

VILLAGE OF BARTLETT

POTABLE WATER STUDY UPDATE

NOVEMBER 17, 2015
REVISED JANUARY 5, 2016



HISTORY

IN THE SUMMER / FALL OF 2014, PRESENTATIONS WERE MADE TO THE BOARD SUMMARIZING 5 ALTERNATIVES CONSIDERED FOR LONG TERM SUSTAINABLE POTABLE WATER SUPPLY FOR BARTLETT.

BOARD DIRECTION

UPON CAREFUL REVIEW AND CONSIDERATION, THE BOARD DIRECTED STAFF TO ENTER NEGOTIATIONS WITH ELGIN FOR A NEW LONG TERM WATER SUPPLY AGREEMENT.



NEW INFORMATION SINCE 2014 BOARD PRESENTATIONS

- **NSMJAWA PROPOSES TO SUPPLY BARTLETT**
 - NSMJAWA PROPOSAL DRIVEN BY DECLINING WATER USE, NSMJAWA'S PROXIMITY TO BARTLETT, AND NSMJAWA'S NEED TO MEET MINIMUM WATER PURCHASE REQUIREMENT
 - "BUY-IN" FEE OF \$14.6 MILLION IS ELIMINATED
 - NSMJAWA INDICATED THAT CURRENTLY ANY FUTURE CITY OF CHICAGO RATE INCREASES ARE LIMITED BY CITY ORDINANCE (FUTURE REMAINS UNCERTAIN BECAUSE NEW ORDINANCE COULD BE ADOPTED)
 - REFINEMENT OF CAPITAL FACILITIES & COST ESTIMATES
 - BASED ON NSMJAWA'S PROPOSAL, 2019 RATE PROJECTION FOR NSMJAWA WATER HAS GONE DOWN BY APPROXIMATELY \$2.40 / 1,000 GALLONS
 - OFFERING OF A 50-50 / ELGIN-NSMJAWA JOINT SUPPLY ALTERNATIVE



NEW INFORMATION SINCE 2014 BOARD PRESENTATIONS

• ELGIN AGREEMENT

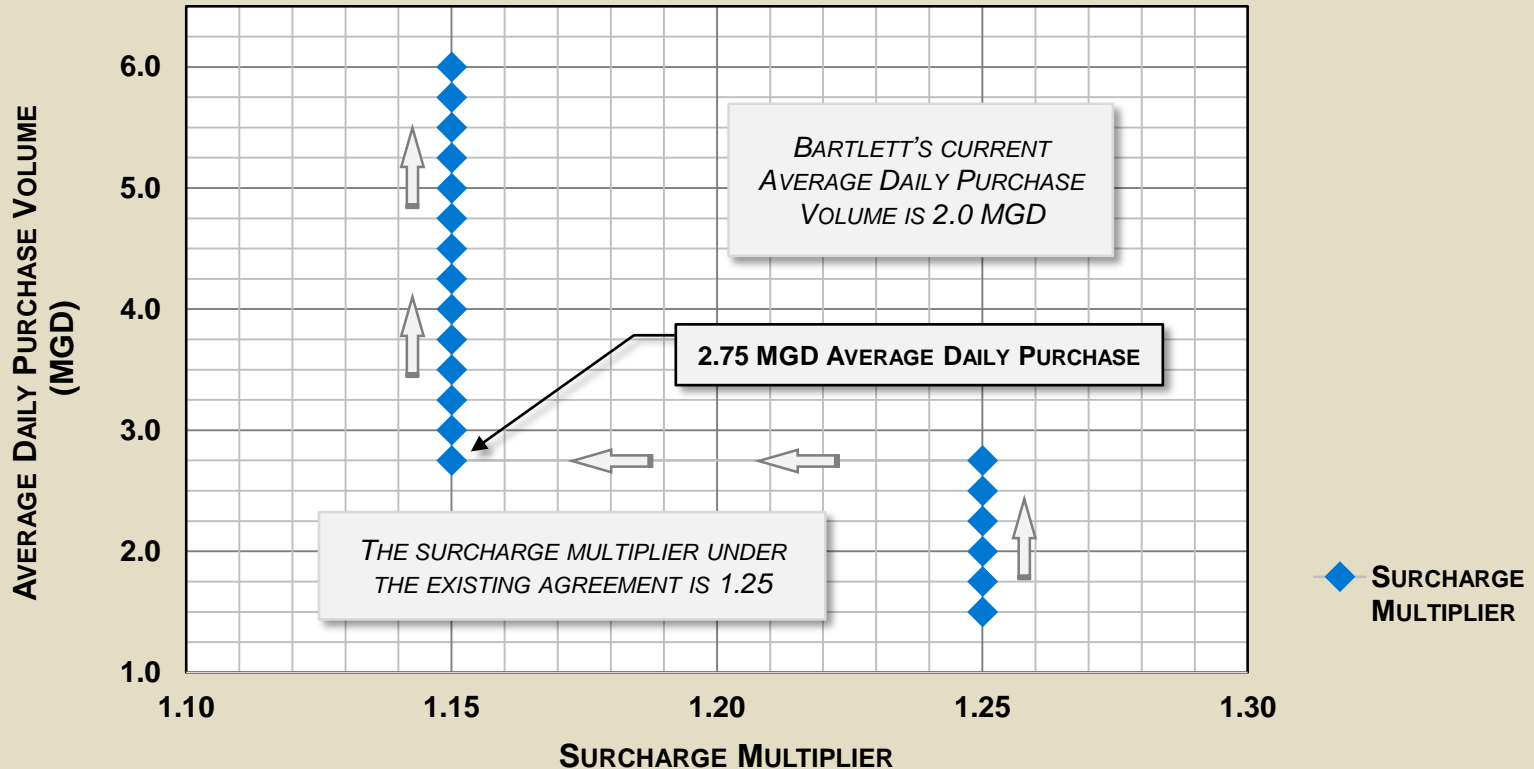
- ELGIN CONCERNED THAT PROVIDING 100% OF BARTLETT'S SUPPLY WILL REQUIRE THE WATER TREATMENT PLANT BE EXPANDED SOONER
- AFTER ELGIN REVIEWED THE 2014 BOARD PRESENTATIONS, ELGIN FELT THAT THE PREVIOUSLY DISCUSSED TERMS OF THE AGREEMENT WERE BALANCED IN FAVOR OF BARTLETT
- STAFF NEGOTIATED NEW TERMS FOR A 35 YEAR AGREEMENT
- ELGIN TOOK OFF THE TABLE CAPS ON FUTURE ANNUAL RATE INCREASES
- ELGIN AGREED TO REDUCE THE "SURCHARGE MULTIPLIER" FROM THE CURRENT 1.25 TO 1.15 WITH A CORRESPONDING INCREASE IN VOLUME PURCHASE
- BASED ON NEGOTIATED TERMS, 2019 RATE PROJECTION FOR ELGIN WATER HAS GONE UP BY APPROXIMATELY \$0.90 / 1,000 GALLONS
- ELGIN AGREED TO SELL WATER TO BARTLETT IF THE 50-50 ALTERNATIVE IS SELECTED



ELGIN SURCHARGE MULTIPLIER

(MULTIPLIER FOR THE 50-50 OPTION IS 1.25 FOR ALL FLOWS)

SURCHARGE MULTIPLIER VERSUS AVERAGE DAILY PURCHASE VOLUME



ALTERNATIVES SHORT LIST

	PROJECTED 2019 BARTLETT RATE (SEE NOTES)	
	<i>CURRENT PROJECTED VALUES</i>	<i>VALUES PRESENTED TO BOARD IN 2014</i>
100% ELGIN [2 ND CONNECTION BUILT UP FRONT]	\$11.10 - \$11.60	\$10.50
100% NSMJAWA	\$12.00 - \$12.90	\$14.80
50-50 ELGIN-NSMJAWA	\$10.90 - \$11.60	N/A [NEW ALTERNATIVE]



PROS & CONS OF ALTERNATIVES

	100% ELGIN [2ND CONNECTION BUILT UP FRONT]	100% NSMJAWA	50-50 ELGIN- NSMJAWA
2019 PROJECTED RATE	\$11.10 - \$11.60	\$12.00 - \$12.90	\$10.90 - \$11.60
5 YEAR CAPITAL IMPROVEMENT PROJECTION (\$2014)	\$18.5 MILLION	\$29.9 MILLION	\$13.0 MILLION
SOURCE WATER	FOX RIVER	LAKE MICHIGAN	FOX RIVER / LAKE MICHIGAN
SOURCE REDUNDANCY	--	--	2 INDEPENDENT SOURCES
ALLOWS REMAINING USEFUL LIFE OF WELLS	No	No	PERHAPS
SUSTAINABLE	YES	YES	YES
SOFT WATER	YES	YES	YES



ALTERNATIVE'S PROJECTED INCREASE 2019 MONTHLY WATER BILLS ^{1,2,3}

		100% ELGIN [2 ND CONNECTION BUILT UP FRONT]	100% NSMJAWA	50-50 ELGIN- NSMJAWA
PROJECTED 2019 RATE / 1,000 GALLONS	AVERAGE PROJECTED RATE OF HIGH-LOW RANGE	\$11.35 / 1,000 GALLONS	\$12.45 / 1,000 GALLONS	\$11.25 / 1,000 GALLONS
6,000 GALLONS / MONTH	MONTHLY BILL INCREASE OVER 2019 INFLATED RATE	\$21.00 MONTHLY	\$27.60 MONTHLY	\$20.40 MONTHLY
8,000 GALLONS / MONTH	MONTHLY BILL INCREASE OVER 2019 INFLATED RATE	\$28.00 MONTHLY	\$36.80 MONTHLY	\$27.20 MONTHLY
10,000 GALLONS / MONTH	MONTHLY BILL INCREASE OVER 2019 INFLATED RATE	\$35.00 MONTHLY	\$46.00 MONTHLY	\$34.00 MONTHLY

¹ Table values based on the average of the Alternative 2019 Projected Rate Range verses 2014 Rates inflated to 2019 Rates at historical average inflation rate of 4.3%

² 2014 Rate is \$6.36 / 1,000 gallons, 2019 Projected Rate at 4.3% historical inflation increase is \$7.85 / 1,000 gallons

³ Residents currently in the zone receiving Village produced well water and softening the water may benefit for all options by eliminating use of home softeners - Saving may be ± \$16 per month as estimated by another public entity



100% ELGIN PHASED TRANSITION FROM WELLS

	100% ELGIN [PHASE OUT WELLS OVER 10 YEARS]	IF SOFTENER ADDED FOR EXISTING WELLS ²
2019 PROJECTED RATE ¹	\$8.60 - \$8.90	\$9.10 - \$9.40
AVERAGE PROJECTED RATE OF HIGH-LOW RANGE	\$8.75	\$9.25
VALUES PRESENTED TO BOARD IN 2014	\$8.40	--
5 YEAR CAPITAL IMPROVEMENT PROJECTION (\$2014)	\$5.7 MILLION	\$11.2 MILLION
100% ELGIN – CAPITAL IMPROVEMENTS DEFERRED BEYOND 2019 (\$2014)	\$12.8 MILLION	\$12.8 MILLION
100% ELGIN – BARTLETT 2019 SELLING RATE DEFERRED ³	\$2.50 - \$2.60	\$2.50 - \$2.60
SOURCE WATER	FOX RIVER / WELLS PHASED OUT OVER 10 YEARS	FOX RIVER / WELLS PHASED OUT OVER 10 YEARS
ALLOWS REMAINING USEFUL LIFE OF WELLS	YES	YES
SOFT WATER	MIXED	YES
MONTHLY BILL INCREASE OVER 2019 INFLATED RATE		
6,000 GALLONS / MONTH	\$5.40 MONTHLY	\$8.40 MONTHLY
8,000 GALLONS / MONTH	\$7.20 MONTHLY	\$11.20 MONTHLY
10,000 GALLONS / MONTH	\$9.00 MONTHLY	\$14.00 MONTHLY

**PHASE OUT WELLS
OVER 10 YEARS**

**2ND ELGIN
CONNECTION BUILT
IN 10 YEARS (2026)**

¹ Note: This Alternative defers the “2nd Connection Built Up Front” costs for 10 years.

² Softening capital cost for Wells 4, 6, & 7 estimated at \$5.5 Million. No Softening Included for Bartlett’s other Wells.

³ Deferred cost of additional Elgin purchase volume plus Deferred capital improvements.

2026 PROJECTED RATE COMPARISON

	PROJECTED 2019 BARTLETT RATE (SEE NOTES)		PROJECTED 2026 BARTLETT RATE (SEE NOTES)
	CURRENT PROJECTED VALUES	VALUES PRESENTED TO BOARD IN 2014	PROJECTED VALUES
100% ELGIN [2 ND CONNECTION BUILT UP FRONT]	\$11.10 - \$11.60	\$10.50	\$13.40 - \$14.70
100% NSMJAWA	\$12.00 - \$12.90	\$14.80	\$13.50 - \$16.50
50-50 ELGIN- NSMJAWA	\$10.90 - \$11.60	N/A [NEW ALTERNATIVE]	\$13.20 - \$15.50
100% ELGIN [NEAR TERM – PHASE OUT WELLS OVER 10 YEARS] ¹	\$8.60 - \$8.90	\$8.40	\$13.60 - \$15.00
100% ELGIN [NEAR TERM – PHASE OUT WELLS OVER 10 YEARS] ¹ [WITH SOFTENING]	\$9.10 - \$9.40	N/A [NEW ALTERNATIVE]	\$14.00 - \$15.40

¹ Note: This Alternative defers the “2nd Connection Built Up Front” costs for 10 years

NOTES

-- SEC DISCLAIMER TO BE PROVIDED --

100% Elgin – [Near Term – Phasing out Wells]:

- ¹ 2019 Elgin Water Purchase assumed at average of 3.0 million gallons per day (MGD).
- ² Range for Elgin 2019 Residential Rate (before surcharge) calculated at 3.4% - 4.6% annual increases from 2014 actual residential rate reflecting the "10 year" and "life of contract" average annual rate increases respectively.
- ³ Elgin Surcharge Multiplier assumed at 1.15 for an average purchase of 3.0 MGD as shown on the Elgin Surcharge Multiplier Chart.
- ⁴ Capital Cost (to 2019) of 100% Elgin – [Near Term – Phasing out Wells] Alternative is estimated at \$5.7 million in \$2014 from facilities and costs discussed and presented at the 2014 Board Presentations and in the 2014 Potable Water Study report.
- ⁵ \$2014 Capital Cost inflated to \$2018 at 3.5% per year
- ⁶ Debt service costs for capital costs estimated as 20 year loan repayment at 6% annual interest.
- ⁷ Bartlett 2019 Water Fund Operating Cost (not including water purchase cost) estimated at \$2.9 million.
- ⁸ Rate calculations assume that 85% of water purchased is billed.

100% Elgin – [2nd Connection Built Up Front]:

- ⁹ 2019 Elgin Water Purchase assumed at average of 3.9 million gallons per day (MGD).
- ¹⁰ Range for Elgin 2019 Residential Rate (before surcharge) calculated at 3.4% - 4.6% annual increases from 2014 actual residential rate reflecting the "10 year" and "life of contract" average annual rate increases respectively.
- ¹¹ Elgin Surcharge Multiplier assumed at 1.15 for an average purchase of 3.9 MGD as shown on the Elgin Surcharge Multiplier Chart.
- ¹² Capital Cost (to 2019) for 100% Elgin – [2nd Connection Built Up Front] Alternative is estimated at \$18.5 million in \$2014 from facilities and costs discussed and presented at the 2014 Board Presentations and in the 2014 Potable Water Study report.
- ¹³ \$2014 Capital Cost inflated to \$2018 at 3.5% per year
- ¹⁴ Debt service costs for capital costs estimated as 20 year loan repayment at 6% annual interest.
- ¹⁵ Bartlett 2019 Water Fund Operating Cost (not including water purchase cost) estimated at \$2.9 million.
- ¹⁶ Rate calculations assume that 85% of water purchased is billed.

100% NSMJAWA:

- ¹⁷ 2019 NSMJAWA Water Purchase assumed at average of 3.9 million gallons per day (MGD).
- ¹⁸ Per NSMJAWA 6/22/15 presentation to Bartlett, NSMJAWA proposes a water selling rate of \$5.60 per 1,000 gallons to Bartlett through Year 2016.
- ²⁰ Per NSMJAWA 6/22/15 presentation to Bartlett, City of Chicago Ordinance currently limits Chicago rate increases to NSMJAWA to the lessor of the Consumer Price Index or 5%. It is assumed that NSMJAWA future rate increases to Year 2019 to Bartlett would be at the same % rate increase that City of Chicago imparts to NSMJAWA.
- ²¹ NSMJAWA selling rate to Bartlett projected to 2019 rates using (as indicated in Note 20):
 - 2% average annual increases representative of current CPI values, and
 - 5% per upper limit.
- ²² Capital Cost of Alternative 4 is estimated at \$29.9 million in \$2014:
 - \$13.0 million for Bartlett's facilities and costs discussed and presented at the 2014

Board Presentations and in the 2014 Potable Water Study report, and

- \$16.9 million for JAWA's facilities from JAWA's estimates in the NSMJAWA 6/22/15 presentation to Bartlett.
- ²³ \$2014 Capital Cost inflated to \$2018 construction costs at 3.5% per year
 - ²⁴ O&M Base Costs and predicted inflation to 2019 estimated at \$2.9 million (without water purchase cost) as presented in 2014
 - ²⁵ Debt service costs for capital costs estimated as 20 year loan repayment at 6% annual interest.
 - ²⁶ Rate calculations assume that 85% of water purchased is billed.

New Alternative – 50/50 Elgin/NSMJAWA – (New Alternative Proposed By NSMJAWA):

- ²⁷ NSMJAWA proposed a new Alternative during the 6/22/15 presentation to Bartlett that would be a combined Elgin and NSMJAWA supply for Bartlett. The Table values assume 50% of Bartlett's supply would be from Elgin and 50% would be from NSMJAWA. The Elgin/NSMJAWA Alternative would require a new agreement with Elgin and an agreement with NSMJAWA
- ²⁸ 2019 Combined Elgin/NSMJAWA Water Purchase assumed at average of 3.9 million gallons per day (MGD).
- ²⁹ Per NSMJAWA 6/22/15 presentation to Bartlett, NSMJAWA's proposed water selling rate is \$5.60 per 1,000 gallons to Bartlett through Year 2016.
- ³⁰ Per NSMJAWA 6/22/15 presentation to Bartlett, City of Chicago Ordinance currently limits Chicago rate increases to JAWA to the lessor of the Consumer Price Index or 5%. It is assumed that NSMJAWA future rate increases to Year 2019 to Bartlett would be at the same % rate increase that City of Chicago imparts to NSMJAWA.
- ³¹ NSMJAWA selling rate to Bartlett projected to 2019 rates using (as indicated in Note 30):
 - 2% average annual increases representative of current CPI values, and
 - 5% per upper limit.
- ³² Elgin selling rate to Bartlett projected to 2019 rates using
 - 1.25 Surcharge Multiplier and 3.4% average annual increases (see Note 10 and Elgin Surcharge Multiplier Chart), and
 - 1.25 Surcharge Multiplier and 4.6% average annual increases (see Note 10 and Elgin Surcharge Multiplier Chart)
- ³³ Capital Cost of the 50/50 Alternative is estimated at \$13.0 million in \$2014:
 - \$5.8 million for Bartlett's facilities from the facilities and costs from values used for facilities in the 2014 Board Presentations and in the 2014 Potable Water Study report, and
 - \$7.2 million for NSMJAWA's facilities from NSMJAWA's estimates in the NSMJAWA 6/22/15 presentation to Bartlett.
- ³⁴ \$2014 Capital Costs inflated to \$2018 construction costs at 3.5% per year
- ³⁵ O&M Base Costs and predicted inflation to 2019 estimated at \$2.9 million (without water purchase cost) as presented in 2014
- ³⁶ Debt service costs for capital costs estimated as 20 year loan repayment at 6% annual interest.
- ³⁷ Rate calculations assume that 85% of water purchased is billed.
- ³⁸ Elgin's engineering consultant EEI, performed an independent review of the 2019 rate projections for the 100% Elgin, 100% NSMJAWA, and 50-50 Alternatives and reported to be a "very close" match of the projected rates.

SUMMARY OF ELGIN & NSMJAWA MEETINGS

November 28, 2011	Meeting with NSMJAWA to explore potential of getting Lake Michigan water through NSMJAWA	March 4 & 23, 2015	Received additional information from NSMJAWA
September 23, 2013	Meeting with Elgin Water Operators to discuss Elgin's supply capabilities		NSMJAWA's proposal to be discussed/approved at next Executive Committee scheduled for April 20, 2015 with proposed water pricing.
December 6, 2013	Meeting with Elgin Administration and Water Operators, to initiate discussions regarding a future water contract with the City. A reduced multiplier and fixed annual increases were discussed.	May 26, 2015	Elgin meeting Elgin concluded from their internal review that Bartlett's proposed agreement terms were too favorable for Bartlett.
February 6, 2014	Elgin provides water rate markup data		Elgin indicates that they will not change any terms from the current contract (no set annual rate increase or reduction in surcharge multiplier).
February 12, 2014	Elgin provides copy of most recent rate study	June 4, 2015	Bartlett sent letter to Elgin showing updated comparison of Elgin vs. NSMJAWA costs.
May 12, 2014	Elgin provides responses to water system information requested by Bartlett	June 22, 2015	NSMJAWA meeting NSMJAWA made presentation to Bartlett Staff <ul style="list-style-type: none"> • 100% NSMJAWA option • 50 - 50 Elgin/NSMJAWA option.
July 1, 2014	Initial Water Study Presentation to the Committee	July 2, 2015	NSMJAWA provided additional information based on questions Bartlett asked during 6/22/15 meeting.
July 11, 2014	Water Study report and Board Power Point presentations provided to Elgin and NSMJAWA	July 23, 2015	Letter sent to Elgin with revised costs comparison of Elgin vs. NSMJAWA Alternatives.
August 19, 2014	Public Information Meeting before Board Meeting	August – September, 2015	Elgin hired consultant to review CBBEL cost comparison estimates
Sept. 16, 2014	Responses to Board's questions	October 8, 2015	Meeting with Elgin Negotiations focused on the surcharge multiplier.
November 4, 2014	Additional discussion/responses to Board's questions Board directed Staff to move forward with negotiating contract with Elgin for 100% Elgin Supply		Elgin agreed to reduce the surcharge multiplier from 1.25 to 1.15 with a corresponding increase of volume of purchased water
December 8, 2014	Meeting with Elgin Bartlett presented a draft contract with 2.5% annual increase rate and declining surcharge multiplier with higher volume of water purchase		Reduction of surcharge multiplier starts at 2.75 million gallons per day (average) water purchase If Elgin selected as Bartlett's water supplier, no limits on annual increases would be included in the agreement.
December 10, 2014	Copies of the Water Study and Board Presentations sent to Elgin		Elgin subsequently agreed that they would accept selling water to Bartlett if the 50 – 50 Elgin/NSMJAWA Alternative is selected by Bartlett.
February 6, 2015	Meeting with Elgin Elgin indicated capacity concerns Elgin hired EEI to review capacity Negotiations deferred until Elgin internal review completed.		
February 9, 2015	Elgin provides copy of most recent Water Master Plan		
February 10, 2015	Water Supply Report and Board Presentations provided to Jim Norris of NSMJAWA		
February 18, 2015	Meeting with NSMJAWA Discussed NSMJAWA's interest in proposing to be Bartlett's water supplier NSMJAWA indicated they could supply with no buy-in fee		