

ADDITIONAL INFORMATION / CHANGES

RESPONDING TO BOARD QUESTIONS & STAFF INPUT

EMERGENCY CONNECTIONS VS. WELLS AS BACKUP

- **EMERGENCY CONNECTIONS**

- PER JAWA – ALL JAWA COMMUNITIES SERVED HAVE AN EMERGENCY CONNECTION WITH A NON-JAWA COMMUNITY
- COST RANGES WITH COMPLEXITY
 - SIMPLE INTERCONNECT TYPICALLY \$200,000
 - COMPLEX INTERCONNECT → \$400,000 - \$500,000
 - ADDED COST IF LONG CONNECTING MAIN IS REQUIRED

EMERGENCY CONNECTIONS VS. WELLS AS BACKUP

- **WELLS AS BACKUP**

- DISCUSSED WELL POLICY WITH 6 COMMUNITIES THAT MAINTAIN WELLS AS BACKUP AND SEVERAL OTHER COMMUNITIES THAT ARE DISCONTINUING MAINTAINING WELLS
- ESTIMATES OF ANNUAL COST TO MAINTAIN RANGE FROM \$20,000 - \$60,000 PER YEAR
 - LABOR INTENSIVE (WELLS ARE OPERATED MANUALLY MONTHLY)
 - LABOR & UTILITY COSTS APPLY
 - REHABILITATION COST ON 10-15 YEAR CYCLES RANGE FROM \$35,000 - \$200,000 BUT CAN BE AS HIGH AS \$500,000

EMERGENCY CONNECTIONS VS. WELLS AS BACKUP

- **PREFERRED EMERGENCY BACKUP MEANS**
 - EMERGENCY CONNECTIONS PREFERRED TO BACKUP WELLS
 - BARTLETT'S WELLS SHOULD BE MAINTAINED AND USED FOR BACKUP UNTIL EMERGENCY CONNECTIONS ARE ESTABLISHED
 - NEED FOR EMERGENCY CONNECTIONS APPLIES TO ALL 5 ALTERNATIVES

ADDITIONAL CAPITAL COSTS

EMERGENCY CONNECTIONS - ALL ALTERNATIVES	\$800,000
WRT TREATMENT AT WELL 8 - ALTERNATIVES 1 & 3	\$1,700,000
STANDBY POWER AT 3 EXISTING SITES - ALTERNATIVES 1 & 3	\$1,200,000

INTEREST RATE ON FINANCING

**STAFF RECOMMENDS USING
6% INTEREST AND 20 YEAR TERM
RATHER THAN
5% INTEREST AND 20 YEAR TERM
TO ALLOW FOR ADDITIONAL FUTURE
VARIABILITY IN INTEREST RATES
BETWEEN NOW AND THE
IMPLEMENTATION OF IMPROVEMENTS**

BARTLETT WATER SELLING RATE

- **RATE PROJECTIONS ESTIMATED FOR 2019**
- **COST OF PURCHASING WATER BASED ON ASSUMED CONDITIONS AND PURCHASE RATE ESCALATION AS FOLLOWS:**
 - ALT 1 ELGIN HISTORICAL ANNUAL RATE OF INCREASE OVER LAST 10 YEARS (3.4%)
 - ALT 2 2.5% ELGIN ANNUAL INCREASE (PER PROPOSED TERMS OF NEW AGREEMENT)
 - ALT 3 N/A BECAUSE THERE IS NO COST FOR PURCHASING GROUNDWATER
 - ALT 4/5 CITY OF CHICAGO HISTORICAL ANNUAL RATE OF INCREASE OVER LAST 10 YEARS (9.9%)

BARTLETT WATER SELLING RATE

- **CAPITAL COST**

- INCLUDES NEAR TERM CAPITAL COST INFLATED TO 2019 AT 3.5% PER YEAR
- FINANCING ASSUMES DEBT AT 6%, 20 YEAR TERM, NO BOND COVERAGE

- **O & M COSTS**

- INCLUDES BASE O & M COST AT \$2.5 MILLION / YEAR INFLATED TO 2019 AT 3% PER YEAR
- ADDITIONAL O & M COSTS ADDED TO ALTs 1 & 3 ASSOCIATED WITH ADDITIONAL COSTS FOR OPERATING NEW WELLS

BARTLETT WATER SELLING RATE

- **WATER SELLING RATE FOR ALTERNATIVE 3 ASSUMED AT CURRENT RATE PLUS INFLATION BASED ON BARTLETT'S 10-YEAR HISTORICAL AVERAGE RATE INCREASE**
- **RATE RANGE FOR ALTERATIVE 2**
 - LOW VALUE ASSUMES USE OF WELLS CONTINUED FOR APPROXIMATELY 10 YEARS
 - HIGH VALUE ASSUMES 2ND ELGIN CONNECTION IS BUILT BY 2019

FROM HISTORICAL AVERAGES
5 YEAR RATE PROJECTIONS
 PROJECTED FROM 10 YEAR RATE HISTORY
 OF AVERAGE ANNUAL INCREASES

	2004 (\$ / 1000 GALLONS)	2014 (\$ / 1000 GALLONS)	AVERAGE ANNUAL INCREASE (%)	PROJECTED TO 2019 FROM HISTORY (\$ / 1000 GALLONS)
BARTLETT SELLING RATE	\$4.16	\$6.36	4.3%	\$7.85
ELGIN RESIDENTIAL RATE	\$3.22	\$4.52	3.4%	\$5.34 ²
<i>ELGIN RESIDENTIAL RATE @ 2.5% ³</i>		\$4.52	2.5%	\$5.11 ²
CITY OF CHICAGO	\$1.29 ¹	\$3.31 ¹	9.9%	\$5.32 ²

- 1 SOURCE – http://www.cityofchicago.org/city/en/depts/water/provdrs/cust_serv/svcs/know_my_water_sewerrates.html
- 2 Does not include Bartlett’s cost to distribute water and operate & maintain the Village’s water system
- 3 Proposed maximum annual increase under new Elgin agreement

2019 BARTLETT WATER SELLING RATE PROJECTIONS FOR EACH ALTERNATIVE

\$ PER 1000 GALLONS

ALT 1	ALT 2	ALT 3	ALT 4	ALT 5
<i>STATUS QUO</i>	<i>100% ELGIN</i>	<i>100 % WELLS</i>	<i>NSMJAWA</i>	<i>DWC</i>
\$8.40 - \$8.90	\$8.40 - \$10.50	\$7.90 - \$8.40	\$14.80	\$15.10

NOTE: WHEN COMPARING RATES, ABOVE RATES DO NOT CONTAIN MONTHLY FIXED FEES COMMON IN MANY COMMUNITY RATE STRUCTURES.

ASSUMPTIONS:	
AVERAGE DAILY USAGE	3.9 MILLION GALLONS PER DAY
ALT 1 ELGIN PURCHASE VOLUME	2.0 MILLION GALLONS PER DAY @ \$6.68 / 1000 GALLONS (\$5.34 x 1.25)
ALT 2 ELGIN PURCHASE VOLUME	3.0 MILLION GALLONS PER DAY @ \$5.88 / 1000 GALLONS – LOW RANGE (\$5.11 x 1.15) 3.9 MILLION GALLONS PER DAY @ \$5.63 / 1000 GALLONS – HIGH RANGE (\$5.11 x 1.10)
COST OF DEEP WELL TREATMENT	\$0.51 PER THOUSAND GALLONS
INFLATION FACTOR CAPITAL IMPROVEMENTS COST	3.5%
DEBT SERVICE	20 YEAR @ 6%, NO COVERAGE
INFLATION FACTOR O&M COSTS	3.0% ON CURRENT O&M OF \$2.5 MILLION (WITHOUT WATER PURCHASE)
VOLUME SOLD	85% OF TOTAL PUMPED OR PURCHASED VOLUME
RANGE FOR ALTs 1 & 3	HIGH RANGE INCLUDES COST OF AN ADDITIONAL WELL FACILITY BECAUSE OF UNCERTAINTIES ASSOCIATED WITH EXISTING AND FUTURE WELLS

PROJECTED MONTHLY & ANNUAL WATER COSTS - 3 CONSUMPTION VOLUMES

Current Rate		Alternatives - 2019 Projected Rates							
2014	Inflated to 2019 @ 4.3%	Alt 1 (Low)	Alt 1 (High)	Alt 2 (Low)	Alt 2 (High)	Alt 3 (Low)	Alt 3 (High)	Alt 4	Alt 5
		Status Quo		100% Elgin		100% Wells		NSMJAWA	DWC

Rate / 1,000 Gallons	\$6.36	\$7.85	\$8.40	\$8.90	\$8.40	\$10.50	\$7.90	\$8.40	\$14.80	\$15.10
----------------------	--------	--------	--------	--------	--------	---------	--------	--------	---------	---------

5,000 Gallons / Month	Monthly Bill	\$31.80	\$39.25	\$42.00	\$44.50	\$42.00	\$52.50	\$39.50	\$42.00	\$74.00	\$75.50
	Annual Cost	\$381.60	\$471.00	\$504.00	\$534.00	\$504.00	\$630.00	\$474.00	\$504.00	\$888.00	\$906.00
		<i>Difference Compared with Alt 1 - Status Quo Monthly</i>		\$0.00	\$8.00	(\$2.50)	(\$2.50)	\$29.50	\$31.00		
		<i>Difference Compared with Alt 1 - Status Quo Annual</i>		\$0.00	\$96.00	(\$30.00)	(\$30.00)	\$354.00	\$372.00		

8,000 Gallons / Month	Monthly Bill	\$50.88	\$62.80	\$67.20	\$71.20	\$67.20	\$84.00	\$63.20	\$67.20	\$118.40	\$120.80
	Annual Cost	\$610.56	\$753.60	\$806.40	\$854.40	\$806.40	\$1,008.00	\$758.40	\$806.40	\$1,420.80	\$1,449.60
		<i>Difference Compared with Alt 1 - Status Quo Monthly</i>		\$0.00	\$12.80	(\$4.00)	(\$4.00)	\$47.20	\$49.60		
		<i>Difference Compared with Alt 1 - Status Quo Annual</i>		\$0.00	\$153.60	(\$48.00)	(\$48.00)	\$566.40	\$595.20		

10,000 Gallons / Month	Monthly Bill	\$63.60	\$78.50	\$84.00	\$89.00	\$84.00	\$105.00	\$79.00	\$84.00	\$148.00	\$151.00
	Annual Cost	\$763.20	\$942.00	\$1,008.00	\$1,068.00	\$1,008.00	\$1,260.00	\$948.00	\$1,008.00	\$1,776.00	\$1,812.00
		<i>Difference Compared with Alt 1 - Status Quo Monthly</i>		\$0.00	\$16.00	(\$5.00)	(\$5.00)	\$59.00	\$62.00		
		<i>Difference Compared with Alt 1 - Status Quo Annual</i>		\$0.00	\$192.00	(\$60.00)	(\$60.00)	\$708.00	\$744.00		