,544,822	2 12,555,399	13,259,151	13,985,089 14	4,734,060	18,366,240	18,828,883	19,304,493	19,793,485	20,296,290	24,630,673	25,162,445	25,709,402 26,272
Net benefit stream with 10% increase in costs and 10% reduction in benefits	(ERR)		-883,306 17%		-18,754,283 -16,191,846	-10,455,231 -155,667	1 11,887,737	12,591,488	13,317,427 14	4,066,397	17,984,508	18,447,151	18,922,761	19,411,753	19,914,557	24,630,673	25,162,445	25,709,402 26,272
Constitution analysis (including asste without project)																		
Sensititivy analysis (including costs without project) Net benefit stream with 10% increase in costs			1,290,235		-16,580,742 -13,410,395	-7,126,846 4,078,952	2 16,198,169	16,980,116	17,786,714 18	8,618,903	22,622,889	23,136,937	23,665,392	22,035,176	22,593,848	27,367,415	27,958,272	28,566,002 29,191
	(ERR)		25%															
Net benefit stream with 10% reduction in benefits	(		1,370,535		-14,875,807 -12,048,938	-6,386,342 3,718,363	3 14,728,940	15,432,692	16,158,630 16	6,907,601	20,539,781	21,002,424	21,478,034	19,793,485	20,296,290	24,630,673	25,162,445	25,709,402 26,272
ERR	(ERR)		26%															
Net benefit stream with 10% increase in costs and 10% reduction in benefits	(ERR)		1,290,235 22%		-16,580,742 -14,018,305	-8,281,690 2,017,881	1 14,061,278	14,765,029	15,490,968 16	6,239,938	20,158,049	20,620,692	21,096,302	19,411,753	19,914,557	24,630,673	25,162,445	25,709,402 26,272
			2276															
Table 7 Beneficiary Analysis																		
Poor and medium poor socio-economic categories.																		
Total savings from switching from shop and tanker water (both			0	0	0 453,552	937,061 1,452,01	1 1,533,296	1,618,366	1,707,383 1	1 800 515	1,897,936	1,960,615	2 025 364	2 092 252	2.161.349	2 232 727	2,306,463	2,382,634 2,461
socio-economic categories combined	(1)(5)(0)				0 100,002		,000,200	1,010,000	1,101,000	,,000,010	1,001,000	1,000,010	2,020,001	2,002,202	2,101,010	2,202,727	2,000,100	2,002,001 2,101
7,993,547 Health gains in raising consumption of those <50 lcd to 60 lcd	(NPV)		0	0	0 0	0 1,316,434	4 1,359,219	1,403,393	1,449,003 1	1,496,096	1,544,719	1,594,923	1,646,758	1,700,277	1,755,536	1,812,591	1,871,500	1,932,324 1,995
6,017,027	(NPV)																	
For each JD invested, how much will the two poorest groups	0.21	[	(JD)															
benefit	<u> </u>						+								+			
Richer socio-economic category																		
Total savings from switching from shop and tanker water	L		0	0	0 1,706,679	3,526,084 5,463,800	5,769,669	6,089,783	6,424,747 6	6,77 <u>5,193</u>	7,141,780	7,377,637	7,621,283	7,872,976	8,132,981	8,401,573	8,679,035	8,965,660 9,261
(richer socio-economic category) 30,079,075	(NP\/)																	
Health gains in raising consumption of those <50 lcd to 60 lcd	, ,		0	0	0 0	0 2,418,919	9 2,497,533	2,578,703	2,662,511 2	2,749,043	2,838,387	2,930,634	3,025,880	3,124,221	3,225,758	3,330,595	3,438,840	3,550,602 3,665
11,056,151	(NPV)	+				<u>                                      </u>	+								<u> </u>			
For each JD invested, how much will the richer socio-	0.62	2	(JD)															
economic group benefit		+																
WAJ																		
Total benefits (savings and opportunity costs)		1	0	0	0 3,918,872	7,085,296 9,959,553	3 10,209,200	10,460,618	10,713,817 10	0,968,804	11,225,584	11,298,644	11,371,623	11,444,507	11,517,280	11,589,928	11,662,434	11,734,781 11,806
48,691,510	(NPV)																	
For each JD invested, how much will WAJ benefit	0.73	3	(JD)															

Year	Year
19 2028	20 2029
2020	2023
0	0
0	0
3,264,035 0.336199 9,708,639	3,273,262 0.33862714
9,708,639	9,666,271
8,542,918	8,605,669
11,723,072	12,110,227
5,661,121	5,845,108
29,191,146	29,834,264
29,191,146	29,834,264
20,101,140	20,004,204
29,191,146	29,834,264
26,272,031	26,850,838
26,272,031	26,850,838
20,272,031	20,030,030
29,191,146	29,834,264
26,272,031	26,850,838
	26 850 838
26,272,031	26,850,838
2,461,321	2,542,606
1,995,125	2,059,966
9,261,751	9,567,621
3,665,996	3,785,141
44.000	44.076
11,806,953	11,878,930