

WATER SECTOR 2021 ... SUSTAIN AND GROW!

ENSURE WATER SERVICES SUSTAINABILITY & CONTINUITY

BEIRUT, 02 June 2021

NEEDS AND FORECAST 2021 - 2024

BEKAA WATER ESTABLISHMENT

BRIEF SUMMARY IN USD – Exchange rate 1507 LBP

	ACTUAL			FORECAST			
	2018	2019	2020	2021	2022	2023	2024
CAPEX	67,174,193	43,612,688	33,350,485	N/A	N/A	N/A	N/A
OPEX	6,696,630	7,136,871	7,455,886	7,789,161	7,789,161	7,789,161	7,789,161
SALARIES & BENEFITS	6,691,789	7,893,595	6,707,088	6,967,485	6,967,485	6,967,485	6,967,485
WATER EQUIPMENT & CONSUMABLES (TOOLS AND ACCESSORIES)	0	0	0	250,000	250,000	250,000	250,000
ICT HARDWARE & SOFTWARE	50,000	120,000	50,000	80,000	84,000	88,200	92,610
AUTOMATION SYSTEMS DEVELOPMENT (ERP, CALL CENTER, MOBILE APPS, WEBSITES, CLOUD COMPUTING, ETC)	24,552	29,861	33,179	39,814	39,814	46,450	46,450
ADMIN CONSUMABLES (PAPERS, INKS, ETC..)	241,727	351,835	274,315	300,000	330,000	360,000	400,000
CARS (MAINTENANCE, INSURANCE, FUEL, OIL CHANE, ETC)	250,000	260,000	270,000	300,000	320,000	350,000	375,000
COMMUNICATION & MARKETING	4,184	4,193	260	0	10,000	10,000	10,000
MISCELLENIOUS (e.g., COVID19 PREPARDNESS AND RESPONSE)	697,944	789,818	739,536	786,323	789,523	793,065	796,535
TOTAL without CAPEX	14,656,827	16,586,172	15,530,265	16,512,783	16,579,983	16,654,361	16,727,241
TOTAL Waste Water (BWE)	1,000,000	2,000,000	2,000,000	2,000,000	5,000,000	7,000,000	10,000,000

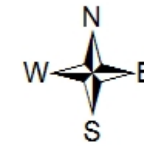
Bekaa Valley

North Lebanon
Water Establishment

Beirut/Mount Lebanon
Water Establishment

South Lebanon
Water Establishment

Bekaa Water
Establishment



- Altitude average : 900m
- Area: 4167 Km²=> 42% of Lebanon's total Area
- Population: More than 1.5 million Lebanese & refugees

0 11,500 23,000 46,000 69,000 92,000
Meters

Bekaa Water Establishment

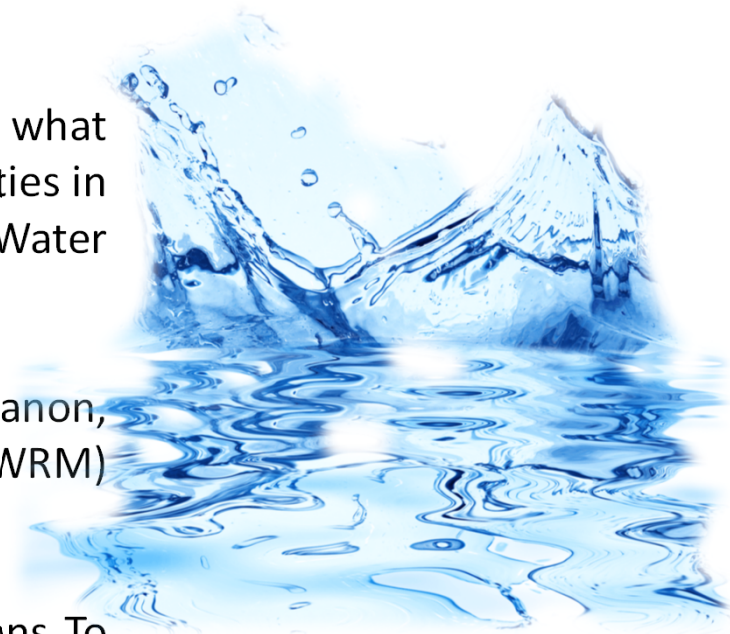


Bekaa Water Establishment was established, along with the other three Water Establishments in Lebanon, by merging former Water Authorities operating as independent entities and responsible for operation and maintenance of water supply systems.

Law 221 of May 2000, and its amendments, allowed for the merger of what were then three separately operated and maintained water supply utilities in the Bekaa known as Zahle, Baalbeck/Hermel and Chamsine Water Authorities.

Law 221/2000 was passed to re-organize the water sector in Lebanon, introduce the principles of Integrated Water Resources Management (IWRM) and improve efficiency in service provision.

Law 77/2018 amended by Law 192/2020 The Water Code (Regulations To protect , develop and rationalize the use of water resources)



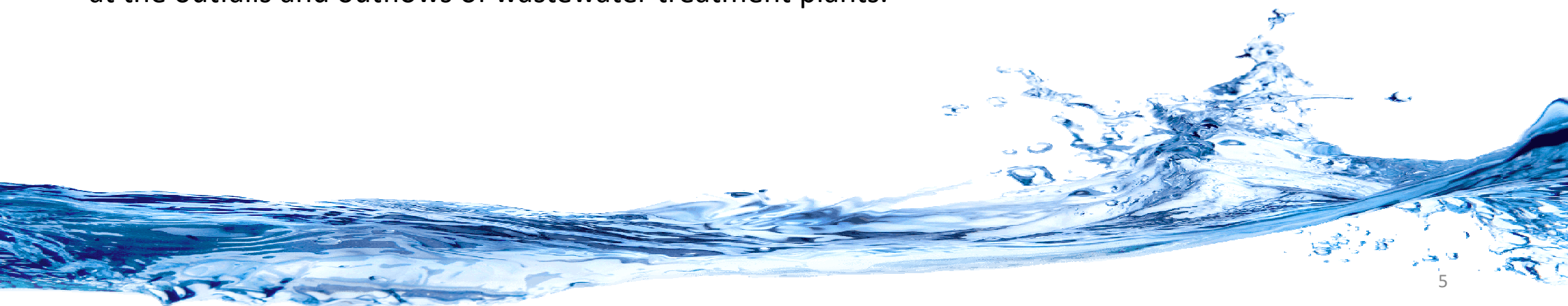
Role and mandate

Provide quality drinking water to residents – Treat wastewater

Study, implement, operate, maintain and renew all potable water, wastewater and irrigation infrastructure, based on the general master plan for water supply and wastewater.

Propose tariffs for water supply, wastewater, and irrigation services, taking into consideration the general socio-economic conditions in the country.

Monitor the quality of supplied drinking water, irrigation water and discharged treated wastewater at the outfalls and outflows of wastewater treatment plants.



BWE Vision Statement

“Transform the Establishment into a modern utility capable of providing the full range of water supply, wastewater and irrigation services to the region, in line with international best practices, while coordinating with all concerned parties to protect the environment surrounding surface and ground water resources.”

BWE Mission Statement

- Apply best practices of integrated water resource management to improve the protection of water resources.
- Extend water supply and wastewater services to all residents in the service area of the Establishment, where it is economically feasible, and achieve equity in the supply of water to all customers.
- Plan and manage wastewater treatment to protect all natural receiving streams in the Bekaa Valley.
- Raise the water awareness of the general public and public officials on the complexity and cost of water supply, wastewater and irrigation services to create more transparency and support for tariffs and investment programs.



OBJECTIVES

Current - To overcome the crisis	Long Term
<ul style="list-style-type: none"> -Keep an acceptable level of service in W & WW - Protect the WE assets - - Keep the WE staff motivated – Retention of staff 	<ul style="list-style-type: none"> - 24/7 service with the optimum quality - Financial equilibrium High rate of collection/ fair tariff - Full coverage with water supply & pipes - Complete network of WWTP & sewers - Maximise the use of HI-TECH in ICT :ERP, GIS, Scada,BI,DMS.... - Improve loyalty, integrity and staff Retention...

CULTURE AND VALUES

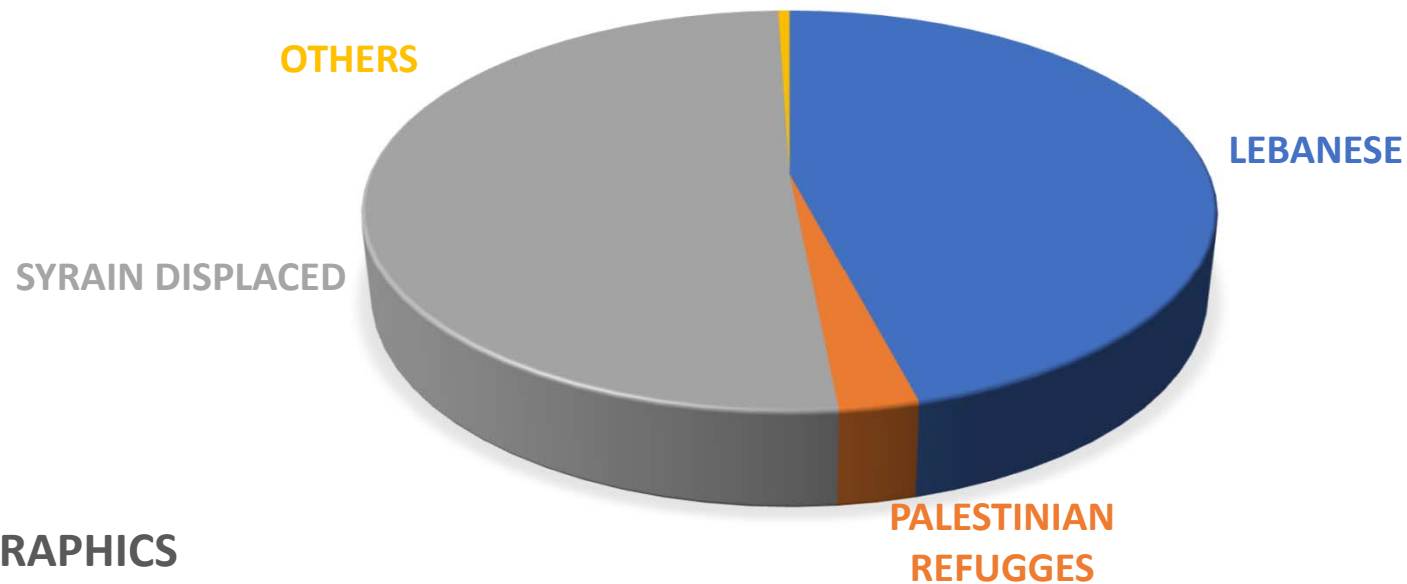
Current	Long Term
<ul style="list-style-type: none"> - Public workers spirit 	<ul style="list-style-type: none"> - Professional Excellence in Service - Transparency & Accountability - Best Practices - Collaboration & Teamwork. - Transform BWE to a customer centric establishment



DEMOGRAPHICS

Demographics – Distribution (BWE estimation nb)

DEMOGRAPHICS		DEMOGRAPHIC DISTRIBUTION	
900000	LEBANESE	250 000	LB HOUSEHOLDS
50000	PALESTINIAN REFUGGES	6000	PALESTINIAN REF.HOUSEHOLDS
1000000	SYRAIN DISPLACED	100 000	SYRIAN DISPLACED TENTS
10000	OTHERS		OTHERS



No. OF
CUSTOMERS

No. OF CUSTOMERS 2018 – 2024

ACTUAL

FORECAST*

	2018	2019	2020	2021	2022	2023	2024
TOTAL	86,761	87,979	88,983	90500	92500	95000	100000
Domestic – Individual	73747	74782	75636	76925	78625	80750	85000
Domestic – Bulk	0	0	0	0	0	0	0
Commercial	4338	4399	4449	4525	4625	4750	5000
Industrial	2603	2639	2669	2715	2775	2850	3000
Tourism	2169	2199	2225	2263	2313	2375	2500
Education	1301	1320	1335	1358	1388	1425	1500
Health	868	880	890	905	925	950	1000
Others	1735	1760	1780	1810	1850	1900	2000

*: Numbers accuracy is above 95% due the existing old data.

REVENUES & BANKS

REVENUES: 2018 – 2024

	ACTUAL			FORECAST			
Millions of LBP	2018	2019	2020	2021	2022	2023	2024
Total Billings	24,291	24,965	25,432	25,866	26,437	27,152	28,581
Total Collections	1,244	11,560	11,435	13,000	14,000	15,000	16,000
Arrear's settlement plan	27,964	2,227	2,855	3,500	4,000	4,500	5,000
Penalties	130	98	154	200	250	300	350
Grants and government * budget contribution	2,095	0	0	0	0	0	0
BDL Accounts	10,000	5,800	2,800	N/A	N/A	N/A	N/A
BDL Accounts in USD	0	0	0	0	0	0	0
Commercial bank accounts	0	0	0	0	0	0	0

*: Government Grants allocated are not paid anymore.

WATER SYSTEM CAPACITY

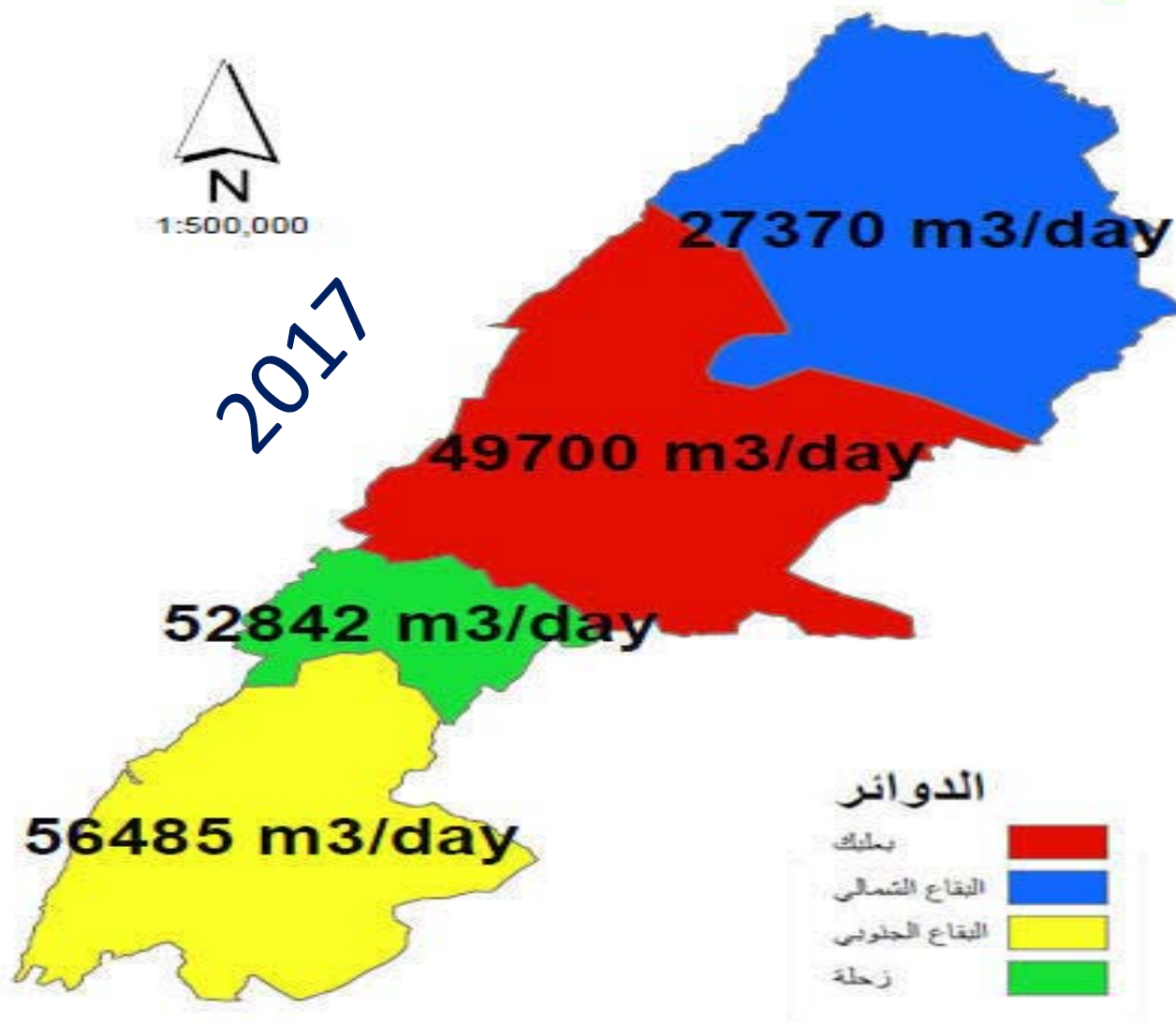
DRINKING WATER GROWTH INDICATORS 2017 – 2020 IN (m³)

Growth Indicators	2018	2019	2020	2021 (Q1)	Last Four Years % Average
Water production, (m ³)	53,981,983	53,670,099	53,183,820	12,854,520	
% Change	- 18 % *	- 0.2 %	- 1.12 %	N/A	
Maximum Production, (m ³)	53,981,983	53,981,983	53,981,983	13,495,496	
Number of Water customers (Based on nb of m ³ plus water tanker customers)	86,761	87,979	88,983	89,041	
% Change	+ 1.40%	+ 1.14%	+ 0.07%	N/A	

*: Electricity supply hours decrease.

MONTHLY WATER PRODUCTION 2020 (m³)

MONTH	RIVERS	SPRINGS	WELLS	TREATED WATER FOR IRRIGATION	TOTAL
JANUARY	N/A	1,767,060	2,768,018		4,535,078
FEBRUARY	N/A	1,593,333	2,732,326		4,325,659
MARCH	N/A	1,821,031	3,754,387		5,575,418
APRIL	N/A	1,867,816	2,816,312		4,684,128
MAY	N/A	1,799,914	3,081,552		4,881,466
JUNE	N/A	1,738,412	3,029,270		4,767,682
JULY	N/A	1,417,454	2,790,449		4,207,903
AUGUST	N/A	1,365,421	3,203,966		4,569,387
SEPTEMBER	N/A	1,326,544	3,049,543		4,376,087
OCTOBER	N/A	1,205,941	3,109,616		4,315,557
NOVEMBER	N/A	1,140,852	2,587,992		3,728,844
DECEMBER	N/A	1,157,206	2,857,569		4,014,775
TOTAL	N/A	18,200,984	35,780,999		53,981,983



WATER PRODUCTION ACTUAL AND FORECAST 2018 – 2024 IN (m³)

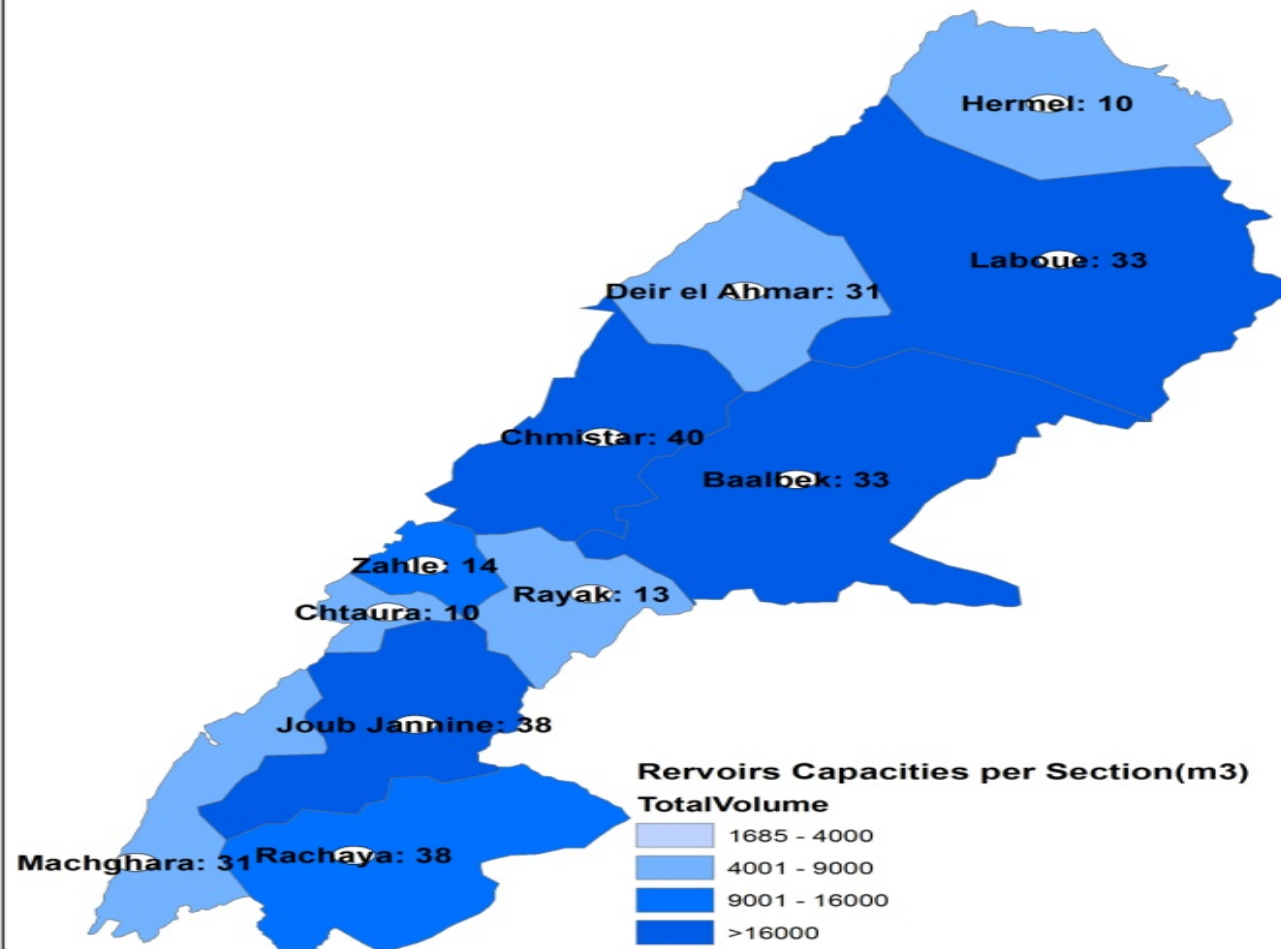
North Bekaa	21591
Baalbeck	39206
Zahleh	41685
West Bekaa	44559

DAILY WATER DISTRIBUTION ACTUAL AND FORECAST 2018 – 2024 IN (m³)

	Produced & Distributed	NRW (20%) Tech Loss	NRW (35%) Illegal Connection	Received At Household
North Bekaa	21591	4318	7557	9716
Baalbeck	39206	7841	13722	17643
Zahleh	41685	8337	14590	18758
West Bekaa	44559	8912	15596	20052

NRW water is estimated as per minimum available values

Number of Reservoirs and capacities per section at BWE



This map was produced on 20/05/2021 by the Bekaa Water Establishment.
Data projection is Double Stereographic, based on Clark 1880.

WATER RESERVOIRS ACTUAL AND FORECAST 2018 – 2024 IN (m³)

Total Capacity 05/2021

145,252 m³

Target is 24h supply from tanks
Annual additional needed qty

North Bekaa	+ 2000 m ³
Baalbeck	+ 3000 m ³
Zahleh	+ 4000 m ³
West Bekaa	+ 3000 m ³

WATER COST ACTUAL AND FORECAST 2018 – 2024 - in LBP

ACTUAL

FORECAST

	2018	2019	2020	2021	2022	2023	2024
WATER PRODUCTION COST (INCL. O&M)	1,034,684,906	1,465,922,058	1,778,413,086	2,045,175,049	2,351,951,306	2,704,744,002	3,110,455,602
WATER DISTRIBUTION COST (INCL. O&M)	477,546,880	676,579,411	820,806,040	943,926,946	1,085,515,987	1,248,343,385	1,435,594,893
WATER QUALITY COST (INCLUDING O&M)	79,591,147	112,763,235	136,801,007	157,321,158	180,919,331	208,057,231	239,265,816
TOT ICT SYS. SUPPORT	240,000,000	252,000,000	264,600,000	277,830,000	291,721,500	306,307,575	321,622,954
TOTAL SALARIES AND ALLOWANCES	10,123,782,983	11,932,547,744	10,153,979,242	11,000,000,000	11,000,000,000	11,000,000,000	11,000,000,000
TOT ELEC. & DIESEL	9,000,000,000	9,300,000,000	10,200,000,000	12,000,000,000	12,000,000,000	12,000,000,000	12,000,000,000
TOTAL COST TO IMPROVE WATER SYSTEM PERFORMANCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL ADJUSTEMENTS TO RECOVER CURRENCY DEVALUATION	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GRAND TOTAL							

WATER COST ACTUAL AND FORECAST 2018 – 2024 US DOLLARS

ACTUAL

FORECAST

	2018	2019	2020	2021	2022	2023	2024
WATER PRODUCTION COST (INCL. O&M)	686,586	972,742	1,180,102	1,357,117	1,560,684	1,794,787	2,064,005
WATER DISTRIBUTION COST (INCL. O&M)	316,886	448,958	544,662	626,362	720,316	828,363	952,618
WATER QUALITY COST (INCLUDING O&M)	52,814	74,826	90,777	104,394	120,053	138,061	158,770
TOT ICT SYS. SUPPORT	159,257	167,220	175,581	184,360	193,578	203,257	213,419
TOTAL SALARIES AND ALLOWANCES	6,717,839	7,918,081	6,737,876	7,299,270	7,299,270	7,299,270	7,299,270
TOT ELEC. & DIESEL	9,000,000,000	9,300,000,000	10,200,000,000	12,000,000,000	12,000,000,000	12,000,000,000	12,000,000,000
TOTAL COST TO IMPROVE WATER SYSTEM PERFORMANCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL ADJUSTEMENTS TO RECOVER CURRENCY DEVALUATION	7,013,720	8,471,072	7,717,105	8,461,944	8,746,969	9,073,933	9,449,086
GRAND TOTAL							

HOW TO IMPROVE PRODUCTION, TRANSMISSION, DISTRIBUTION, WATER QUALITY 2021 - 2024

COST OF IMPROVEMENTS USD

WATER	TREND	TARGET	EQUIPMENT	MANPOWER	SYSTEM
SOURCES	Hijacked	BWE Ownership	3 000 000	50 pers	
WELLS	Unfenced	Protected	2 500 000	++	CCTV
PRODUCTION	Increase	24h Supply	450 000/m	++	Scada
TRANSMISSION	High NRW	↓ 10 % NRW	10 000 000	++	DMA's
DISTRIBUTION	High NRW	↓ 10 % NRW	15 000 000	++	DMA's
WATER LOSS	High NRW	↓ 10 % NRW	1 000 000	++	GIS
QUALITY	2 times yearly	Monthly test	500 000 / y	++	3 Labs equip.
RESERVOIRS	145k m3	200k m3	13 750 000**	++	Scada
HOUSE CNX	Net. Incomp.	Complete	5 000 000	++	
MONITORING QLT	Poor coverage	High perform.	500 000	++	
ICT MONITORING	SI ready 40%		6 000 000	++	
IWMS	N/A	N/A	?		Full system

** 8 250 000 Reservoirs + 5 500 000 wells and supply systems

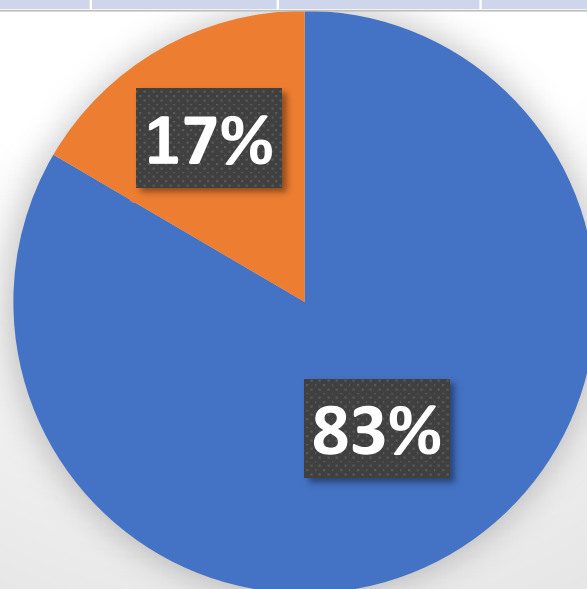
EXPENSES

CAPEX 2018 – 2024 (Donors' Grants & CDR Projects – Nothing by BWE)

USD	ACTUAL		FORECAST			
	2018	to 2020	2021	2022	2023	2024
Lebanese Rep: CDR + MOEW + BWE	194,605,876	83%				
DONORS	38,632,001	17%				
Tot	233,237,877					

Projects

N.B: Some of the LR projects are under progress and a lot of them are on hold till a more stable context.....



- Lebanese Rep: CDR + MOEW + BWE
- Donors

CAPEX 2018 – 2024 (Donors' Grants & CDR Projects – Nothing by BWE)

	ACTUAL			FORECAST			
USD	2018	2019	2020	2021	2022	2023	2024
Equipment	1,077,000	2,464,775	120,000	N/A	N/A	N/A	N/A
New main water network	14,645,962	9,173,171	10,795,131	N/A	N/A	N/A	N/A
New secondary water network	-	-	-	N/A	N/A	N/A	N/A
House connection	-	130,000	-	N/A	N/A	N/A	N/A
Installation of water meters	-	-	3,020	N/A	N/A	N/A	N/A
Rehabilitation/replacement of old water network	12,114,664	16,681,929	745,240	N/A	N/A	N/A	N/A
Wells and pumping station	3,649,534	9,078,822	1,112,604	100,000	N/A	N/A	N/A
Water reservoirs	500,000	166,000	1,921,296	N/A	N/A	N/A	N/A
Water towers	-	252,000	-	N/A	N/A	N/A	N/A
Laboratories	-	-	-	N/A	N/A	N/A	N/A
GenSets	-	183,873	200,000	19,000	N/A	N/A	N/A
Others (waste water, etc...)	35,187,033	5,482,118	18,453,194	N/A	N/A	N/A	N/A
TOTAL	67,174,193	43,612,688	33,350,485	119,000	N/A	N/A	N/A

OPEX 2018 – 2020

	ACTUAL			FORECAST			
	2018	2019	2020	2021	2022	2023	2024
O&M	1,591,822,933	2,255,264,704	2,736,020,132	2,872,821,139	3,016,462,196	3,167,285,305	3,325,649,571
EDL/EDZ/EDQ	7,833,600,000	8,160,000,000	8,500,000,000	8,925,000,000	9,371,250,000	9,839,812,500	10,331,803,125
DIESEL	750,000,000	750,000,000	750,000,000	787,500,000	826,875,000	868,218,750	911,629,688
STAFF TRANSPORT	800,000,000	800,000,000	800,000,000	840,000,000	882,000,000	926,100,000	972,405,000
SPARE PARTS	460,800,000	480,000,000	500,000,000	525,000,000	551,250,000	578,812,500	607,753,125
IT HARDWARE & SOFTWARE	92,160,000	96,000,000	100,000,000	105,000,000	110,250,000	115,762,500	121,550,625
WWTP	3,686,400,000	3,840,000,000	4,000,000,000	4,200,000,000	4,410,000,000	4,630,500,000	4,862,025,000
WATER	737,280,000	768,000,000	800,000,000	840,000,000	882,000,000	926,100,000	972,405,000
IRRIGATION	27,648,000	28,800,000	30,000,000	31,500,000	33,075,000	34,728,750	36,465,188
RENT WELLS	40,000,000	40,000,000	40,000,000	42,000,000	44,100,000	46,305,000	48,620,250
Total in LBP	16,019,710,933	17,218,064,704	18,256,020,132	19,168,821,139	20,127,262,196	21,133,625,305	22,190,306,572
Total in USD	10,630,200	11,425,391	12,114,147	12,719,855	13,355,848	14,023,640	14,724,822

CURRENCY DEVALUATION IMPACT ON CAPEX & OPEX

CAPEX

- Currently, as per Law, investments are not allowed. Budgeted CAPEX estimated to zero.
- Only CAPEX offered by donors and already initiated by CDR might exist.
- Any new CAPEX, has an exponential effect on OPEX...

OPEX

- For OPEX, all budgeted items are estimated on 1\$=1507 LBP **V/S** 1\$=13000 LBP as per market:
 - All items quoted in US dollars are out of reach
 - Subsidized items are becoming out of reach in a progressive way.
 - Total loss of BWE power of purchase
- O&M of Zahleh WWTP is not included: 2.5 million USD / year
- Total Incapacity of skilled worker retention and motivation...
- VOWP VS. VOWD :
 - Fixing a pump was equivalent to 25 subscriptions fees → Now it is to 200 subscriptions fees
 - EDZ invoice increased 3 times....
 - LBP allocated amount are not anymore useful in the majority of time...
- % OF DEVALUATION IMPACT FOR OPEX is 85% to 90%.

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SALARIES & BENEFITS

مؤسسة
مياه البقاع
BEKAA WATER
ESTABLISHMENT

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SALARY SCHEME: ECONOMIC CRISIS IMPACT (2019 – 2020) and FORECAST (2021 – 2024)

Income

Impact

Average pay	LBP	\$ 2019	\$ 2021	POP	
Permanent Staff Manager	2500000	1659	190 ++	-88 %	<ul style="list-style-type: none"> • Total demotivation: 20 % of availability • Collateral damages: less ethical behavior • No staff retention incentives: <ul style="list-style-type: none"> • 25 % of skilled engineers left • 20 % of workers left • Skilled staff is searching to leave • Skilled are leaving, Unskilled are not performing
Permanent Staff worker	1200000	796	90 ++	-88 %	
Contractual Staff Manager	2500000	1659	190	-88 %	
Contractual Staff worker	900000	597	60	-88 %	
Seconded Staff Manager		3000	3000		
Seconded Staff worker		750	750		
NGO's Staff Manager		3500	3500		
NGO's Staff worker		1000	1000		
MINIMUM WAGE	675000	400	50	-88 %	
MAXIMUM PAY	4500000	3000	350	-88 %	

MANPOWER

MANPOWER 2018 – 2024 | PERMANENT: ON DUTY AND RETIRED STAFF

	ACTUAL			FORECAST			
For Drinking water Only	2018	2019	2020	2021	2022	2023	2024
No. OF POSITIONS AS STRUCTURE	786	786	786	786	786	786	786
PERMANENT STAFF	200	186	178	168	157	148	141
ENGINEERS	5	4	4	4	4	4	4
BA HOLDERS	15	15	15	14	14	14	14
BT/TS HOLDERS	29	29	29	50	50	50	50
SKILLED LABOR (TECHNICAL, ADMIN)	19	18	17	16	14	13	13
UNSKILLED LABOR (TECHNICAL & ADM)	118	112	103	94	88	82	75
RESIGNED PERMANENT STAFF	1	2	1				
RETIRED PERMANENT STAFF	13	6	9	11	9	7	7
TOTAL VACANT POSITIONS excl. WW	586	600	608	618	629	638	645
Required for wastewater (if by BWE)				260	260	260	260
Total VACANT including Wastewater	586	600	608	878	889	898	905

MANPOWER 2018 – 2024

CONTRACTUAL WORKERS: ON DUTY AND RETIRED STAFF

ACTUAL

FORECAST

	2018	2019	2020	2021	2022	2023	2024
No. OF POSITIONS AS STRUCTURE	786	786	786	786	786	786	786
CONTRACTUAL WORKERS	234	234	234	234	234	234	234
<i>ENGINEERS - Masters</i>	13	13	13	13	13	13	13
<i>BA HOLDERS</i>	39	39	39	39	39	39	39
<i>BT/TS HOLDERS</i>	17	17	17	17	17	17	17
<i>SKILLED LABOR (TECH, ADM, FIN.)</i>	9	9	9	9	9	9	9
<i>UNSKILLED LABOR (TECHNICAL AND NON-TECHNICAL)</i>	156	156	156	156	156	156	156
RESIGNED CONTRACTUAL WORKERS	5	4	20				
RETIRED CONTRACTUAL WORKERS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL CONTRACTUAL WORKERS	234	234	234	234	234	234	234

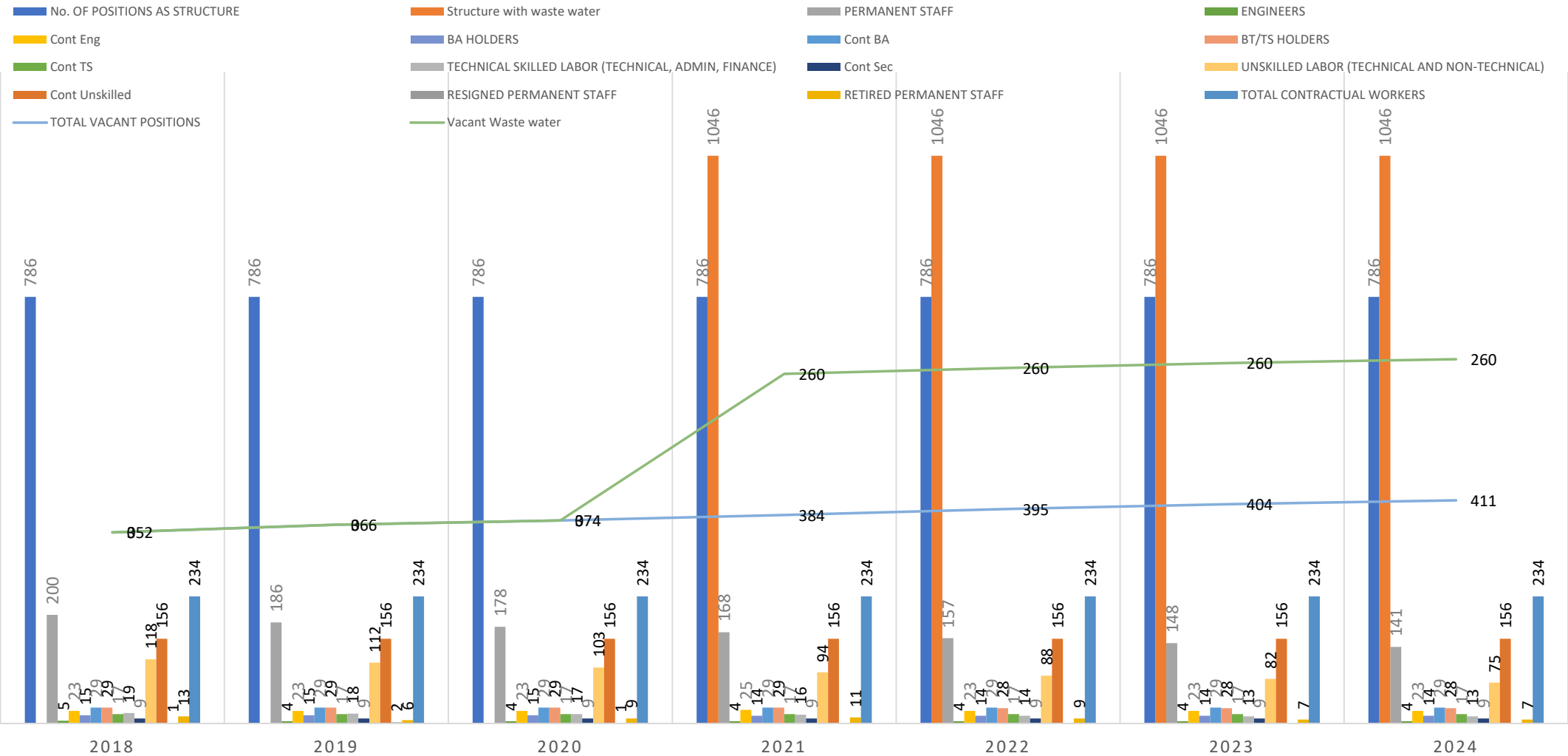
MANPOWER BALANCE 2018 – 2024 | PERMANENT/CONTRACTUAL/TEMPORARY

	ACTUAL			FORECAST			
	2018	2019	2020	2021	2022	2023	2024
No. OF POSITIONS AS STRUCTURE	786	786	786	786	786	786	786
Structure with waste water				1046	1046	1046	1046
PERMANENT STAFF	200	186	178	168	157	148	141
ENGINEERS	5	4	4	4	4	4	4
Cont Eng + MASTER	13	13	13	13	13	13	13
BA HOLDERS	25	25	25	24	24	24	24
Cont BA	29	29	29	29	29	29	29
BT/TS HOLDERS	29	29	29	29	28	28	28
Cont TS	17	17	17	17	17	17	17
SKILLED LABOR (TECHNICAL, ADMIN, FINA)	19	18	17	16	14	13	13
Cont Sec	9	9	9	9	9	9	9
UNSKILLED LABOR (TECHNICAL & ADM)	118	112	103	94	88	82	75
Cont Unskilled	156	156	156	156	156	156	156
RESIGNED PERMANENT STAFF	1	2	1				
RETIRED PERMANENT STAFF	13	6	9	11	9	7	7
TOTAL CONTRACTUAL WORKERS	234	234	234	234	234	234	234
TOTAL VACANT POSITIONS	352	366	374	384	395	404	411
Vacant Waste water				260	260	260	260

MANPOWER 2018 – 2021 | VACANT POSITIONS PERMANENT, CONTRACTUAL AND RETIRED STAFF



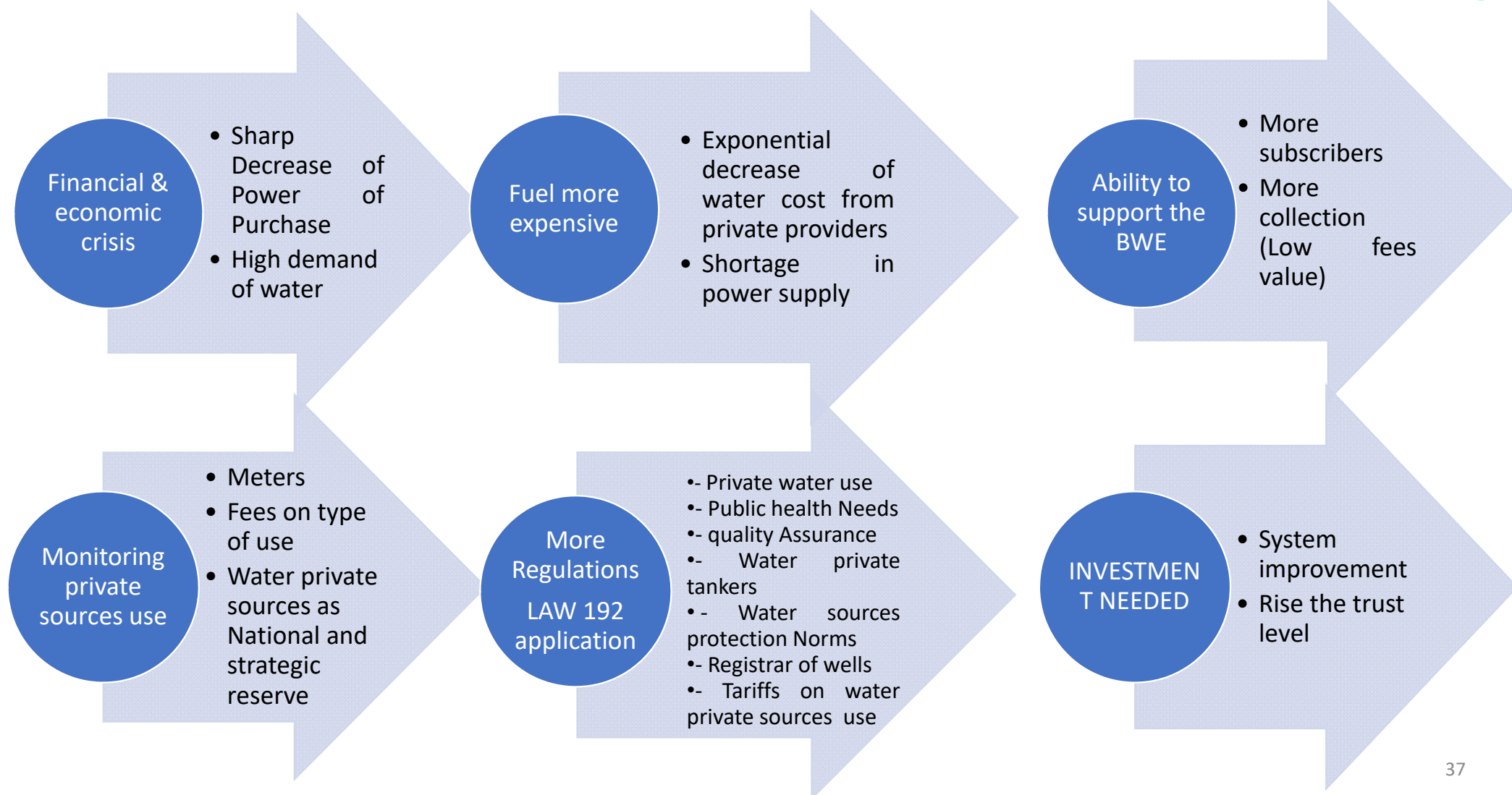
MANPOWER DYNAMICS: STRUCTURE VS. ACTUAL (2018 – 2020)/FORECAST (2021 – 2024)





GROWTH OPPORTUNITIES

OPPORTUNITIES: IMPACT OF CRISIS ON BUSINESS DEVELOPMENT



FIXED ASSETS

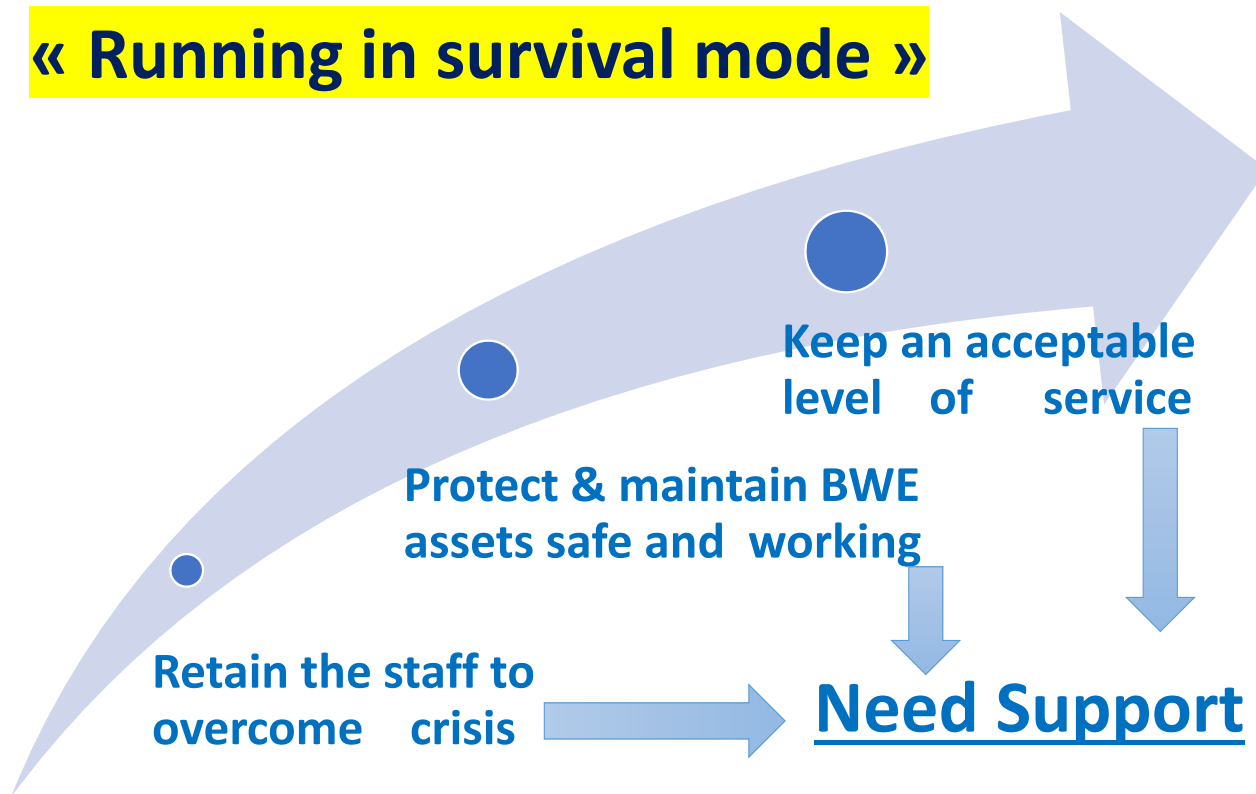
FIXED ASSETS 2018 – 2024

	ACTUAL			FORECAST			
	2018	2019	2020	2021	2022	2023	2024
FIXED ASSETS VALUES	192,038,223,124	196,085,038,207	200,006,402,023				
<i>DRINKING WATER ASSETS</i>							
<i>WASTEWATER ASSETS</i>							
<i>WATER FOR IRRIGATION ASSETS</i>							
<i>ADMINISTRATIVE AND OFFICE ASSETS</i>							
<i>STUDIES AND ACQUISITION EXPENSES</i>							
<i>DEBTS OR LIABILITIES ASSOCIATED WITH FIXED ASSETS</i>							
DEPRECIATION OF FIXED ASSETS (%)	5,953,711,917	6,011,000,000	6,011,000,000				
FIXED ASSETS DETERIORATION (%)							
COST TO MAINTAIN THE FIXED ASSETS RUNNING WITH GREAT VALUE							

FIXED ASSETS 2018 – 2024

Impact of economic and financial crisis on fixed assets values:

« Running in survival mode »



- Estimated cost to maintain the F.A. running with great value:
 - 3 to 5 Millions of dollars per year.
 - Waste water not included
- Steps to minimize the fixed assets deterioration:
 - Enforce Protection measures
 - Municipalities & Sec. forces cooperation
 - More preventive maintenance
 - Fast curative maintenance
 - Staff awareness and stewardship

SUMMARY IN USD

SUMMARY IN USD – CURRENT & FORECAST (2018 – 2024)

	ACTUAL			FORECAST			
	2018	2019	2020	2021	2022	2023	2024
CAPEX	67,174,193	43,612,688	33,350,485	N/A	N/A	N/A	N/A
OPEX	6,696,630	7,136,871	7,455,886	7,789,161	7,789,161	7,789,161	7,789,161
SALARIES & BENEFITS	6,691,789	7,893,595	6,707,088	6,967,485	6,967,485	6,967,485	6,967,485
WATER EQUIPMENT & CONSUMABLES (TOOLS AND ACCESSORIES)	0	0	0	250,000	250,000	250,000	250,000
ICT HARDWARE & SOFTWARE	50,000	120,000	50,000	80,000	84,000	88,200	92,610
AUTOMATION SYSTEMS DEVELOPMENT (ERP, CALL CENTER, MOBILE APPS, WEBSITES, CLOUD COMPUTING, ETC)	24,552	29,861	33,179	39,814	39,814	46,450	46,450
ADMIN CONSUMABLES (PAPERS, INKS, ETC..)	241,727	351,835	274,315	300,000	330,000	360,000	400,000
CARS (MAINTENANCE, INSURANCE, FUEL, OIL CHANE, ETC)	250,000	260,000	270,000	300,000	320,000	350,000	375,000
COMMUNICATION & MARKETING	4,184	4,193	260	0	10,000	10,000	10,000
MISCELLENIOUS (e.g., COVID19 PREPARDNESS AND RESPONSE)	697,944	789,818	739,536	786,323	789,523	793,065	796,535
TOTAL without CAPEX	14,656,827	16,586,172	15,530,265	16,512,783	16,579,983	16,654,361	16,727,241
TOTAL Waste Water (BWE)	1,000,000	2,000,000	2,000,000	2,000,000	5,000,000	7,000,000	10,000,000

THANK YOU

مؤسسة
مياه البقاع
BEKAA WATER
ESTABLISHMENT

