

TOWN OF JERUSALEM

## **WATER FUND**

Keuka College Water Discussion Outline

CAPITAL CHARGE ALLOCATION

**(FOR DISCUSSION PURPOSES ONLY)**

**Draft: August 11, 2011**

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*TR*  
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TOWN OF JERUSALEM - WATER FUND

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TOWN OF JERUSALEM - WATER FUND

**ANNUAL UTILITY RATE REVIEW**

- (1) Review latest actual year-end results
- (2) Review trend of fund balance:
  - Appropriated
  - Unappropriated
- (3) Review reserves:
  - Current levels
  - Contributions to
  - Needs from (long-range plan update)
- (4) New capital projects - review needs:
  - Authorization dates
  - Financing - bonds, grants, cash, other?
  - Construction dates
  - Borrowing / cash flow needs
  - Debt service impacts
- (5) Existing debt fall off:
  - Timing of
  - Amount of
- (6) Review any increase / decrease in EDU's, service area, or usage
- (7) Review budgeting trends (what is relationship of expenses to CPI - NE?)
- (8) Does current rate structure suffice?
  - Allocations of user types - shifting? Consistent?
  - Rate levels?



Town of Jerusalem

WATER USERS

Keuka Park Water & Extensions

Water District	EDU's for Capital Charge <sup>2</sup>	# of Water Meters	Water Customer Accounts	# of Minimums Charged <sup>1</sup>
As of May 31, 2011 Billing	1,652.5	1,074	1,178	1,417
2011 Budget Preparation	1,648.0	1,074	1,178	1,415

Notes: 1) Several commercial users are billed multiple EDU's and multiple minimums.

2) Keuka College is located in the original Water District. KC is billed 342 EDU's (Capital) and 342 water minimums (Consumption). They have 43 meters/buildings.



Town of Jerusalem

WATER FUND

2011 Budget Breakdown - EXPENSES

	<u>BUDGET</u>	<u>Projected</u>	<u># Units</u>	<u>Annual Rate</u>
<b>O &amp; M</b>				
Admin	\$58,378			
Source, Supply, Power	\$154,692			
Trans & Dist	\$127,319			
Contingency	\$9,500			\$5.95
Benefits	\$44,385			
Interfund Transfer	\$180,590			
Subtotal O & M	<u>\$574,864</u>			
Consolidated DS	\$411,563			
		\$411,563	=	1,648
				\$249.74
<b>TOTAL</b>	<u><u>\$986,427</u></u>			



TOWN OF JERUSALEM

Keuka College History of Water Meter Readings

Meter #	03/31/05	06/30/05	09/30/05	12/31/05	03/31/06	06/30/06	09/30/06	12/31/06	03/31/07	06/30/07	09/30/07	12/31/07
2	13,100	15,300	15,100	19,100	92,300	18,300	9,900	18,700	17,400	22,500	8,100	13,500
3	483,600	483,600	2,209,900	110,700	32,800	32,800	965,300	5,700	22,500	320,900	2,529,600	2,000
4	75,940	75,940	325,640	13,400	38,500	38,500	117,360	1,720	20,500	20,500	129,900	1,720
5	503,000	483,000	336,000	550,000	480,000	377,000	122,500	207,500	582,960	5,800	244,000	423,300
6	25,000	1,700	3,500	5,500	15,100	3,700	9,000	6,400	7,900	5,800	19,300	8,100
7	173,000	178,000	139,000	212,000	166,000	164,000	145,000	220,000	166,300	153,000	269,000	391,000
8	241,000	274,000	409,000	402,000	409,000	365,000	453,000	620,000	317,000	275,000	296,810	329,780
9	24,000	37,000	464,000	25,000	29,000	34,000	39,000	44,000	50,000	50,000	88,272	74,600
10	290,000	320,000	250,000	430,000	310,000	310,000	300,000	420,000	319,100	292,200	328,100	489,900
11	208,600	281,800	369,300	239,000	310,000	147,000	355,100	125,900	71,400	174,000	456,000	139,000
12	231,000	413,000	324,000	327,000	238,000	298,000	356,000	407,000	258,400	197,000	376,000	422,000
13	53,000	65,200	53,400	71,400	63,800	70,800	71,700	75,200	68,300	79,900	63,900	85,000
14	2,000	2,200	1,500	1,900	2,100	2,400	1,900	2,600	2,100	2,100	21,600	27,200
15	28,400	22,800	22,700	11,500	13,700	11,500	20,100	12,200	58,130	15,550	10,870	1,780
16	3,600	3,600	11,300	3,300	0	5,300	5,600	5,600	5,900	4,800	2,900	2,400
17	3,200	4,700	6,300	3,800	7,100	6,100	31,900	9,000	3,000	6,200	11,200	14,800
18	3,400	6,400	3,000	5,100	2,700	5,300	5,300	4,700	5,100	4,600	5,000	4,700
19	6,000	2,800	4,800	5,100	4,500	3,200	4,100	2,200	4,000	3,900	3,600	3,200
20	346,000	429,000	369,000	545,000	432,000	453,000	471,000	542,000	368,000	199,000	416,000	665,000
21	133,400	506,800	11,100	19,100	122,400	25,300	347,400	16,200	15,500	12,000	202,700	20,800
22	3,700	3,900	11,100	460,000	9,600	20,000	10,600	480,000	354,800	37,700	17,000	437,000
23	290,000	360,000	320,000	5,500	330,000	45,900	290,000	4,500	1,700	363,700	296,900	200
24	16,600	37,500	800	3,200	0	0	0	0	5,500	2,000	9,200	16,500
25	7,100	5,600	5,300	9,700	4,600	3,600	5,400	4,300	23,100	22,300	16,000	14,900
26	11,400	11,000	13,400	100,000	13,600	12,600	18,600	14,700	182,400	143,600	122,700	148,700
27	140,000	100,000	70,000	1,100	250,000	150,000	90,000	130,000	7,500	4,400	10,000	8,800
28	2,200	2,000	8,900	25,600	1,400	4,200	10,300	4,400	7,500	11,100	10,800	7,300
29	22,800	21,500	23,500	21,600	42,300	29,500	68,000	42,200	46,500	46,800	71,300	7,400
30	4,100	8,700	16,000	9,700	32,900	27,100	11,900	11,100	12,200	10,800	10,600	8,700
31	16,900	15,700	14,800	7,000	13,300	11,500	11,900	4,150	9,320	8,570	9,760	930
32	8,400	9,500	14,200	12,100	8,700	6,700	8,400	7,500	8,000	8,500	1,700	10,700
33	16,600	15,100	18,900	7,700	8,300	12,600	12,900	10,800	12,000	13,100	9,800	10,700
34	7,300	10,100	13,000	45,300	11,000	11,600	11,700	4,100	4,200	5,600	3,800	7,300
35	3,000	9,100	11,600	11,200	11,700	15,400	29,200	45,300	10,900	1,000	7,900	6,600
36	11,100	5,500	6,200	8,400	5,900	300	1,000	10,600	22,100	58,100	12,000	8,400
37	13,000	10,200	12,900	900	200	100	13,200	12,400	15,800	11,700	12,200	15,600
38			3,500		5,400	9,100	21,600	7,300	10,900	6,900	6,900	15,400
39							6,400	1,100	1,900	8,200	2,000	15,600
40												11,300
41												
42												
43												
44												
<b>GROSS TOTAL</b>	<b>2,737,200</b>	<b>3,867,440</b>	<b>6,393,040</b>	<b>3,691,600</b>	<b>3,654,900</b>	<b>3,119,800</b>	<b>4,473,660</b>	<b>3,566,670</b>	<b>3,057,410</b>	<b>2,547,320</b>	<b>6,114,612</b>	<b>3,855,920</b>
<b>LESS IRRIGATION</b>	<b>0</b>	<b>(692,940)</b>	<b>(3,042,340)</b>	<b>(124,100)</b>	<b>(122,400)</b>	<b>(97,000)</b>	<b>(1,430,060)</b>	<b>(18,820)</b>	<b>0</b>	<b>(353,400)</b>	<b>(2,862,200)</b>	<b>(3,720)</b>
<b>NET TOTAL</b>	<b>2,737,200</b>	<b>3,174,500</b>	<b>3,350,700</b>	<b>3,567,500</b>	<b>3,532,500</b>	<b>3,022,800</b>	<b>3,043,600</b>	<b>3,547,850</b>	<b>3,057,410</b>	<b>2,193,920</b>	<b>3,252,412</b>	<b>3,852,200</b>
				<b>76.88%</b>				<b>88.74%</b>				<b>79.33%</b>
<b>GROSS TOTAL</b>	<b>15,693,191</b>											
<b>3 Year Averages:</b>	<b>15,138,854</b>											
2005-2007	<b>13,240,554</b>											
2006-2008												
2007-2009												
2008-2010												



TOWN OF JERUSALEM  
Keuka College History of Water Meter Readings

Meter #	03/31/08	06/30/08	09/30/08	12/31/08	03/31/09	06/30/09	09/30/09	12/31/09	03/31/10	06/30/10	09/30/10	12/31/10
2	12,630	16,210	11,900	20,260	10,480	13,230	8,270	19,330	14,430	18,140	9,620	18,900
3	602,700	638,700	638,700	600	1,200	333,200	737,800	300	200	14,700	467,300	700
4	37,150	37,150	30,110	1,650	200	22,470	38,580	1,140	220	7,460	20,840	1,010
5	273,800	389,900	316,200	418,700	339,700	395,200	274,300	439,200	316,700	301,600	272,300	397,400
6	9,060	12,350	36,020	39,880	8,470	32,560	29,340	16,270	11,870	12,450	18,760	5,370
7	380,000	335,000	317,000	457,000	395,000	411,000	308,000	494,000	274,000	310,000	302,000	459,000
8	254,000	315,900	426,670	364,930	289,300	305,100	363,100	377,700	300,400	331,600	400,500	360,700
9	59,800	78,400	71,300	69,100	59,100	82,300	116,100	89,600	50,500	78,500	81,900	70,800
10	333,200	381,000	437,700	617,600	432,900	470,100	384,900	682,500	62,000	539,900	416,100	679,300
11	101,000	224,000	384,000	85,000	71,000	146,000	312,000	113,000	179,000	239,000	288,000	277,000
12	264,000	263,000	262,000	332,000	242,000	307,000	234,000	260,000	179,000	90,800	78,100	92,600
13	68,300	90,700	70,800	94,000	71,600	93,000	73,700	103,100	38,000	39,500	27,900	51,100
14	26,400	31,300	24,000	33,100	25,100	34,000	22,200	37,600	7,320	8,220	23,230	7,530
15	10,920	19,970	55,340	14,530	6,330	9,330	13,890	7,830	1,510	1,470	-	1,870
16	10	50	20	180	20	110	1,010	1,360	7,060	6,460	1,590	4,610
17	5,460	10,580	8,190	5,230	10,130	15,270	6,580	14,140	4,120	4,700	4,300	4,470
18	6,810	4,900	4,680	2,880	4,560	5,000	4,110	3,550	2,850	2,470	2,700	2,300
19	3,400	3,430	3,460	2,880	2,940	3,550	3,960	2,520	347,000	327,000	271,000	417,000
20	428,000	404,000	404,000	546,000	505,000	603,000	508,000	470,000	21,340	26,950	21,200	19,990
21	132,900	155,900	21,060	24,210	21,940	24,480	11,140	56,700	328,200	336,800	245,800	403,700
22	14,320	18,310	332,800	387,800	351,400	345,100	1,340	9,090	13,060	17,910	1,740	62,490
23	660	710	1,050	860	670	630	590	540	780	510	1,180	1,380
24	14,000	15,600	41,200	11,800	11,200	13,600	10,300	8,100	7,300	9,100	7,900	6,500
25	177,200	147,800	140,700	166,400	187,100	148,900	119,000	162,500	169,400	114,700	75,300	53,900
26	8,400	10,300	6,300	4,000	6,200	3,700	9,000	5,900	4,100	4,500	4,700	5,000
27	4,670	6,720	9,120	5,030	7,570	6,010	8,390	7,540	4,930	6,180	19,160	40,810
28	410	3,770	3,860	3,780	11,290	3,750	3,430	4,320	3,780	1,800	2,970	4,370
29	8,980	11,840	11,510	11,240	9,410	11,740	11,760	12,180	8,780	26,740	21,920	24,040
30	390	5,720	5,340	5,560	4,770	5,390	5,830	5,140	20	750	8,010	850
31	10,740	13,580	17,220	16,900	22,250	22,630	17,070	17,900	21,770	16,220	22,270	23,370
32	3,200	5,030	3,370	3,980	3,550	5,210	8,230	4,160	2,730	3,630	6,820	13,070
33	6,230	5,570	5,990	5,690	7,310	5,750	6,290	4,880	4,700	5,740	6,580	4,670
34	8,510	10,610	10,220	8,910	9,810	9,460	12,720	13,390	13,000	19,990	16,510	19,870
35	15,000	29,410	19,720	440	36,160	9,200	23,400	21,190	15,150	5,400	7,060	5,800
36	10,860	11,760	12,430	12,820	12,120	11,940	10,950	14,180	14,090	14,120	16,350	17,740
37	3,900	9,500	10,900	10,600	11,000	11,100	13,500	10,900	17,400	12,300	14,300	9,300
38	18,800	15,700	22,500	20,500	18,900	16,900	20,100	17,900	19,200	18,500	20,900	21,500
39	2,869,090	4,008,180	4,341,420	3,807,580	3,187,750	3,937,680	4,085,880	3,980,740	2,868,210	3,201,710	3,673,470	3,682,000
40	0	15,026,270	15,026,270	15,026,270	15,192,050	15,192,050	15,192,050	15,192,050	13,425,390	13,425,390	13,425,390	13,425,390
41	2,869,090	(772,750)	(824,710)	(2,250)	(1,400)	(355,670)	(894,360)	(1,440)	(420)	(22,160)	(509,340)	(1,710)
42	2,869,090	3,235,430	3,516,710	3,805,330	3,196,350	3,582,010	3,191,500	3,979,300	2,867,790	3,179,550	3,164,130	3,680,290
43	NET TOTAL	13,426,560	13,426,560	89.35%	13,939,160	13,939,160	91.75%	12,891,760	12,891,760	12,891,760	96.03%	12,891,760
44	NET TOTAL	15,138,854	15,138,854	13,240,554	13,419,160	13,419,160	13,419,160	13,419,160	13,419,160	13,419,160	13,419,160	13,419,160

cash/klfjms  
Updated: 6/29/2011  
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2005-2007  
2006-2008  
2007-2009  
2008-2010

Bernard P. Donegan, Inc.  
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Keuka College Water & Sewer Consumption & Billing.xls  
KC History



**KC Gross Total - Water Meter Readings  
Summary for Years 2005-2010**

<b>KC Total Gallons (By Year)</b>	
2005	16,689,280
2006	14,815,030
2007	15,575,262
2008	15,026,270
2009	15,192,050
2010	13,425,390
2011	

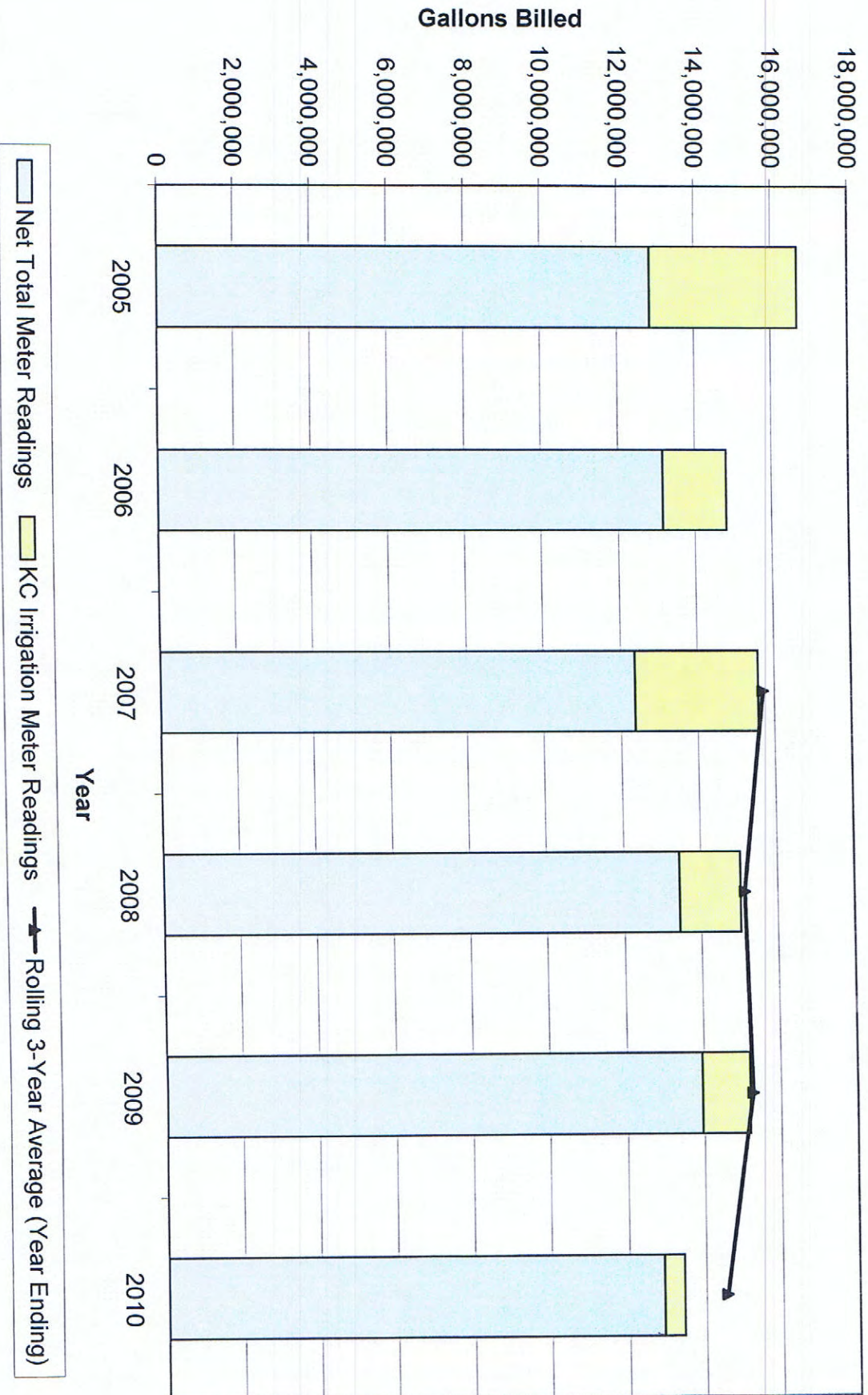
<b>KC Total Average Gallons (Rolling 3-Year Averages)</b>	
2005-2007	15,693,191
2006-2008	15,138,854
2007-2009	15,264,527
2008-2010	14,547,903
2009-2011	

Average 15,120,547

Average 15,161,119



## Water Fund (Rolling 3-Year Average vs. Gross Total Meter Readings)





TOWN OF JERUSALEM

Proposed Keuka College Water EDU Allocation

(0) CURRENT ALLOCATION

Students = 1,368 (Keuka Magazine Winter 2007)  
 If 4 students = 1 EDU, then 1,368 / 4 = 342 EDU's  
 then 342 / 1,648 EDU's **20.75%** 342 EDU's

(1) CONSUMPTION BASIS - w/ 40,000 Gallon Divisor

	Keuka College	Divisor	EDU's	Non-Keuka College EDU's	Calculated Keuka College EDU's	New Total EDU's
2008	15,026,270	40,000	376	1,306		
2009	15,192,050	40,000	380			
2010	13,425,390	40,000	336			
3 Year AVERAGE	<u>14,547,903</u>	<u>40,000</u>	<b>364</b>			<b>1,670</b>
	(Need Minimum?)					<b>21.78%</b>

(2) CONSUMPTION BASIS - to be used for January 1, 2012 Capital Charge on Tax Bill

	ACTUAL BILLED CONSUMPTION			Calculated	
	Keuka College	Keuka Park Water & Exts.	Non-Keuka College EDU's	Keuka College EDU's	New Total EDU's
2008	15,026,270	48,514,385	1,306		
2009	15,192,050	47,156,496			
2010	13,425,390	45,731,733			
3 Year AVERAGE	<u>14,547,903</u>	<u>47,134,205</u>			<b>1,889</b>
	(Need Minimum?)				<b>30.86%</b>



TOWN OF JERUSALEM  
WATER FUND

**BUDGET Cost Allocation**

	KC Using 40,000 Gallon Divisor 2011 BUDGET		KC Using CONSUMPTION BASIS 2011 BUDGET	
DEBT SERVICE	\$411,563	\$411,563	\$411,563	
Budget EDU Count	1,648	1,670	1,889	
Minimum Budget Cost / EDU	\$249.73	\$246.49	\$217.87	

**Proposed Cost Allocation Options**

	<u>KC EDU's</u>	<u>TOTAL EDU's</u>	<u>RATE / EDU</u>	<u>KC Cost</u>
(0) CURRENT ALLOCATION (2011)	342	1,648	\$249.73	\$85,409
(1) 40,000 GALLON DIVISOR BASIS (2011)	364	1,670	\$246.49	\$89,648
(2) CONSUMPTION BASIS (2011)	583	1,889	\$217.87	\$127,028



8/5/10 CC Jen  
LARRY

### KEUKA PARK SEWER & EXTENSIONS

SEWER DISTRICT	EDU'S	# OF MINIMUMS CHARGED	Grinder Pumps
ORIGINAL	481	481	0
SEWER EXT #1	234	234	0
SEWER EXT #2	272	283	279
SEWER EXT #3	9	9	0
TOTALS	996	1007	279

### KEUKA PARK WATER & EXTENSIONS

WATER DISTRICT	EDU'S	# OF MINIMUMS CHARGED
ORIGINAL, Ext 1, Ext 2, Ext 3	1648	1415