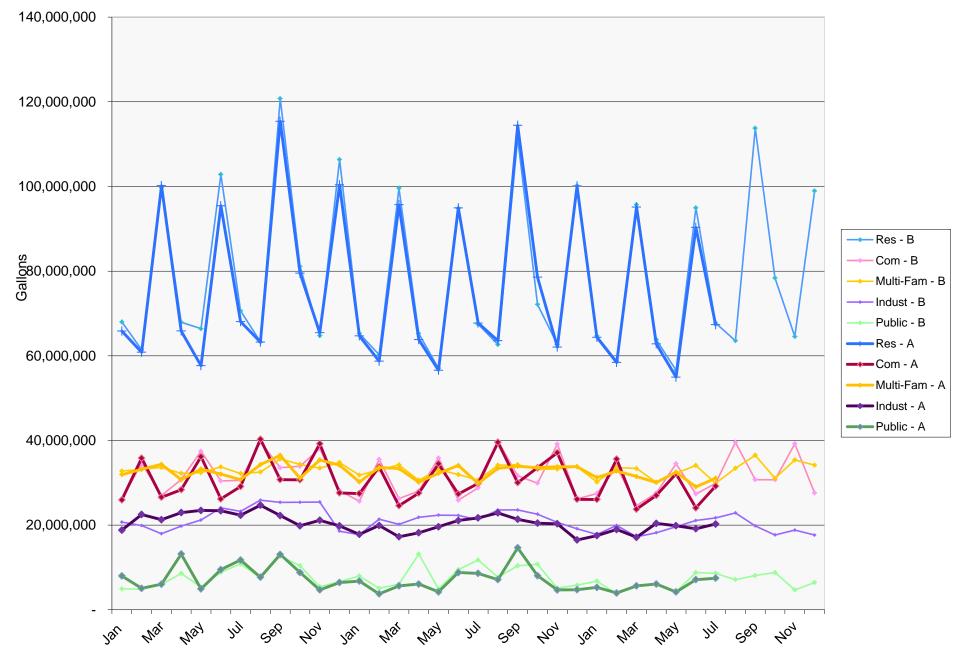
#### WAUKESHA WATER UTILITY STATEMENT OF REVENUES & EXPENSES MONTH ENDED 7/31/2017

		CURRENT M	IONTH				ANNUAL BUDGET			
	ACTUAL'17	BUDGET'17	VARIANCE	%	ACTUAL'17	BUDGET'17	VARIANCE	%		
OPERATING REVENUES:										
Residential	\$342,963.87	\$380,073.07	(\$37,109.20)	(9.76)	\$2,536,338.51	\$2,714,521.81	(\$178,183.30)	(6.56)	\$5,030,437.72	
Commercial	117,412.64	132,685.95	(15,273.31)	(11.51)	783,006.82	847,808.01	(64,801.19)	(7.64)	1,569,599.84	
Industrial	66,065.43	78,247.02	(12,181.59)	(15.57)	433,297.39	479,321.11	(46,023.72)	(9.60)	827,015.90	
Public	27,717.21	34,619.82	(6,902.61)	(19.94)	152,986.10	180,321.99	(27,335.89)	(15.16)	326,294.38	
Multi Family	125,153.79	134,372.59	(9,218.80)	(6.86)	863,435.81	930,709.38	(67,273.57)	(7.23)	1,668,162.54	
Total Metered Sales	\$679,312.94	\$759,998.45	(\$80,685.51)	(10.62)	\$4,769,064.63	\$5,152,682.30	(\$383,617.67)	(7.45)	\$9,421,510.38	
Private Fire Capacity	\$15,883.22	\$17,319.33	(\$1,436.11)	(8.29)	\$109,642.63	\$113,939.44	(\$4,296.81)	(3.77)	\$199,976.65	
Public Fire Capacity	139,335.80	151,533.87	(12,198.07)	(8.05)	1,027,251.92	1,084,407.19	(57,155.27)	(5.27)	1,927,919.50	
Other Operating Revenues	30,213.84	28,545.06	1,668.78	5.85	228,947.50	241,138.03	(12,190.53)	(5.06)	496,500.37	
TOTAL OPERATING REVENUES	\$864,745.80	\$957,396.71	(\$92,650.91)	(9.68)	\$6,134,906.68	\$6,592,166.96	(\$457,260.28)	(6.94)	\$12,045,906.90	
OPERATING EXPENSES:										
Source	\$70,008.06	\$64,128.89	\$5,879.17	9.17	\$1,329,782.73	\$448,902.23	\$880,880.50	196.23	\$769,546.68	
Pumping	76,562.58	82,634.79	(6,072.21)	(7.35)	481,575.75	585,321.00	(103,745.25)	(17.72)	1,015,429.53	
Treatment	26,595.89	31,468.90	(4,873.01)	(15.49)	241,015.44	268,069.80	(27,054.36)	(10.09)	473,201.80	
Distribution	63,455.72	118,327.12	(54,871.40)	(46.37)	553,046.84	863,257.79	(310,210.95)	(35.93)	1,476,932.94	
Customer Service	12,443.96	17,502.81	(5,058.85)	(28.90)	113,059.44	109,593.90	3,465.54	3.16	203,204.17	
Administrative	157,893.05	119,136.18	38,756.87	32.53	977,312.03	1,002,777.66	(25,465.63)	(2.54)	1,626,498.94	
Total	\$406,959.26	\$433,198.69	(26,239.43)	(6.06)	\$3,695,792.23	\$3,277,922.38	417,869.85	12.75	\$5,564,814.06	
MANAGERS' MARGIN	457,786.54	524,198.02	(66,411.48)	(12.67)	2,439,114.45	3,314,244.58	(\$875,130.13)	(26.41)	6,481,092.84	
Depreciation	166,260.51	156,724.04	9,536.47	6.08	1,119,892.22	1,097,068.28	22,823.94	2.08	1,880,688.48	
Tax Equivalent	146,566.83	145,847.99	718.84	0.49	1,025,652.51	1,020,935.93	4,716.58	0.46	1,750,175.88	
Other Taxes	11,254.38	12,017.86	(763.48)	(6.35)	83,887.35	84,250.02	(362.67)	(0.43)	154,451.82	
TOTAL OPERATING EXPENSES	\$731,040.98	\$747,788.58	(\$16,747.60)	(2.24)	\$5,925,224.31	\$5,480,176.61	\$445,047.70	8.12	\$9,350,130.24	
TOTAL OPERATING INCOME(LOSS)	\$133,704.82	\$209,608.13	(\$75,903.31)	(36.21)	\$209,682.37	\$1,111,990.35	(\$902,307.98)	(81.14)	\$2,695,776.66	
NON OPERATING INCOME&(EXPENSE)	(260,512.59)	(145,143.82)	(115,368.77)	79.49	(888,792.32)	(1,037,382.04)	148,589.72	(14.32)	(1,009,821.75)	
NET INCOME(LOSS)	(\$126,807.77)	\$64,464.31	(\$191,272.08)	(296.71)	(\$679,109.95)	\$74,608.31	(\$753,718.26)	(1010.23)	\$1,685,954.91	

WWU Billed Gallons Actual v Budget 2015 - 2017



# WAUKESHA WATER UTILITY STATEMENT OF SOURCES AND USES OF CASH PERIOD ENDING JULY 31, 2017

# Cash Balance - June 30, 2017

\$37,066,517

# SOURCES:

USES:

Operations:			
Customers - water sales	\$877,971		
Waste Water Utility - joint metering billing	56,968		
Rent of utility property - cellular leases	12,028		
Receipts on sewer bills	1,181,203		
Other - miscellaneous	14,138		
Total Cash From Operating Activities	\$2,142,308		
<b>Capital and Related Financing Activities:</b>			
Grants			
Contributions	17,314		
Issuance of long-term debt			
Sale of short-term debt			
Interest income	28,783		
Total Cash From Capital/ Investing Activities	\$46,097		
Total Cash Receipts		\$2,188,405	-
Salaries, wages, payroll taxes and benefits Subcontracted and outside services Disbursement to city for sewer transfer Pumping power Purchase of materials and supplies	\$245,031 24,922 1,004,051 59,042 65,093		
Tax equivalent - PILOT	00,000		
Acquisition of capital assets Debt service - principal Debt service - interest	1,344,666		
Total Cash Used		\$2,742,805	
Net Change in Cash			(\$554,400)
Cash Balance - July 31, 2017			\$36,512,117

# WAUKESHA WATER UTILITY BALANCE SHEET 7/31/2017

ASSETS	THIS YEAR
	<b>\$00.050.044.07</b>
	\$22,856,611.87
ACCOUNTS RECEIVABLE	4,856,255.71
RECEIVABLE FROM SEWER REIMB	0.00
MATERIALS & SUPPLIES	559,715.40
	15,997.00
ACCRUED UTILITY REVENUE TOTAL CURRENT ASSETS	0.00
DEFERRED	\$28,288,579.98
DEFERRED ASSETS	\$10,199,768.42
TOTAL DEFERRED DEBITS	10,199,768.42
RESTRICTED	
DEBT PAYMENT ACCOUNT	\$1,058,952.04
DEBT RESERVE ACCOUNT	475,489.44
CONSTRUCTION FUND	10,478,908.60
TAX EQUIV RESERVE ACCOUNT	1,642,155.33
TOTAL RESTRICTED FUNDS	\$13,655,505.41
LONG TERM	
UTILITY PLANT IN SERVICE-NET	\$89,262,522.37
PROPERTY HELD FOR FUTURE USE	435,089.69
CONSTRUCTION WORK IN PROGRESS	1,781,023.24
RESTRICTED NET PENSION	(225,396.00)
TOTAL UTILITY PLANT	\$91,253,239.30
TOTAL ASSETS	\$143,397,093.11
LIABILITIES CURRENT CUR PORTION BOND NOTES PAYABLE ACCOUNTS PAYABLE	420,134.14 27,285,000.00 1,831,047.33
PAYABLE TO OTHER FUNDS	2,931,143.38
CUSTOMER DEPOSITS	96,269.68
A/P MISCELLANEOUS	0.00
TAXES ACCRUED	1,046,283.00
INTEREST ACCRUED	539,629.89
EMPLOYEE WITHHOLDING	15,056.82
ACCRUED PAYROLL	93,962.00
ACCRUED VACATION	227,813.40
TOTAL CURRENT LIABILITIES	\$34,486,339.64
DEFERRED CREDITS CUSTOMER ADVANCES CONSTRUCTION	\$0.00
REGULATORY LIABILITY	50.00 1,226,261.98
OPEB LIABILITY	1,235,875.73
OTHER DEFERRED CREDITS	3,160,701.04
TOTAL DEFERRED CREDITS	
LONG-TERM	\$5,622,838.75
BONDS	\$28,128,907.51
EQUITY	
CAPITAL PAID IN BY MUNICIPALITY	\$2,666,484.02
EQUITY FINANCED BY UTILITY	39,949,268.22
EQUITY FROM CONTRIBUTIONS	32,526,407.92
RESTRICTED EQUITY	695,957.00
NET PROFIT (LOSS)	(679,109.95)
TOTAL EQUITY	\$75,159,007.21
TOTAL EQUITY AND LIABILITIES	\$143,397,093.11

### WWU TRANSMISSION AND DISTRIBUTION BUDGET VARIANCE ANALYSIS

Project	Project #	Description/Location	Budget		Current Estimate	P	JC Total	Ald	ermanic District	Construction Completion
WM offsets from WSB from Fiddlers Creek to Northview Road	M00500	Water Main offsets to accommodate changes in the storm sewer and roadway alignments. Project run by CH2M on behalf of the County.		\$	58,407	\$	49,488	14	Bill Boyle	December 2017
WM offsets from WSB		Water Main offsets to						6	Adam Jankowski	
from Genesee Road	M00501	accommodate changes in the storm sewer and roadway		\$	250,000	\$	9,432	7	Daniel J. Manion	Fall 2018
to Fiddlers Creek Drive		alignments. Project run by		Ŷ	200,000	Ť	0,.02	13	Dean Lemke	
Biwe		WDOT.						14	Bill Boyle	
WM offsets from WSB from Northview to	M00502	Water Main offsets to accommodate changes in the storm sewer and roadway		\$	298,751	\$	251,308	5	Peter Bartels	November 2017
Rolling Ridge Drive		alignments. Project run by the City.						14	Bill Boyle	
N Grand - 5 Points to Wisconsin and South St - Clinton to Grand Ave.	M00507	Replace 600 feet if 10" main from 1908 with 12" on South Street from Clinton to Grand and on N. Grand from 5 Points to Wisconsin. Project done with the City.		\$	298,945	\$	249,150	11	Erik Helgestad	June 2017
Prairie Ave - College to St Paul Ave.	M00508	Cancelled by the City until a Future Year	447	\$	-	\$	794			Cancelled
Caroline St - Arcadian	1400500	Replace 750 of 6" main from 1911	\$2,787,447	¢	470.000	¢	\$ 9,818	3	Cassie Rodriguez	November
to Main St.	M00509	with 8" on Caroline between Arcadian and Main Street. Project done with City Sanitary.		\$	176,392	\$		11	Erik Helgestad	2017
NW Barstow - Buena Vista to Lemira Ave.	M00510	Replace 1,560 feet of 6" main from 1909, 1915, and 1930 with 8" on NW Barstow from Buena Vista to Lemira. Project done with the City.		\$	312,364	\$	256,569	2	Eric Payne	June 2017
Arcadian - Eugene to Greenfield Ave.	M00512	Replace 1,500 feet of 6" main from 1924 with 550' of 8" and 950' 12" on NW Barstow from Buena Vista to Lemira. Project done with the City.		\$	363,087	\$	236,869	3	Cassie Rodriguez	October 2017
Oscar Street - Jefferson to Highland Ave.	M00513	Lower services on Oscar between Jefferson & Highland to eliminate annual water runs due to large storm sewer. Main is from 1958 but will not be replaced due to budget constraints.		\$	41,622	\$	6,633	3	Cassie Rodriguez	October 2017
Waukesha County Expo Center	M00514	Eliminate water meter pit and install 20 feet of 8" ductile iron pipe.		\$	7,508	\$	7,508	2	Eric Payne	May 2017
	Routine Misc R		\$ 2,787,447 \$ 558,809	\$ \$	1,807,077	\$1 \$	,077,571			
	Total R		\$ 558,809 \$ 3,346,256		558,809 2,365,886	· ·	558,809 ,636,380			
						1				
West Ave from Wisconsin to Glenwood, West on	GLCD0008	Replacing 8" from 1913 on West from Wisconsin to Glenwood, 6" from 1927 on Glenwood, with 24" main, then new 24" crossing river,	\$ 1,924,600	\$	1,632,662	\$	72,315	2	Eric Payne	November
Glenwood, under Fox River to Mountain Ave.		passing through Grede Park and connecting to 20" main on Mountain. Project done with City Sanitary.			, ,		,	11	Erik Helgestad	2017
Dist	ibution Syste	m Improvements	\$1,924,600	\$	1,632,662	\$	72,315		•	•
Disti	,	1			.,,		7			

# Monthly Interim Report

# Waukesha Water Utility Future Water Supply

August 15, 2017

This update is solely intended for the use of Waukesha Water Utility's internal management and for Waukesha Water Utility's discussions with the Owner's Engineer and Contractor. The update is not intended to be and should not be used by any other parties without prior written consent from Baker Tilly Virchow Krause, LLP





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Waukesha Water Utility ("WWU" or "Owner") engaged Baker Tilly Virchow Krause, LLP (Baker Tilly, "we" or "our") to perform construction audit services on the Future Water Supply project. Greeley and Hansen ("GH" or "PM/CM") is the Program Manager and Construction Manager engaged by the Owner.

The primary objective of this engagement is to verify whether project expenditures billed to Waukesha Water Utility are adequately supported, verifiable and appropriately allocated to the project.

# **Current Period Significant Events**

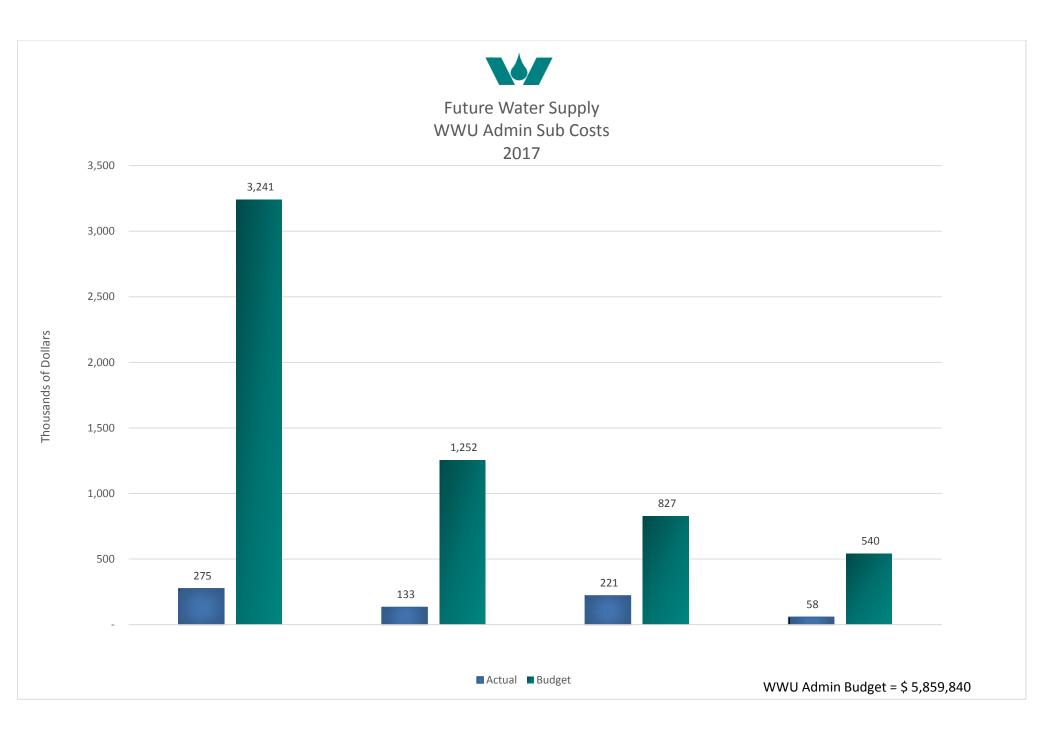
This section of the monthly interim report summarizes Audit Issues and Requests for Information during the current period. The project-to-date Audit Issues (AI) and Request for Information (RFI) logs are included as attachments with this document.

# **Current Period Audit Issues**

During the current period we reviewed Invoice No. 11 from Greeley and Hansen. Additional information is required to verify the Earned Value Analysis included as Exhibit 5 in Monthly Program Status Report No. 11 (see AI-003). We met with Greeley and Hansen on July 27, 2017 and conducted a follow up call on August 7, 2017 to discuss the earned value calculations provided with monthly progress reporting. Specifically we inquired about the Budget at Completion for each task, actual costs utilized in the calculations, and the methodology for determining earned value for the period. Greeley and Hansen provided additional support on August 7, 2017; however, the values per the support did not reconcile to Exhibit 5 in Monthly Program Status Report No. 11. We will continue to follow up with Greeley and Hansen during August 2017 in order to close this audit issue.

# **Current Period Request for Information**

Additional documentation was requested to validate labor hours for four Greeley and Hansen employees whose hours did not reconcile to billings on Invoice No. 11 (see RFI-012). Greeley and Hanson provided the requested documentation, the labor hours were verified, and this item was closed.





# Great Lakes Water Supply Program PM/CM

### Budget Summary (Phase 1 and Phase 2)

# Greeley and Hansen LLC Thru July 17, 2017

	Phase 1 Budget Summary			Phase 2 Budget Summary				Program Budget Summary						
Task Number	Description	Previously Phase 1 Budget Invoiced (thru Inv 10)	Invoice No. 11 Invoiced to Date	Phase 1 Remaining Budget	Phase 2 Budget	Previously Invoiced (thru Inv 10)	Invoice No. 11	Invoiced to Date	Phase 2 Remaining Budget	Program Approved Budget	Previously Invoiced (thru Inv 10)	Total Invoice No. 11 (Phase 1 + 2)	Total Invoiced to Date	Remaining Budget
Task 1	Program Management	\$ 526,460.00 \$ 462,949.38	\$ 2,957.15 \$ 465,906.53	\$ 60,553.47	\$ 1,880,329.00	\$ 954,720.63	\$ 147,441.52	\$ 1,102,162.15	\$ 778,166.85	\$ 2,406,789.00	\$ 1,417,670.01	\$ 150,398.67	\$ 1,568,068.68	\$ 838,720.32
Task 2	Programmatic Support Services	\$ 336,701.00 \$ 316,708.36	\$ - \$ 316,708.36	\$ 19,992.64	\$ 952,370.00	\$ 621,375.52	\$ 87,978.21	\$ 709,353.73	\$ 243,016.27	\$ 1,289,071.00	\$ 938,083.88	\$ 87,978.21	\$ 1,026,062.09	\$ 263,008.91
Task 3	Permitting	\$ 649,764.00 \$ 403,114.48	\$ 22,683.54 \$ 425,798.02	\$ 223,965.98	\$ 1,145,304.00	\$ 575,713.18	\$ 131,800.83	\$ 707,514.01	\$ 437,789.99	\$ 1,795,068.00	\$ 978,827.66	\$ 154,484.37	\$ 1,133,312.03	\$ 661,755.97
Task 4	Route Study and Pipeline	\$ 440,700.00 \$ 367,058.70	\$ - \$ 367,058.70	\$ 73,641.30	\$ 1,882,754.00	\$ 1,186,919.78	\$ 273,963.56	\$ 1,460,883.34	\$ 421,870.66	\$ 2,323,454.00	\$ 1,553,978.48	\$ 273,963.56	\$ 1,827,942.03	\$ 495,511.97
Task 5	Distribution System and Water Quality	\$ 259,751.00 \$ 139,808.12	\$ 14,391.87 \$ 154,199.99	\$ 105,551.01	\$ 438,654.00	\$-	\$ 1,396.08	\$ 1,396.08	\$ 437,257.92	\$ 698,405.00	\$ 139,808.12	\$ 15,787.95	\$ 155,596.07	\$ 542,808.93
Task 6	Pump Stations, Storage and Chemical Treatment				\$ 908,390.00	\$ 423,305.73	\$ 211,103.27	\$ 634,409.00	\$ 273,981.00	\$ 908,390.00	\$ 423,305.73	\$ 211,103.27	\$ 634,409.00	\$ 273,981.00
Task 7	Construction and Construction Management				\$ 99,105.00		\$ 1,483.08		\$ 99,105.00	\$ 99,105.00	\$-	\$ 1,483.08	\$ 1,483.08	\$ 97,621.92
	Miscellaneous Services Allowances, Task Authorizations, and Contingencies	\$ 169,897.00 \$ 93,081.94	\$ 8,223.48 \$ 101,305.42	\$ 68,591.58	\$ 761,271.00		\$-		\$ 761,271.00	\$ 931,168.00	\$ 93,081.94	\$ 8,223.48	\$ 101,305.42	\$ 829,862.58
	TOTAL	\$ 2,383,273.00 \$ 1,782,720.98	\$ 48,256.03 \$ 1,830,977.02	\$ 552,295.98	\$ 8,068,177.00	\$ 3,762,034.83	\$ 855,166.49	\$ 4,615,718.30	\$ 3,452,458.70	\$ 10,451,450.00	\$ 5,544,755.81	\$ 903,422.52	\$ 6,448,178.40	\$ 4,003,271.60



Great Lakes Water Supply Program

Monthly Program Status Report No. 11 Invoice Period June 10, 2017 through July 7, 2017

Exhibit 4: Task-Hour Status





Great Lakes Water Supply Program PM/CM

Hours Summary (Phase 1 and Phase 2)

Greeley and Hansen LLC

Thru July 19, 2017

Ph	ase 1& 2 Hours Summary	Program Hour Summary								
Task Number	Description	Program Approved Hours	Previously Invoiced (thru Inv 10)	Current Invoice No. 11 (Phase 1 + 2)	Total Invoiced to Date	Remaining Hours				
Task 1	Program Management	13,910.0	8,557.0	1,001.5	9,558.5	4,351.5				
Task 2	Programmatic Support Services	6,430.0	4,906.5	444.8	5,351.3	1,078.8				
Task 3	Permitting	10,754.0	5,086.3	932.7	6,019.0	4,735.1				
Task 4	Route Study and Pipeline	16,041.0	10,372.2	1,793.7	12,165.9	3,875.1				
Task 5	Distribution System and Water Quality	3,327.0	390.9	109.8	500.7	2,826.4				
Task 6	Pump Stations, Storage and Chemical Treatment	7,010.0	2,354.5	1,557.8	3,912.3	3,097.8				
Task 7	Construction and Construction Management	600.0	0.0	10.5	10.5	589.5				
	Miscellaneous Services Allowance	1,066.0	0.0	40.0	40.0	1,026.0				
	 TOTAL	59,138.0	31,667.4	5,890.6	37,558.0	21,580.0				

Great Lakes Water Supply Program

Monthly Program Status Report No. 11 Invoice Period June 10, 2017 through July 7, 2017

Exhibit 5: Earned Value Analysis

Great Lakes Water Supply Program

Monthly Program Status Report No. 11 Invoice Period June 10, 2017 through July 7, 2017

# Earned Value Narrative

The Earned Value (EV) technique is being used to monitor the Program scope, schedule and cost, and to assess overall Program performance. The components of EV are the work breakdown structure, the schedule and the estimated costs. By connecting these components, future Program performance can be predicted and proactive actions can be taken to stay on track.

The work breakdown structure is a grouping of Program elements that define and organize the scope of the Program. For this Program, the work breakdown structure is defined by the Task and subtask activities, deliverables, meetings and workshops. An estimated cost, or Planned Value (PV), duration and interdependencies are assigned to the Task and subtask activities, deliverables, meetings and workshop. A PV cumulative cost curve is used to identify the value at any point in time of the work that is planned to be done.

On a monthly basis, the value of the work completed as a percentage of the PV is determined by the Program Manager and defines the EV which is shown on the cumulative cost curve. The monthly Program invoices define the Actual Costs (AC) which are also shown on the cumulative cost curve. Using the cumulative cost curves developed for the overall Program and each Task, the Schedule Performance Index (SPI) and the Cost Performance Index (CPI) are calculated. SPI is calculated by dividing EV by PV. The CPI is calculated by dividing EV by AC.

The PV for the overall Program reflects that the full approved budget amount less allowances and contingencies will be spent by September 2017 with some Tasks sooner. The full approved budget of \$10,451,450 includes \$875,781.30 of allowances and contingencies. Please note that the budgets utilized for earned value analysis reflect only authorized amounts which does not include allowances and contingency.

In order to provide greater clarity for the development of overall Program costs and to be prepared to accelerate Program design and permitting activities to meet anticipated funding timelines, the Program Tasks originally anticipated to occur in 2018 are being expedited in 2017. The budget status and challenges for each Task are noted on the following graphs.





Great Lakes Water Supply Program PM/CM

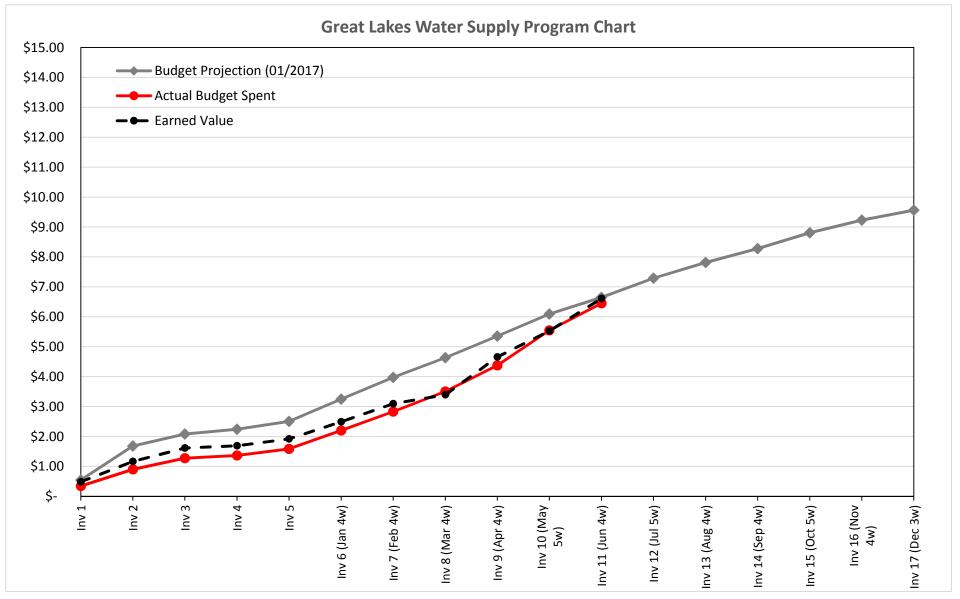
Program

Earned Value Chart

Phase 1 and 2

(Excluding Allowances and Contingencies)





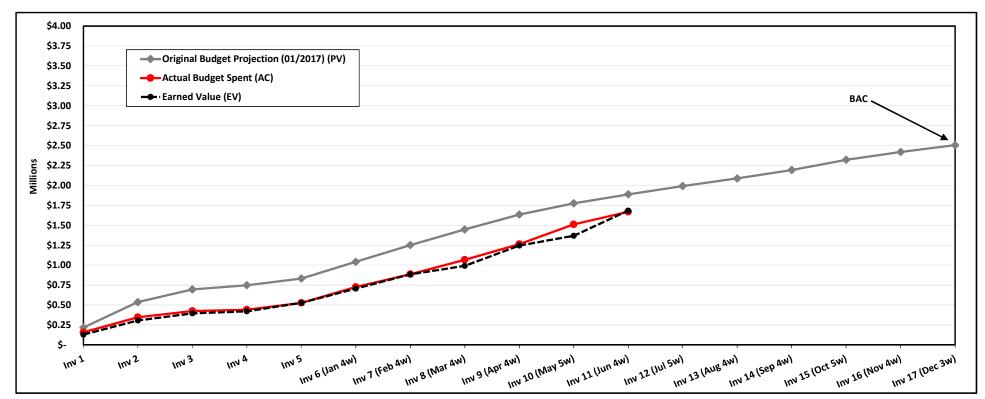
% Spent 61.7% Actual Budget Spent \$6,447,521.23 Schedule Performance Index (SPI) 0.99

Cost Performance Index (CPI) 1.03



#### Great Lakes Water Supply Program Phase 1 and 2 Task 1 - Program Management Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations	
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$ 2,630,655.70
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 939,023.01
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$ (204,440.35)
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$ 14,245.41
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	1.01
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.89
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.90
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 2,608,397.25
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ 22,258.45

#### Task 1 Program Management Plan/Progress

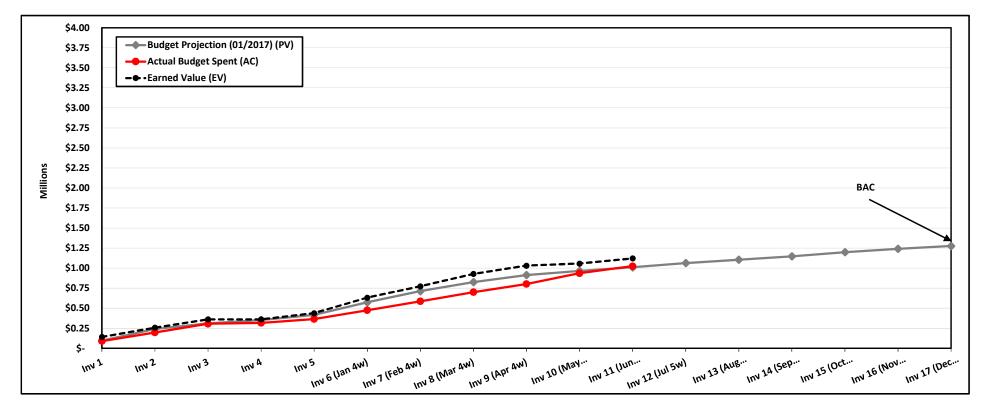
- The AWWA conference presentation was given by Dan Duchniak and Nicole Spieles.
- Program Cost was reviewed and further updated based on design refinements.
- The Financial Management Dashboard has been drafted and is under review.

#### Task 1 Program Management Challenges

- It is anticipated that the Task 1 budget will be expended by the end of November 2017. An estimate of 2018 budget needed in 2017 to continue providing Program Management will be developed and reviewed with WWU in advance of November 2017.
- Development of the Design Reports for the Public Service Commission is being expedited to be prepared to meet anticipated funding timelines and provide greater design refinement for Program Cost update.







Earned Value Calculations	
Budget at completion <sup>(BAC)</sup> (BAC)	\$ 1,289,071.00
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 153,172.87
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$ 96,413.87
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$ 110,520.42
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	1.09
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	1.11
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	1.21
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 1,178,250.42
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ 110,820.58

#### Task 2 Programmatic Support Services Plan/Progress

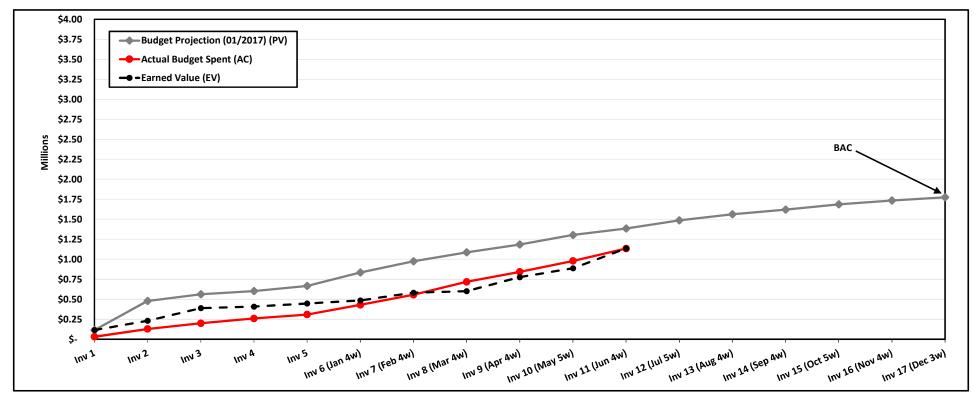
- The Strategic Communication Plan was resubmitted and approved by WWU.
- Open Houses in Franklin, Muskego and New Berlin were held. Planning for Open Houses in Waukesha and Oak Creek has started.
- Communication with local stakeholders continues to support Route Study field investigations.

#### Task 2 Programmatic Support Services Challenges

- To support the Program added programmatic support services have been performed, specifically:
  - o Maintenance of the WWU website,
  - o Increased social media presence,
  - Greater focus on multi-tiered community outreach,
     Additional strategic communication rapid response
  - needs, and
- Press release development
- The Task 2 budget will be expended by July 2017. Contingency budget will be requested to continue Task 2 until a budget shift is approved. An estimate of budget needed to continue providing Programmatic Support Services will be developed and reviewed with WWU in August 2017.







Earned Value Calculations	
Budget at completion <sup>(BAC)</sup> (BAC)	\$ 1,774,155.80
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 635,850.63
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$ (249,675.89)
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$ 1,821.09
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	1.00
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.82
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.82
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 1,771,310.34
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ 2,845.46

#### Task 3 Permitting Plan/Progress

- WDNR Workgroup Workshop meetings for construction and WPDES permitting occurred. The PM/CM team, Paul Kent, and Bruce Baker continue to contact WDNR weekly to maintain open lines of communication.
- Support and planning for field investigations is occurring with external entities regarding the routes.
- Meetings with local municipalities are being scheduled and prepared for.

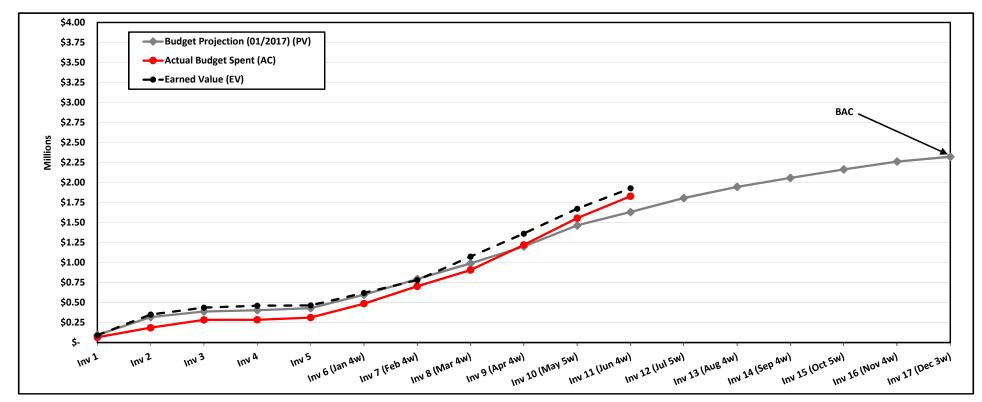
#### Task 3 Permitting Challenges

- It is anticipated that the Task 3 budget will be expended by the end of November 2017. An estimate of 2018 budget needed in 2017 will be developed and reviewed with WWU in advance of November 2017.
- Scheduling the water supply meeting with WDNR is awaiting final water supply agreement execution.



#### Great Lakes Water Supply Program Phase 1 and 2 Task 4 - Route Study and Pipeline Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations	
Budget at completion <sup>(BAC)</sup> (BAC)	\$ 2,322,359.60
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 374,397.79
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$ 99,616.30
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$ 296,058.47
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	1.05
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	1.18
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	1.25
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 2,202,339.96
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ 120,019.64

#### Task 4 Route Study and Pipeline Plan/Progress

- Preliminary Design has been initiated to provide greater clarity for development of program costs and to be prepared to accelerate Program design and permitting activities to meet anticipated funding timelines.
- Open Houses occurred to share prospective routes with local communities. The process to secure permits for field investigations has been initiated and as well as conversations external entities regarding the routes.

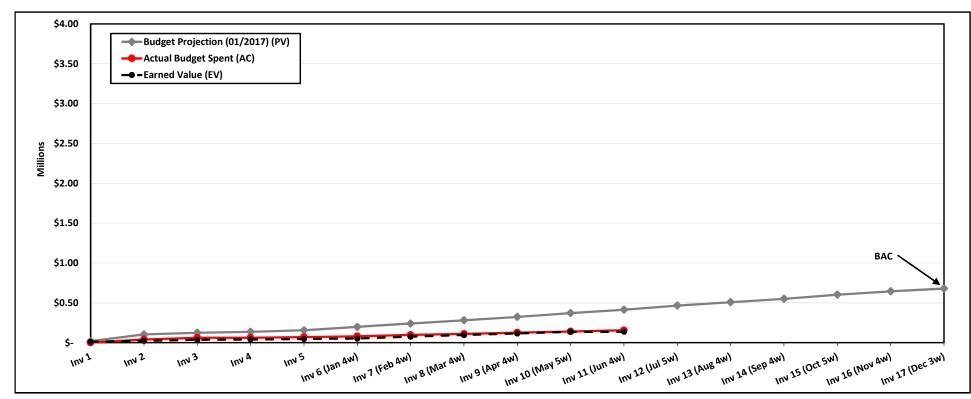
#### Task 4 Route Study and Pipeline Challenges

 It is anticipated that the Task 4 budget will be expended by the end of July 2017. An estimate of 2018 budget needed in 2017 to support the accelerated schedule will be developed and reviewed with WWU in August 2017.



#### Great Lakes Water Supply Program Phase 1 and 2 Task 5 - Distribution System and Water Quality Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations	
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$ 678,580.90
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 622,386.29
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$ (19,880.39)
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$ (277,383.82)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	0.87
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.33
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.29
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 777,982.87
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ (99,401.96)

#### Task 5 Distribution System and Water Quality Plan/Progress

- The Pipe Loop Test Plan was submitted and accepted by WWU.
- Preliminary design documents for the pipe loop test apparatus will be initiated upon confirmation of water supplier.
- Preparation for field testing occurred for calibration of the distribution system model.

#### Task 5 Distribution System and Water Quality Challenges

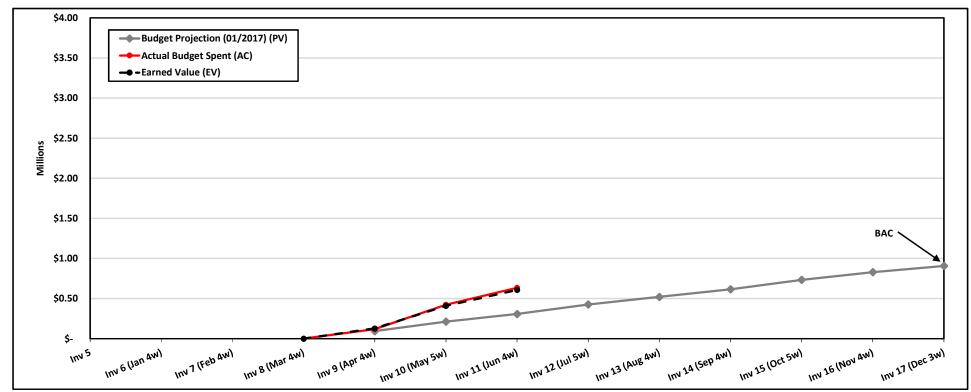
- Selection of the water supplier has resulted in a delay in having the WDNR Water Supply meetings for permitting has impacted Task 5 from a schedule perspective.
- No 2018 budget is anticipated in 2017 to achieve the Task 5 plan for 2017.

1. Task 6 total budget value has been corrected



#### Great Lakes Water Supply Program Phase 1 and 2 Task 6 - Pump Stations, Storage, and Chemical Treatment Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations	
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$ 906,741.60
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 312,470.10
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$ (26,892.13)
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$ 299,621.87
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	0.96
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	1.97
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	1.89
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 946,879.10
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ (40,137.50)

#### Task 6 Pump Stations, Storage and Chemical Treatment Plan/Progress

 The Preliminary Design Report is being expedited in order to provide a basis for water supply contract negotiations with respect to operations, to provide greater clarity for the development of program costs and to be prepared to accelerate Program design and permitting activities to meet anticipated regulatory and funding schedules.

#### Task 6 Pump Stations, Storage and Chemical Treatment Challenges

- It is anticipated that the Task 6 budget will be expended by September 2017. An estimate of 2018 budget needed in 2017 will be developed and reviewed with WWU in advance of September 2017.
- The water supplier has not been confirmed . The supplier will need to be identified in order to move project milestones and compliance with the justice department.

1. Task 5 total budget value has been corrected



### Great Lakes Water Supply Program Phase 1 and 2 Task 7 - Construction and Construction Management Earned Value Chart (Excluding Allowances and Contingencies)



	\$4.00																
	\$3.75		et Projection	(01/2017) (P	V)												
	\$3.50	Actu	al Budget Spe	nt (AC)													
	\$3.25	Earn	ed Value (EV)														
	\$3.00																
	\$2.75																
	\$2.50																
suo	\$2.25																
Millions	\$2.00																
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			Inv 3	lnv 4	lnv 5	v)	(Feb v)	(Mai	(Apr	(May	) (Jur	2 (Ju	(Au£	(Sep /)	, (Oct	Nov.	(Dec
						Inv 6 (Jan 4w)	Inv 7 (Feb 4w)	Inv 8 (Mar 4w)	Inv 9 (Apr 4w)	Inv 10 (May 5w)	lnv 11 (Jun 4w)	Inv 12 (Jul 5w)	Inv 13 (Aug 4w)	lnv 14 (Sep 4w)	lnv 15 (Oct 5w)	lnv 16 (Nov 4w)	Inv 17 (Dec 3w)
							-	=	-	Ę	5	-	Ē	드	5	Ē	드

Earned Value Calculations		٦	Task 7         Construction and Construction Management           Plan/Progress	Ta	sk 7	Construction and Construction Management Challenges		
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$	99,105.00		1 101/1 105.000			Ū.	
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)		-	•	<ul> <li>Preliminary evaluation of contracting strategies has been initiated.</li> </ul>	•	No	o challenges.	
Cost Variance <sup>(CV)</sup> (CV=EV-PV)	\$	-						
Schedule Variance <sup>(SV)</sup> (SV=EV-AC)	\$	-						
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)		0.00						
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)		0.00						
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)		0.00						
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$	-						
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$	-	L					

1. Task 7 total budget value is added