

**Na'ur and Adjacent Areas Wastewater Project
Hydraulic Analysis (M m³/yr)**

Item	Allocation	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water Produced		0.0	0.0	0.0	0.0	2.0	2.1	2.1	2.2	2.3	2.5	2.4	2.5	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.2
Municipal Water	1.00	0.0	0.0	0.0	0.0	2.0	2.1	2.1	2.2	2.3	2.5	2.4	2.5	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.2
Physical Losses (%)		0.34	0.22	0.22	0.21	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Physical Losses		0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Administrative/Managerial Losses (%)		0.21	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Administrative/Managerial Losses		0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Quantity Delivered		0.0	0.0	0.0	0.0	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.6	2.7
Quantity Whose Bills are Collected		0.0	0.0	0.0	0.0	1.3	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.4	2.5	2.6
Industrial Water	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Physical Losses (%)		0.34	0.22	0.22	0.21	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Physical Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative/Managerial Losses (%)		0.21	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Administrative/Managerial Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quantity Delivered		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quantity Whose Bills are Collected		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Financial Analysis (M JD at 2000 Prices)

Item	Percent	Amount	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Costs																								
Local Components	28%	3.6	0.0	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Foreign Components	28%	14.4	0.0	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Duty & Taxes	8%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Capital Costs		18.0	0.0	6.0	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingency Costs			0.0	6.0	12.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	
O & M Costs			0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Total Costs			0.0	6.0	6.0	6.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Revenues																								
Municipal Usage Qty (M m3)			0.0	0.0	0.0	0.0	1.3	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6	
Municipal Tariff (JD/m3)			0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	
Municipal Revenues (M JD)			0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	
Industrial Usage Qty (M m3)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Industrial Tariff (JD/m3)			1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800	
Industrial Revenues (M JD)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Revenues (M JD)			0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	
Net Cash Flow (M JD)			0.0	-6.0	-6.0	-6.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	
Discounting (D.R.=10%)			0.00087	0.00164	0.00276	0.00432	0.00708	0.00853	0.00856	0.00842	0.00795	0.00723	0.00621	0.00494	0.00348	0.00218	0.00118	0.00050	0.00018	0.00008	0.00000	0.00000	0.00000	
Total Qty Whose Bills are Collected (M m3)			0.0	0.0	0.0	0.0	1.3	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6	
RRR																								
NPV (M JD)	-12.8		0.0	-5.3	-5.0	-4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
PV of Total Costs (M JD)	16.7		0.0	5.3	5.0	4.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	
PV of Total Bills Collected Qty (M m3)	19.8		0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	
Unit Water Price (Flakty)	945																							

Economic Analysis (JD at 2000 Prices)

Item	Percent	Amount	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs																							
Local Components	28%	3.6	0.0	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign Components	28%	14.4	0.0	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Duty & Taxes	8%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capital Costs		18.0	0.0	6.0	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contingency Costs			0.0	6.0	12.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
O & M Costs			0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Costs			0.0	6.0	6.0	6.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Revenues																							
Municipal Usage Qty (m3)			0.0	0.0	0.0	0.0	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.6	2.7
Unit Benefits of Municipal Water (JD/m3)			0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360
Municipal Benefits (JD)			0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Industrial Usage Qty (m3)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Benefits of Industrial Water (JD/m3)			2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740
Industrial Benefits (JD)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Benefits (JD)			0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Net Cash Flow (JD)			0.0	-6.0	-6.0	-6.0	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Discounting (D.R.=10%)			0.00089	0.00245	0.00401	0.00601	0.00892	0.00947	0.01014	0.00951	0.00854	0.00734	0.00589	0.00438	0.00284	0.00133	0.00070	0.00030	0.00010	0.00004	0.00000	0.00000	0.00000
Total Qty Delivered (m3)			0.0	0.0	0.0	0.0	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.6	2.7
RRR																							
NPV (JD)	-9.6		0.0	-5.6	-4.5	-4.1	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
PV of Total Costs (JD)	14.7		0.0	5.6	4.5	4.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV of Total Qty Delivered (m3)	11.2		0.0	0.0	0.0	0.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Unit Water Price (JD/m3)	L112																						

1000 Stage II																								
Hydrologic Analysis (M m³/yr)																								
Item	Allocation	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Water Produced		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Municipal Water	1.00	8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Physical Losses (%)		0.04	0.23	0.22	0.21	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Physical Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Administrative/Managerial Losses (%)		0.21	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Administrative/Managerial Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Quantity Delivered		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Quantity Where Bills are Collected		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Industrial Water	0.00	8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Physical Losses (%)		0.04	0.23	0.22	0.21	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Physical Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Administrative/Managerial Losses (%)		0.21	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Administrative/Managerial Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Quantity Delivered		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Quantity Where Bills are Collected		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Financial Analysis (M JD at 2008 Prices)																								
Item	Percent	Amount	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Local Components	28%	9.6	8.0	0.4	1.6	2.0	2.0	2.0	1.6	0.8	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Foreign Components	88%	30.4	8.0	1.6	6.4	8.0	8.0	8.0	6.4	0.8	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Duty & Taxes	8%	0.8	8.0	0.0	0.0	8.0	0.0	0.8	8.0	0.0	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Total Capital Costs	40.8		8.0	2.0	8.0	10.0	10.0	10.0	8.0	0.8	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Operational Costs		8.0	2.0	10.0	20.0	30.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	
O & M Costs		8.0	0.0	0.0	8.0	8.0	0.0	0.0	8.0	0.5	8.5	0.5	8.5	8.0	0.0	8.0	0.5	8.5	8.0	0.5	8.5	8.0	0.5	8.5
Total Costs		8.0	2.0	8.0	18.0	10.0	10.0	10.0	8.0	0.5	8.5	0.5	8.5	8.0	0.0	8.0	0.5	8.5	8.0	0.5	8.5	8.0	0.5	8.5
Revenues																								
Municipal Usage Qty (M m³)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	4.4	4.7	5.0	5.3	5.4	5.6	5.8	5.9	6.1	6.2	6.4	6.6	6.7	7.0	7.0
Municipal Tariff (JD/m³)	0.147	8.147	8.147	8.147	8.147	8.147	8.147	8.147	8.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	
Municipal Revenues (M JD)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	0.7	0.7	0.7	0.8	8.0	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	
Industrial Usage Qty (M m³)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	0.8	0.8	0.8	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.0	
Industrial Tariff (JD/m³)	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	
Industrial Revenues (M JD)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	0.8	0.8	0.8	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.0	
Total Revenues (M JD)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	0.7	0.7	0.7	0.8	8.0	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	
Net Cash Flow (M JD)		8.0	-2.0	-8.0	-10.0	-10.0	-10.0	-10.0	-10.0	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	
Discounting (D=6% Yr)	0.98909	0.88166	0.82785	0.77332	0.72588	0.68351	0.64351	0.60431	0.56728	0.53273	0.50001	0.46868	0.44192	0.41418	0.38883	0.36501	0.34261	0.32169	0.30224	0.28388	0.26648	0.25000	0.23448	
Total Qty Where Bills are Collected (M m³)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	4.4	4.7	5.0	5.3	5.4	5.6	5.8	5.9	6.1	6.2	6.4	6.6	6.7	7.0	
RISR																								
NPV (M JD)	-32.4	8.0	-1.8	-6.8	-7.8	-7.3	-6.9	-6.1	0.1	8.1	0.1	0.1	8.2	0.2	0.2	0.2	8.2	0.2	0.1	8.1	0.1	8.1	0.1	
PV of Total Costs (M JD)	39.2	8.0	1.8	6.8	7.8	7.3	6.9	-6.1	0.3	8.3	0.3	0.3	8.2	0.2	0.2	0.2	8.2	0.2	0.1	8.1	0.1	8.1	0.1	
PV of Total Qty Delivered Qty (M m³)	41.9	8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
Unit Water Price (JD/m³)	154																							
Economic Analysis (JD at 2008 Prices)																								
Item	Percent	Amount	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Local Components	28%	9.6	8.0	0.4	1.6	2.0	2.0	2.0	1.6	0.8	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Foreign Components	88%	30.4	8.0	1.6	6.4	8.0	8.0	8.0	6.4	0.8	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Duty & Taxes	8%	0.8	8.0	0.0	0.0	8.0	0.0	0.8	8.0	0.0	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Total Capital Costs	40.8		8.0	2.0	8.0	10.0	10.0	10.0	8.0	0.8	8.8	0.0	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.8	0.0
Operational Costs		8.0	2.0	10.0	20.0	30.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	
O & M Costs		8.0	0.0	0.0	8.0	8.0	0.0	0.0	8.0	0.5	8.5	0.5	8.5	8.0	0.0	8.0	0.5	8.5	8.0	0.5	8.5	8.0	0.5	8.5
Total Costs		8.0	2.0	8.0	18.0	10.0	10.0	10.0	8.0	0.5	8.5	0.5	8.5	8.0	0.0	8.0	0.5	8.5	8.0	0.5	8.5	8.0	0.5	8.5
Benefits																								
Municipal Usage Qty (m³)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	4.4	5.1	5.4	5.6	5.8	6.0	6.1	6.3	6.5	6.6	6.8	7.0	7.1	7.4	7.4
Unit Benefits of Municipal Water (JD/m³)	0.368	8.168	8.168	8.168	8.168	8.168	8.168	8.168	8.168	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	
Municipal Benefits (M JD)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	1.6	1.8	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	
Industrial Usage Qty (m³)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	0.8	0.8	0.8	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.0	
Unit Benefits of Industrial Water (JD/m³)	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	2.740	
Industrial Benefits (M JD)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	0.8	0.8	0.8	0.8	8.0	0.0	0.8	8.0	0.0	0.8	8.0	0.8	0.8	8.0	
Total Benefits (M JD)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	1.6	1.8	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	
Net Cash Flow (M JD)		8.0	-2.0	-8.0	-10.0	-10.0	-10.0	-10.0	-10.0	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	
Discounting (D=6% Yr)	0.98909	0.88166	0.75131	0.68303	0.62092	0.56447	0.51316	0.46591	0.42248	0.38254	0.34569	0.31149	0.27948	0.25033	0.22386	0.20073	0.17974	0.16069	0.14340	0.12866	0.11511	0.10356	0.09381	
Total Qty Delivered (m³)		8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	4.4	5.1	5.4	5.6	5.8	6.0	6.1	6.3	6.5	6.6	6.8	7.0	7.1	7.4	
RISR																								
NPV (JD)	-32.2	8.0	-1.7	-6.8	-6.8	-6.2	-5.6	-4.1	0.8	8.6	0.6	0.8	8.5	0.5	0.5	0.5	8.4	0.4	0.4	6.4	0.3	8.3	0.3	
PV of Total Costs (M JD)	31.7	8.0	0.0	0.0	8.0	8.0	6.2	5.6	4.1	0.2	8.2	0.2	0.2	8.2	0.1	0.1	8.1	0.1	0.1	8.1	0.1	8.1	0.1	
PV of Total Qty Delivered (m³)	28.5	8.0	0.0	0.0	8.0	8.0	0.0	0.0	0.0	-2.3	-2.2	-2.1	-2.0	-1.8	-1.7	-1.6	-1.5	-1.4	-1.3	-1.2	-1.1	-1.1	-1.0	
Unit Water Price (JD/m³)	1.347																							

Sakab Wastewater System																							
Hydraulic Analysis (M m ³ /yr)																							
Item	Allocation	2009	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Water Produced		8.0	0.0	0.0	8.0	0.0	8.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.5	
Municipal Water	1.00	8.0	0.0	0.0	8.0	0.0	8.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.5	
Physical Losses (%)		8.24	0.23	8.22	0.21	0.21	8.20	0.19	8.18	0.17	0.16	8.15	0.15	8.15	0.15	8.15	0.15	8.15	0.15	0.15	0.15	8.15	
Physical Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	8.2	0.2	8.2	0.2	8.2	0.2	8.2	0.2	8.2	0.2	8.2	0.2	8.2	
Administrative/Managerial Losses (%)		8.21	0.19	8.16	0.14	0.12	8.10	0.09	8.08	0.07	0.06	8.05	0.05	8.05	0.05	8.05	0.05	8.05	0.05	0.05	0.05	8.05	
Administrative/Managerial Losses		8.0	0.0	0.0	8.0	0.0	8.0	0.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	
Quantity Delivered		8.0	0.0	0.0	8.0	0.0	8.0	0.8	0.8	8.9	0.9	8.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	
Quantity Waste B&S are Collected		8.0	0.0	0.0	8.0	0.0	8.0	0.7	0.7	8.8	0.8	8.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	
Industrial Water	0.00	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Physical Losses (%)		8.24	0.23	8.22	0.21	0.21	8.20	0.19	8.18	0.17	0.16	8.15	0.15	8.15	0.15	8.15	0.15	8.15	0.15	0.15	0.15	8.15	
Physical Losses		8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Administrative/Managerial Losses (%)		8.21	0.19	8.16	0.14	0.12	8.10	0.09	8.08	0.07	0.06	8.05	0.05	8.05	0.05	8.05	0.05	8.05	0.05	0.05	0.05	8.05	
Administrative/Managerial Losses		8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Quantity Delivered		8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Quantity Waste B&S are Collected		8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Financial Analysis (M JD at 2000 Prices)																							
Item	Percent	Amount	2009	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs																							
Local Components	20%	2.0	8.0	0.0	0.4	8.6	0.6	8.4	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Foreign Components	80%	3.0	8.0	0.0	1.6	2.4	2.4	1.6	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Duty & Taxes	8%	0.8	8.0	0.0	0.8	8.0	0.8	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Total Capital Costs		10.8	8.0	0.0	2.8	2.0	3.8	2.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Contingency Costs			8.0	0.0	2.8	2.0	3.8	2.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
O & M Costs			8.0	0.0	0.8	8.0	0.8	8.0	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	
Total Costs			8.0	0.0	2.8	2.0	3.8	2.0	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	
Revenues																							
Municipal Usage Qty (M m ³)			8.0	0.0	0.8	8.0	0.8	8.0	0.7	0.7	8.8	0.9	8.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	
Municipal Tariff (JD/m ³)			0.147	0.147	8.147	0.147	8.147	0.147	0.147	8.147	0.147	8.147	0.147	8.147	0.147	8.147	0.147	8.147	0.147	8.147	0.147	8.147	
Municipal Revenues (M JD)			8.0	0.0	0.8	8.0	0.8	8.0	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.2	8.2	0.2	8.2	0.2	8.2	
Industrial Usage Qty (M m ³)			8.0	0.0	0.8	8.0	0.8	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Industrial Tariff (JD/m ³)			1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	
Industrial Revenues (M JD)			8.0	0.0	0.8	8.0	0.8	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Total Revenues (M JD)			8.0	0.0	0.8	8.0	0.8	8.0	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.2	8.2	0.2	8.2	0.2	8.2	
Net Cash Flow (M JD)			8.0	0.0	-2.0	-2.0	-3.8	-2.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.1	8.1	0.1	8.1	0.1	8.1	
Discounting (DR=5%)			0.93897	8.38186	0.82785	8.77732	0.72592	0.68555	8.64391	0.60422	8.56735	0.55203	0.59021	8.46868	0.44102	8.44410	0.38883	0.38510	8.34281	0.32189	8.28224	0.28588	0.26642
Total Qty Waste B&S are Collected (M m ³)			8.0	0.0	0.8	8.0	0.8	8.0	0.7	0.7	8.8	0.9	8.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	
FIRR	8.011111																						
NPV (M JD)	-7.1		8.0	0.0	-1.7	-2.5	-2.2	-1.4	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
PV of Total Costs (M JD)	1.4		8.0	0.0	1.7	2.5	2.2	1.4	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.0	8.0	0.0	8.0	0.0	8.0	
PV of Total B&S Collected Qty (M m ³)	1.5		8.0	0.0	0.8	8.0	0.8	8.0	0.5	0.4	8.5	0.5	8.4	0.5	0.4	8.4	0.4	8.4	0.4	8.3	0.3	8.3	
Unit Water Price (B&S/m ³)	886																						
Economic Analysis (JD at 2000 Prices)																							
Item	Percent	Amount	2009	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs																							
Local Components	20%	2.0	8.0	0.0	0.4	8.6	0.6	8.4	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Foreign Components	80%	3.0	8.0	0.0	1.6	2.4	2.4	1.6	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Duty & Taxes	8%	0.8	8.0	0.0	0.8	8.0	0.8	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Total Capital Costs		10.8	8.0	0.0	2.8	2.0	3.8	2.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Contingency Costs			8.0	0.0	2.8	2.0	3.8	2.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
O & M Costs			8.0	0.0	0.8	8.0	0.8	8.0	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	
Total Costs			8.0	0.0	2.8	2.0	3.8	2.0	0.1	0.1	8.1	0.1	8.1	0.1	0.1	8.1	0.1	8.1	0.1	8.1	0.1	8.1	
Revenues																							
Municipal Usage Qty (m ³)			8.0	0.0	0.8	8.0	0.8	8.0	0.8	0.8	8.9	0.9	8.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	
Unit Benefits of Municipal Water (JD/m ³)			0.368	0.368	8.368	0.368	8.368	0.368	0.368	8.368	0.368	8.368	0.368	8.368	0.368	8.368	0.368	8.368	0.368	8.368	0.368	8.368	
Municipal Revenues (JD)			8.0	0.0	0.8	8.0	0.8	8.0	0.3	0.3	8.3	0.3	8.3	0.4	0.4	8.4	0.4	8.4	0.4	8.4	0.5	8.5	
Industrial Usage Qty (m ³)			8.0	0.0	0.8	8.0	0.8	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Unit Benefits of Industrial Water (JD/m ³)			2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	
Industrial Revenues (JD)			8.0	0.0	0.8	8.0	0.8	8.0	0.0	0.0	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	0.0	8.0	0.0	8.0	
Total Revenues (JD)			8.0	0.0	0.8	8.0	0.8	8.0	0.3	0.3	8.3	0.3	8.3	0.4	0.4	8.4	0.4	8.4	0.4	8.4	0.5	8.5	
Net Cash Flow (JD)			8.0	0.0	-2.0	-2.0	-3.8	-2.0	0.2	0.2	8.2	0.2	8.2	0.3	0.3	8.3	0.3	8.3	0.3	8.3	0.4	8.4	
Discounting (DR=5%)																							

Community Infrastructure Wastewater Project
Hydraulic Analysis (M³/yr)

Item	Allocation	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water Produced		8.0	0.0	8.0	0.8	8.0	1.8	1.0	1.1	1.1	1.1	1.2
Municipal Water	1.00	8.0	0.0	8.0	0.8	8.0	1.8	1.0	1.1	1.1	1.1	1.2
Physical Losses (%)		0.24	0.23	0.22	0.21	0.21	0.19	0.18	0.17	0.16	0.15	0.15
Physical Losses		8.0	0.0	8.0	0.8	8.0	0.2	8.2	0.2	8.2	0.2	8.2
Administrative/Managerial Losses (%)		0.21	0.19	0.18	0.14	0.12	0.10	0.09	0.08	0.07	0.05	0.05
Administrative/Managerial Losses		8.0	0.0	8.0	0.8	8.0	0.1	8.1	0.1	8.1	0.1	8.1
Quantity Delivered		8.0	0.0	8.0	0.8	8.0	0.8	8.5	0.9	8.9	1.0	1.1
Quantity Whose Bills are Collected		8.0	0.0	8.0	0.8	8.0	0.7	8.7	0.8	8.8	0.9	1.0
Industrial Water	1.00	8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Physical Losses (%)		0.24	0.23	0.22	0.21	0.21	0.19	0.18	0.17	0.16	0.15	0.15
Physical Losses		8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Administrative/Managerial Losses (%)		0.21	0.19	0.18	0.14	0.12	0.10	0.09	0.08	0.07	0.05	0.05
Administrative/Managerial Losses		8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Quantity Delivered		8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Quantity Whose Bills are Collected		8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0

Financial Analysis (M JD on 2000 Prices)

Item	Percent	Amount	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs													
Local Components	20%	20	8.0	0.4	8.6	0.8	8.4	0.8	8.0	0.8	8.0	0.8	8.0
Foreign Components	80%	80	8.0	1.6	2.4	1.6	0.8	0.8	8.0	0.8	8.0	0.8	8.0
Duty & Taxes	0%	00	8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Total Capital Costs		100	8.0	2.0	3.0	3.8	2.0	0.8	8.0	0.8	8.0	0.8	8.0
Capital Costs			8.0	2.0	5.0	8.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0
O & M Costs			8.0	0.0	8.0	0.8	8.0	0.1	8.1	0.1	8.1	0.1	8.1
Total Costs			8.0	2.0	3.0	3.8	2.0	0.1	8.1	0.1	8.1	0.1	8.1
Revenues													
Municipal Usage Qty (M m3)			8.0	0.0	8.0	0.8	8.0	0.7	8.7	0.8	8.8	0.9	1.0
Municipal Tariff (JD/m3)			0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147
Municipal Revenues (M JD)			8.0	0.0	8.0	0.8	8.0	0.1	8.1	0.1	8.1	0.1	8.1
Industrial Usage Qty (M m3)			8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Industrial Tariff (JD/m3)			1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088	1.088
Industrial Revenues (M JD)			8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Total Revenues (M JD)			8.0	0.0	8.0	0.8	8.0	0.1	8.1	0.1	8.1	0.1	8.1
Net Cash Flow (M JD)			8.0	-2.0	-3.0	-3.8	-2.0	0.8	8.0	0.8	8.0	0.8	8.0
Discounting (Df=6%)			8.9389	0.8816	8.8285	0.7773	8.7188	0.6853	8.6431	0.6043	8.5675	0.5327	8.5082
Total Qty Whose Bills are Collected (M m3)			8.0	0.0	8.0	0.8	8.0	0.7	8.7	0.8	8.8	0.9	1.0
EBIT	#DIV/0!												
NPV (M JD)	-7.6		8.0	-1.8	-3.5	-2.3	-4.5	0.8	8.0	0.8	8.0	0.8	8.0
PV of Total Costs (M JD)	8.9		8.0	1.8	2.5	2.3	1.5	0.1	8.1	0.1	8.1	0.1	8.0
PV of Total Bills Collected Qty (M m3)	8.0		8.0	0.0	8.0	0.8	8.0	0.5	8.5	0.5	8.5	0.5	8.4
Unit Water Price (Fishes)	993												

Financial Analysis (JD on 2000 Prices)

Item	Percent	Amount	2008	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs													
Local Components	20%	20	8.0	0.4	8.6	0.8	8.4	0.8	8.0	0.8	8.0	0.8	8.0
Foreign Components	80%	80	8.0	1.6	2.4	1.6	0.8	0.8	8.0	0.8	8.0	0.8	8.0
Duty & Taxes	0%	00	8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Total Capital Costs		100	8.0	2.0	3.0	3.8	2.0	0.8	8.0	0.8	8.0	0.8	8.0
Capital Costs			8.0	2.0	5.0	8.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0
O & M Costs			8.0	0.0	8.0	0.8	8.0	0.1	8.1	0.1	8.1	0.1	8.1
Total Costs			8.0	2.0	3.0	3.8	2.0	0.1	8.1	0.1	8.1	0.1	8.1
Revenues													
Municipal Usage Qty (m3)			8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Unit Revenue of Municipal Water (JD/m3)			0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368	0.368
Municipal Revenues (JD)			8.0	0.0	8.0	0.8	8.0	0.3	8.3	0.3	8.4	0.4	8.5
Industrial Usage Qty (m3)			8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Unit Revenue of Industrial Water (JD/m3)			2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748	2.748
Industrial Revenues (JD)			8.0	0.0	8.0	0.8	8.0	0.8	8.0	0.8	8.0	0.8	8.0
Total Revenues (JD)			8.0	0.0	8.0	0.8	8.0	0.3	8.3	0.3	8.4	0.4	8.5
Net Cash Flow (JD)			8.0	-2.0	-3.0	-3.8	-2.0	0.2	8.2	0.2	8.3	0.3	8.4
Discounting (Df=6%)			8.9809	0.8265	8.7813	0.8838	8.6392	0.8047	8.5116	0.7491	8.4340	0.6954	8.3849
Total Qty Delivered (m3)			8.0	0.0	8.0	0.8	8.0	0.8	8.8	0.8	8.9	1.0	1.1
EBIT													
NPV (JD)	-5.6		8.0	-1.7	-3.3	-2.8	-4.2	0.1	8.1	0.1	8.1	0.1	8.0
PV of Total Costs (JD)	7.8		8.0	1.7	2.3	2.8	1.2	0.1	8.1	0.8	8.0	0.8	8.0
PV of Total Qty Delivered (m3)	5.9		8.0	0.0	8.0	0.8	8.0	0.5	8.4	0.4	8.4	0.3	8.2
Unit Water Price (Fishes)	1,220												

**Jordan Valley Sanitation - North Shomsh
Hydraulic Analysis (M m³/yr)**

Item	Allocation	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water Produced		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1
Municipal Water	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1
Physical Losses (%)		0.24	0.23	0.22	0.21	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Physical Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
Administrative/Managerial Losses (%)		0.21	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Administrative/Managerial Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Quantity Delivered		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.5
Quantity Whose Bills are Collected		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.4
Industrial Water	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Physical Losses (%)		0.24	0.23	0.22	0.21	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Physical Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative/Managerial Losses (%)		0.21	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Administrative/Managerial Losses		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quantity Delivered		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quantity Whose Bills are Collected		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Financial Analysis (M JD at 2000 Prices)

Item	Percent	Amount	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs																							
Local Components	25%	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign Components	80%	24.0	0.0	0.0	0.0	0.0	0.0	4.0	8.0	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Duty & Taxes	0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capital Costs		24.0	0.0	0.0	0.0	0.0	0.0	5.0	10.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contingency Costs		0.0	0.0	0.0	0.0	0.0	0.0	5.0	15.0	25.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
O & M Costs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Costs		0.0	0.0	0.0	0.0	0.0	0.0	5.0	10.0	10.0	5.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Revenues																							
Municipal Usage Qty (M m ³)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.5
Municipal Tariff (JD/m ³)			0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147
Municipal Revenues (M JD)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Industrial Usage Qty (M m ³)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Industrial Tariff (JD/m ³)			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Industrial Revenues (M JD)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues (M JD)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Net Cash Flow (M JD)			0.0	0.0	0.0	0.0	0.0	-5.0	-10.0	-10.0	-5.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Discounting (DRO=6.5%)			0.9097	0.8806	0.8295	0.7773	0.7298	0.6833	0.6415	0.6042	0.5695	0.5373	0.5062	0.4898	0.4410	0.4140	0.3883	0.3650	0.3426	0.3208	0.3024	0.2830	0.2646
Total Qty Whose Bills are Collected (M m ³)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.5
RRR																							
NPV (M JD)	-17.8		0.0	0.0	0.0	0.0	0.0	-3.4	-4.4	-4.0	-2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV of Total Costs (M JD)	20.9		0.0	0.0	0.0	0.0	0.0	1.4	4.4	4.0	2.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
PV of Total Bills Collected Qty (M m ³)	20.7		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.0	0.9	0.9	0.9	0.9
Unit Water Price (Flaky)	1.000																						

Economic Analysis (JD at 2000 Prices)

Item	Percent	Amount	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Costs																							
Local Components	25%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign Components	80%	24.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	8.0	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Duty & Taxes	0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capital Costs		24.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	10.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contingency Costs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	15.0	25.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
O & M Costs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Costs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	10.0	10.0	5.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Revenues																							
Municipal Usage Qty (m3)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5
Unit Benefits of Municipal Water (JD/m3)		0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308
Municipal Benefits (JD)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Industrial Usage Qty (m3)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Benefits of Industrial Water (JD/m3)		2.748	2.740	2.740	2.740	2.740	2.740	2.748	2.748	2.748	2.740	2.740	2.740	2.740	2.748	2.748	2.748	2.740	2.740	2.740	2.748	2.748	2.748
Industrial Benefits (JD)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Benefits (JD)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cash Flow (JD)		0.0	0.0	0.0	0.0	0.0	0.0	-5.0	-10.0	-10.0	-5.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Discounting (DRO=6.5%)		0.90907	0.82045	0.75131	0.68301	0.62002	0.56447	0.51116	0.46451	0.42410	0.38544	0.35044	0.31804	0.28661	0.25666	0.22813	0.20039	0.17422	0.14944	0.12655	0.10460	0.08464	0.06533
Total Qty Delivered (m3)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5
RRR																							
NPV (JD)	-31.5	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	-5.1	-4.7	-2.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
PV of Total Costs (JD)	15.9	0.0	0.0	0.0	0.0	0.0	0.0	2.0	5.1	4.7	2.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
PV of Total Qty Delivered (m3)	31.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5
Unit Water Price (F\$/m3)	1.36																						