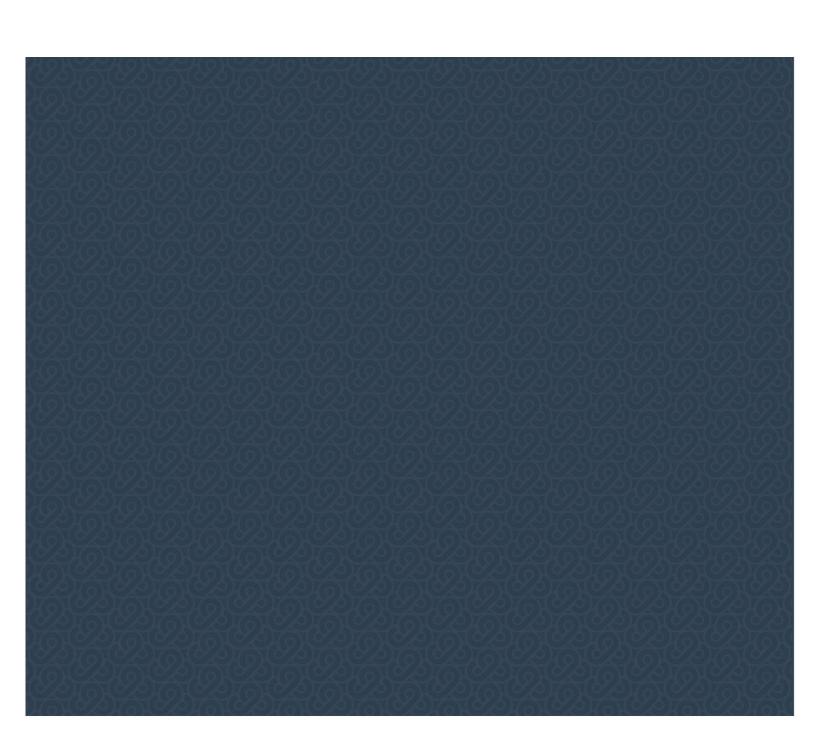


## **Exhibit 5 – Earned Value Analysis**

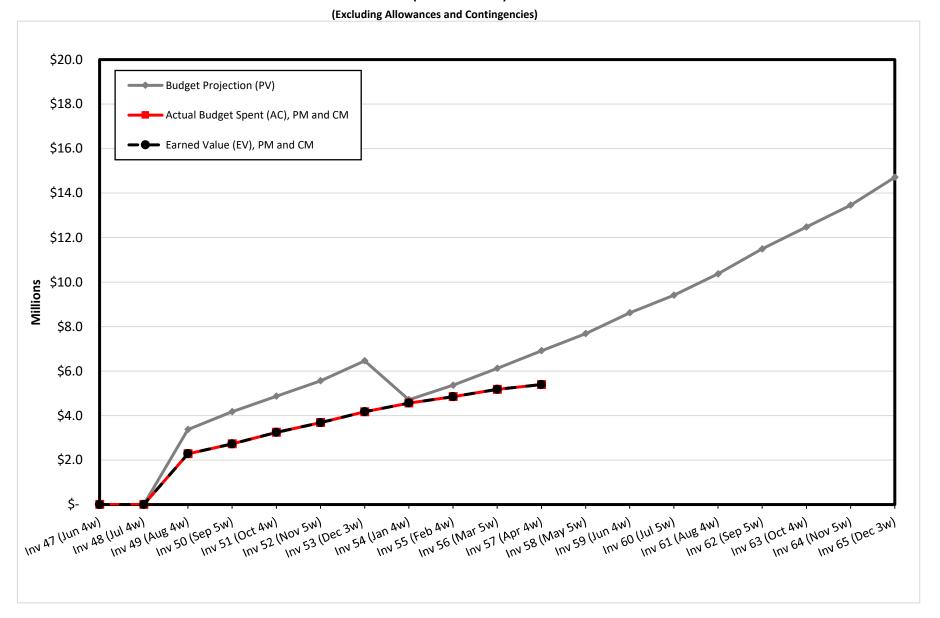




# Great Lakes Water Supply Program PM/CM Program Earned Value Chart



Phase 3 (Invoice No. 57)



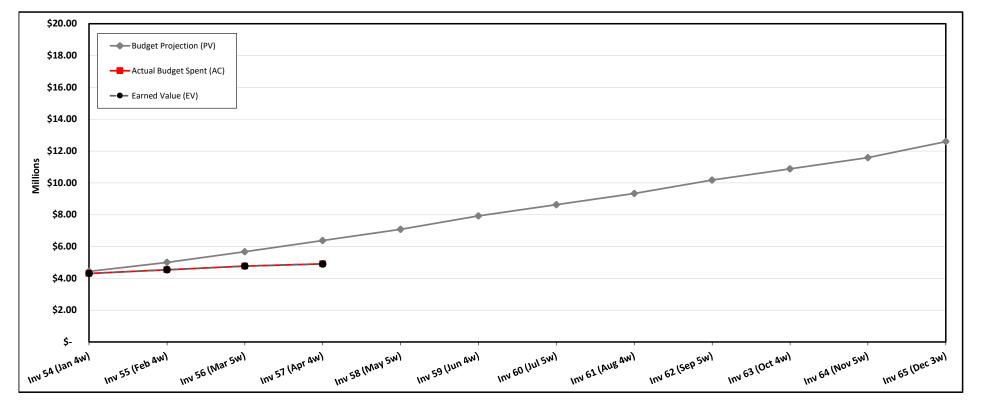
% Spent 32.0% Actual Budget Spent \$5,389,653 Schedule Performance Index (SPI) 0.78
Cost Performance Index (CPI) 1.00

Note: Budget associated with Task 3-300, 5-200 and 5-300 water quality scope has been removed.



#### Section 1 - Program Management Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations	
Budget at Completion <sup>(BAC)(1)</sup> (BAC)	\$ 14,630,234
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 9,721,355
Cost Variance <sup>(CV)</sup> (CV=EV-AC)	\$ -
Schedule Variance <sup>(SV)</sup> (SV=EV-PV)	\$ (9,721,355)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	1.00
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.34
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.34
Estimate at Completion (EAC1) (EAC1=BAC/CPI)	\$ 14,630,234.47
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ -

#### Section 1 Program Management Plan/Progress

- Prepare Monthly Program Status Report and Invoice No. 56.
   Prepared for an Online Open House for the City of West Allis and City of Greenfield area scheduled for May 19.
- Worked on development of the Quarterly E-Newsletter, Spring Edition.
- Developed and finalized Spring DPW Insert to be used by the City of Waukesha to educate residents about Great Water Alliance.
- Continued to update soil management plan for Site 12.17.
- Evaluated new Rusty Patch Bumblebee (RPBB) High Potential Zone (HPZ).
- Continued work on Diversion document and responding to DNR comments.
- Provided inspection services of open cut, HDD, and jack and bore pipeline installation.
- Prepared Field Order for CP5, CP6, CP2A, and CP2B.
- Reviewed CP3 bids, performed bid evaluation, and coordinated with selected Contractor upon award.

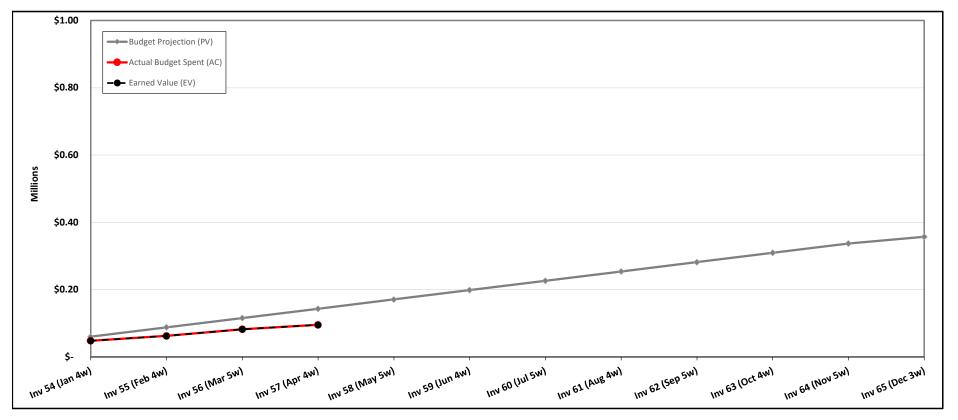
#### Section 1 Program Management Challenges

- Lack of construction schedule from Contractor has impacted the ability to acquire the WisDOT Permits.
- SJ Louis delays providing CP5 and CP6 monthly schedule updates to GWA.





Section 2 - Water Supply Pipeline Section I, II and III and Station Suction Pipelines, Contract Package 2A Earned Value Chart (Excluding Allowances and Contingencies)



Earned Value Calculations	
Budget at completion <sup>(BAC)</sup> (BAC)	\$ 404,090
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 2,855,708
Cost Variance <sup>(CV)</sup> (CV=EV-AC)	\$ (82,227)
Schedule Variance <sup>(SV)</sup> (SV=EV-PV)	\$ (391,044)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	0.14
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.03
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.00
Estimate at Completion (EAC1) (EAC1=BAC/CPI)	\$ 2,950,981.27
Variance at Completion (VAC1) (VAC1=BAC-EAC1)	\$ (2,546,891.27)

Section 2 Water Supply Pipeline Section I, II and III and Station Suction Pipelines, Contract Package 2A Plan/Progress

- Eight (8) submittals were reviewed.
- Two (2) RFIs were reviewed.

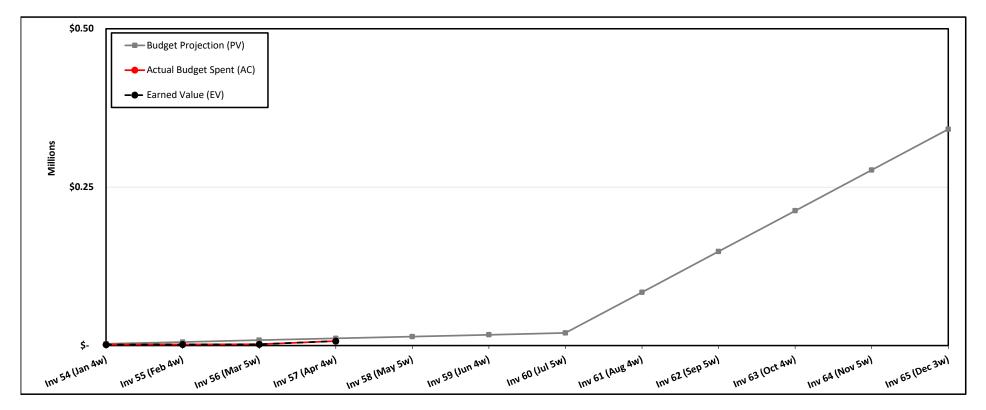
Section 2 Water Supply Pipeline Section I, II and III and Station Suction Pipelines, Contract Package 2A Challenges

No Challenges.





Section 3 - Return Flow Pipeline, BPS Discharge Pipeline, and Water Supply Pipeline, Contract Package 2B Earned Value Chart (Excluding Allowances and Contingencies)



Earned Value Calculations	
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$ 341,382
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 468,824
Cost Variance <sup>(CV)</sup> (CV=EV-AC)	\$ (1,973)
Schedule Variance <sup>(SV)</sup> (SV=EV-PV)	\$ (336,372)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	0.72
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.01
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.01
Estimate at Completion (EAC1) (EAC1=BAC/CPI)	\$ 475,807.75
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ (134,425.37)

#### Section 3 Return Flow Pipeline, BPS Discharge Pipeline, and Water Supply Pipeline, Contract Package 2B Plan/Progress

- Nineteen (19) submittals were reviewed.
- One (1) RFI was reviewed.

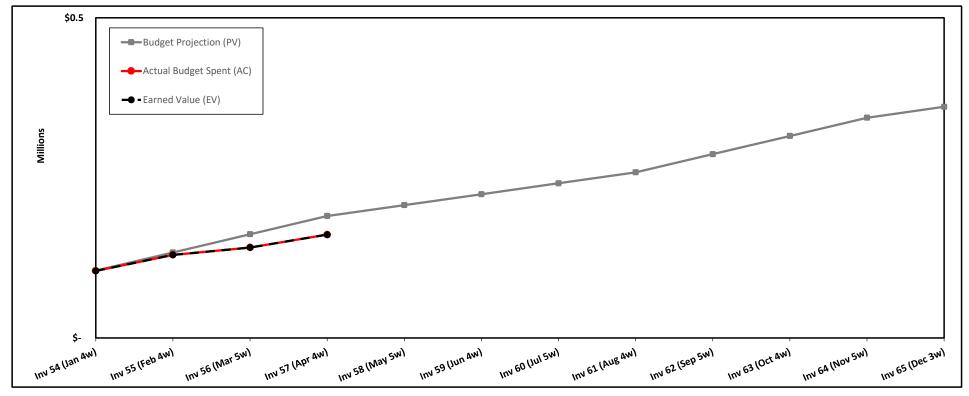
#### Section 3 Return Flow Pipeline, BPS Discharge Pipeline, and Water Supply Pipeline, Contract Package 2B Challenges

· No challenges.



### Section 4 - Return Flow Pipeline, Contract Package 5 Earned Value Chart (Excluding Allowances and Contingencies)





Note: The Task 4 Budget at completion amount was revised to reflect Task Authorizations and contract amendments

Earned Value Calculations	
Budget at completion (BAC)	\$ 381,662
Estimate to Complete (ETC1) (ETC1=EAC1-AC)	\$ 220,245
Cost Variance <sup>(CV)</sup> (CV=EV-AC)	\$ -
Schedule Variance <sup>(SV)</sup> (SV=EV-PV)	\$ (220,245)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	1.00
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.42
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.42
Estimate at Completion (EAC1=BAC/CPI)	\$ 381,662.16
Variance at Completion (VAC1=BAC-EAC1)	\$ -

### Section 4 Return Flow Pipeline, Contract Package 5 Plan/Progress

- Seven (7) submittals were reviewed.
- One (1) RFI was reviewed.
- Reviewed information provided by contractor on possible disposal option for soil from Site 12.17.

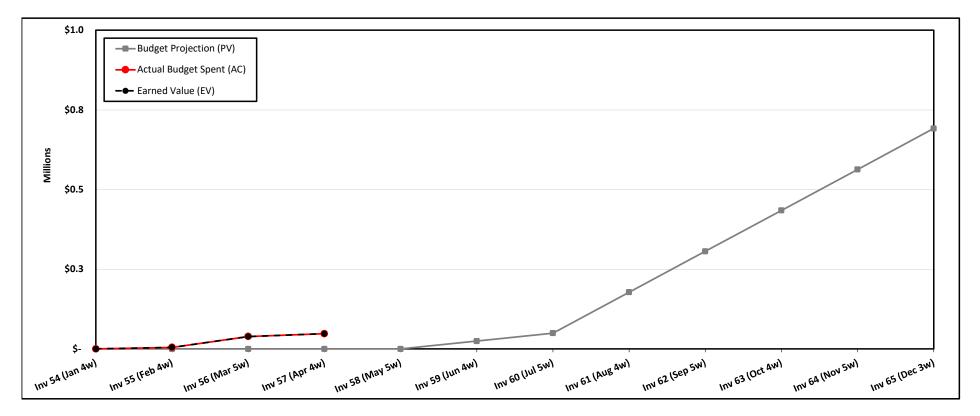
#### Section 4 Return Flow Pipeline, Contract Package 5 Challenges

 Lack of construction schedule from Contractor has impacted the ability to accurately staff for shop drawings being submitted for review.



### Section 5 - Booster Pumping Station, Contract Package 3 Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations		
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$	691,644
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$	3,747,475
Cost Variance <sup>(CV)</sup> (CV=EV-AC)	\$	(38,929)
Schedule Variance <sup>(SV)</sup> (SV=EV-PV)	\$	(682,968)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)		0.18
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)		0.01
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)		0.00
Estimate at Completion <sup>(EAC1)</sup> (EAC1=BAC/CPI)	\$ 3	,795,080.52
Variance at Completion (VAC1) (VAC1=BAC-EAC1)	\$ (3	3,103,436.37)

### Section 5 Booster Pumping Station, Contract Package 3 Plan/Progress

- Contract Package 3 Addenda Nos. 4 and 5 were posted to QuestCDN.
- Contract Package 3 Bid Opening Meeting was held April
  13.
- Contract Package 3 Bid Tabulation was provided to WWU.
- Responses were provided to questions received during bidding.

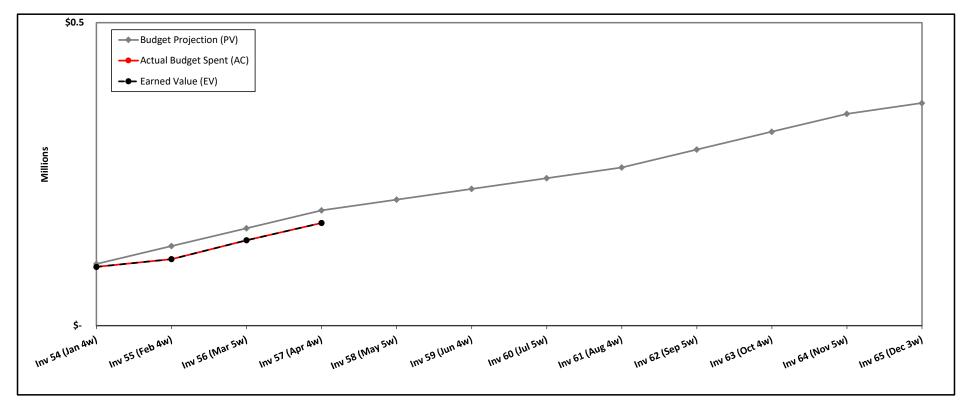
#### Section 5 Booster Pumping Station, Contract Package 3 Challenges

No challenges.



### Section 6 - Return Flow Pipeline, Contract Package 6 Earned Value Chart (Excluding Allowances and Contingencies)





Earned Value Calculations	
Budget at completion <sup>(BAC)(1)</sup> (BAC)	\$ 409,706
Estimate to Complete <sup>(ETC1)</sup> (ETC1=EAC1-AC)	\$ 2,270,421
Cost Variance <sup>(CV)</sup> (CV=EV-AC)	\$ (141,034)
Schedule Variance (SV) (SV=EV-PV)	\$ (381,245)
Cost Performance Index <sup>(CPI)</sup> (CPI=EV/AC)	0.17
Schedule Performance Index <sup>(SPI)</sup> (SPI=EV/PV)	0.07
Cost /Schedule Index <sup>(CSI)</sup> (CSI=CPI x SPI)	0.01
Estimate at Completion (EAC1=BAC/CPI)	\$ 2,439,915.87
Variance at Completion <sup>(VAC1)</sup> (VAC1=BAC-EAC1)	\$ (2,030,209.75)

### Section 6 Return Flow Pipeline, Contract Package 6 Plan/Progress

- Twenty five (25) submittals were reviewed.
- One (1) RFI was reviewed.

#### Section 6 Return Flow Pipeline, Contract Package 6 Challenges

- Lack of construction schedule from Contractor has impacted the ability to accurately staff for shop drawings being submitted for review.
- SJ Louis delays starting CP6 construction work.